K. Chad Burgess
Director & Deputy General Counsel

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March 20, 2019

VIA ELECTRONIC FILING
The Honorable Jocelyn Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29211

Re: South Carolina Electric & Gas Company;
Request for Approval of Contract to Acquire the Fort Jackson Natural Gas Distribution
Docket No. 2019- ___-G

Dear Ms. Boyd:

In accordance with S.C. Code Ann. Regs. 103-403 and 103-445 (2012) and other applicable law, South Carolina Electric & Gas Company ("Company" or "SCE&G") herein files for approval a contract ("Contract")[1] between the Company and the United States Department of Defense ("DOD"), through its contracting agent Defense Logistics Agency Energy FEE - Utility Services ("DLA Energy"), to acquire and operate the natural gas distribution system ("System")[2] serving Fort Jackson located in Richland County, South Carolina ("Fort Jackson").

By way of background, in 2016, DLA Energy, in conjunction with DOD, solicited requests for proposals to privatize the System, convey the natural gas system infrastructure, and to acquire natural gas utility services through a utility services contract. Privatization is the transfer of ownership of a federal asset to the

[1] The Contract consists of two documents entitled "Award/Contract" and "Amendment to Solicitation/Modification of Contract", a copy of which is attached as Exhibit A.

[2] A more complete description of the System is set forth in Attachment JA2 to the Contract.

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private sector. SCE&G received the award of this contract in September 2018 and, as a result, will assume ownership, operate, and maintain the System and infrastructure and will provide natural gas utility services to Fort Jackson pursuant to the terms and conditions of the Contract. Please be advised that the Contract does not provide for the procurement or transportation of natural gas. SCE&G will continue to provide natural gas service to Fort Jackson as it does today.

Following regulatory approval of the Contract by the Public Service Commission of South Carolina ("Commission"), SCE&G and Fort Jackson will begin a transition period that is scheduled to last twelve months. During the transition period, transition planning and management will take place, an initial leak survey of the System will be performed, system mapping, inspection, inventory and report will occur along with pothole inspection and environmental reconnaissance study. The transition period will also allow for SCE&G to perform additional due diligence functions, complete the joint inventory, and stand up operations in support of the Contract. Upon conclusion of the transition period, SCE&G and DOD will execute a Bill of Sale formally transferring ownership of the System facilities to the Company.

Based upon an initial evaluation, the Company has determined that it is likely that a substantial portion of the System is not in compliance with Pipeline and Hazardous Materials Safety Administration ("PHMSA") and other regulatory requirements.[3]All deficiencies identified will require remediation, and the Company estimates that bringing the entire System into regulatory compliance will take time. During this period, SCE&G will employ the necessary steps required of it under PHMSA regulations as may be needed while the System is being upgraded. The Company also will coordinate its activities with the South Carolina Office of Regulatory Staff ("ORS") to ensure that the necessary System upgrades are progressing towards establishing a PHMSA compliant natural gas system at Fort Jackson.

As set forth in the Contract and among other charges set forth therein, SCE&G will impose a Utility Services Charge for the operations, maintenance, renewals, and

[3] PHMSA is not applicable to natural gas systems owned by the federal government; however, when SCE&G assumes ownership of the System, PHMSA regulations will apply. As the owner of the System, the Company is required to ensure that the System is operated and maintained in compliance with PHMSA regulations.

replacements of the System, and which will be adjusted to recover the costs of correcting the initial system deficiencies. The Company also will impose a Contract Rate Charge incorporating a return on and of SCE&G's investment in the System plus associated expenses and income taxes. These costs and charges will be paid directly by the federal government and as a result, SCE&G's other customers will not be impacted by the Contract or the Company's acquisition of the System. Accordingly, the Company submits that no notice or hearing regarding this matter is required. *See* S.C. Code Ann. § 58-5-240(G).

SCE&G therefore respectfully requests that this matter be placed upon the agenda for the Commission's consideration and requests that the Contract be approved.

By copy of this letter, we are providing ORS with this request as well as a copy of the Contract.

Thank you for your assistance and consideration of this matter. If you have any questions, please do not hesitate to contact me. With best regards, I am

Very truly yours,

K. Chad Burgess

KCB/kms
Enclosure

cc: Jeffrey M. Nelson, Esquire
(via electronic and U.S. Mail w/enclosures)

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AWARD/CONTRACT

1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE 1 OF PAGES 62

2. CONTRACT (Proc. Inst. Ident.) NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.
SP0600-18-C-8326	See Block 20C	SPE600-16-R-0805

5. ISSUED BY	CODE	6. ADMINISTERED BY (If other than Item 5)	CODE
SP0600			

DLA Energy FEE - Utility Services (Lorton)
8725 John J. Kingman Road, STP 10400
Fort Belvoir, VA 22060-6221
Email: vicki.warner@dla.mil Phone:(571) 767-9120

7. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

South Carolina Electric & Gas Co. DUNS# 007919517
100 SCANA Pkwy
Cayce, SC, 29033-3712
Phone: (803) 217-9220
POC: William Eisele E-mail: weisele@scana.com

8. DELIVERY ☐ FOB ORIGIN ☐ OTHER (See below)

9. DISCOUNT FOR PROMPT PAYMENT

10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN — ITEM: See Section G

CODE 1DQY6 FACILITY CODE

11. SHIP TO/MARK FOR CODE

12. PAYMENT WILL BE MADE BY CODE HQ0490
Defense Finance and Accounting Services
DFAS- INDY VP GFEBS
8899 E 56th Street
Indianapolis, IN 46249-3800

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:
☐ 10 U.S.C. 2304(c)( ) ☐ 41 U.S.C. 3304(a)( )

14. ACCOUNTING AND APPROPRIATION DATA
See Section G

15A. ITEM NO.	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	See Section B.3 - Schedule				
				15G. TOTAL AMOUNT OF CONTRACT ▶	$33,658,296.00

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CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE

17. [X] CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return ONE copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

18. ☐ SEALED-BID AWARD (Contractor is not required to sign this document.) Your bid on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the terms listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.)

19A. NAME AND TITLE OF SIGNER (Type or Print)
Felicia Howard, V.P. Gas Operations

20A. NAME OF CONTRACTING OFFICER
Vicki L Warner

19B. NAME OF CONTRACTOR
BY Felicia Howard
(Signature of person authorized to sign)

19C. DATE SIGNED
9/27/18

20B. UNITED STATES OF AMERICA
BY Vicki L Warner
(Signature of Contracting Officer)

20C. DATE SIGNED
28 Sept 2018

AUTHORIZED FOR LOCAL REPRODUCTION
Previous edition is NOT usable

STANDARD FORM 26 (REV. 3/2013)
Prescribed by GSA - FAR (48 CFR) 53.214(a)

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Section B

Supplies or Services and Prices/Costs

B.1 Systems to be Privatized

The utility system shown below represent the utility systems included in this contract:

Installation, State	Utility System
Fort Jackson, SC	Natural Gas Distribution System

B.2 Utility Service Charges

The Contract Line Item Numbers (CLINs) shown below, represent the natural gas distribution system included in this contract for privatization. The total monthly price due to South Carolina Electric & Gas Co. (hereafter named "SCE&G") is the sum of the amounts due in each month for the applicable schedule, monthly credit as payment for purchase price, transition cost, initial system deficiency corrections, and monthly charge for recoverable portion of purchase price.

B.2.1 Type of Contract

This is a Regulated Tariff Rate Special Contract. The process for price adjustments will be in accordance with Section G.4, *Price Adjustments*.

B.2.2 CLINs 0001 – 0050: Utility Services Charge

The total monthly Utility Services Charge due to SCE&G is the fully built up monthly charge to the Government for provision of utility services, including operations and maintenance and renewals and replacements. The Contract Rate Charge (CRC) and the Monthly Credit collectively represent the price to provide utility services at Fort Jackson and form the basis for the Utility Services Charge. Invoicing for the Utility Services Charge will commence following completion of the first full month of service after the contract start date, in accordance with Section G.2, *Submission and Payment of Invoices*.

B.2.2.1 CLINs 0001 – 0050: Contract Rate Charge

The applicable tariff for this contract is the Contract Rate Charge (CRC). The CRC incorporates a return on and of the SCE&G investment in the natural gas distribution system plus associated expenses and income taxes. These items collectively represent the cost to serve Fort Jackson, and form the basis for the Contract Rate Charge (see Exhibit JE7, *Vol. IV – Price Proposal*, Table 2-7 for the derivation of the CRC for Contract Year 1). The CRC will be adjusted at least annually.

The Contract Rate Charge incorporates a return on and of the SCE&G investment in the privatized natural gas distribution system plus associated expenses and income taxes. The Contract Rate Charge is based on the monthly charge for the first 12-month period after ownership of the system is transferred to SCE&G, which is projected to occur within nine months after the South Carolina Public Service Commission (SCPSC) approves the service contract and the regulatory approval contingency is satisfied.

B.2.2.2 CLINs 0001 – 0050: Monthly Credit as Payment for Purchase Price and Recoverable Portion of the Purchase Price

In accordance with 10 U.S.C. § 2688(c)(1)(B), the Government will receive a reduction in charges for utility services as consideration for the fair market value of the natural gas distribution system. The purchase price of $1,364,700.00 for the Fort Jackson natural gas distribution system will be payable to the Government over 600 months at an annual interest rate of 0.00% through a monthly credit of $4820.00.

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The Recoverable Portion of the Purchase Price for the natural gas distribution system will be the initial plant-in-service component of the Contract Rate Charge when ownership of the natural gas distribution system is transferred from the Government to SCE&G. Cost recovery will be accommodated under the Contract Rate Charge as a depreciation expense. Accordingly, there is no separate and distinct purchase price recovery mechanism.

B.2.2.3 Schedule 1: Utility Services Charge

Schedule 1 illustrates the Utility Services Charge for the natural gas distribution system, as described in Sections B.2.2 and B.2.2.1 of this contract.

Contract Year	Contract Rate Charge	Monthly Credit	Monthly Utility Services Charge	Annual Utility Services Charge
1	$17,455	($4,820)	$12,635	$151,620
2	$24,728	($4,820)	$19,908	$238,896
3	$31,980	($4,820)	$27,160	$325,920
4	$39,230	($4,820)	$34,410	$412,920
5	$46,491	($4,820)	$41,671	$500,052
6	$53,769	($4,820)	$48,949	$587,388
7	$61,072	($4,820)	$56,252	$675,024
8	$60,485	($4,820)	$55,665	$667,980
9	$59,898	($4,820)	$55,078	$660,936
10	$59,313	($4,820)	$54,493	$653,916
11	$58,729	($4,820)	$53,909	$646,908
12	$58,145	($4,820)	$53,325	$639,900
13	$57,563	($4,820)	$52,743	$632,916
14	$56,982	($4,820)	$52,162	$625,944
15	$56,402	($4,820)	$51,582	$618,984
16	$55,824	($4,820)	$51,004	$612,048
17	$55,246	($4,820)	$50,426	$605,112
18	$54,670	($4,820)	$49,850	$598,200
19	$54,095	($4,820)	$49,275	$591,300
20	$53,521	($4,820)	$48,701	$584,412
21	$52,949	($4,820)	$48,129	$577,548
22	$52,378	($4,820)	$47,558	$570,696
23	$51,808	($4,820)	$46,988	$563,856
24	$51,240	($4,820)	$46,420	$557,040
25	$50,673	($4,820)	$45,853	$550,236
26	$50,107	($4,820)	$45,287	$543,444
27	$49,543	($4,820)	$44,723	$536,676
28	$48,981	($4,820)	$44,161	$529,932
29	$48,420	($4,820)	$43,600	$523,200
30	$47,860	($4,820)	$43,040	$516,480
31	$47,302	($4,820)	$42,482	$509,784
32	$49,319	($4,820)	$44,499	$533,988
33	$51,350	($4,820)	$46,530	$558,360
34	$53,397	($4,820)	$48,577	$582,924
35	$55,459	($4,820)	$50,639	$607,668
36	$57,536	($4,820)	$52,716	$632,592
37	$59,630	($4,820)	$54,810	$657,720
38	$61,740	($4,820)	$56,920	$683,040
39	$63,867	($4,820)	$59,047	$708,564
40	$66,011	($4,820)	$61,191	$734,292

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Contract Year	Contract Rate Charge	Monthly Credit	Monthly Utility Services Charge	Annual Utility Services Charge
41	$68,172	($4,820)	$63,352	$760,224
42	$67,727	($4,820)	$62,907	$754,884
43	$67,287	($4,820)	$62,467	$749,604
44	$66,852	($4,820)	$62,032	$744,384
45	$66,422	($4,820)	$61,602	$739,224
46	$65,998	($4,820)	$61,178	$734,136
47	$65,579	($4,820)	$60,759	$729,108
48	$65,165	($4,820)	$60,345	$724,140
49	$64,758	($4,820)	$59,938	$719,256
50	$64,356	($4,820)	$59,536	$714,432

B.2.3 CLINs 0051 – 0100: Extraordinary Operations and Maintenance (EOM) Charge

The EOM Charge is to cover these non-standard services that are uniquely required to provide a responsive privatized service. The initial $7,500 monthly EOM Charge will be applied on a fixed-price basis, without inflation or other adjustments, beginning the first billing month after the ownership transfer and continuing for a 36-month term. The EOM Charge then will be reduced to $5,500 a month for the next 48-months on a fixed-price basis. The EOM Charge then will be further reduced to $3,500 a month and thereafter will be adjusted annually for the remainder of the 600-month contract term based on 75 percent of the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U).

B.2.3.1 Schedule 2: EOM Charges

Extraordinary Operations & Maintenance					
Contract Year	Monthly	Annually	Contract Year	Monthly	Annually
1	$7,500.00	$90,000.00	26	$4,558.00	$54,696.00
2	$7,500.00	$90,000.00	27	$4,625.00	$55,500.00
3	$7,500.00	$90,000.00	28	$4,693.00	$56,316.00
4	$5,500.00	$66,000.00	29	$4,763.00	$57,156.00
5	$5,500.00	$66,000.00	30	$4,833.00	$57,996.00
6	$5,500.00	$66,000.00	31	$4,905.00	$58,860.00
7	$5,500.00	$66,000.00	32	$4,977.00	$59,724.00
8	$3,500.00	$42,000.00	33	$5,051.00	$60,612.00
9	$3,552.00	$42,624.00	34	$5,125.00	$61,500.00
10	$3,604.00	$43,248.00	35	$5,201.00	$62,412.00
11	$3,657.00	$43,884.00	36	$5,278.00	$63,336.00
12	$3,712.00	$44,544.00	37	$5,356.00	$64,272.00
13	$3,766.00	$45,192.00	38	$5,435.00	$65,220.00
14	$3,822.00	$45,864.00	39	$5,515.00	$66,180.00
15	$3,879.00	$46,548.00	40	$5,597.00	$67,164.00
16	$3,936.00	$47,232.00	41	$5,680.00	$68,160.00
17	$3,994.00	$47,928.00	42	$5,763.00	$69,156.00
18	$4,053.00	$48,636.00	43	$5,849.00	$70,188.00
19	$4,113.00	$49,356.00	44	$5,935.00	$71,220.00
20	$4,174.00	$50,088.00	45	$6,023.00	$72,276.00
21	$4,235.00	$50,820.00	46	$6,112.00	$73,344.00
22	$4,298.00	$51,576.00	47	$6,202.00	$74,424.00

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23	$4,361.00	$52,332.00	48	$6,294.00	$75,528.00
24	$4,426.00	$53,112.00	49	$6,387.00	$76,644.00
25	$4,491.00	$53,892.00	50	$6,481.00	$77,772.00

B.2.4 CLINs 0101 – 0150: Gross Receipts Tax (GRT) and South Carolina Public Service Commission (SCPSC) Support Tax

There will be an annual flow-through of GRT and SCPSC Support Tax, which are applied to gross contract revenues, exclusive of the CLIN 0001 Monthly Credit for Purchase Price, as set forth in Section 2.9 of the Attachment JE7, *Vol. IV – Price Proposal (July 20, 2018)*.

B.2.4.1 Schedule 3: GRT and SCPSC Support Tax

Receipts Tax (GRT) and South Carolina Public Service Commission (SCPSC) Support Tax					
Contract Year	**Monthly**	**Annually**	**Contract Year**	**Monthly**	**Annually**
1	$286.00	$3,432.00	26	$286.00	$3,432.00
2	$168.00	$2,016.00	27	$283.00	$3,396.00
3	$206.00	$2,472.00	28	$281.00	$3,372.00
4	$234.00	$2,808.00	29	$278.00	$3,336.00
5	$272.00	$3,264.00	30	$275.00	$3,300.00
6	$310.00	$3,720.00	31	$273.00	$3,276.00
7	$348.00	$4,176.00	32	$284.00	$3,408.00
8	$334.00	$4,008.00	33	$295.00	$3,540.00
9	$332.00	$3,984.00	34	$306.00	$3,672.00
10	$329.00	$3,948.00	35	$317.00	$3,804.00
11	$326.00	$3,912.00	36	$328.00	$3,936.00
12	$323.00	$3,876.00	37	$340.00	$4,080.00
13	$321.00	$3,852.00	38	$351.00	$4,212.00
14	$318.00	$3,816.00	39	$363.00	$4,356.00
15	$315.00	$3,780.00	40	$374.00	$4,488.00
16	$312.00	$3,744.00	41	$386.00	$4,632.00
17	$310.00	$3,720.00	42	$384.00	$4,608.00
18	$307.00	$3,684.00	43	$382.00	$4,584.00
19	$304.00	$3,648.00	44	$380.00	$4,560.00
20	$302.00	$3,624.00	45	$379.00	$4,548.00
21	$299.00	$3,588.00	46	$377.00	$4,524.00
22	$296.00	$3,552.00	47	$375.00	$4,500.00
23	$294.00	$3,528.00	48	$374.00	$4,488.00
24	$291.00	$3,492.00	49	$372.00	$4,464.00
25	$288.00	$3,456.00	50	$370.00	$4,440.00

B.2.5 CLIN 0151: Transition

The transition period will commence on the contract award date (CAD) and will end upon execution of the Bill of Sale in accordance with Section C.13, *Operational Transition Plan*. It is anticipated that the transition period will last 12 months. The transition price identified in Section B.3, *Schedule,* for CLIN 0151 is firm-fixed price and is payable upon completion of the transition period. If, due to Government delay, the transition period must be extended, the contractor may be entitled to an adjustment in accordance with Section G.4, *Price Adjustments*.

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B.2.5.1 Schedule 4: Transition Projects

Project #	Project Name	Price (FFP)
T-1	Transition Planning and Management	$107,100
T-2	Initial Leak Survey	$15,700
T-3	System Map, Inspection, Inventory & Repair	$75,800
T-4	Pothole Inspections	$135,600
T-5	Environmental Reconnaissance Study	$23,700
	Total Price:	$357,900

B.2.6 Initial System Deficiency Corrections

The estimated cost for each Initial System Deficiency Corrections (ISDCs) for the Fort Jackson natural gas distribution system is listed in Section B.2.5.1, *Schedule 4: Initial System Deficiency Corrections*. Payment for the ISDCs will be made through an adjustment to the Utility Services Charge. The ISDCs will not be separately invoiced.

B.2.6.1 Schedule 5: Initial System Deficiency Corrections

Schedule 4 illustrates the Initial System Deficiency Corrections for the natural gas distribution system, as described in Section B.2.6 of this contract.

ISDC #	Project Name	Start Date	Completion	Project Cost
C-1	Replace Steel Piping	CSD	CSD + 60 Months	$3,339,700
C-2	Miscellaneous Station Repairs	CSD	CSD + 24 Months	$83,600
C-3	Replace Secondary Meters	CSD	CSD + 60 Months	$3,200
			Total Price of ISDCs:	$3,426,500

B.3 Schedule

Utility Service Payment by the Government

CLIN	SUPPLIES/SERVICES	QTY	UNIT	UNIT PRICE	AMOUNT
0001	Utility Services Charge - Contract Year 1 (Months 1-12 of 600) [a] Period of Performance: October 1, 2019 - September 30, 2020 ACRN: TBD	12	MO	$12,635.00	$151,620.00
0002	Utility Services Charge - Contract Year 2 (Months 13-24 of 600) [a] Period of Performance: October 1, 2020 - September 30, 2021 ACRN: TBD	12	MO	$19,908.00	$238,896.00
0003	Utility Services Charge - Contract Year 3 (Months 25-36 of 600) [a] Period of Performance: October 1, 2021 - September 30, 2022 ACRN: TBD	12	MO	$27,160.00	$325,920.00
0004	Utility Services Charge - Contract Year 4 (Months 37-48 of 600) [a]	12	MO	$34,410.00	$412,920.00

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	Period of Performance: October 1, 2022 - September 30, 2023 ACRN: TBD				
0005	Utility Services Charge - Contract Year 5 (Months 49-60 of 600) [a] Period of Performance: October 1, 2023 - September 30, 2024 ACRN: TBD	12	MO	$41,671.00	$500,052.00
	The Contracting Officer reserves CLINs 0006-0050 for future year Utility Service Charges				
0051	EOM Charge - Contract Year 1 (Months 1-12 of 600) Period of Performance: October 1, 2019 - September 30, 2020 ACRN: TBD	12	MO	$7,500.00	$90,000.00
0052	EOM Charge - Contract Year 2 (Months 13-24 of 600) Period of Performance: October 1, 2020 - September 30, 2021 ACRN: TBD	12	MO	$7,500.00	$90,000.00
0053	EOM Charge - Contract Year 3 (Months 25-36 of 600) Period of Performance: October 1, 2021 - September 30, 2022 ACRN: TBD	12	MO	$7,500.00	$90,000.00
0054	EOM Charge - Contract Year 4 (Months 37-48 of 600) Period of Performance: October 1, 2022 - September 30, 2023 ACRN: TBD	12	MO	$5,500.00	$66,000.00
0055	EOM Charge - Contract Year 5 (Months 49-60 of 600) Period of Performance: October 1, 2023 - September 30, 2024 ACRN: TBD	12	MO	$5,500.00	$66,000.00
	The Contracting Officer reserves CLINs 0056-0100 for future year EOM Charges				
0101	GRT / PSC Fee - Contract Year 1 (Months 1-12 of 600) Period of Performance: October 1, 2019 - September 30, 2020 ACRN: TBD	12	MO	$286.00	$3,432.00
0102	GRT / PSC Fee - Contract Year 2 (Months 13-24 of 600) Period of Performance: October 1, 2020 - September 30, 2021 ACRN: TBD	12	MO	$168.00	$2,016.00
0103	GRT / PSC Fee - Contract Year 3 (Months 25-36 of 600) Period of Performance: October 1, 2021 - September 30, 2022 ACRN: TBD	12	MO	$206.00	$2,472.00
0104	GRT / PSC Fee - Contract Year 4 (Months 37-48 of 600) Period of Performance: October 1, 2022 - September 30, 2023 ACRN: TBD	12	MO	$234.00	$2,808.00
0105	GRT / PSC Fee - Contract Year 5 (Months 49-60 of 600)	12	MO	$272.00	$3,264.00

Period of Performance: October 1, 2023 - September 30, 2024

ACRN: TBD

The Contracting Officer reserves CLINs 0106-0150 for future year GRT / PSC Fee

0151	Transition – Natural Gas Distribution System Period of Performance: September 28, 2018 - September 30, 2019 ACRN: AA	1	LO	$357,900.00	$357,900.00

[a] See paragraph B.2.2.1 CLINs 0001 – 0050: *Contract Rate Charge*

- END OF SECTION -

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SECTION C

Description/Specifications/Work Statement

C.1 Precedence

In accordance with Federal Acquisition Regulation (FAR) 52.215-8, any inconsistency in this contract shall be resolved by giving precedence in the following order:
(a) The Schedule (excluding the specifications);
(b) Representations and other instructions;
(c) Contract clauses appearing in the contract;
(d) Contract clauses incorporated by reference;
(e) Other documents, exhibits, and attachments;
(f) The specifications.

Additionally, the terms and conditions of Sections A through J, including the Section J attachments, shall take precedence over any inconsistent provisions contained within portions of the Contractor's proposal incorporated in or made exhibits to the Contract.

C.2 Authority, Scope, and Program Goal

C.2.1 General

The Government seeks to convey the utility system identified in this contract, provided a favorable business case exists to do so. Subsequent to the Military Service's decision to convey the utility system, the Government will enter into a contract to acquire the corresponding utility service from the Contractor as the new owner of the system.

C.2.2 Authority

Utilities privatization consists of two (2) transactions:
(1)The conveyance of the utility infrastructure via a Bill of Sale;
(2)The acquisition of utility service on the privatized system via a utility services contract.

The conveyance of the utility system is a property disposal action made in accordance with 10 U.S.C § 2688, and is not covered under the FAR or this contract. The acquisition of utility service is a FAR Part 41 acquisition and will be governed by the FAR and its applicable supplements

C.2.3 Scope

The Contractor shall assume ownership of the utility system and infrastructure specified in Section B.1, *Systems to be Privatized,* (the "system" or "utility system"), and as the new owner, to operate and maintain the systems and provide utility services to the Government. Assumption of ownership and provision of utility services shall be performed in accordance with all terms, conditions, and special contract requirements, specifications, attachments, exhibits, and drawings contained in this contract or incorporated by reference.

C.2.4 Program Goal

The desired goal of the conveyance is to transfer all rights, title, and interest of the Government in and to the utility system listed in the Schedule. Consequently, the Government will retain no reversionary interests in the utility system sold, other than the terms regarding the repurchase option and rights to access. The transfer of title will be accomplished after contract award and full transfer is the intended and preferred consequence. The utility system being sold includes equipment, fixtures, structures, and other improvements utilized in connection with the utility system, which will be more specifically described in the Bill of Sale. The divestiture will not include the real property upon, under, or around the utility

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system. The sale will be documented by a Bill of Sale. In addition to the sale of the utility system identified in the Bill of Sale, the Government will also acquire utility services from the transferee.

C.2.5 Utility Systems

An Attachment is included in Section J for the utility system listed in Section B.1 and are herein referred to a "utility-specific attachment." The utility-specific attachment provides details specific to the Installation utility system and requirement.

C.2.5.1

The property being sold in this action will be as described in the utility-specific attachment to the contract. The system will be sold in an "as is, where is" condition without any warranties, representations, or obligation on the part of the Government to make any alterations, repairs, or improvements.

C.3 Requirement

C.3.1 Utility Services Requirement

Subject to the terms and conditions in this contract, the Contractor (a.k.a. "System Owner") shall furnish all necessary labor, management, supervision, permits, licenses, certifications, equipment, supplies, materials, transportation, and any other incidental items or services required for the complete ownership of and provision of utility services via the utility system, including operation, maintenance, repair, upgrade, and improvement of the system.

The Contractor shall provide reliable and dependable utility services to each Government or tenant connection within the service area (see Section C, *Service Area*) 24 hours each and every day. The Contractor shall be responsible for providing capital investments and all other resources required to own, maintain, and operate its utility system in a safe and reliable condition, and to meet all the requirements listed herein.

Access to the utility system will be as specified in Section C.6, *Access to the Utility System*.

C.3.2 Performance Standards

The Contractor shall ensure adequate and dependable utility service(s) to all facilities and equipment served. Unless otherwise provided for in this contract, the Contractor shall provide utility service(s) in accordance with industry-standard construction, operations, maintenance, management, environmental, safety, and other relevant standards, that apply to similarly situated utility services providers serving customers whose service characteristics are comparable to the service characteristics of the Installation. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, and unusually severe weather. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

Services provided shall comply with all applicable Federal, state, and local laws/regulations and any Installation specific requirements set forth in the utility-specific attachment, as they may be amended from time to time, including those requirements relating to health, safety, and the environment. The Contractor shall modify its service practice as necessary to accomplish such compliance.

If a change in the service requirement necessitated by compliance with later imposed/modified laws and regulations or Installation requirements constitutes reasonable cause for an adjustment to the service

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charge, the charge will be adjusted in accordance with either FAR 52.243-1, *Changes -Fixed-Price-Alt 1* or FAR 52.241-7 *Changes in Rates or Terms and Conditions of Service for Regulated Services* as applicable (hereinafter the "Changes clause").

C.3.3 Sub-Metering

The Contractor shall be responsible for reading, maintaining, and calibrating all sub-meters on the privatized utility system, as identified in the utility-specific attachment. The Government will use sub-meters for internal installation billing purposes, commodity management, and energy conservation purposes. Meter reading reports shall be submitted to the recipient identified in the utility-specific attachment.

All costs for providing, installing, reading, reporting, and maintaining the existing and additional meters shall be the responsibility of the Contractor.

C.3.3.1 Future Sub-Meters

The Contractor shall provide, install, read, maintain, and calibrate sub-meters requested by the Government for any purpose throughout the contract period. Government-approved installation of and responsibility for future sub-meters (not on the system at the time of sale or identified for installation as part of the contract) may constitute reasonable cause for an initial installation charge and a utility services charge adjustment in accordance with Section G.

C.3.4 Energy Efficiencies and Conservation, Renewable Energy Generation, and Energy Security

The Contractor shall strive to provide energy efficient systems. In addition, the Contractor will facilitate interconnection of new or existing renewable energy generation assets that are located on the installation, whether the Government or a third party is the owner/operator of any such generation assets. The Government has an established program for conducting and implementing energy savings, conservation projects, and renewable energy generation projects to reduce utility usage, costs, and to obtain other benefits including mandated levels of renewable energy usage and reduction of emissions. Some of these have resulted in the Government entering into long-term financing arrangements with non-Government entities. The utility-specific attachment identifies any such energy savings projects that are currently in place for the specific utility system.

Additionally, the Government may enter into energy-security projects, including, but not limited to, the use of microgrids, system-redundancy projects for critical infrastructure, and auxiliary or emergency generation. The Contractor shall facilitate development and implementation of these projects, as requested by the Government.

The Contractor agrees to take no action that will negatively impact these utility conservation or security projects without prior approval of the Contracting Officer. The Government reserves the ability to enter into any future energy savings or security projects. Projects implemented by the Government that will require changes in the privatized system shall be coordinated between the parties prior to implementation.

If, after award, additional efficiency System Deficiency Corrections (SDCs)/Upgrades projects are identified by the Contractor, they shall be proposed to the Government in accordance with Section C, *SDCs/Upgrades/Connections and Renewals and Replacements*. The Government may consider cost-savings sharing and incentives either through utility services charge adjustments or lump-sum payments.

C.3.5 Commodity Supply

Natural gas commodity supply is not included in this contract, even if any production facilities are included as part of the system to be conveyed. The Government retains the right to procure or supply any commodity that will be transported on the system(s) covered by this contract from any source, including

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the Contractor if the Contractor proposes to supply the commodity via an alternate proposal. In accordance with FAR 41.102, natural or manufactured gas cannot be procured under this contract.

C.4 Service Area

The service area is defined as all areas within the Government installation boundaries and any other facilities and property boundaries under the control of the Installation. Within the service area and upon the Government's request, the Contractor shall provide utility services to all existing and new customers. At any time, by written order, the Contracting Officer may designate any location within the service area where utility services under this contract shall commence or be discontinued. Any service charge adjustment as a result of these actions will be in accordance with Section G.

C.4.1 Use of Distribution Systems to Serve Areas Outside the Installation Service Area

The Contractor may use the utility infrastructure on the Installation to serve or benefit areas or customers outside the service area(s) only with concurrence of the Government. Compensation to the Government will be negotiated. In no way shall service to off-installation customers degrade or hinder reliable service, or create unhealthy, unsafe, or unacceptable conditions or outages to the Government's facilities.

C.4.2 Joint Use

C.4.2.1 Government Use

The Government may have property and equipment installed on or attached to poles, conduits, pipes, duct banks, towers, buildings, and other portions of the utility system to be transferred. The Government reserves the right to continue to use the property to be transferred for this purpose, to enter on the transferred property to maintain, repair, operate, upgrade, and replace its property and equipment, and to install new Government equipment. Any upgrade or replacement of such installed or attached property shall be made only after coordinating with the Contractor. Any upgrade or replacement of such installed or attached property shall comply with all applicable safety regulations.

Attachment fees shall not apply. However, costs of any make-ready work related to safety requirements may be recovered under the contract. All new attachments will be coordinated with the Contractor prior to the attachment.

C.4.2.2 Commercial Use

C.4.2.2.1

The Contractor shall enter into joint use agreements with the Installation's telephone company, cable television company, and other service providers in accordance with applicable law and regulation.

C.4.2.2.2

Certain system components may have third-party equipment attached pursuant to a lease or other contractual arrangement between the third party and the Installation. The Contractor will take ownership of these components subject to such lease(s), with any revenue continuing to accrue to the Installation until the lease(s) expire or are otherwise terminated at the discretion of the Installation. Any new lease(s), lease extensions, or other arrangements between the Contractor and any third party to permit attachment of third party equipment to system components must be approved by the Installation and may be subject to revenue sharing, all of which must be negotiated with the Installation under separate agreement. The Installation considers cellular telephone antennae to be mission-essential equipment and requests for permission by a third party to attach such equipment to the Contractor-owned components shall not be unreasonably withheld or subjected to unreasonable fees.

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C.5 Utility System Ownership, Personnel, and Security

C.5.1 Utility System Ownership

C.5.1.1 Transfer of Title

A general description of the utility system assets to be transferred is included in the utility-specific attachment. Prior to the transfer of title, such facilities shall continue to be owned by the Government. Transfer of title shall be accomplished by Bill of Sale, with access provided via the Right to Access granted in the Contract. The Bill of Sale shall provide the complete list of all assets to be sold.

The Contractor shall neither transfer nor assign its interests in the utility system assets transferred by Bill of Sale without the prior written consent of the Government. No transfer or assignment of the Contractor's interests in the utility system assets transferred by Bill of Sale shall occur except in connection with the Government's recognition of a successor in interest to this contract under FAR 42.1204.

The parties shall prepare and execute such additional documents as may be necessary to implement the ownership transfer.

C.5.1.2 Tools, Vehicles, and Equipment

Unless listed in the final Bill of Sale, Government-owned tools, vehicles, and equipment used for system operations and maintenance that are not a physical part of the utility system will remain the property of the Government.

C.5.1.2.1 Contractor Vehicles

All Contractor vehicles shall be readily identifiable. Identification shall include displaying Contractor name in a clear and unobstructed location on the vehicle.

C.5.1.2.2 Contractor Communications Devices

Prior to operating communications devices on the Installation, the Contractor shall obtain approval of the Installation Communication Group by requesting an available clear frequency. The Contractor shall follow all Installation procedures for operating communications devices on the Installation in accordance with Department of Defense FAR Supplement (DFARS) 252.235-7003, *Frequency Authorization*.

C.5.1.2.3 Contractor Advertising

The Contractor shall not place or display (nor permit a third party to place or display) advertising of any kind on Government property or on the Contractor's property located on the Installation. Reasonable markings on the Contractor's property, including vehicles, for the purpose of identifying it as the Contractor's property are permitted.

C.5.1.2.4 Radiation-Causing Devices

The Contractor shall provide the Government with notice that it has obtained all licenses required by Federal laws and regulations for all licensed or licensable radiation source or byproduct materials and provide the Government copies of the licenses. The Government may deny the use or storage of any radiation source or byproduct material on the Installation. The Contractor shall comply with the terms of the licenses and all applicable Federal laws and regulations when maintaining, storing, utilizing, and disposing of radiation source or byproduct materials.

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C.5.1.3 Placement of Utility System

The Contractor shall comply with requests from the Installation regarding the placement of new or renewal utility systems either overhead or underground, unless to do so would cause the Contractor to violate any applicable law or regulation or would be inconsistent with sound utility operational practices. Requests for placement that differ from normal utility practice may constitute a reasonable cause for an equitable adjustment in accordance with Section G.

C.5.1.4 Contractor Facilities

The Contractor, at its expense, shall acquire, furnish, install, and operate and maintain all facilities required to provide the utility service hereunder. The Contractor shall have title to all facilities it builds and equipment it installs under this contract, except as otherwise provided herein. If available, and at the Government's sole discretion, the Contractor may be permitted to either build or lease office space, maintenance shops, materials storage/staging areas, or other facilities on the Installation, free of any rental or similar charge.

The Contractor shall be responsible for acquiring all utilities, janitorial services, building maintenance, and ground maintenance for these facilities. The Government may, if its capabilities permit, consent to provide certain of these services to the Contractor on a reimbursable basis, as defined in the utility-specific attachment.

New construction or remodeling of existing facilities shall comply with the Installation's architectural standards and be fully coordinated with the Installation prior to beginning construction (see utility-specific attachment for list of available facilities).

C.5.1.5 Record Drawings and Utility System Maps

The Contractor shall maintain record drawings for all existing and new facilities installed by the Contractor within the service area. Upon reasonable request and with reasonable notice, the Government may use and copy such drawings. The Contractor shall provide available drawings to the Government in the form of CAD-CAM disks using the latest release software compatible with Government systems at no cost to the Government. The Contractor will also provide information to allow for updates to the Installation Geographical Information System (GIS). The Contractor shall identify changes to and update utility system maps in both hard copy (full size) and electronic media formats to ensure delineation of all Contractor facilities within one year of contract award and annually with the Annual Capital Plan or upon reasonable request of the Government.

File manipulation will normally be required to transport data directly between the Contractor's system and GIS. The Government will be responsible for reasonable costs associated with this file manipulation. The Contractor will continue to provide compatible CAD-CAM and GIS data files as long as the Contractor is able to do so using standard system resources, and will apply all reasonable measures to maintain compatibility. If the systems become incompatible, the Contractor will provide GPS coordinates for use in the Government's system.

C.5.1.6 Disposition of Removed or Salvaged Materials

The removal and disposition of facilities and materials that are not used and useful for the purpose of providing utility service(s) shall be the responsibility of the Contractor. The Contractor shall notify the Contracting Officer or designated representative when removing hazardous substances in accordance with Section *H.14, Hazardous Substances* and the Specific Service Requirements outlined in the utility-specific attachment. Abandoned plant items not identified on existing maps but found during operations shall be documented on the drawings. In order to prevent hazardous conditions, the Contractor shall be responsible for ensuring that no interconnections exist between abandoned and utilized facilities.

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C.5.1.7 Liens and Mortgages

The Contractor shall not engage in any financing or other transaction creating any mortgage upon any Government property, place or suffer to be placed upon Government property any lien or other encumbrance, or suffer any levy or attachment to be made on the Contractor's interest in any easement or right of access to Government property. For the purposes of this clause, property shall include, but not be limited to: fee, lease, license, personal property, or any authorized Government use or interest in property.

C.5.2 Personnel

For purposes of this contract, the term “personnel” or “employee(s)” refers to any person performing work related to this contract, including but not limited to, the Contractor’s employees, agents, representatives, or subcontractors. The Contractor shall not permit any personnel to work under this contract if such person is identified to the Contractor as a potential threat to the health, safety, security, general well-being, or operational mission of the Installation or population. All personnel will comply with Installation security, health, and safety conditions.

The Contractor will allow the Installation to review on a continuing basis a listing of all personnel engaged in providing utility services to the Installation. The listing will provide sufficient information on all personnel to allow precise Government identification of each individual.

C.5.2.1 Speaking, Reading, and Understanding English

Where reading, understanding, and discussing environmental, health, and safety warnings are an integral part of an employee’s duties, that employee shall be able to understand, read, write, and speak the English language fluently. All personnel that interface with customers shall be able to speak and understand the English language fluently.

C.5.2.2 Personnel Appearance and Identification

The Contractor’s personnel shall present a neat appearance and be readily recognized as Contractor personnel. As required by the Installation, the Contractor shall ensure each employee obtains from Security Forces an identification card that shall include at a minimum the employee’s name, photograph, and Contractor’s name. Each employee shall follow established Installation procedures for displaying their identification card while within the boundaries of the Installation.

C.5.2.3 Employee Certification

The Contractor shall ensure that employees meet all applicable federal, state, local, and Installation certification, licensing, and medical requirements to perform all assigned tasks and functions as defined in this contract.

C.5.2.4 Installation’s Rules Apply to the Contractor

Rules, regulations, directions, and requirements issued by the Installation, or other command authorities, under their responsibility for good order, administration, and security, including Specific Service Requirements as outlined in the utility-specific attachment, apply to all personnel who enter the Installation or who travel by Government transportation.

C.5.2.5 Controlled-Access Areas

The Contractor shall apply for personnel security clearances required for performance after the contract is awarded. Personnel requiring access to secured areas or restricted areas under the control of the Installation shall comply with applicable regulations. The Government reserves the right to terminate the entry of any employee upon disclosure of information that indicates the individual’s continued entry to the Installation is not in the best interests of national security. Additionally, violation of, or deviation from, the established security procedures by the Contractor’s personnel may result in the confiscation of identification media and the denial of future entry to the Installation.

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C.5.2.6 Conflict of Interest

The Contractor shall not knowingly employ any person who is a U.S. Government employee if employing that person would create a conflict of interest. Additionally, the Contractor shall not knowingly employ any person who is an employee of the Government, either military or civilian, unless such person seeks and receives written approval according to DOD 5500.7-R, *Joint Ethics Regulations (JER).*

C.5.2.7 Employment of Military Personnel

The Contractor is cautioned that off-duty active military personnel hired under this contract may be subject to permanent change of station, changing duty hours, or deployment. Military reservists and National Guard members may be subject to recall to active duty. The abrupt absence of these personnel could adversely affect the Contractor's ability to perform. However, their absence at any time shall not constitute an excuse for nonperformance under this contract.

C.5.2.8 Employment of Quality Assurance Representative Personnel

The Contractor is prohibited from employing Quality Assurance Representatives (QAR) whom the Contractor knows or should know are responsible for monitoring any contracts/subcontracts awarded to the Contractor.

C.5.2.9 Applicability of the Service Contract Act of 1965 and Davis-Bacon Act

If applicable, the Contractor shall comply with the Service Contract Act of 1965 ("SCA") and Davis-Bacon Act ("DBA"), as amended, unless an exception exists.

C.6 Access to the Utility System

C.6.1 General

The Contractor and its agents, employees, contractors, and subcontractors shall have reasonable access to the Installation to accomplish its duties and responsibilities under the Contract, to include the installation of Contractor-owned lines and pipes, or the construction of utility system components as directed by government in accordance with Section C.4. Such access is subject to the general supervision and control of the Installation Commander, Fort Jackson, SC, and his / her duly authorized representatives. In accepting the rights, privileges, and obligations established hereunder, the Contractor recognizes that Fort Jackson, SC serves the national defense and that the Government will not permit the operation, construction, installation, repair, and maintenance of a utility system and the provision of utility services to interfere with the Installation's military mission or the national defense.

For the purposes of this Section C.6.1, access to the Contractor-owned above-ground and underground lines/pipes under this Contract shall be a total of thirty (30) feet in width, fifteen (15) feet on each side of the lines/pipes). The access to utility system containing operational components of the Contractor-owned system shall include the area inside the fence line that encloses the area and an area of four (4) feet outside the perimeter of the fence line. The Contractor is also provided access to all areas/facilities associated with facilities, lines and pipes covered by this Contract for purposes of performing the Utilities Privatization contract as directed by the Government under this Contract.

If the Contractor is denied access to the system, due to circumstances beyond its control or negligence, its obligations and liabilities under this Agreement will be suspended if such a deficient condition would not have occurred but for its inability to gain access to the utility system and was not the result of previous deficiencies in performance.

C.6.2 Contractor's Right to Access the Utility System

This Installation is an operating military installation that is closed to the public and is subject to the provisions of the Internal Security Act of 1950, 50 U.S.C § 797, and of 18 U.S.C § 1382. Access to the Installation is subject to the control of its Installation Commander and is governed by such regulations and

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orders as have been lawfully promulgated or approved by the Secretary of Defense or by any designated military commander. Access by the Contractor, its officers, employees, contractors of any tier, agents, and invitees is subject to such regulations and orders. Contractor access to the utility system, as provided in this Section C.6.2, is subject to all regulations and orders currently promulgated or which may be promulgated by lawful authority as well as all other conditions contained herein. Such regulations and orders may, by way of example and not by way of limitation, include restrictions on who may enter, how many may enter at any one time, when they may enter, and what areas of the Installation they may visit, as well as requirements for background investigations, including those for security clearances, of those entering. The Contractor is responsible for the actions of its officers, employees, contractors of any tier, agents, and invitees while on the Installation and acting under this Contract.

In the event Contractor access to the utility system is either prohibited or curtailed by the Government or in the event the presence of the Contractor's property shall be considered detrimental to governmental activities, the Contractor shall, from time-to-time and upon notice to do so, and as often as so notified, remove or relocate its property to such other location or locations on the Installation as may be required by the Contracting Officer or authorized representative, and in the event the Contractor's property shall not be removed or relocated within ninety (90) days after any aforesaid notice, the Government may cause the same to be done. Any removal or relocation of the Contractor's property at the direction of the Government under this Section shall be at the Government's expense.

The Contractor further recognizes that the operation, construction, installation, repair, and maintenance of the utility system on the Installation may be subject to requirements and approvals not ordinarily imposed by civilian authorities, including, but not limited to, compliance with the National Environmental Policy Act of 1969, as implemented. The Contractor agrees to abide by all applicable regulations and Installation requirements.

The access granted under this Contract is personal to the Contractor shall neither be transferred nor assigned without the prior written approval of the Government. No transfer or assignment of the Contractor's access under this Contract shall occur except in connection with the Government's recognition of a successor in interest to the Contract under FAR Subpart 42.12 *Novation and Change-of-Name Agreements*.

C.6.2.1 Condition of the Property

The portions of the Installation on which the Contractor is granted access are provided in an "as is, where is" condition without any warranty, representation by the Government concerning their condition , or obligation on the part of the Government to make any alterations, repairs, improvements, or corrections to defects whether patent or latent. At such times and for such part of the Installation as the Installation Commander may determine, the Government and the Contractor, hereinafter referred to as the "Parties," will prepare and sign a Physical Condition Report to reflect the condition of the portions of the Installation where the utility systems are sited prior to the any ground disturbing activities of the Contractor. Such Report shall be used by the Government upon the expiration or termination of this Contract to determine whether the Contractor has fulfilled its obligations to maintain and restore the portions of the Installation where said utility systems are sited, to the condition required by this Contract.

C.6.2.2 Airspace Regulations

If the Contractor's property located on the Premises intrudes into airspace subject to regulation under the Federal Aviation Regulations or their military counterparts, such property shall be operated, constructed, installed, repaired, and maintained in conformance with such regulations.

C.6.2.3 Government Access

The Contractor's access to the utility system hereunder shall not be interpreted as interfering with or otherwise limiting the right of the Government and its duly authorized officers, employees, contractors of

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any tier, agents, and invitees to enter upon the any portion of the installation on which the Contractor is authorized access for any lawful purpose.

C.6.2.4 Other Grants of Access

The Contractor's access hereunder is subject to and shall not interfere with all outstanding easements, rights-of-way, leases, permits, licenses, and uses for any purpose with respect to the Installation. The Government shall have the right to grant additional easements, rights-of-way, leases, permits, and licenses, and make additional uses with respect to the any portions of the Installation, including those portions where the Contractor's utility system is sited. This is provided, however, that the Government shall not grant any such additional easements, rights-of-way, leases, permits, licenses, or uses which will, as determined in the sole discretion of the Government, unreasonably interfere with the Contractor's access to the utility system under this Contract.

C.6.2.5 Liability for Damages

The Contractor shall keep the portions of the Installation on which access is granted to perform its obligations under this Contract, in good order and in a clean, safe condition by and at the expense of the Contractor.

Any interference with the use of or damage to any real or personal property under the control of the Government incident to the exercise of the rights and privileges granted to the Contractor under this Contract shall be promptly corrected by the Contractor to the satisfaction of the Installation Commander. If the Contractor fails to promptly repair or replace any damaged property after being notified to do so by the Installation Commander, the Government may repair or replace such property and the Contractor shall be liable to the Government for the costs of such repairs or replacements.

C.6.2.6 Contractor Restoration

On or before the date of expiration or termination of this Contract, the Contractor shall vacate any and all portions of the Installation on which the Government granted access under this Contract, and the Contractor shall remove all of its equipment, fixtures, structure, property and improvements of whatever nature from the Installation and restore the land on which the Contractor was granted access to a condition satisfactory to the Installation Commander without additional expense to the Government. Such restoration shall include, if applicable, removal of contamination caused by the Contractor. The Contractor may, upon receipt of the prior written consent of the Government, which consent shall not be unreasonably withheld by the Government, abandon in place any buried conduits, pipes, duct banks, tubes, or wires (Underground Abandoned Utilities), provided that (i) the nature, location, and depth of such Underground Abandoned Utilities are known to the Contractor and shown on the Contractor's records, and (ii) the Underground Abandoned Utilities neither contain any environmental contaminant nor pose an environmental or safety hazard. Upon abandonment, the Contractor shall forego any further ownership rights to such Underground Abandoned Utilities. The Contractor may, upon receipt of the prior written consent of the Government, which consent shall not be unreasonably withheld by the Government, abandon in place any buried conduits, pipes, duct banks, tubes, or wires (Underground Abandoned Utilities), provided that (i) the nature, location, and depth of such Underground Abandoned Utilities are known to the Contractor and shown on the Contractor's records, and (ii) the Underground Abandoned Utilities neither contain any environmental contaminant nor pose an environmental or safety hazard. Upon abandonment, the Contractor shall forego any further ownership rights to such Underground Abandoned Utilities.

C.7 Response to Service Interruptions/Contingencies and Catastrophes

The Contractor shall employ sound utility practices to ensure continuous, dependable, and reliable utility services and to minimize the scope and length of any service disruption. If the installation has a specific

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response time requirement then it will be identified in the utility-specific attachment for each utility system.

The Contractor shall maintain a Service Interruption/Contingency and Catastrophic Loss Plan. The Plan shall define procedures and provisions for reacting to all service interruptions. The Plan shall address possible causes for interruption including, but not limited to, acts of God or public enemy, natural disasters, human error, equipment failure, vehicular damage, vandalism, employee strikes, cease and desist orders, and Notice of Violations (NOVs) issued by any regulatory agency. The Contractor may propose standard operating procedures broadly applicable across its customer base as its Plan.

The Contractor shall maintain and update the Plan as necessary and adhere to its requirements throughout the contract term. It shall not be materially altered without the Government's prior consent. However, the Contractor need not seek the Government's consent prior to minor, non-substantive alterations in such procedures, but the Government will be notified of the alterations within a reasonable period of time (no less than annually).

In the event the Installation has an Emergency Restoration Plan that prioritizes service restoration, the Contractor shall adhere to the priority list established by the Installation's Plan.

C.8 Repair Response Procedures

The Contractor shall identify to the Government and implement clearly defined procedures by which Installation personnel can submit service requests to the Contractor. The Contractor also shall clearly identify any difference in service request procedures that apply to emergency, urgent, and routine matters. The Government will be responsible for disseminating such procedures within the Installation. The Contractor shall provide a service request line with a local or toll-free telephone number by which it can be contacted 24 hours a day, 7 days a week, for service requests. This number will connect the Government to a Contractor representative capable of estimating Contractor repair crew arrival time. When a system condition designation is downgraded to a less severe condition, required response times shall run from the date and time that the initial service call was made. Specific procedures for classification of service call requests, if any, are described in the utility-specific attachment.

The Contractor shall maintain records of all service request calls, documenting the time of the call, time of service response, cause of request, and action taken (including time and date completed). Such records shall be retained for two (2) years, and may be reviewed by the Contracting Officer or designated representative upon reasonable notice.

If the service request affects building operations, the Contractor shall coordinate all work with the person responsible for the building or facility. The Government will provide the Contractor with a list of Government representatives and the buildings or facilities for which they are responsible.

Unless specifically stated otherwise in the utility specific attachment in Section J, the following requirements in subparagraphs C.8.1 through C.8.4 shall govern the Contractor's response times and procedures:

C.8.1 Notification Procedures

The Contractor shall have in place mechanisms, means, or procedures by which Installation personnel can submit service requests to the Contractor. If there is an order of precedence of phone numbers for Government personnel to call, the Contractor shall determine and clearly define that precedence. The Contractor also shall clearly identify any difference in service request procedures that apply to emergency, urgent, and routine matters.

The Government will be responsible for disseminating such procedures within the Installation. In addition, the Contractor shall provide to the Contracting Officer or designated representative the name of

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the local Utility Manager or other responsible person and an alternate with after-hours contact telephone numbers.

C.8.2 Emergency Service Requests

An emergency condition is one that is detrimental to the mission of the installation, significantly impacts operational effectiveness, or compromises the safety, health, and life of personnel. Such requests shall include, but are not necessarily limited to, electrical outages, downed power lines, natural gas outages or natural gas leaks.

The Contractor shall ensure it is able to receive the Installation's emergency service requests 24 hours a day, every day. Once an emergency request is received, the Contractor shall respond immediately. A representative knowledgeable of the system and the Service Interruption/ Contingency and Catastrophic Loss Plan shall be on the site of the emergency within one hour. Additionally, repair crews appropriately trained to eliminate the condition shall be at the emergency site within two (2) hours. Work will be continuous until the emergency condition is eliminated or downgraded and service is restored. All emergencies will be remedied or downgraded to a non-emergency status within 24 hours, unless the cost and/or level of effort to do so is unreasonable. For regulated utilities, the service and its restoration in times of outage for emergency service requests shall be at least equivalent to the service provided to other similar customers.

C.8.3 Urgent Service Requests

An urgent condition is not an emergency but significantly hinders performance of Installation activities and requires elimination of potential fire, health, and safety hazards (for example, environmental controls, non-emergency utility leaks, special requests and events, plumbing problems, downgraded emergency responses, etc.).

Once an urgent request is received, the Contractor shall respond with a representative knowledgeable of the system and the Service Interruption/Contingency and Catastrophic Loss Plan to the site of the request within 24 hours. All urgent requests will be remedied within five (5) calendar days. For regulated utilities, the service and its restoration in times of outage for urgent service requests shall be at least equivalent to the service provided to other similar customers.

C.8.4 Routine Service Requests

A routine service request is one that does not pose an immediate threat to public health, safety, or property, or to a mission or operation conducted at the Installation. Such requests may arise due to situations that, if left uncorrected will cause measurable discomfort or inconvenience to the customer, waste resources, create the need for additional minor repairs, or is aesthetically unpleasant or inconvenient.

The Contractor is not required to respond to the Installation's routine service requests outside normal duty hours. The Contractor may respond to routine service requests outside of normal duty hours at its option and with appropriate coordination. Initial response to any routine service request shall be made within five (5) calendar days, and completed within 30 calendar days of receiving the request. For regulated utilities, the service and its restoration in times of outage for routine service requests shall be at least equivalent to the service provided to other similar customers.

C.9 Coordination of Work

C.9.1 Routine Work

Routine work, such as the scheduled repair, replacement, or removal of system components that require service interruption, shall be coordinated with the Contracting Officer's Representative at least two (2) weeks prior to commencing work to ensure minimal impact to the mission and operations. The Contractor and Government shall each provide a single point of contact for coordination.

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Notification shall include date, time of outage, a list of buildings that will be affected, and the estimated time until the service will be restored. The Contractor shall also notify building occupants in advance of an outage.

C.9.2 Routine, Urgent, and Emergency Service Requests

Any routine, urgent, or emergency service request by Government personnel shall be reported to the Contractor's service request line or point of contact. Emergency service requests to the Contractor or emergencies identified by the Contractor shall be identified immediately to the Contracting Officer's Representative.

C.9.2.1.Scheduled Utility Services Interruptions

The Installation reserves the right to reschedule Contractor work requiring service interruption at any time if such interruption might materially adversely affect the Installation's mission and operations. If an interruption is rescheduled, the parties shall coordinate a mutually acceptable alternative time for the scheduled service interruption. Scheduled utility outages may be required to occur after normal duty hours to lessen the inconvenience to Installation mission-critical functions. Except for outages required to be scheduled outside of normal working hours in accordance with the utility specific attachment, Section J, the Contractor may be entitled to an equitable adjustment in accordance with Section G where such rescheduling to non-duty hours results in additional costs. Only designated Government personnel, in coordination with the Contracting Officer's designated representative may request utility services interruption. The Contractor will refer any other service interruption requests to a designated Government representative.

C.9.3 Construction and Restoration of Site

The Contractor will ensure that proper temporary facilities and controls are in place during any construction and other work it performs that could affect Installation activities. All work must include temporary facilities and control measures to facilitate the flow of vehicular, emergency, and pedestrian traffic to include the following: high-intensity reflective signs, barricades, temporary sidewalks, fencing, and traffic cones. Once work is complete, the Contractor will restore the area to an equal or better condition. Site restoration requires proper waste cleanup, removal, and disposal; replacement of cracked pavement and sidewalks; proper repair and sealing of utility cuts both on improved and unimproved land and roadways; replacement of loam or topsoil; top dressing by hand; lawn bed preparation; hydro air seeding, mulch, fertilizer, and shrub replacement.

C.9.3.1.Excavation Permits

The Contractor shall obtain a written excavation permit from the Contracting Officer's Representative or applicable Installation personnel before commencing any digging or excavation on the Installation. The excavation permit will contain requirements normally applied to similar excavation work on the Installation. The Contracting Officer's Representative or applicable Installation personnel will notify the Contractor as to reasonable time periods for applying for an excavation permit.

C.9.3.2. Underground Utility Location

At the request of the Installation, the Contractor shall be responsible for locating underground utility system components in support of the Installation's excavation permit process. Requests for line location shall be responded to within three (3) working days of the request at no additional cost to the Government.

Information regarding frequency of line locates, underground utility locations, and Points of Demarcation are identified in the utility-specific attachment and/or the Technical Library.

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C.9.4 Duty Hours

Normal duty hours shall be Monday-Friday (0730-1600). All routine work shall be accomplished during normal duty hours. The Government must approve deviations from these duty hours.

C.9.5 Coordination, Planning and Programming

The Contractor shall be available for meetings as reasonably required by the Contracting Officer or designated representative. This includes planning and programming activities for projects and plans that may impact the utility system. Costs associated with such activities shall be included in the Contractor's O&M costs as part of normal operations. The following listing generally describes activities in which the Contractor may be requested to participate:

(1) Meetings for planning and design of Military Construction (MILCON) projects expecting to impact or connect to the utility system;

(2) Discussions concerning proposed plans and initiatives expected to impact demand for utility services;

(3) Discussions concerning impacts to the system of any future Base Realignment and Closure (BRAC) action.

C.9.6 Exercises and Crisis Situations Requiring Utility Support

The Contractor shall respond to Installation emergency and crisis situations and exercises that require utility support. The Contractor shall respond to these events with qualified personnel and equipment as soon as possible after notification. Participation may be in a simulated capacity equal to other participants. In no case will response be longer than those requirements listed in Section C, *Emergency Service Requests*. The Contractor shall advise and assist the on-scene Commander until the event is terminated. Extra work effort under these circumstances may entitle the Contractor to an equitable adjustment in accordance with Section G.

C.9.7 Government Operation

During Contingencies and/or in the event of Contractor Non-Performance, the Government may take over operation of the system. In such circumstances, the Contractor shall make the privatized facilities available at no cost to the Government for as long as the circumstance requiring Government operation persists. Operation/performance by the Government shall not be deemed a waiver of the Government's right to pursue any remedies for Contractor non-performance that may otherwise exist under the terms of this Contract.

C.9.7.1. Contingencies

The Government reserves the right to perform or supplement performance of contract functions with only qualified/trained personnel during periods of disaster, emergency or other conditions that affect the Installation and prevent the Contractor from fulfilling its obligations under the contract. The Government shall use best efforts to coordinate with the Contractor and obtain authorization before supplementing the Contractor's performance in these circumstances. Such authorization shall not be unreasonably withheld.

C.9.7.2. Contractor Non-Performance

The Government reserves the right to perform or supplement performance of contract functions with Government-designated personnel if the Contractor consistently fails to perform its obligations under the contract, has been notified in writing of failure to perform its obligations, and has not cured the performance failures within a reasonable time.

C.9.8 Plant Control

After obtaining the prior permission of the Contracting Officer's Representative, the Contractor may trim or remove plants and trees that pose a potential hazard to its utility system. In those areas where the plants or trees contribute to historic or aesthetic values and trimming or removing them would be

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destructive of those values, the Contractor may be prohibited from trimming or removing them. In all instances, plants or trees listed as threatened or endangered under applicable federal, state, interstate, or local law will not be harmed by the activities of the Contractor.

C.10 Environmental Compliance

The Contractor shall comply with all applicable environmental laws and regulations including Installation-specific requirements (collectively, "Environmental Requirements"). Environmental Requirements include any statute, law, act, ordinance, rule, regulation, order, decree, permit, or ruling of any Federal, state, and/or local government, or administrative regulatory body, agency, board, or commission or a judicial body, relating to the protection of human health and/or the environment or otherwise regulating and/or restricting the management, use, storage, transportation, treatment, disposal, and/or any release of a hazardous substance, hazardous waste, pollutant, or other material. The Contractor shall provide the Government with advance written notice, of and an opportunity to jointly participate in, meetings (including permit request meetings) with environmental regulatory authorities.

Should implementation of response actions with respect to Environmental Requirements interfere with Contractor's activities under the Contract, such actions may constitute an excusable delay for which Contractor may be entitled to an excuse from performance.

C.10.1 Permit Compliance

Once ownership of the utility system is transferred, the Contractor shall be the party of record for all environmental permits related to operating the system. Thereafter, the Contractor shall be responsible for obtaining any new or revised permits needed to operate and maintain the utility system. The Government shall remain the party of record, and retain responsibility for, any applicable permits prior to the transfer of ownership as defined by Section C, *Operational Transition Plan*. For those permits that the Government cannot transfer, to the extent the non-transferable permit applies to the Utility System, the Contractor shall indemnify the Government as provided in Section H.4., *Liability*.

C.10.2 Spill Contingencies

The Contractor shall adopt the procedures of the Installation Spill Contingency Plan or shall submit to the Contracting Officer for review and acceptance a Contractor-developed Spill Contingency Plan. A Contractor-developed plan shall be prepared in accordance with the National Response Team's Integrated Contingency Plan Guidance (http://www.epa.gov/emergencies/guidance.htm#oneplan).

C.10.3 Work in Environmentally Sensitive Areas

The Contractor shall comply with Installation procedures and standards for work in and around environmentally sensitive or contaminated property. Prior to accessing any environmentally sensitive or contaminated areas, the Contractor shall coordinate with the designated Government Representative.

C.10.4 Environmental Impact Assessments

Modification of the utility system on Government installations may require an Environmental Impact Assessment in accordance with environmental impact analysis processes applicable to the Installation. The Contractor shall be responsible for fully-cooperating with the Government and any third parties to facilitate the assessment process, including, but not limited to, providing records, preparing documents, and allowing access to utility infrastructure.

C.10.5 Hazardous Material and Waste Minimization

Hazardous materials used in utility system operation and maintenance shall be handled in accordance with applicable laws and regulations. Appropriate Material Safety Data Sheets (MSDS) shall accompany all hazardous materials used on the Installation. The Contractor shall submit copies of MSDS to the Contracting Officer's Representative and retain a copy of each MSDS on-site. The Contractor shall

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maintain a viable hazardous waste minimization program that includes making every commercially-reasonable effort to identify and utilize non-hazardous or less hazardous materials than those currently in use and recycling versus disposing of consumable wastes.

C.10.6 Environmental Response

The Contractor shall be responsible for accomplishing at no cost to the Government any environmental response required as a result of the Contractor's activities. The Contractor may be required to perform, but shall not be responsible for the cost of, remediation for preexisting environmental conditions with the exception of Asbestos and Lead-based paint as outlined in Section C.10.7 below. Unexploded ordnance shall be considered a preexisting environmental condition and shall not be disturbed by the Contractor but, upon discovery, shall be immediately reported to Installation Security and the Contracting Officer's Representative. The Contractor shall not undertake to move any soil media off-site without the written permission of the Government. This requirement is in effect even if the Contractor does not believe the media is contaminated.

The Contractor shall provide the Government with a copy of all correspondence with environmental regulatory authorities related to enforcement actions or notices of violations that arise from, affect, or otherwise relate to the Contractor's performance under the contract, within 5 days of receipt or issuance.

The contractor shall not perform any response, removal, remedial or restoration actions on or affecting the Installation relating to Environmental Requirements without the prior written consent of the Government, except that such prior written consent shall not be required to the extent that prompt action is required to abate an imminent and substantial threat to health, safety and welfare and the Government has been notified of Contractor's intent to take such actions. Such Government consent will not be unreasonably withheld.

C.10.7 Asbestos and Lead-based Paint

The Contractor will not make any improvements or engage in any construction on Government property which contains asbestos-containing material (ACM), without prior approval of the Contracting Officer or designated representative. Any such improvements or construction shall be done in compliance with all applicable Federal, state, interstate and local laws and regulations governing ACM. The Contractor is responsible for monitoring the condition of its facilities and/or plant containing ACM on Government property for deterioration or damage. The Contractor will, at its expense, test any painted surface to be affected by any of its operations, construction, installation, repair, or maintenance activities to determine if the paint is lead-based; and will handle that surface in compliance with all applicable laws and regulations.

The Contractor may be required to perform, but shall not be responsible for the cost of, remediation for preexisting ACM or lead-based paint which is disturbed or damaged by the Contractor or is deteriorated; except that the Contractor shall be responsible for the cost of any remediation of ACM or lead-based paint necessitated due to Contractor's non-compliance with the terms of this contract or Contractor's fault, negligence, or misconduct.

C.10.8 Environmental Restoration Program

If the Installation has not been listed on the National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, at the time of contract award, but is listed subsequent to the award of this contract, the Government will provide the Contractor with a copy of any Federal Facility Agreement (FFA) that is entered into between the Government and the Environmental Protection Agency (EPA), along with any amendments to the FFA when they become effective.

If the Installation has been listed on the NPL at the time of the award of this Contract but no FFA has been entered into, the Government will provide the Contractor with a copy of any FFA subsequently entered into along with any amendments to the FFA when they become effective.

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If the Installation has been listed on the NPL at the time of award of this Contract and an FFA has been entered into, the Contractor acknowledges that the Government has provided it with a copy of the FFA, with current amendments. The Government will provide the Contractor with a copy of any subsequent amendments thereto.

The Contractor agrees that should any conflict arise between the terms of such agreement as it presently exists, or may be amended or entered into, and the provisions of this Contract, the provisions of the FFA will take precedence.

C.11 SDCs/Upgrades/Connections and Renewals and Replacements

C.11.1 Responsibility

The Contractor shall be responsible for all required SDCs, upgrades, and renewals and replacements necessary to maintain and operate the utility system in a safe, reliable condition, such that the system is complete and usable, and to meet the requirements of this contract.

C.11.2 Initial System Deficiency Corrections/Connection Charges

Initial System Deficiency Corrections (ISDC)/connection charges are those necessary to reach the standards typically maintained by the Contractor on its utility system or to ensure compliance with applicable law, so that subsequent renewals and replacements will permit the long-term safe and reliable operation of the utility system. All ISDCs/Connections shall be listed in the first submittal of the Initial System Deficiency Corrections and Renewals and Replacements Plan, as part of the offer. Any ISDCs/Connections proposed to remedy Government-identified deficiencies listed in the utility-specific attachment, shall be complete within five (5) years of the contract start date. The Government reserves the right to buy down a previously amortized ISDC/connection at no penalty to the Government.

C.11.2.1 Reserved

C.11.3 Renewals and Replacements

Renewals and replacements are investments in the utility system to renew or replace system components that fail or reach the end of their useful life.

C.11.4 Annual SDC/Upgrades/Connections and Renewals and Replacements Plan

The Contractor shall prepare and submit annually to the Contracting Officer for approval an SDC/Upgrades/Connections and Renewals and Replacements Plan that identifies DCs/Upgrades/Connections and major renewals and replacements the Contractor intends to accomplish. Each Plan shall contain a proposed SDC/Upgrade/Connection list with work efforts that the Contractor intends to accomplish for each of the five (5) years following plan submission. The plan shall be structured as follows:

- Year 1 shall include detailed information for each work effort including site plans, cost estimates, schedules, and an analysis of the impact of construction on Installation operations and the environment. It shall also address safety requirements.
- Years 2-5 shall include work effort descriptions, order-of-magnitude estimates, and general-area site plans for each work effort.

Unless the Contracting Officer provides written notification of an alternate date, the first Annual Plan shall be submitted no later than **March 31** of the first full fiscal year following contract start, and

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annually thereafter. The Plan shall be submitted to the Contracting Officer's Representative designated in Section G.

C.11.4.1 SDCs/Upgrades

The Contractor may propose SDCs/Upgrades to include, but not limited to, energy efficient conservation projects in the Annual Plan (Future SDCs/Upgrades/Connections). The Government reserves the right to determine at its discretion whether it will pay for any portion of proposed SDCs/Upgrades/Connections. Future SDCs/Upgrades/Connections required to comply with requirements and standards imposed by law that have changed during the contract term will be paid subject to the availability of funds. Approved SDCs/Upgrades and improvements identified in the Plan will be paid, in accordance with Section B.2.6 *Initial System Deficiency Corrections*, when accomplished. The Government reserves the right to pay for any SDC/Upgrade/Connection as a lump-sum payment rather than by amortizing the SDC/Upgrade/Connection costs. The Government further reserves the right to buy down a previously amortized SDC/Upgrade/Connection at no penalty to the Government.

C.11.4.2 Renewals and Replacements

Renewals and replacements identified in the Plan will be paid in accordance with Section B.3, *Schedule.*

C.11.4.3 Requirements and Standards

The Plan shall include an assessment of any new or revised standards and clearly address planned system improvements or operational changes needed to comply with such standards.

C.11.4.4 Anticipated Connections and Disconnections

The Plan shall include a list of anticipated new service connections, including a preliminary design and estimated installation costs. The Government will provide a list of new service requirements and anticipated disconnections.

C.11.5 Connections and Disconnections

The Government may require the Contractor to make future connections and/or disconnections. The Contractor shall coordinate this work with the Contracting Officer's Representative and obtain approval from the Contracting Officer.

If a connection or disconnection constitutes reasonable cause for a change in the utility services charge, the rate will be re-negotiated in accordance with Section G.

C.11.5.1 Temporary Connections

The Contractor shall extend temporary service to the Government or contractors performing work on the Installation when requested by the Government.

The Government will identify the party responsible for reimbursing the Contractor for temporary connections. The temporary connection customer shall provide the following information regarding any temporary service connections to the Contracting Officer's Representative:

1. Name of the temporary customer
2. Cost
3. Date of Installation
4. Expected duration of the connection
5. Description of the connection, including route and type of material
6. POC, Title, and Phone Number

C.11.5.2 Permanent Connections

(a) *Charge*. In consideration of the Contractor furnishing and installing at its expense any new connecting facilities requested by the Government, the Government may pay the Contractor a mutually agreed upon

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connection charge. Any payment will be in a form agreed to by the parties and as permitted by applicable law. When the Government requests new connecting facilities, including work necessary to increase the capacity of existing facilities, the Contractor shall submit a detailed proposal identifying the work necessary to provide the required utility services, any proposed connection charge, and the proposed change in the monthly utility services fee that will go into effect upon completion and placement into service of the new connecting facilities.

Payment for connection charges may be made as a line item under this contract or directly by the requesting party; however, regardless of payment method, the terms and conditions of this contract shall control. As a condition precedent to final payment, the Contractor shall execute a release of any claims against the Government arising under or by the virtue of such installation. Proposed changes to the monthly utility services fee(s) must be approved in advance by the Contracting Officer, regardless of the payment vehicle utilized for the connection charge.

(b) *Ownership, operation, maintenance, and repair of new facilities to be provided*. The facilities to be supplied by the Contractor under this clause, notwithstanding the payment by the Government of a connection charge, shall be and remain the property of the Contractor and shall, at all times during the life of this contract or any renewals thereof, be operated, maintained, and repaired by the Contractor at its expense. All taxes and other charges in connection therewith, together with all liability arising out of the construction, operations, maintenance, or repair of such facilities, shall be the obligation of the Contractor.

(c) *Credits*.

(1) Where the Government is part of the Contractor's general rate base and the Contractor subsequently includes the cost of the connecting facilities in its general rate base, the Contractor agrees to allow the Government, on each monthly bill for service furnished under this contract to the service location, a credit in the form of a percentage of the amount of each such bill as rendered until the accumulation of credits shall equal the amount of such connection charge. The amount of the credit percentage shall be negotiated, but shall not be less than that provided for under the terms of any tariff filed by the Contractor or otherwise provided by the Contractor to any commercial customer, provided that the Contractor may at any time allow a credit up to 100 percent of the amount of each such bill.

(2) In the event the Contractor serves any customer other than the Government (regardless of whether the Government is being served simultaneously, intermittently, or not at all) by means of these facilities, the Contractor shall promptly notify the Government in writing. Unless otherwise agreed by the parties in writing at that time, the Contractor shall promptly credit the Government, up to 100 percent of each monthly bill, until there is refunded the amount that reflects the Government's connection costs for that portion of the facilities used in serving others.

(d) *Terminations*. Payment for and disposition of wholly or partially completed facilities upon termination of the contract shall be in accordance with the terms and/or formulas set forth in the Government Repurchase Option clause (see Section H, *Government Repurchase Option*, this Contract).

C.11.5.3 Third-Party Construction

(a) Where the Government contracts with a third party to construct new utility system infrastructure that is intended to connect to the Contractor's system, the following terms and conditions shall apply:

(1) The Contractor will provide the Government and the third-party contractor with specifications (the "Specifications") applicable under the terms of this Contract for its system components and for interconnections.

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(2) The Government will require the third-party contractor to renovate or construct any infrastructure that will connect to the Contractor's existing systems in accordance with the Specifications.

(3) The Government will coordinate with the Contractor to ensure the existing system can accommodate any additional load requirements necessitated by the renovation/construction. Should the Contractor determine that the existing systems require upgrades to support the additional load requirements; a price for the upgrade will be negotiated in accordance with the Changes Clause.

(b) At the Government's option, the Contractor will take ownership of system components renovated or constructed by the third-party contractor to the Specifications. Any adjustment to service requirements and the contract price as a result of these actions will be in accordance with the Changes Clause.

(c) The Contractor shall have the right to reasonably inspect the third-party contractor's construction of system components for which the Contractor will take ownership. The fixed-price hourly rate to be paid by the Government for such inspections shall be specified below and shall be subject to adjustment in accordance with the appropriate price adjustment clauses/mechanisms applicable to the monthly utility service charges under this Contract. If no rate is specified, then inspections shall be deemed to be among the utility services included in the monthly Utility Services Charge. Any inspection charge rates identified below will not be considered in evaluation of offers for awards although rates may be addressed during negotiations and must be determined fair and reasonable. The Hourly Inspection Charge Rate shall be indexed to the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers.

Hourly Inspection Charge Rate: $88.81 per hour.

(d) If third-party constructed system components are not built to the Specifications, the Contractor shall identify such components and the basis for the discrepancy to the Government with specificity. The Government may direct the Contractor to perform any work required to bring the system into compliance with the Specifications, in which case the Contractor will be compensated in accordance with the Changes Clause.

(e) In the event the parties are unable to agree on an equitable price adjustment for any of the above paragraphs, the matter shall be resolved under the Disputes provisions of this contract.

C.12 Operations and Maintenance/Quality Management

The Contractor shall maintain an Operation and Maintenance Plan / Quality Management Plan. The Plan shall ensure the provision of reliable, cost-effective, and compliant service over the term of the contract. The Contractor shall update the Plan as necessary and adhere to its requirements throughout the contract term. It shall not be materially altered without the Government's consent.

C.13 Operational Transition Plan

The Operational Transition Plan (Exhibit JE4) shall be executed during the transition period. The Plan shall not be materially altered without the Government's consent. The transition period will begin on contract award and end no later than the contract start date.

This transition period is intended to provide the Contractor time to perform additional due diligence functions, complete the joint inventory, and stand up operations in support of the contract. The Contractor will be paid for transition costs in accordance with the pricing proposal. Transition costs are defined as all costs expended during the transition period that are necessary and reasonable to assume ownership and responsibility for the system.

The Contractor is required to base its proposal on the inventory listed in the utility-specific attachment. If during the joint inventory that takes place during the transition period between contract award and

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contract start, the Contractor identifies additional inventory not listed in the utility-specific attachment, the Contractor may submit a request for an equitable adjustment to the Contracting Officer. If the Contractor determines that the inventory listed in the utility-specific attachment is overstated, the Contractor shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment as appropriate.

The Bill of Sale (BOS) must be approved/signed by the appropriate Service official(s) prior to contract start, and the Government requires sixty (60) days for the BOS coordination and approval process. This BOS process cannot begin until the agreed upon joint inventory is complete. Therefore, the Contractor's transition plan must permit sufficient time for the joint inventory to be completed and agreed upon at least sixty (60) days prior to contract start date to provide the Government the necessary sixty (60) day BOS processing period prior to conclusion of the transition period. The BOS shall include all additional infrastructure identified as a result of the joint inventory. Failure to timely submit the joint inventory may result in extension of the transition period and a delayed contract start date. Any resultant additional transition costs incurred as a result of failure to meet these timeliness requirements will only be compensated by the Government where the failure is not attributable in any way to the acts or omissions of the Contractor.

C.14 Historical, Architectural, and Landscaping Requirements

Cultural resources on Federal property are protected and managed by the Archaeological Resources Protection Act of 1979 and other applicable laws. The Contractor shall exercise care so as not to disturb or damage artifacts or fossils (should any be uncovered) during the excavation operations. Should the Contractor discover evidence of possible scientific, prehistoric, historic, or archaeological finds, the Contractor shall immediately cease work at that location and notify the Contracting Officer’s designated representative. The Contractor shall provide the said representative with complete information as to the specific location and nature of the findings. Where appropriate by reason of discovery, the Contracting Officer may order delays in time of performance or changes in the work or both. If such delays or changes are ordered, an equitable adjustment will be made in accordance with the applicable clauses of the contract.

Information regarding historical, architectural, and landscaping requirements is identified in the utility-specific attachment and/or the Technical Library.

C.15 Reserved

C.16 Latent Subsurface Inventory

For purposes of this Subsection, “latent subsurface inventory” means additional subsurface inventory not listed in the BOS (as amended) that was not reasonably discoverable during the transition period due diligence assessment. If, after the contract start date, the Contractor discovers latent subsurface inventory not covered by another provision in this Contract, such inventory shall be promptly identified to the Contracting Officer. If the Military Service determines to convey such inventory to the Contractor, then a modification will be issued to add the inventory to the Contract and the contract price adjusted as necessary and appropriate.

- END OF SECTION -

SECTION D

Packaging and Marking

None

- END OF SECTION -

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SECTION E

Inspection and Acceptance

None

- END OF SECTION -

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SECTION F

Deliveries or Performance

F.1 Contract Term

The Contractor agrees to furnish, and the Government agrees to purchase, utility distribution and/or collection services, in accordance with the terms and conditions of this contract, for a maximum period of 50 years commencing with the contract start date, provided that the Government is able to make the determination required by 10 U.S.C. § 2688(d)(2). If the Government terminates the contract, whether for convenience or default, the appropriate FAR termination clauses will apply.

F.2 Commencement of Utility Services

The Contractor shall complete all transition activities and be prepared to provide utility services on the contract start date. The contract start date, as defined below shall begin on the first day of a given month. The period of performance for the utility services contract begins at the contract start date.

Phase I	Phase II
Transition Period (Pre-performance)	Contract Start Date (Performance Period)
Contractor proposes duration of Transition Period; Transition Period begins upon execution of contract award unless a later date is specified	Transition Period ends with the conveyance of Utility System Infrastructure and Performance of Utility Services Contract begins

F.3 50-Year Performance Period

The following table will be completed upon the commencement of utility services.

Year	Period of Performance	Year	Period of Performance
1	10/1/2019 - 09/30/2020	**26**	10/1/2044 - 09/30/2045
2	10/1/2020 - 09/30/2021	**27**	10/1/2045 - 09/30/2046
3	10/1/2021 - 09/30/2022	**28**	10/1/2046 - 09/30/2047
4	10/1/2022 - 09/30/2023	**29**	10/1/2047 - 09/30/2048
5	10/1/2023 - 09/30/2024	**30**	10/1/2048 - 09/30/2049
6	10/1/2024 - 09/30/2025	**31**	10/1/2049 - 09/30/2050
7	10/1/2025 - 09/30/2026	**32**	10/1/2050 - 09/30/2051
8	10/1/2026 - 09/30/2027	**33**	10/1/2051 - 09/30/2052
9	10/1/2027 - 09/30/2028	**34**	10/1/2052 - 09/30/2053
10	10/1/2028 - 09/30/2029	**35**	10/1/2053 - 09/30/2054
11	10/1/2029 - 09/30/2030	**36**	10/1/2054 - 09/30/2055
12	10/1/2030 - 09/30/2031	**37**	10/1/2055 - 09/30/2056
13	10/1/2031 - 09/30/2032	**38**	10/1/2056 - 09/30/2057
14	10/1/2032 - 09/30/2033	**39**	10/1/2057 - 09/30/2058
15	10/1/2033 - 09/30/2034	**40**	10/1/2058 - 09/30/2059
16	10/1/2034 - 09/30/2035	**41**	10/1/2059 - 09/30/2060
17	10/1/2035 - 09/30/2036	**42**	10/1/2060 - 09/30/2061
18	10/1/2036 - 09/30/2037	**43**	10/1/2061 - 09/30/2062
19	10/1/2037 - 09/30/2038	**44**	10/1/2062 - 09/30/2063
20	10/1/2038 - 09/30/2039	**45**	10/1/2063 - 09/30/2064
21	10/1/2039 - 09/30/2040	**46**	10/1/2064 - 09/30/2065
22	10/1/2040 - 09/30/2041	**47**	10/1/2065 - 09/30/2066
23	10/1/2041 - 09/30/2042	**48**	10/1/2066 - 09/30/2067
24	10/1/2042 - 09/30/2043	**49**	10/1/2067 - 09/30/2068
25	10/1/2043 - 09/30/2044	**50**	10/1/2068 - 09/30/2069

F.4 Clauses Incorporated by Reference

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text.

The following FAR Clauses are incorporated by reference:

FARParagraph	Clause Title	IAW	Date
52.242-15	Stop Work Order	FAR 42.1305(b)(1)	Aug 1989
52.242-17	Government Delay of Work	FAR 42.1305(c)	Apr 1984

- END OF SECTION -

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SECTION G

Contract Administration Data

G.1 DFARS 252.201-7000: Contracting Officer's Representative (Dec 1991)

(a) *Definition*. *Contracting Officer's Representative* means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

G.2 Submission and Payment of Invoices

With every monthly invoice that includes a request for the initial payment of a completed ISDC/Upgrade/Connection identified in Schedule B, the Contractor shall submit an amortization schedule. The amortization schedule shall specify for each ISDC/Connection the principal and interest components of each monthly payment, the number of the payment of the total payments required, and the remaining principal balance. Any Government-initiated change to the amortization schedule will require the Contractor to submit a new amortization schedule for that project to the Contracting Officer.

The Government will pay the Contractor for utility services in accordance with the CLIN items in Section B.3, *Schedules*.

The Contractor shall submit monthly invoices electronically using the Wide Area Workflow (WAWF) system in accordance with DFARS clause, 252.232-7003, *Electronic Submission of Payment Requests and Receiving Reports*. The WAWF system is located at the following internet website: https://wawf.eb.mil. Failure to submit invoices in WAWF may result in delay of payment.

The Contractor shall prepare and submit the electronic invoice for payment by the 25th of each month for the previous month's billing period.

G.3 DFARS 252.232-7006: Wide Area WorkFlow Payment Instructions (May 2013)

(a) *Definitions.* As used in this clause—

"Department of Defense Activity Address Code (DoDAAC)" is a six (6) position code that uniquely identifies a unit, activity, or organization.

"Document type" means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

"Local processing office (LPO)" is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) *Electronic invoicing.* The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

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(c) *WAWF access.* To access WAWF, the Contractor shall—

(1) Have a designated electronic business point of contact in the System for Award Management at https://www.acquisition.gov; and

(2) Be registered to use WAWF at https://wawf.eb.mil/ following the step-by-step procedures for self-registration available at this web site.

(d) *WAWF training.* The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at https://wawf.eb.mil/

(e) *WAWF methods of document submission.* Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) *WAWF payment instructions.* The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:

(1) *Document type.* The Contractor shall use the following document type(s).

Invoice 2-in-1

(Contracting Officer: Insert applicable document type(s).
Note: If a "Combo" document type is identified but not supportable by the Contractor's business systems, an "Invoice" (stand-alone) and "Receiving Report" (stand-alone) document type may be used instead.)

(2) *Inspection/acceptance location.* The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

"Not applicable."

(3) *Document routing.* The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

Field Name in WAWF	*Data to be entered in WAWF*
Pay Official DoDAAC	HQ0490
Issue By DoDAAC	SP0600
Admin DoDAAC	SP0600
Inspect By DoDAAC	N/A
Ship To Code	N/A
Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	N/A
Service Acceptor (DoDAAC)	W55RN3
Accept at Other DoDAAC	N/A
LPO DoDAAC	N/A
DCAA Auditor DoDAAC	N/A
Other DoDAAC(s)	N/A

(4) *Payment request and supporting documentation.* The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.

(5) *WAWF email notifications.* The Contractor shall enter the e-mail address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

"Not applicable."

(g) *WAWF point of contact.*

(1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

"Not applicable."

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

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(End of clause)

G.4 Price Adjustments

Other price adjustments resulting from changed service requirements, at the request of either party to this contract and with reasonable cause, may be negotiated, at any time, in accordance with the Changes clause, if applicable. Price adjustments for noncompliance with accounting procedures shall be in accordance with Section G.5.1.

Any changes to charges, terms, or conditions as a result of negotiations shall be made part of this contract by the issuance of a bilateral contract modification. The failure of the parties to agree upon any change after a reasonable period of time shall be a dispute under the Disputes clause as defined in Section I.

G.5 Accounting Procedures

The Contractor shall maintain records of all costs and payments associated with the provision of utility service(s) to the Installation using the National Association of Regulatory Utility Commissioners (NARUC) Uniform System of Accounts (USOA), Federal Energy Regulatory Commission (FERC) USOA, the Rural Utility Service (RUS) USOA, or the American Water Works Association (AWWA) USOA, or an alternative USOA acceptable to the Government. The USOA may be supplemented by the Contractor's standard accounting procedures and generally recognized accounting practices and principles, as long as such supplemental procedures and practices are consistent with the NARUC (or an accepted alternative) USOA. The standard utilized must be consistent with the Contractor's written and established practices for measuring, assigning, and allocating costs.

G.5.1 Price Adjustment for Noncompliance with Accounting Procedures

The Government shall be entitled to a price adjustment if it finds that the contract price was adjusted as a result of the use of noncompliant or inconsistent accounting practices. The amount of the adjustment shall be the difference between the contract price that was negotiated and the price that would have been negotiated had the Contractor used compliant and established accounting practices that were in accordance with FERC, NARUC, RUS, AWWA, or other accepted alternative USOA, and were consistent with the Contractor's written and established practices. In such cases, the Government shall be entitled to a credit or cash recovery, at the Government's option, for the amount of the increased price plus interest. The interest rate shall be computed from the date of the payment by the Government until the date of repayment by the Contractor. The interest rate shall be the rate specified at 26 U.S.C. § 6621(a)(2).

G.6 Accounting and Appropriation Data

Summary for the Payment Office: The Contractor shall prepare and submit the electronic invoice for payment by the 25th of each month for the previous month's billing period.

Invoices will be paid by:
Defense Finance and Accounting Services
DFAS- INDY VP GFEBS
8899 E 56th Street
Indianapolis, IN 46249-3800
Pay Office DODAAC: HQ0490

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ACRN AA is established in the amount of $357,900.00. Funds are provided under Direct Fund Cite MIPR #11106664. A funding breakdown is provided as follows:

AA 02120182018 2020000 A22TT 131079QUTS 251J 0011106664 0040844538 021001 $357,900.00

Funding Breakdown: CLIN 0101 $357,900.00

Total Funding for ACRN AA: $357,900.00
Remaining Funds for ACRN AA: $0.00

G.7 Utility Service Charge Adjustment

At the request of either party to this contract, and with reasonable cause, the Utility Service Charge may be discussed and adjusted as a result of system increase or decrease, change in condition, or inflationary conditions in accordance with FAR 52.241-7 *Changes in Rates or Terms and Conditions of Service for Regulated Services,* whichever is applicable. Any changes to charges, terms, or conditions as a result of negotiations shall be made part of this contract by the issuance, in a timely manner, of a bilateral contract modification. The failure of the parties to agree upon any change after a reasonable period of time shall be a dispute under the Disputes clause of this contract.

The Contract Rate Charge component of the Monthly Utility Service Charge shall be recalculated on an annual basis for all work completed as of December 31st of the previous calendar year, with the new monthly rate being updated in May and applied in the upcoming year commencing with the June billing month. Recalculation shall be based on the Attachment JE9, *Contract Rate Charge Template*. Per the Attachment JE9, the Rate of Return component of the Contract Rate Charge shall be based on the most recent decision of the SCPSC in a SCE&G rate proceeding.

The annual recalculation will reflect changes as of December 31st of the previous calendar year in the rate base for the privatized system and in SCE&G's system-wide plant-in-service values and cost of service as reported in annual SCPSC or Federal Energy Regulatory Commission filings.

Notwithstanding any other provision, the cost of service basis for the Contract Rate Charge, as well as the Extraordinary Operations and Maintenance (EOM Charge) does not include pressure testing of existing lines in order to establish a higher maximum allowable operating pressure (MAOP). Such pressure testing required for the convenience of the Government shall be as approved by the Contracting Officer and in accordance with FAR 52.241-7 – *Changes in Rates or Terms and Conditions of Service for Regulated Services.*

Any changes to the Contract Rate Charge is subject to the availability of funds and the Contracting Officer's approval.

- END OF SECTION -

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SECTION H

Special Contract Requirements

H.1 Mobilization and Other Contingencies

In the event of troop mobilization or other contingencies, the Contractor will be expected to promptly take whatever measures are needed to meet any new demands placed upon it, to include extended work hours and expansion of the contract work force.

Extra work effort under these circumstances may entitle the Contractor to equitable adjustment under the Changes clause.

H.2 Insurance Requirements

H.2.1 Insurance Certificate

Contractor shall deliver or cause to be delivered upon execution of this contract (and thereafter not less than thirty (30) days prior to the expiration date of each policy furnished pursuant to this contract) to the Government a certificate of insurance evidencing the insurance required by this contract. Each certificate provided shall clearly state the contract number. The Contractor cannot undertake work under the Contract until the certificate of insurance is accepted by the Contracting Officer.

H.2.2 Types of Insurance

During the entire period this contract shall be in effect, the Contractor and its subcontractors at any tier shall carry and maintain the following:

H.2.2.1 General Liability

Commercial general liability insurance with a minimum combined single limit of $1,000,000 per occurrence and $2,000,000 in the aggregate for all premises and operations, including products/completed operations. The policy shall include coverage for bodily injury, including death, and property damage arising out of the acts or omissions by or on behalf of the Contractor by any invitee or any other person or organization, or involving any owned, non-owned, or hired automotive equipment in connection with the Contractor's activities. The policy shall also include broad form property damage and shall cover independent contractors. The policy shall include coverage for hazards referred to as XCU (explosion, collapse, and underground).

H.2.2.2 Automobile Liability

Comprehensive automobile liability insurance with a combined single limit of $1,000,000 per occurrence for bodily injury and property damage. Coverage shall include owned, hired, and non-owned vehicles.

H.2.2.3 Workers' Compensation and Employer's Liability

If and to the extent required by law, workers' compensation and employer's liability insurance. Workers' compensation coverage is to be provided in compliance with applicable laws and employer's liability limits shall be at least $500,000.

H.2.2.4 Umbrella/Excess Liability Coverage

Umbrella or Excess Liability coverage in an amount of $1,000,000 per occurrence and $1,000,000 in the aggregate. Coverage is to be in excess of commercial general liability, automobile liability, and employer liability.

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H.2.3 General

All policies of insurance which this contract requires the Contractor to carry and maintain or cause to be carried or maintained pursuant to this contract shall be with insurance companies who have an A.M. Best Financial Strength Rating of A- or better and a Financial Size Category of VIII or higher.. All such policies of insurance shall list the Government as additional insured, except for workers' compensation. Each such policy shall provide that any losses shall be payable notwithstanding any act or failure to act or negligence of Contractor or Government or any other person; provide that no cancellation, reduction in amount, or material change in coverage thereof shall be effective until at least sixty (60) days after receipt by Government of written notice thereof; provide that the insurer shall have no right of subrogation against the Government; and be reasonably satisfactory to the Government in all other respects. In no circumstances will the Contractor be entitled to assign to any third party rights of action which the Contractor may have against the Government. The foregoing notwithstanding, any cancellation of insurance coverage based on nonpayment of the premium shall be effective upon ten (10) days written notice to the Government. The Contractor understands and agrees that cancellation of any insurance coverage required to be carried and maintained by the Contractor under this contract will constitute a failure to comply with the terms of this contract.

H.2.4 Self-insurance

The requirements to maintain insurance under Section H, *Insurance Requirements*, may be met by the use of self-insurance only under the following conditions and with the express **prior** written approval of the Contracting Officer:

H.2.4.1 Submittals

If the Contractor desires to self-insure, the Contractor shall submit to the Contracting Officer, in writing, a request to self-insure. When submitting any documents under this provision, the Contractor shall apprise the Contracting Officer of any such documents that constitute confidential or proprietary business records, and mark those records accordingly. The Contracting Officer may request some or all of the following information, to the extent the Contractor maintains such information, on the Contractor's proposed self-insurance program—

(1) A complete description of the program, including any resolution of the board of directors authorizing and adopting coverage, including types of risks, limits of coverage, assignments of safety and loss control, and legal service responsibilities;
(2) If available, the corporate insurance manual;
(3) The terms regarding insurance coverage for any Government property;
(4) The Contractor's latest financial statements;
(5) Loss history and premiums history;
(6) The means by which the self-insurance will be funded;
(7) Claims administration policy, practices, and procedures;
(8) The method of projecting losses; and
(9) A disclosure of all captive insurance company and reinsurance agreements, including methods of computing cost.

H.2.4.2 Programs of Self Insurance

Programs of self-insurance covering Contractor's insurable risks, including the deductible portion of purchased insurance, may be approved by the Contracting Officer when examination of a program indicates that its application is in the Government's interest; such determination is within the sole discretion of the Government. The Government will not approve a program of self-insurance for workers' compensation in a jurisdiction where workers' compensation does not completely cover the employer's liability to employees, unless the Contractor—

(1) Maintains an approved program of self-insurance for any employer's liability not so covered; or

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(2) Shows that the combined cost to the Government of self-insurance for workers' compensation and commercial insurance for employer's liability will not exceed the cost of covering both kinds of risk by commercial insurance.

H.2.4.3 Approval

Once the Contracting Officer has approved a program, the Contractor must submit to that official for approval any major proposed changes to the program. Any program approval may be withdrawn if the Contracting Officer finds that either—

(1) Any part of a program does not comply with the requirements of this part and/or the criteria at FAR 31.205-19; or
(2) Conditions or situations existing at the time of approval that were a basis for original approval of the program have changed to the extent that a program change is necessary.

H.2.4.4 Qualifications

To qualify for self-insurance, the Contractor must demonstrate to the Government an ability to sustain the potential losses involved. In making the determination, the Contracting Officer shall consider the following factors:

(1) The soundness of Contractor's financial condition, including available lines of credit;
(2) The geographic dispersion of assets, so that the potential of a single loss depleting all the assets is unlikely;
(3) The history of previous losses, including frequency of occurrence and the financial impact of each loss;
(4) The type and magnitude of risk, such as minor coverage for the deductible portion of purchased insurance or major coverage for hazardous risks; and
(5) The Contractor's compliance with Federal and State laws and regulations.

H.3 Availability of Funds

Nothing in this contract shall be construed to obligate funds in advance of appropriations.

H.4 Liability

The Contractor shall indemnify and hold the Government harmless against any and all judgments, expenses, liabilities, claims, and charges of whatever kind or nature that arise from the Contractor's acts or omissions in the performance of, or as a result of its activities under, this contract, whether tortuous, contractual, or other, except to the extent such claim or charge is cognizable under the Federal Tort Claims Act, or, in regard to indemnification, to the extent the Contractor is prohibited from doing so by Federal or state law.

H.4.1 Environmental Liability

The Contractor shall indemnify, defend, save, and hold the Government harmless against any and all judgments, expenses, liabilities, claims, and charges of whatever kind or nature, resulting from the Contractor's failure to comply with Section C.10, *Environmental Compliance*. Such indemnification shall include, but is not limited to, any costs or claims arising from, or related to, any damage to property, or injury to, or death of, a person to the extent that the Contractor's failure to comply with Environmental Requirements and/or management of contaminated materials caused, or contributed to, such damage, injury, or death. The Contractor shall not be required to indemnify the Government for Losses that are both caused by pre-existing environmental conditions and not caused by the negligence, misconduct, or recklessness of the Contractor.

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H.5 Notification of Infrastructure/Service Contract Transfer

The Contractor shall provide 120-day written notice prior to any resale, transfer, or encumbrance of the system or any components thereof. Regardless of the disposition of the Contractor's property, the utility services contract can only be transferred to another entity with the Government's consent (See FAR 42.1204).

H.6 Government Termination Liability Prior to Conveyance

If for any reason conveyance of the utility system does not occur, the Government's termination liability will be limited to transition costs.

H.7 Government Repurchase Option

1. The Government may, at its sole option, repurchase the privatized system at the end of the contract term or in the event the contract is terminated for the convenience of the Government or for default.

2. The Government shall exercise its repurchase option by providing written notice to the Contractor.

3. As consideration for the repurchase, the Government shall pay the Contractor the amount of the Contractor's Unrecovered Investments in the System as defined in Paragraph 8 below. The repurchase shall become effective and the System shall become the property of the Government 120 days after the Government issues notice of its intent to exercise its repurchase option or on such later date as the Government may designate.

4. In the event of a repurchase, the system shall be transferred to the Government free of all liens and encumbrances. The Contractor and the Government shall cooperate in preparing and executing all documents required to accomplish the transfer. All information in all media (electronic, paper, and otherwise) including, without limitation, books, manuals, operating procedures, specifications, databases and maps necessary or useful for operating the System shall be transferred to the Government with the System. In addition, copies of all Contractor operations and maintenance records shall be transferred to the Government with the System.

5. To the extent the Contractor receives payments for Unrecovered Investments in accordance with this clause; the Contractor shall not be entitled to equivalent payments for Unrecovered Investments under any termination, cancellation, or similar provision of the Contract.

6. In the event of termination for default, the Government may offset against payments made as consideration for repurchase under this Section any damages, including excess reprocurement costs, it suffers as a consequence of the Contractor's default. The Government shall have no obligation to tender the repurchase price until the quantum of such damages is defined.

7. The Contractor shall maintain an up to date account of the current System repurchase price throughout the contract term based upon a methodology established by the Contractor and approved by the Government prior to contract award. Upon request, the Contractor shall make the account available to the Government with appropriate supporting documentation.

8. Definitions

a. For purposes of this Section, "Privatized System" or "System" means all fixtures and equipment used or useful for operating the utility system

b. For purposes of this Section, "Unrecovered Investments" means

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1. The purchase price for the utility system defined in Section B of the contract but only to the extent the Contractor has paid all or a portion of the purchase price to the Government without offsetting recovery;

2. Improvements or additions to the system located on Government property and approved by the Government that are:

a) identified in the Contractor's Initial System Deficiency Corrections and Renewal and Replacement Plan and subsequent Plans provided annually throughout the contract term; or
b) the result of requests for connections or connecting facilities.

However, the Contractor will only be compensated to the extent such investments have not been recovered by the Contractor in the form of payments made by or on behalf of the Government on account of such investments.

H.8 Foreign Object Damage Prevention Program

The Contractor shall comply with the Installation's foreign object damage prevention program whenever it engages in activities on or around flightlines, airfields, or runways.

H.9 Hazardous Substances

The Contractor, at its expense, must comply with all applicable laws on occupational safety and health, the handling and storage of hazardous materials, and the proper handling and disposal of hazardous wastes and hazardous substances generated by its activities. Responsibility for the costs of proper handling and disposal of hazardous wastes and hazardous substances is governed by applicable law. The terms hazardous materials, hazardous wastes, and hazardous substances are as defined in the Federal Water Pollution Control Act, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Solid Waste Disposal Act, the Clean Air Act, and the Toxic Substances Control Act, and their implementing regulations, as they may be amended from time to time.

Any unexploded ordnance discovered on Government property by the Contractor is the responsibility of the Government and will not be disturbed by the Contractor but, upon discovery, shall be immediately reported to Installation Security, Installation Safety, and the Contracting Officer's Representative.

H.10 Interest Allowability of Capital Investment

Pursuant to the DoD Class Deviation signed March 31, 2011 and as determined by the Contracting Officer, the Contractor will be permitted to recover its interest costs associated only with capital expenditures to acquire, renovate, replace, upgrade, and/or expand utility system. Interest rates used to calculate allowable interest costs must be limited to 600 basis points above the Contract Disputes Act (CDA) interest rate (41 U.S.C. § 7109) in effect at the time the Contractor makes the capital expenditure. The Contractor shall not receive facilities capital cost of money under FAR 52.215-16. CDA interest rate(s) are determined by the Bureau of the Public Debt and are published at the following website: http://www.fms.treas.gov/prompt/index.html.

H.11 Contribution in Aid of Construction (CIAC) Tax Liability

A purchase by the Contractor of a Government utility system at less than fair market value may be treated as a CIAC and taxable income to the Contractor. As a result, the Contractor may incur an associated income tax liability. It is the responsibility of the Contractor to ensure that all transactions undertaken under the contract are in compliance with the United States Internal Revenue Service notices, guidelines,

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rules, and regulations governing the CIAC tax, and particularly the notices, guidelines, rules, and regulations governing how to determine fair market value, so that there is no CIAC tax liability to the Government. The Government will have no liability for, nor will it pay, any CIAC tax, related to the initial purchase of the utility system, for which the Contractor is liable, or may become liable because of the Contractor's performance under this contract.

H.12 Differing Site Conditions

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of –

(1) Subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or made available to offerors during the negotiation process; or

(2) Unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; *provided*, that the time prescribed in paragraph (a) of this clause for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

H.13 Future SDCs/Upgrades/ Connection Charges

Payment for Future SDCs/Upgrades/Connection Charges for which the Government agrees to pay in accordance with Section C, *SDCs/Upgrades/Connection Charges and Renewals and Replacements,* will be in addition to the monthly Utility Services Charge for the number of months agreed upon and will commence when the SDC/Upgrade/Connection is put in useful service. The amortization schedule shall specify for each SDC/Upgrade/Connection the additional monthly payment included in addition to the monthly Utility Services Charge and the number of the payment (of the total payments required).

If new SDCs/Upgrades/Connections are required as a result of a change in service requirements, the Utility Services Charge may be re-negotiated in accordance with Section G.

H.14 Disposition at Contract Expiration

(a) At least one year prior to the end of the contract, the Parties should begin discussions concerning disposition at contract expiration. The parties may mutually agree to renew the contract through execution of a follow-on contract. However, if the Parties mutually agree to forego renewal through a follow-on agreement, then the Parties should enter discussions to address disposition of the system, including possible:

(1) transition of ownership of the System from the Contractor to the Government under the Government's Repurchase Option;

(2) transition of any remaining service requirements from this contract to the Contractor's commercial or regulatory service standards; or

(3) the abandonment of the system.

(b) The total duration of any follow-on contract shall not exceed the greater of fifty (50) years or the length of time then authorized by 10 U.S.C. § 2688 or any other applicable statute.

(c) In the event that following expiration or termination of the Contract, the Government's disposition or usage of the real property upon which the utility system is located effectively results in permanent inability of the Contractor to recover its investment in the system by providing service to either the Government or other customers, the Contractor may seek reimbursement of its unrecovered investment in the system.

H.15 South Carolina Public Service Commission (SCPSC) Regulatory Approval

The contract award shall be conditioned upon the SCPSC review and approval of this utility services contract. Upon the receipt of a bilaterally executed copy of the contract, the Contractor shall expeditiously prepare a filing with the SCPSC for such review and approval. The Government shall cooperate by providing a declaration or other such reasonable documentation that might be needed to support the regulatory approval process; provided that the Contractor shall provide appropriate guidance on the need for and content of such documentation. This condition shall be removed and contract performance shall commence on the effective date of the SCPSC's approval. Should the SCPSC impose any substantive conditions on its regulatory approval that are unacceptable to either the Government or the Contractor, the parties shall negotiate in good faith to modify the contract to alleviate any objectionable provisions. Either party may terminate the contract, upon 30 days written notice, without penalty or added costs, in the event (i) SCPSC approval is not obtained within twelve (12) months from the date of contract award or (ii) the parties are unable to alleviate any objectionable provisions imposed incidental to the SCPSC's approval within four (4) months from the date of the SCPSC's final approval of the contract.

- END OF SECTION -

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SECTION I

Contract Clauses

In the event of any inconsistencies between non-mandatory FAR and DFARS clauses incorporated by reference herein or elsewhere and any clauses set forth in full text in this Contract, the full text clauses shall control.

I.1 FAR 52.252-2 Clauses Incorporated by Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

http://farsite.hill.af.mil
https://www.acquisition.gov/

(End of Clause)

I.2 FAR Clauses

The following FAR clauses are incorporated by reference:

FAR Paragraph	Clause Title	IAW	Date
52.202-1	Definitions	FAR 2.201	Nov 2013
52.203-3	Gratuities	FAR 3.202	Apr 1984
52.203-5	Covenant Against Contingent Fees	FAR 3.404	May 2014
52.203-6	Restrictions on Subcontractor Sales to the Government	FAR 3.503-2	Sep 2006
52.203-7	Anti-Kickback Procedures	FAR 3.502-3	May 2014
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	FAR 3.104-9(a)	May 2014
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	FAR 3.104-9(b)	May 2014
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	FAR 3.808(b)	Oct 2010
52.203-13	Contractor Code of Business Ethics and Conduct	FAR 3.1004(a)	Oct 2015
52.203-17	Contractor Employee Whistleblower Rights and Requirements to Inform Employees of Whistleblower Rights	FAR 3.908-9	Apr 2014
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	FAR 3.909-3(b)	Jan 2017
52.204-4	Printed or Copied Double-sided on Postconsumer Fiber Content Paper	FAR 4.303	May 2011

FAR Paragraph	Clause Title	IAW	Date
52.204-9	Personal Identity Verification of Contractor Personnel	FAR 4.1303	Jan 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	FAR 4.1403(a)	Oct 2016
52.204-13	System for Award Management Maintenance	FAR 4.1105(b)	Oct 2016
52.204-16	Commercial and Government Entity Code Reporting	FAR 4.1804(a)	Jul 2016
52.204-19	Incorporation by Reference of Representations and Certifications	FAR 4.1202(b)	Dec 2014
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities	FAR 4.2004	Jul 2018
52.207-3	Right of First Refusal of Employment	FAR 7.305(c)	May 2006
52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	FAR 9.409	Oct 2015
52.209-7	Information Regarding Responsibility Matters	FAR 9.104-7(b)	Jul 2013
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	FAR 9.104-7(c)	Jul 2013
52.215-2	Audit and Records – Negotiation	FAR 15.209(b)	Oct 2010
52.215-8	Order of Precedence – Uniform Contract Format See Section C.1 of contract	FAR 15.209(h)	Oct 1997
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns	FAR 19.1309(b)	Oct 2014
52.219-8	Utilization of Small Business Concerns	FAR 19.708(a)	Nov 2016
52.219-9	Small Business Subcontracting Plan *(DEVIATION 2018-O0013 Alternate IV)*	FAR 19.708(b)	Apr 2018 Alt IV Jan 2017
52.219-16	Liquidated Damages—Subcontracting Plan	FAR 19.708(b)(2)	Jan 1999
52.219-28	Post-Award Small Business Program Representation	FAR 19.309(c)	Jul 2013
52.222-1	Notice to the Government of Labor Disputes	FAR 22.103-5(a)	Feb 1997
52.222-3	Convict Labor	FAR 22.202	Jun 2003
52.222-4	Contract Work Hours and Safety Standards—Overtime Compensation	FAR 22.305	May 2018
52.222-21	Prohibition of Segregated Facilities	FAR 22.810(a)(1)	Apr 2015
52.222-26	Equal Opportunity	FAR 22.810(e)	Sep 2016
52.222-35	Equal Opportunity for Veterans	FAR 22.1310(a)(1)	Oct 2015

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FAR Paragraph	Clause Title	IAW	Date
52.222-36	Equal Opportunity for Workers with Disabilities	FAR 22.1408(a)	Jul 2014
52.222-37	Employment Reports on Veterans	FAR 22.1310(b)	Feb 2016
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	FAR 22.1605	Dec 2010
52.222-50	Combating Trafficking in Persons	FAR 22.1705(a)(1)	Mar 2015
52.222-54	Employment Eligibility Verification	FAR 22.1803	Oct 2015
52.223-3	Hazardous Material Identification and Material Safety Data	FAR 23.303	Jan 1997
52.223-5	Pollution Prevention and Right-to-Know Information *Alternate I*	FAR 23.1005(b)	May 2011 Alt I May 2011
52.223-6	Drug-Free Workplace	FAR 23.505	May 2001
52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners	FAR 23.804(a)(2)	Jun 2016
52.223-18	Encouraging Contractor Policies to Ban Text Messaging While Driving	FAR 23.1105	Aug 2011
52.225-13	Restrictions on Certain Foreign Purchases	FAR 25.1103(a)	Jun 2008
52.227-1	Authorization and Consent	FAR 27.201-2(a)(1)	Dec 2007
52.228-5	Insurance-Work on a Government Installation	FAR 28.310	Jan 1997
52.232-1	Payments	FAR 32.111(a)(1)	Apr 1984
52.232-8	Discounts for Prompt Payment	FAR 32.111(b)(1)	Feb 2002
52.232-11	Extras	FAR 32.111(c)(2)	Apr 1984
52.232-17	Interest	FAR 32.611(a) and (b)	May 2014
52.232-18	Availability of Funds	FAR 32.706-1(a)	Apr 1984
52.232-23	Assignment of Claims *Alternate I*	FAR 32.806(a)(1)	May 2014 Alt I Apr 1984
52.232-25	Prompt Payment	FAR 32.908(c)	Jan 2017
52.232-33	Payment by Electronic Funds Transfer - System for Award Management	FAR 32.1110(a)(1)	Jul 2013
52.232-39	Unenforceability of Unauthorized Obligations	FAR 32.706-3	Jun 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	FAR 32.009-2	Dec 2013

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FAR Paragraph	Clause Title	IAW	Date
52.233-1	Disputes *Alternate I*	FAR 33.215	May 2014 Alt I Dec 1991
52.233-3	Protest after Award	FAR 33.106(b)	Aug 1996
52.233-4	Applicable Law for Breach of Contract Claim	FAR 32.215(b)	Oct 2004
52.237-2	Protection of Government Buildings, Equipment, and Vegetation	FAR 37.110(b)	Apr 1984
52.237-3	Continuity of Services	FAR 37.110(c)	Jan 1991
52.242-13	Bankruptcy	FAR 42.903	Jul 1995
52.243-1	Changes – Fixed-Price *Alternate I*	FAR 43.205(a)(1)	Aug 1987 Alt I Apr 1984
52.243-7	Notification of Changes	FAR 43.107	Jan 2017
52.244-6	Subcontracts for Commercial Items	FAR 44.403	Jul 2018
52.246-25	Limitation of Liability – Services	FAR 46.805	Feb 1997
52.248-1	Value Engineering	FAR 48.201	Oct 2010
52.249-2	Termination for Convenience of the Government (Fixed-Price)	FAR 49.502(b)(1)(i)	Apr 2012
52.249-8	Default (Fixed-Price Supply and Service)	FAR 49.504(a)(1)	Apr 1984
52.253-1	Computer Generated Forms	FAR 53.111	Jan 1991

I.2.1 Disputes

The requirements of the Disputes clause at FAR 52.233-1 are supplemented to provide that in regard to the interpretation of retail rates, rate schedules and items directly related to rates and rate schedules provided under this contract, the parties agree to accept as authoritative the interpretation of any statewide public utility regulatory authority with jurisdiction over the contractor. The Government shall not be bound to accept as authoritative interpretations that conflict with Federal law or regulation or that are found by any administrative or judicial forum to: 1) result in discrimination against the Installation; 2) have resulted from abuse of discretion; or 3) have directly or indirectly resulted from any failure on the part of the regulatory authority or its members to comply with applicable laws and regulations.

I.3 DFARS Clauses Incorporated by Reference

The use in this contract of any Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

The following DFARS clauses are incorporated by reference:

DFARS Paragraph	Clause Title	IAW	Date
252.201-7000	Contracting Officer's Representative	DFARS 201.602-70	Dec 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	DFARS 203.171-4(a)	Sep 2011
252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DFARS 203.570-3	Dec 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	DFARS 203.970	Sep 2013
252.203-7003	Agency Office of the Inspector General	DFARS 203.1004(a)	Dec 2012
252.203-7004	Display of Hotline Posters	DFARS 203.1004(b)(2)(ii)	Oct 2016
252.204-7000	Disclosure of Information	DFARS 204.404-70(a)	Oct 2016
252.204-7003	Control of Government Personnel Work Product	DFARS 204.404-70(b)	Apr 1992
252.205-7000	Provision of Information to Cooperative Agreement Holders	DFARS 205.470	Dec 1991
252.209-7004	Subcontracting with Firms that Are Owned or Controlled by the Government of a Country that is a State Sponsor of Terrorism	DFARS 209.409	Oct 2015
252.215-7000	Pricing Adjustments	DFARS 215.408(1)	Dec 2012
252.219-7003	Small Business Subcontracting Plan (DoD Contracts)--Basic	DFARS 219.708(b)(1)(A)(1)	Apr 2018
252.223-7001	Hazard Warning Labels	DFARS 223.303	Dec 1991
252.223-7004	Drug-Free Work Force	DFARS 223.570-2	Sep 1988
252.223-7006	Prohibition on Storage, Treatment, and Disposal of Toxic and Hazardous Materials	DFARS 223.7106	Sep 2014
252.223-7008	Prohibition of Hexavalent Chromium	DFARS 223.7306	Jun 2013
252.225-7012	Preference for Certain Domestic Commodities	DFARS 225.7002-3(a)	Dec 2017
252.225-7048	Export Controlled Items	DFARS 225.7901-4	Jun 2013
252.226-7001	Utilization of Indian Organizations, Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	DFARS 226.104	Sep 2004
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	DFARS 232.7004(a)	Jun 2012
252.232-7010	Levies on Contract Payments	DFARS 232.7102	Dec 2006
252.235-7003	Frequency Authorization – Basic	DFARS 235.072(b)(1)	Mar 2014
252.236-7005	Airfield Safety Precautions	DFARS 236.570(b)(3)	Dec 1991
252.243-7002	Requests for Equitable Adjustment	DFARS 243.205-71	Dec 2012

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DFARS Paragraph	Clause Title	IAW	Date
252.244-7000	Subcontracts for Commercial Items and Commercial Components (DOD Contracts)	DFARS 244.403	Jun 2013
252.247-7023	Transportation of Supplies by Sea—Basic	DFARS 247.574(b)(1)	Apr 2014

I.4 Utility Services Clauses Incorporated by Reference

The following Utility Services FAR and DFARS clauses are incorporated herein by reference.

Paragraph	Clause Title	IAW	Date
52.241-5	Contractor's Facilities	FAR 41.501(c)(4)	Feb 1995
52.241-11	Multiple Service Locations	FAR 41.501(d)(5)	Feb 1995
252.241-7001	Government Access	DFARS 241.501-70(b)	Dec 1991

I.5 Clauses Incorporated by Reference: Construction Wage Rates Requirements

The following FAR clauses are incorporated by reference and apply to Initial System Deficiency Corrections, subsequent System Deficiency Corrections, and new connections that involve construction, alteration, or repair (including painting or decorating).

Paragraph	Clause Title	IAW	Date
52.222-5	Construction Wage Rate Requirements – Secondary Site of the Work	FAR 22.407(h)	May 2014
52.222-6	Construction Wage Rate Requirements	FAR 22.407(a)	May 2014
52.222-7	Withholding of Funds	FAR 22.407(a)	May 2014
52.222-8	Payrolls and Basic Records	FAR 22.407(a)	May 2014
52.222-9	Apprentices and Trainees	FAR 22.407(a)	Jul 2005
52.222-10	Compliance with Copeland Act Requirements	FAR 22.407(a)	Feb 1988
52.222-11	Subcontracts (Labor Standards)	FAR 22.407(a)	May 2014
52.222-12	Contract Termination – Debarment	FAR 22.407(a)	May 2014
52.222-13	Compliance with Construction Wage Rate Requirements and Related Regulations	FAR 22.407(a)	May 2014
52.222-14	Disputes Concerning Labor Standards	FAR 22.407(a)	Feb 1988
52.222-15	Certification of Eligibility	FAR 22.407(a)	May 2014

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I.6 Other Clauses and Contract Text

FAR 52.204-21 Basic Safeguarding of Covered Contractor Information Systems (Jun 2016)

(a) *Definitions*. As used in this clause--

"Covered contractor information system" means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

"Federal contract information" means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public Web sites) or simple transactional information, such as necessary to process payments.

"Information" means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

"Information system" means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

"Safeguarding" means measures or controls that are prescribed to protect information systems.

(b) Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

(i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).

(ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.

(iii) Verify and control/limit connections to and use of external information systems.

(iv) Control information posted or processed on publicly accessible information systems.

(v) Identify information system users, processes acting on behalf of users, or devices.

(vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

(vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.

(viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.

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(ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.

(x) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.

(xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.

(xii) Identify, report, and correct information and information system flaws in a timely manner.

(xiii) Provide protection from malicious code at appropriate locations within organizational information systems.

(xiv) Update malicious code protection mechanisms when new releases are available.

(xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

(2) *Other requirements*. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.

(c) *Subcontracts*. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial items, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

(End of clause)

FAR 52.241-2: Order of Precedence—Utilities (FEB 1995)

In the event of any inconsistency between the terms of this contract (including the specifications) and any rate schedule, rider, or exhibit incorporated in this contract by reference or otherwise, or any of the Contractor's rules and regulations, Section C.1, Precedence, of this contract shall control.

(End of clause)

FAR 52.241-3: Scope and Duration of Contract (FEB 1995)

(a) For the period identified in F.2, Commencement of Service, the Contractor agrees to furnish and the Government agrees to purchase the utility services as set forth in the contract.

(b) It is expressly understood that neither the Contractor nor the Government is under any obligation to continue any service under the terms and conditions of this contract beyond the expiration date.

(End of clause)

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FAR 52.241-6: Service Provisions (FEB 1995)

(a) Measurement of service.

(1) If required under the terms of the contract, the Contractor shall provide suitable metering equipment of standard manufacture, to be furnished, installed, maintained, repaired, calibrated, and read by the Contractor at its expense.

(2) When applicable, the Contractor shall read all meters at periodic intervals of approximately 30 days unless otherwise identified in this contract.

(b) Meter test.

(1) The Contractor, at its expense, shall periodically inspect and test Contractor-installed meters, if any, at intervals identified in this contract. The Government has the right to have representation during the inspection and test.

(2) At the written request of the Contracting Officer, the Contractor shall make additional tests of any or all such meters in the presence of Government representatives. The cost of such additional tests may be grounds for a request for equitable adjustment.

(c) Change in volume or character. Reasonable notice shall be given by the Contracting Officer to the Contractor regarding any material changes anticipated in the volume or characteristics of the utility service required at each location.

(d) Continuity of service and consumption. The Contractor shall use reasonable diligence to provide a regular and uninterrupted supply of service at each service location, and, unless otherwise stated in this contract, shall not be liable for damages, breach of contract or otherwise, to the Government for failure, suspension, diminution, or other variations of service occasioned by or in consequence of any cause beyond the control of the Contractor, including but not limited to acts of God or of the public enemy, fires, floods, earthquakes, or other catastrophe, strikes, or failure or breakdown of transmission or other facilities.

(End of clause)

FAR 52.241-7: Change in Rates or Terms and Conditions of Service for Regulated Services (FEB 1995).

(a) This clause applies to the extent services furnished under this contract are subject to regulation by a regulatory body. The Contractor agrees to give the Contracting Officer written notice of

(1) The filing of an application for change in rates or terms and conditions of service concurrently with the filing of the application and

(2) Any changes pending with the regulatory body as of the date of contract award. Such notice shall fully describe the proposed change. If, during the term of this contract, the regulatory body having jurisdiction approves any changes, the Contractor shall forward to the Contracting Officer a copy of such changes within 15 days after the effective date thereof. The Contractor agrees to continue furnishing service under this contract in accordance with the amended tariff, and the Government agrees to pay for such service at the higher or lower rates as of the date when such rates are made effective.

(b) The Contractor agrees that throughout the life of this contract the applicable published and unpublished rate schedule(s) shall not be in excess of the lowest cost published and unpublished rate schedule(s) available to any other customers of the same class under similar conditions of use and service.

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(c) In the event that the regulatory body promulgates any regulation concerning matters other than rates which affects this contract, the Contractor shall immediately provide a copy to the Contracting Officer. The Government shall not be bound to accept any new regulation inconsistent with Federal laws or regulations.

(d) Any changes to rates or terms and conditions of service, if in accordance with the terms of this contract, will become effective upon the issuance of a contract modification (unless otherwise specified in the contract). The effective date of the change shall be the effective date by the regulatory body. Any factors not governed by the regulatory body will have an effective date as agreed to by the parties.

(End of Clause)

FAR 52.252-6 Authorized Deviations in Clauses (Apr 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Defense Federal Acquisition Regulations Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of Clause)

DFARS 252.204-7012 Safeguarding Covered Defense Information and Cyber Incident Reporting (OCT 2016)

(a) *Definitions*. As used in this clause—

"Adequate security" means protective measures that are commensurate with the consequences and probability of loss, misuse, or unauthorized access to, or modification of information.

"Compromise" means disclosure of information to unauthorized persons, or a violation of the security policy of a system, in which unauthorized intentional or unintentional disclosure, modification, destruction, or loss of an object, or the copying of information to unauthorized media may have occurred.

"Contractor attributional/proprietary information" means information that identifies the contractor(s), whether directly or indirectly, by the grouping of information that can be traced back to the contractor(s) (e.g., program description, facility locations), personally identifiable information, as well as trade secrets, commercial or financial information, or other commercially sensitive information that is not customarily shared outside of the company.

"Controlled technical information" means technical information with military or space application that is subject to controls on the access, use, reproduction, modification, performance, display, release, disclosure, or dissemination. Controlled technical information would meet the criteria, if disseminated, for distribution statements B through F using the criteria set forth in DoD Instruction 5230.24, Distribution Statements on Technical Documents. The term does not include information that is lawfully publicly available without restrictions.

"Covered contractor information system" means an unclassified information system that is owned, or operated by or for, a contractor and that processes, stores, or transmits covered defense information.

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"Covered defense information" means unclassified controlled technical information or other information, as described in the Controlled Unclassified Information (CUI) Registry at http://www.archives.gov/cui/registry/category-list.html, that requires safeguarding or dissemination controls pursuant to and consistent with law, regulations, and Governmentwide policies, and is—

(1) Marked or otherwise identified in the contract, task order, or delivery order and provided to the contractor by or on behalf of DoD in support of the performance of the contract; or

(2) Collected, developed, received, transmitted, used, or stored by or on behalf of the contractor in support of the performance of the contract.

"Cyber incident" means actions taken through the use of computer networks that result in a compromise or an actual or potentially adverse effect on an information system and/or the information residing therein.

"Forensic analysis" means the practice of gathering, retaining, and analyzing computer-related data for investigative purposes in a manner that maintains the integrity of the data.

"Information system" means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information.

"Malicious software" means computer software or firmware intended to perform an unauthorized process that will have adverse impact on the confidentiality, integrity, or availability of an information system. This definition includes a virus, worm, Trojan horse, or other code-based entity that infects a host, as well as spyware and some forms of adware.

"Media" means physical devices or writing surfaces including, but is not limited to, magnetic tapes, optical disks, magnetic disks, large-scale integration memory chips, and printouts onto which covered defense information is recorded, stored, or printed within a covered contractor information system.

''Operationally critical support'' means supplies or services designated by the Government as critical for airlift, sealift, intermodal transportation services, or logistical support that is essential to the mobilization, deployment, or sustainment of the Armed Forces in a contingency operation.

"Rapidly report" means within 72 hours of discovery of any cyber incident.

"Technical information" means technical data or computer software, as those terms are defined in the clause at DFARS 252.227-7013, Rights in Technical Data—Noncommercial Items, regardless of whether or not the clause is incorporated in this contract. Examples of technical information include research and engineering data, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, technical orders, catalog-item identifications, data sets, studies and analyses and related information, and computer software executable code and source code.

(b) *Adequate security*. The Contractor shall provide adequate security on all covered contractor information systems. To provide adequate security, the Contractor shall implement, at a minimum, the following information security protections:

(1) For covered contractor information systems that are part of an Information Technology (IT) service or system operated on behalf of the Government, the following security requirements apply:

(i) Cloud computing services shall be subject to the security requirements specified in the clause 252.239-7010, Cloud Computing Services, of this contract.

(ii) Any other such IT service or system (i.e., other than cloud computing) shall be subject to the security requirements specified elsewhere in this contract.

(2) For covered contractor information systems that are not part of an IT service or system operated on behalf of the Government and therefore are not subject to the security requirement specified at paragraph (b)(1) of this clause, the following security requirements apply:

(i) Except as provided in paragraph (b)(2)(ii) of this clause, the covered contractor information system shall be subject to the security requirements in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, "Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations" (available via the internet at http://dx.doi.org/10.6028/NIST.SP.800-171) in effect at the time the solicitation is issued or as authorized by the Contracting Officer.

(ii)(A) The Contractor shall implement NIST SP 800-171, as soon as practical, but not later than December 31, 2017. For all contracts awarded prior to October 1, 2017, the Contractor shall notify the DoD Chief Information Officer (CIO), via email at osd.dibcsia@mail.mil, within 30 days of contract award, of any security requirements specified by NIST SP 800-171 not implemented at the time of contract award.

(B) The Contractor shall submit requests to vary from NIST SP 800-171 in writing to the Contracting Officer, for consideration by the DoD CIO. The Contractor need not implement any security requirement adjudicated by an authorized representative of the DoD CIO to be nonapplicable or to have an alternative, but equally effective, security measure that may be implemented in its place.

(C) If the DoD CIO has previously adjudicated the contractor's requests indicating that a requirement is not applicable or that an alternative security measure is equally effective, a copy of that approval shall be provided to the Contracting Officer when requesting its recognition under this contract.

(D) If the Contractor intends to use an external cloud service provider to store, process, or transmit any covered defense information in performance of this contract, the Contractor shall require and ensure that the cloud service provider meets security requirements equivalent to those established by the Government for the Federal Risk and Authorization Management Program (FedRAMP) Moderate baseline (https://www.fedramp.gov/resources/documents/) and that the cloud service provider complies with requirements in paragraphs (c) through (g) of this clause for cyber incident reporting, malicious software, media preservation and protection, access to additional

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information and equipment necessary for forensic analysis, and cyber incident damage assessment.

(3) Apply other information systems security measures when the Contractor reasonably determines that information systems security measures, in addition to those identified in paragraphs (b)(1) and (2) of this clause, may be required to provide adequate security in a dynamic environment or to accommodate special circumstances (e.g., medical devices) and any individual, isolated, or temporary deficiencies based on an assessed risk or vulnerability. These measures may be addressed in a system security plan.

(c) *Cyber incident reporting requirement.*

(1) When the Contractor discovers a cyber incident that affects a covered contractor information system or the covered defense information residing therein, or that affects the contractor's ability to perform the requirements of the contract that are designated as operationally critical support and identified in the contract, the Contractor shall—

(i) Conduct a review for evidence of compromise of covered defense information, including, but not limited to, identifying compromised computers, servers, specific data, and user accounts. This review shall also include analyzing covered contractor information system(s) that were part of the cyber incident, as well as other information systems on the Contractor's network(s), that may have been accessed as a result of the incident in order to identify compromised covered defense information, or that affect the Contractor's ability to provide operationally critical support; and

(ii) Rapidly report cyber incidents to DoD at http://dibnet.dod.mil.

(2) *Cyber incident report*. The cyber incident report shall be treated as information created by or for DoD and shall include, at a minimum, the required elements at http://dibnet.dod.mil.

(3) *Medium assurance certificate requirement.* In order to report cyber incidents in accordance with this clause, the Contractor or subcontractor shall have or acquire a DoD-approved medium assurance certificate to report cyber incidents. For information on obtaining a DoD-approved medium assurance certificate, see http://iase.disa.mil/pki/eca/Pages/index.aspx.

(d) *Malicious software.* When the Contractor or subcontractors discover and isolate malicious software in connection with a reported cyber incident, submit the malicious software to DoD Cyber Crime Center (DC3) in accordance with instructions provided by DC3 or the Contracting Officer. Do not send the malicious software to the Contracting Officer.

(e) *Media preservation and protection*. When a Contractor discovers a cyber incident has occurred, the Contractor shall preserve and protect images of all known affected information systems identified in paragraph (c)(1)(i) of this clause and all relevant monitoring/packet capture data for at least 90 days from the submission of the cyber incident report to allow DoD to request the media or decline interest.

(f) *Access to additional information or equipment necessary for forensic analysis.* Upon request by DoD, the Contractor shall provide DoD with access to additional information or equipment that is necessary to conduct a forensic analysis.

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(g) *Cyber incident damage assessment activities*. If DoD elects to conduct a damage assessment, the Contracting Officer will request that the Contractor provide all of the damage assessment information gathered in accordance with paragraph (e) of this clause.

(h) *DoD safeguarding and use of contractor attributional/proprietary information.* The Government shall protect against the unauthorized use or release of information obtained from the contractor (or derived from information obtained from the contractor) under this clause that includes contractor attributional/proprietary information, including such information submitted in accordance with paragraph (c). To the maximum extent practicable, the Contractor shall identify and mark attributional/proprietary information. In making an authorized release of such information, the Government will implement appropriate procedures to minimize the contractor attributional/proprietary information that is included in such authorized release, seeking to include only that information that is necessary for the authorized purpose(s) for which the information is being released.

(i) *Use and release of contractor attributional/proprietary information not created by or for DoD.* Information that is obtained from the contractor (or derived from information obtained from the contractor) under this clause that is not created by or for DoD is authorized to be released outside of DoD—

(1) To entities with missions that may be affected by such information;

(2) To entities that may be called upon to assist in the diagnosis, detection, or mitigation of cyber incidents;

(3) To Government entities that conduct counterintelligence or law enforcement investigations;

(4) For national security purposes, including cyber situational awareness and defense purposes (including with Defense Industrial Base (DIB) participants in the program at 32 CFR part 236); or

(5) To a support services contractor ("recipient") that is directly supporting Government activities under a contract that includes the clause at 252.204-7009, Limitations on the Use or Disclosure of Third-Party Contractor Reported Cyber Incident Information.

(j) *Use and release of contractor attributional/proprietary information created by or for DoD.* Information that is obtained from the contractor (or derived from information obtained from the contractor) under this clause that is created by or for DoD (including the information submitted pursuant to paragraph (c) of this clause) is authorized to be used and released outside of DoD for purposes and activities authorized by paragraph (i) of this clause, and for any other lawful Government purpose or activity, subject to all applicable statutory, regulatory, and policy based restrictions on the Government's use and release of such information.

(k) The Contractor shall conduct activities under this clause in accordance with applicable laws and regulations on the interception, monitoring, access, use, and disclosure of electronic communications and data.

(l) *Other safeguarding or reporting requirements.* The safeguarding and cyber incident reporting required by this clause in no way abrogates the Contractor's responsibility for other safeguarding or cyber incident reporting pertaining to its unclassified information systems as required by other applicable clauses of this contract, or as a result of other applicable U.S. Government statutory or regulatory requirements.

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(m) *Subcontracts*. The Contractor shall—

(1) Include this clause, including this paragraph (m), in subcontracts, or similar contractual instruments, for operationally critical support, or for which subcontract performance will involve covered defense information, including subcontracts for commercial items, without alteration, except to identify the parties. The Contractor shall determine if the information required for subcontractor performance retains its identity as covered defense information and will require protection under this clause, and, if necessary, consult with the Contracting Officer; and

(2) Require subcontractors to—

(i) Notify the prime Contractor (or next higher-tier subcontractor) when submitting a request to vary from a NIST SP 800-171 security requirement to the Contracting Officer, in accordance with paragraph (b)(2)(ii)(B) of this clause; and

(ii) Provide the incident report number, automatically assigned by DoD, to the prime Contractor (or next higher-tier subcontractor) as soon as practicable, when reporting a cyber incident to DoD as required in paragraph (c) of this clause.

(End of clause)

DFARS 252.232-7007: Limitation of Government's Obligation (APR 2014)

(a) Contract line item(s) 0001 through 0150 are incrementally funded. For these item(s), the sum of $0.00 of the total price is presently available for payment and allotted to this contract. An allotment schedule is set forth in paragraph (j) of this clause.

(b) For item(s) identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those item(s) for the Government's convenience, approximates the total amount currently allotted to the contract. The Contractor is not authorized to continue work on those item(s) beyond that point. The Government will not be obligated in any event to reimburse the Contractor in excess of the amount allotted to the contract for those item(s) regardless of anything to the contrary in the clause entitled "Termination for Convenience of the Government." As used in this clause, the total amount payable by the Government in the event of termination of applicable contract line item(s) for convenience includes costs, profit, and estimated termination settlement costs for those item(s).

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (j) of this clause, the Contractor will notify the Contracting Officer in writing at least ninety (90) days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount then allotted to the contract for performance of the applicable item(s). The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of applicable line items up to the next scheduled date for allotment of funds identified in paragraph (j) of this clause, or to a mutually agreed upon substitute date. The notification will also advise the Contracting Officer of the estimated amount of additional funds that will be required for the timely performance of the item(s) funded pursuant to this clause, for a subsequent period as may be specified in the allotment schedule in paragraph (j) of this clause or otherwise agreed to by the parties. If after such notification additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause of this contract entitled "Termination for Convenience of the Government."

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(d) When additional funds are allotted for continued performance of the contract line item(s) identified in paragraph (a) of this clause, the parties will agree as to the period of contract performance which will be covered by the funds. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and agreed substitute date, and the contract will be modified accordingly.

(e) If, solely by reason of failure of the Government to allot additional funds, by the dates indicated below, in amounts sufficient for timely performance of the contract line item(s) identified in paragraph (a) of this clause, the Contractor incurs additional costs or is delayed in the performance of the work under this contract and if additional funds are allotted, an equitable adjustment will be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the item(s), or in the time of delivery, or both. Failure to agree to any such equitable adjustment hereunder will be a dispute concerning a question of fact within the meaning of the clause entitled "Disputes."

(f) The Government may at any time prior to termination allot additional funds for the performance of the contract line item(s) identified in paragraph (a) of this clause.

(g) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default." The provisions of this clause are limited to the work and allotment of funds for the contract line item(s) set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded except with regard to the rights or obligations of the parties concerning equitable adjustments negotiated under paragraphs (d) and (e) of this clause.

(h) Nothing in this clause affects the right of the Government to terminate this contract pursuant to the clause of this contract entitled "Termination for Convenience of the Government."

(i) Nothing in this clause shall be construed as authorization of voluntary services whose acceptance is otherwise prohibited under 31 U.S.C. 1342.

(j) The parties contemplate that the Government will allot funds to this contract in accordance with Section B.3, *Schedule.*

(End of clause)

I-0001 I.I28.01 FEDERAL, STATE, AND LOCAL TAXES (DLA Energy NOV 2011) (DEVIATION)

(a) As used in this contract provision—

(1) **After-imposed tax** means any new or increased Federal, State, or local tax that the Contractor is required to pay or bear the burden of as the result of legislative, judicial, or administrative action taking effect after the contract date.

(2) **After-relieved tax** means any amount of Federal, State, or local tax that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear the burden of, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(3) **All applicable Federal and State taxes** means all excise taxes that the taxing authority is imposing and collecting on the transactions or property covered by this contract pursuant to written ruling or regulation in effect on the contract date.

(4) **Contract date** means the date set for bid opening or, if this is a negotiated contract or a modification, the date set for final revised prices.

(5) **Local taxes** means taxes levied by the political subdivisions of the States, District of Columbia, or outlying areas of the United States, e.g., cities and counties.

(6) **Outlying areas** means—

(i) **Commonwealths.** Puerto Rico and the Northern Mariana Islands;

(ii) **Territories.** American Samoa, Guam, and the U.S. Virgin Islands; and

(iii) Minor outlying islands. Baker Island; Howland Island, Jarvis Island; Johnston Atoll; Kingman Reef; Midway Islands; Navassa Island; Palmyra Atoll; and Wake Atoll.

(7) **State taxes** means taxes levied by the States, the District of Columbia, or outlying areas of the United States.

(8) **Tax** means taxes, duties and environmental or inspection fees, except social security or other employment taxes.

(b) The contract price includes all applicable Federal, State, and local taxes, except as otherwise provided.

(c) The contract price shall be increased by the amount of any after-imposed tax if the Contractor states in writing that the contract price does not include any contingency for such tax.

(d) The contract price shall be decreased by the amount of any after-relieved tax.

(e) The contract price shall also be decreased by the amount of any tax that the Contractor is required to pay or bear the burden of, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) The Contractor shall promptly notify the Contracting Officer of all matters relating to any tax that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(g) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

- END OF SECTION -

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SECTION J

List of Attachments, Exhibits and References

TABLE J.1-1, List of Attachments, Exhibits, and Reference Documents

Attachments	Title
JA2	Fort Jackson, SC – Natural Gas Distribution System
JA1, JA3, and JA4	RESERVED
JA5	Wage Determinations
JA6	Federal Equivalents
JA43	RESERVED
JA44	Quality Assurance Surveillance Plan (QASP)
Exhibits	**Title**
JE1	Vol. I – Natural Gas Service Interruption/Contingency and Catastrophic Loss Plan (July 20, 2018)
JE2	Vol. I – Natural Gas Operations and Maintenance/Quality Management Plan (July 20, 2018)
JE3	Vol. I – Natural Gas Initial System Deficiency Corrections/Upgrades/Connections and Renewals and Replacements Plan (July 20, 2018)
JE4	Vol. I – Natural Gas Operational Transition Plan (July 20, 2018)
JE5	Vol. III – Socioeconomic Plan (Look up)
JE6	Vol. III – Sub Contracting Plan
JE7	Vol. IV – Price Proposal (July 20, 2018)
JE8	B Schedules and Price Data Sheets (July 20, 2018)
JE9	Contract Rate Charge Template (July 20, 2018)
Reference Documents	**Title**
JR1	Bill of Sale No. XXXX (Natural Gas Distribution System, Fort Jackson, SC)

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1 CONTRACT ID CODE K	PAGE 1	OF PAGES 4

2. AMENDMENT/MODIFICATION NUMBER	3 EFFECTIVE DATE	4 REQUISITION/PURCHASE REQUISITION NUMBER	5 PROJECT NUMBER *(If applicable)*
P00001	See Block 16C		

6. ISSUED BY CODE SP0600

DEFENSE LOGISTICS AGENCY ENERGY
8725 JOHN J KINGMAN ROAD, STP 10400
FORT BELVOIR, VA 22060-6221
Buyer/Symbol Vicki Warner / DLA-Energy FEEAB
Phone (571) 767-9120
Email vicki warner@dla mil P P 8 2

7 ADMINISTERED BY *(If other than Item 6)* CODE

8 NAME AND ADDRESS OF CONTRACTOR *(Number, street, county, State and ZIP Code)*

South Carolina Electric & Gas Co
220 Operations Way MC J50
Cayce, SC, 29033
POC Felicia Howard
Phone (803) 217-9788

DUNS # 007919517

Email FHoward@scana com

CODE 1DQY6 FACILITY CODE

(X)

☐ **9A AMENDMENT OF SOLICITATION NUMBER**

9B DATED *(SEE ITEM 11)*

☒ **10A MODIFICATION OF CONTRACT/ORDER NUMBER** SP0600-18-C-8326

10B. DATED *(SEE ITEM 13)* **September 28, 2018**

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14 The hour and date specified for receipt of Offers ☐ is extended ☐ is not extended Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods (a) By completing items 8 and 15, and returning_____copies of the amendment, (b) By acknowledging receipt of this amendment on each copy of the offer submitted, or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified

12 ACCOUNTING AND APPROPRIATION DATA *(If required)*

See Section G, Accounting and Appropriation Data.

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A THIS CHANGE ORDER IS ISSUED PURSUANT TO *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NUMBER IN ITEM 10A
☐	B THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43 103(b)
☒	C THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF FAR 52 243-1 *Changes -- Fixed Price -- Alt 1*
☐	D OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office

14 DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Fort Jackson, SC – Utility Services Contract
Natural Gas Distribution Systems

See Additional Pages for further Details

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Felicia Howard, V.P. Gas Operations	Vicki L Warner, Contracting Officer DLA Energy FEEAB

15B CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B UNITED STATES OF AMERICA	16C. DATE SIGNED
Felicia Howard	3/11/19		14 Mar 2019
(Signature of person authorized to sign)		*(Signature of Contracting Officer)*	

Previous edition unusable

STANDARD FORM 30 (REV. 11/2016)
Prescribed by GSA FAR (48 CFR) 53 243

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A. The purpose of this modification is to:

1. Add CLIN 0152 Manual Reading of Secondary Meters and add CLIN 0152AA for Yr 1 (Oct 2019-Sep 2020) Manual Reading of Secondary Meters.

2 Remove and replace the Attachment JA2 *Fort Jackson, SC – Natural Gas Distribution System,* in its entirety,

3 Revise Section J – *List of Attachments, Exhibits and References*, TABLE J 1-1, *List of Attachments, Exhibits, and Reference Documents*, to remove JA6 *Federal Equivalents*,

B. SECTION B – Supplies and Services and Pries/Costs – As a result of items listed in paragraph A, Section B.3 *Schedule*, is revised as follows:

1. CLIN 0152 is added as follows:

0152 Manual Reading of Secondary Meters
Manual Reading of Secondary Meters until replaced

2 CLIN 0152AA is added as follows:

0152AA Manual Reading of 21 Secondary Meters Yr 1 (Oct 2019-Sept 2020)

C. Attachment JA2 Fort Jackson, SC – Natural Gas Distribution System is replaced in its entirety

D. SECTION J – List of Attachments, Exhibits and References – As a result of items listed in paragraph A, TABLE J 1-1, *List of Attachments, Exhibits, and Reference Documents* is revised:

FROM:

Attachments	Title
JA2	Fort Jackson, SC – Natural Gas Distribution System
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JA6	Federal Equivalents
JA43	RESERVED
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JE4	Vol I – Natural Gas Operational Transition Plan (July 20, 2018)
JE5	Vol III – Socioeconomic Plan (Look up)
JE6	Vol III – Sub Contracting Plan
JE7	Vol IV – Price Proposal (July 20, 2018)
JE8	B Schedules and Price Data Sheets (July 20, 2018)
JE9	Contract Rate Charge Template (July 20, 2018)
Reference Documents	**Title**
JR1	Bill of Sale No XXXX (Natural Gas Distribution System, Fort Jackson, SC)

TO:

Attachments	Title
JA2	Fort Jackson, SC – Natural Gas Distribution System
JA1, JA3, and JA4	RESERVED
JA5	Wage Determinations
JA43	RESERVED
JA44	Quality Assurance Surveillance Plan (QASP)
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E. The total amount obligated on this contract remains unchanged in the amount of $357,900 00

F. The total estimated contract value is increased by $6,600 from $33,658,296.00 to $33,664,896 00.

G. All other Terms and Conditions of this contract remain unchanged and in full force and effect.

– END OF MODIFICATION –

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ATTACHMENT JA2

Fort Jackson Natural Gas Distribution System

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JA2 Fort Jackson Natural Gas Distribution System

JA2.1 Fort Jackson Overview

Established in June 1917, Fort Jackson (the Installation), first known as the Sixth National Cantonment and later as Camp Jackson, has become the largest and most active Initial Entry Training Center in the United States Army. Established to answer America's call for trained fighting men in the early, ominous days of World War I, Fort Jackson has always served as the Army's pioneer in the training environment. Named in honor of Major General Andrew Jackson, a native son of the Palmetto State and the seventh president of the United States, Fort Jackson, which is located in the heart of the midlands region of South Carolina, was incorporated into the city of Columbia (the City) in 1968. The Installation's primary mission is providing the Army with trained, disciplined, motivated and physically fit Soldiers who uphold the Army's core values and are focused on teamwork. Succeeding in that mission means training in excess of 36,000 basic training and 8,000 advanced individual training Soldiers every year.

The Installation has other missions as well. Fort Jackson is home to the U.S. Army Soldier Support Institute, the U.S. Army Chaplains Center and School, and the National Center for Credibility Assessment. It also is home to the Army's Drill Sergeant School, which trains all active and Reserve instructors.

The Installation encompasses more than 52,000 acres of land with more than 100 ranges and field training sites and 1,160 buildings. Soldiers, civilians, retirees, and family members make up the Fort Jackson community that continues to grow in numbers and facilities. The Installation is home to more than 3,500 assigned active duty Soldiers and their 12,000 family members. Fort Jackson employs almost 3,500 civilians and provides services to more than 46,000 retirees and their family members. An additional 10,000 students attend courses at the Soldier Support Institute, Armed Forces Chaplaincy Center, the National Center for Credibility Assessment, and Drill Sergeant School annually.[1]

Fort Jackson has a significant economic impact on the local area, contributing $2.6 billion annually to the local economy. In addition, over 100,000 family members visit the Columbia area each year to attend basic training graduation activities, using local hotels, restaurants, and shopping areas.

JA2.1.1 Family Housing

About one-third of the 3,500 Soldiers and families live in on-post housing. Balfour-Beatty, a private contractor, is currently demolishing old quarters and building new homes. The end result will be 640 new and 210 renovated homes for Army families.

[1] Information from http://www.jackson.army.mil/sites/info/pages/292

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JA2.2 Natural Gas Distribution System Description

JA2.2.1 Fixed Equipment Inventory

The Fort Jackson natural gas distribution system consists of all appurtenances physically connected to the natural gas system between the points of demarcation (PODs) separating Government ownership from the supplier and separating the system from end-users.

The actual inventory of items sold will be in the Bill of Sale (sample shown at Attachment JR1) at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on the inventory listed in **Table 3**. However, the Contractor should use the site inspections as well as information included in the Technical Library as reference points for developing other aspects of its proposal. As described in Request for Proposal (RFP) Paragraph C, *Operational Transition Plan*, if during the joint inventory that takes place during the Transition Period between contract award and contract start, the Contractor identifies additional inventory not listed in Paragraph JA2.2.5, the Contractor may submit a request for an equitable adjustment to the Contracting Officer. If the Contractor determines the inventory listed in Paragraph JA2.2.5 is overstated, the Contractor shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment as appropriate.

Specifically excluded from the natural gas distribution system privatization package:

- Liquid propane / air backup system.
- Government-owned/Contractor-operated laundry (Facility No. 1558) standby propane system.

The Government uses the following useful lives to determine the value of the natural gas distribution system to be privatized. The design lives are not mandated to be used in the Offeror's proposal. However, the Offeror's proposal must clearly explain the use of any system component design life that significantly differs from the Government's assumed design life noted in the following table.

Component	Useful Life
Polyethylene Pipe	75 years
Steel Pipe	40 years
Pressure Reducing Stations	25 years
Valves	35 years
Meters/Regulators	25 years
Cathodic Protection	25 years

JA2.2.2 System Description

Fort Jackson is supplied natural gas by the local utility, South Carolina Electric and Gas Company (SCE&G). Gas supply for the Main Cantonment area enters the reservation boundary through a utility-owned and maintained, dual-metered, master service near the southwest area of the

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Installation and west of Gate 1 (Jackson Boulevard). Delivery pressures, according to the delivery contract, range from a high of 150 pounds per square inch (psi) during low load periods to 50 psi during the heating season. The delivery contract is for interruptible service; interruptions are most likely to occur during the heating season due to natural gas curtailment by SCE&G. During interruptions, the Installation uses a backup gas source - a liquid propane / air blending system with sufficient capacity to operate the entire Installation (except for the central energy plants). When the backup system is in operation all gas supplied by the local utility ceases. SCE&G notifies Fort Jackson when to turn off/on the natural gas supply.

Distribution System

Government ownership of gas system begins at the outside boundary of the enclosed SCE&G master meter area. The four central energy plants, the family housing areas, and a Government-owned / Contractor-operated laundry (Facility 1558) are individually metered. The laundry is equipped with a standby propane system allowing for normal operations during gas service interruptions.

The natural gas system is provided with isolation valves at key locations allowing smaller segments of the system to be taken out of service for repairs while maintaining the larger system in service. Piping sizes throughout the gas distribution system vary from ¾-inch to 10-inches. Pipe materials are steel and polyethylene (PE). Aboveground facilities have steel pipe coated with coal tar enamel, epoxy, or have factory applied polyethylene jacket.

The Fort Jackson distribution system is operated at two distinct pressures. The high pressure system operates at 75 pounds per square inch gauge (psig) while the medium high pressure (MHP) system operates at 40 psig. There are 27 pressure regulating stations reducing pressure off the high pressure system into various MHP segments of pipe. Pressure regulators further reduce pressures at each building/service points throughout the system.

JA2.2.3 Condition Assessment[2]

The Installation performs periodic leak detection surveys throughout the gas system. The latest system inspection and field survey was conducted in March 2010 to assess the system condition. Interviews were conducted with Directorate of Public Works (DPW) staff and reviewed records. The condition assessment was limited to visual inspections, discussions with operators, and review of existing records. It did not include intrusive investigation to assess material condition (e.g., no excavation to examine buried facilities). The field survey attempted to determine and verify all existing conditions, including aboveground gas lines, meters, valves, etc., and other pertinent information necessary to verify and complete existing drawings to reflect actual conditions. Without excavation, the field survey verification of gas line sizes and lengths, gas line material, size of meters and valves, etc., was limited to what could be ascertained by visually inspecting aboveground facilities and the review of existing system maps.

Field inspection discovered a lack of continuity or “locatability” within the gas system (probable causes include shorts from the steel pipe to other systems such as water lines as well as broken or cut locate wires within the PE system). This lack of continuity prevented successful locating of

[2] Condition Assessment information taken from the PBS&J *Gas Utilities Assessment Technical Report*, March 2010. The report in its entirety is included in the Technical Library.

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underground pipe in most areas of the system. As such, validation of the system maps was not possible in most instances unless excavation to examine buried facilities was allowed.

A report prepared by the U.S. Army Corps of Engineers, dated April 2008, entitled "*Demonstration of Cathodic Protection Systems for Utilities in Severely Corrosive Environments at Fort Jackson*"[3] was reviewed by PBS&J. Pipe-to-soil potential readings were taken at strategic locations at building risers and test stations within the system during the month of November 2009. These readings indicate that cathodic protection measures, while for the most part have improved since the installation of the rectifiers in 2008, are still NOT sufficiently providing protection to the steel pipe for major sections of the underground pipe. Of particular concern is the lack of significant improvement in the readings taken at the regulator stations on Sumter Avenue (main 10-inch trunkline serving west and north end of the Installation) and the apparent lack of any improvement in the readings taken at Buildings 12625 and 12656.

Visual inspection of the aboveground piping in the Fort Jackson system showed that most of the pipe had not been painted, introducing the opportunity for atmospheric corrosion. Signs of atmospheric corrosion on many segments of the aboveground pipe were observed. In addition to the regulator stations, most of the riser/regulator assemblies serving individual buildings showed signs of atmospheric corrosion. To mitigate additional corrosion, all aboveground piping has been wire brushed and painted since the publishing of this report.

A flow analysis of the distribution system was done using GASWorks 9.0 modeling software. The analysis indicated that pressure drop is within acceptable parameters for safe operation of the 75 psig gas system during the current peak demand period and for any reasonable future additions.

PBS&J's recommendations for the gas distribution system are:

1. According to CFR 49 Part 192, Subpart M, Paragraph 192.723(b.2), "for cathodically unprotected distribution lines, a leakage survey must be conducted at least once every three calendar years not exceeding 39 months." As the last survey was completed in November of 2006, it is recommended to conduct a comprehensive leak survey for all above ground and underground pipe as soon as possible.
2. Coordinate all repairs to underground pipe as identified by the leak survey so that a visual inspection and pipe condition assessment by a qualified inspector can be conducted on all exposed pipe.
3. Develop program for detailed analysis of existing cathodic protection system to eliminate electrical shorts and other causes of insufficient corrosion protection.
4. Initiate painting program for all above ground piping to mitigate atmospheric corrosion.
5. Using qualified procedures as documented in the Operations and Maintenance (O&M) manual, initiate program for the following:
    - Periodic odorant sniff test
    - Regulator & relief valve inspection

[3]The US Army Corps of Engineers report, *Demonstration of Cathodic Protection Systems for Utilities in Severely Corrosive Environments at Fort Jackson*, April 2008 is included in the Technical Library as an Appendix to the PBS&J *Gas Utilities Assessment Technical Report*, March 2010

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- Emergency valve inspections

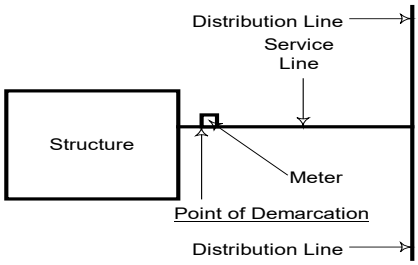
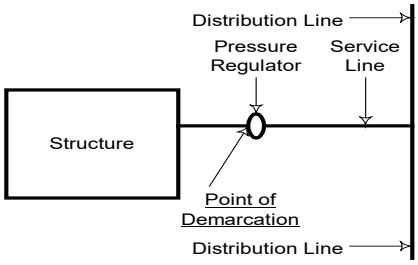
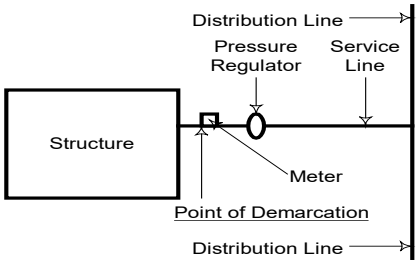
Since the publishing of the PBS&J report, Fort Jackson conducted a natural gas leak survey in August 2011. Fort Jackson then repaired the leaks identified in the report in early 2012. The next natural gas leak survey is scheduled to be conducted in late 2015.

The Installation's natural gas system provides an acceptable quality of service. DPW personnel did not indicate any significant problems with the gas system other than typical age-related problems and leakage.

JA2.2.4 Points of Demarcation

The point of demarcation (POD) for each end user is defined as the point on the distribution system where ownership changes from the utility owner to the building owner. **Table 1** identifies the type of service and location of the POD with respect to each building served by the distribution system.

TABLE 1
Points of Demarcation
Natural Gas Distribution System, Fort Jackson, South Carolina

Point of Demarcation	Applicable Scenario	Sketch
The point of demarcation is the downstream side of the natural gas meter.	Natural gas service to the building is metered.	
The point of demarcation is the downstream side of the pressure regulator.	Natural gas service to the building is regulated but not metered.	
Point of demarcation is the downstream side of the closest apparatus to the exterior of the facility.	More than one apparatus is connected to the service line feeding the facility.	

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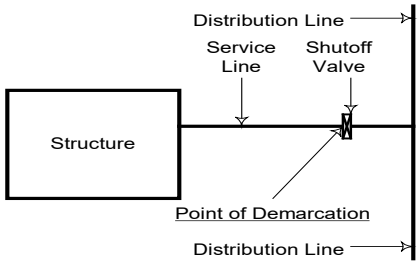
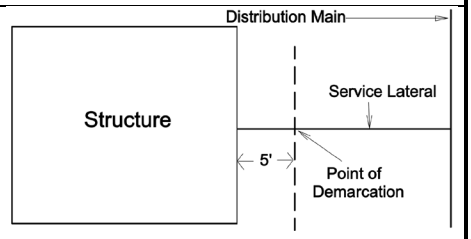
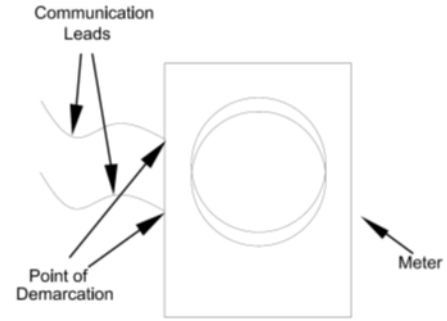
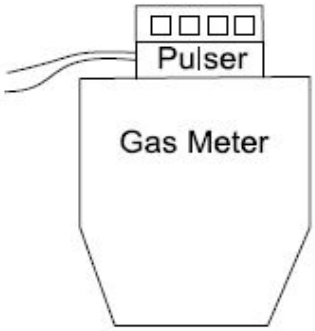
Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is downstream side of the closest shutoff valve to the exterior of the building.	No meter or regulator exists at the facility.	
POD is the five-foot line exterior to building footprint.	No meter, regulator or closest shutoff valve exists at the facility.	
Point of demarcation is the point of connection of the communication leads to the meter.	Meter with communication leads installed at facility.	
If a pulser is attached to the meter, the POD is the connection point of the pulser to the meter.	Service with a meter that has an external pulser attached to the meter exterior.	

Unique points of demarcation are identified in **Table 2**.

TABLE 2
Unique Points of Demarcation
Natural Gas Distribution System, Fort Jackson, South Carolina

Point of Demarcation	Applicable Scenario
Delivery Point - The point of demarcation is the underground isolation flange downstream of the SCE&G-owned master	SCE&G gas supply location.

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Point of Demarcation	Applicable Scenario
meter located inside the walled-in gas delivery/metering station.	
The isolation valve on the air blended propane system.	Liquid propane / air backup system.

JA2.2.5 Inventory

Table 3 identifies the inventory of the Installation's natural gas distribution system fixed assets. When not specifically identified by system drawings, the size and type of system components were estimated based on the size of the piping the component was connected to. Additionally when the year of construction was not known, it was estimated based on the age of the adjacent piping or the age of the facility served.

TABLE 3
Fixed Inventory
Natural Gas Distribution System, Fort Jackson, South Carolina

Item	Size	Quantity	Unit	Approximate Year of Installation
Pipe				
Coated & Wrapped Steel	¾-inch	16,194	Linear Feet	1965
	1-inch	16,235	Linear Feet	1965
	1¼-inch	14,996	Linear Feet	1965
	1½-inch	8,688	Linear Feet	1965
	2-inch	24,656	Linear Feet	1965
	2½-inch	680	Linear Feet	1965
	3-inch	7,326	Linear Feet	1965
	4-inch	11,886	Linear Feet	1965
	5-inch	500	Linear Feet	1965
	6-inch	8,101	Linear Feet	1965
	8-inch	3,978	Linear Feet	1965
	10-inch	3,455	Linear Feet	1965
Polyethylene (PE)	5/8-inch	320	Linear Feet	2016
	¾-inch	6,616	Linear Feet	1983
	1-inch	4,818	Linear Feet	1983
		180	Linear Feet	2016
	1¼-inch	8,320	Linear Feet	1983
		715	Linear Feet	2016

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Item	Size	Quantity	Unit	Approximate Year of Installation
	1½-inch	2,964	Linear Feet	1983
	2-inch	28,530	Linear Feet	1983
		2,425	Linear Feet	2016
	2½-inch	569	Linear Feet	1983
	3-inch	885	Linear Feet	1983
	4-inch	7,765	Linear Feet	2016
	6-inch	2,357	Linear Feet	1983
		14,965	Linear Feet	2011
		2,150	Linear Feet	2016
	8-inch	3,280	Linear Feet	1983
	10-inch	12,431	Linear Feet	1983
Pressure Reducing Stations	1-inch	4	Each	1965
	2-inch	13	Each	1965
	4-inch	5	Each	1965
	6-inch	4	Each	1965
	8-inch	1	Each	1965
Regulators	¾-inch	79	Each	1965
	1-inch	44	Each	1965
		40	Each	2016
	1¼-inch	73	Each	1965
	2-inch	131	Each	1965
	3-inch	2	Each	1965
	4-inch	6	Each	1965
	10-inch	1	Each	1965
Valves	¼-inch	10	Each	2016
	½- inch	40	Each	2016
	¾-inch	54	Each	1965
		24	Each	1983
	1-inch	18	Each	1965
		9	Each	1983
		38	Each	2016
	1¼-inch	28	Each	1965
		13	Each	1983

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Item	Size	Quantity	Unit	Approximate Year of Installation
	1½-inch	12	Each	1965
		6	Each	1983
	2-inch	40	Each	1965
		18	Each	1983
		102	Each	2016
	2½-inch	1	Each	1965
		1	Each	1983
	3-inch	18	Each	1965
		9	Each	1983
	4-inch	12	Each	1965
		5	Each	1983
	5-inch	1	Each	1965
	6-inch	4	Each	1965
		2	Each	1983
	8-inch	2	Each	1965
		1	Each	1983
	10-inch	3	Each	1965
		2	Each	1983
Meters				
Advanced	¾-inch	3	Each	2009
	1¼-inch	1	Each	2009
	1½-inch	3	Each	2009
	2-inch	5	Each	2009
	3-inch	4	Each	2009
	4-inch	1	Each	2009
Analog	¾-inch	9	Each	1987
	1-inch	6	Each	1987
	1¼-inch	1	Each	1987
	2-inch	2	Each	1987
	2½-inch	2	Each	1987
	4-inch	1	Each	1987
Cathodic Protection *(see JA2.3.17 for detail)*		1	Each	2008

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Existing fences and bollards around natural gas system assets and facilities are included in this privatization package. The Contractor shall maintain these fences and/or bollards so as to ensure proper physical security of these facilities and to prevent unauthorized entry into these facilities. Additionally, the Contractor shall be responsible for proper maintenance of the grounds within the fenced area and within 5-feet outside of the fenced area. Ground maintenance includes, but is not limited to, snow/ice removal as necessary for access and safety, mowing/trimming/weed control, and tree trimming. The Contractor shall ensure that employees who have access to these areas are in compliance with the provisions of RFP Section C paragraph, *Controlled Access Areas*.

JA2.2.6 Non-Fixed Equipment and Specialized Tools

Table 4 lists other ancillary equipment (spare parts), and **Table 5** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a proposal. Offerors shall make their own determination of the adequacy of all equipment and tools.

TABLE 4
Spare Parts
Natural Gas Distribution System, Fort Jackson, South Carolina

Quantity	Item	Make/Model	Description	Remarks
Spare parts may be available at the time of transfer. For any spare parts available, the Government and the Contractor will negotiate the value, if any, and include in the bill of sale at the time of transfer.				

TABLE 5
Specialized Vehicles and Tools
Natural Gas Distribution System, Fort Jackson, South Carolina

Quantity	Item	Make/Model	Description	Remarks
No specialized vehicles or tools for maintenance of the Installation's natural gas system will be available for purchase by the new owner of the system.				

JA2.2.7 System Manuals, Drawings, and Records

All available manuals, drawings and records, including those in the technical library will be made available to the successful Offeror upon contract award.

JA2.3 Specific Service Requirements

The service requirements for the Fort Jackson natural gas utility system are as defined in Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Fort Jackson utility system and are additive to those found in Section C. If there is a conflict between requirements described below and those described in Section C, the requirements listed below take precedence over those found in Section C.

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JA2.3.1 On-Site Contractor Facility

To facilitate response times, Fort Jackson will provide a 1-2 acre, on-site area to be used for Contractor offices, shops, and storage. The exact location of this area will be determined by Fort Jackson at a later date. Should the Contractor opt to use this area, the Contractor shall include a Transition Project showing the proposed layout of all facilities within the area. Should the Contractor opt to construct a structure or structures in this area, the Contractor is advised that temporary structures may be used; however, the temporary structures must be replaced by permanent Installation Design Guide (IDG) compatible facilities within 24 months after the contract start date. Prior to construction and/or installation of any facility, an approved Record of Environmental Consideration (REC) from the Environmental Division is required.

The Contractor shall be responsible for maintaining the grounds around the facility or facilities, as well as areas throughout Fort Jackson that are fenced in for Contractor use only, to include, but not limited to, snow/ice removal as necessary for access and safety, mowing/trimming/weed control, and tree trimming. The Contractor shall be responsible for all repair and maintenance of any structure within their assigned footprint, whether temporary or permanent.

If the Contractor opts not to use the on-site area, the Contractor must explain in its proposal how it will meet Fort Jackson's response time requirements.

JA2.3.2 Temporary Contractor Facilities

Temporary facilities may be placed on post for construction projects. Approval from the Contracting Officer's Representative (COR) is required prior to the Contractor locating a temporary facility on the Installation. The approval will be for a term commensurate with the construction period and will provide for termination of the approval upon completion of the work. Construction, use, duration of use, removal, and clean-up associated with these temporary facilities will be negotiated with the Government on a project-specific basis.

JA2.3.3 Restricted Access Areas

Contractor access will be restricted in secure areas and during times when the Installation is secured due to threat or alert. The Government may limit or restrict the right to access granted for any reason considered to be necessary (e.g., national security, public safety). If an unforeseen closure of the Installation prohibits Contractor access to a work site, the Contractor shall reschedule the work and coordinate with the COR. If the Contractor cannot gain access to Fort Jackson, the Contractor shall notify the COR via telephone, text message or email within one hour of the event.

JA2.3.4 Limited Access

Fort Jackson is a closed post and access may be limited at times with controlled gate openings and closures. Gate operating times and procedures are published by the Provost Marshal's Office. Unscheduled gate closures by the Military Police may occur at any time, and personnel entering or exiting the Installation may experience a delay due to vehicle inspection, registrations, wearing of seat belts, etc. If an unforeseen closure of the Installation prohibits Contractor access to a work site, the Contractor shall reschedule the work. The exact date and time shall be coordinated with the COR. If the Contractor cannot gain access to the Installation, the Contractor shall notify the COR within one hour via telephone, text message, or e-mail.

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JA2.3.5 Vehicles

The Contractor and its employees shall comply with vehicle registration requirements of the Installation. Currently, Contractor-owned and employee-owned vehicles shall be registered with the Fort Jackson Provost Marshal within 5 working days from date of employment and renew registrations annually thereafter. Personnel operating vehicles on Government property shall possess a valid South Carolina or other state driver's license. This registration procedure is established to facilitate access to the Installation. The Contractor shall not fuel and/or maintain personal or Contractor-owned vehicles on the Installation.

The Contractor shall maintain legible (easily readable from 20 feet by a person with 20/20 vision) markings (logo) conspicuously located on both sides of Contractor-furnished vehicles and/or equipment. Exceptions to this requirement may be granted by the COR for vehicles that are readily identifiable (e.g., refuse disposal trucks, tractors, etc.) as special use vehicles as opposed to general transportation vehicles. Exceptions may also be granted to subcontractors and Contractor-owned vehicles brought on post to perform emergency activities or to restore utility service during times of major utility outage.

JA2.3.6 Coordination Requirements Prior to Performing Work

The COR and the Contractor shall coordinate with the appropriate Installation staff personnel regarding vehicle parking areas, work staging areas, vegetative disturbance, landscaping disturbance and customer notification prior to the installation of new infrastructure or major renewals/replacements. Prior to starting any construction or repair work, the Contractor shall submit a REC to the Installation Environmental Division. The Environmental Division will respond with a completed, approved REC. Subsequent work shall be completed in compliance with the approved REC.

JA2.3.7 Planning and Programming

The Contractor shall be fully engaged with the Fort Jackson DPW in planning and programming activities for projects possibly impacting the utility system(s). Costs associated with planning / programming shall be included in the Contractor's O&M costs as part of normal operations. The following listing generally describes activities in which the Contractor may be asked to assist the DPW:

- The Contractor shall assist in the development of Requests for Action (RFAs) (See Section JA2.3.8). This may include providing detailed information to support scopes of work, budget estimates, etc. for any necessary changes to the utility system and/or services provided.
- The Contractor will be invited to and participate in meetings for projects impacting the utility system(s) such as, but not limited to, DD1391s development of Statement of Work (SOW) for Military Construction (MILCON) projects, Planning Charrette for MILCON projects, Real Property Master Planning Boards, Fort Jackson and SOW Line Item Reviews. As required by the Government Project Manager, the Contractor will attend the pre-design meetings, design charrettes, pre-construction meetings, site visits, partnering meetings, etc. The Contractor shall expect to attend 12 such meetings / events through the year.
- The Installation anticipates that it will experience growth and expansion during the Contract period necessitating new and/or upgraded facilities. Therefore, as part of its regular utility

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services under the monthly utility service charge, the Contractor must maintain capability to prepare and provide in a timely manner complete designs for such facilities, including site maps, sketches, and / or drawings.

- The Contractor shall respond to requests from the Government for new/upgraded facilities and/or demolition of existing facilities. The Contractor shall coordinate the design and construction of such facilities with the Government, Architect/Engineer, and construction contractors.
- The Contractor shall identify future project requirements as well as system deficiencies. The Contractor shall identify the specific utility requirements for each project and prepare designs and project cost proposals.
- The Contractor shall participate in strategic planning and propose long-term initiatives.
- The Contractor shall provide supporting information to assist the Government in developing budget estimates for unfunded projects.
- The Contractor shall maintain open dialog with the DPW and respond to questions within a timely manner.

JA2.3.8 Request for Action Process

The following language GENERALLY describes the process for an RFA and may not be all inclusive. It is provided for informational purposes only, and the Government is not binding itself to follow these steps. Nonetheless, the current process is as follows: (*Abbreviations: PM – DPW Project Manager; KO – Contracting Officer; COR - Contracting Officer's Representative; UP – Utility Privatization Contractor.*)

STEP 1: The PM prepares SOW and provides to the COR. The COR then forwards to the KO and the KO contacts the UP Contractor regarding the potential project.

STEP 2: The PM develops an Independent Government Estimate (IGE) and provides to the COR and KO.

STEP 3: The UP Contractor identifies specific utility system requirements for the project, develops a scope of work, detailed cost estimate, sketch, period of performance, and project schedule. The UP Contractor shall also identify any applicable increase/decrease to the O&M/Renewals & Replacements (R&R).

STEP 4: The KO, COR, and PM review the UP Contractor's proposal.

STEP 5: The UP Contractor, KO, COR, and PM discuss and agree on price and schedule.

STEP 6: The PM provides the COR with funds and work order.

STEP 7: Funds are provided to the KO.

STEP 8: The KO issues a modification.

STEP 9: The PM and/or general contractor coordinates with the UP Contractor regarding the schedule.

STEP 10: The UP Contractor completes Quality Control (QC) and Inspections.

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STEP 11: The UP Contractor invoices for the project.

STEP 12: Modify the UP contract to include O&M and R&R for the added assets.

JA2.3.9 Mapping Requirements

Maps shall be prepared according to the following specifications:

a. All maps and associated data must comply with the latest version of Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE) available at http://www.sdsfieonline.org/.

b. Due north on the maps will be as viewed from the bottom of the maps. Rotation and translation of coordinate systems will not be allowed nor will orientation to Magnetic North. The Magnetic North orientation view may be rotated for plotting purposes but the orientation of the maps must be geographically correct when selecting 'top view'.

c. The maps will contain a labeled coordinate grid with spacing appropriate to the map extents. For instance, a map scale of 1"=30' will have coordinates labeled at 100' intervals north/south and east/west.

d. All natural gas distribution utility system components shall be clearly labeled as to size and material on the maps.

JA2.3.10 Updated Utility Maps

The Contractor is required to provide electronically (GIS format) an updated set of utility maps (complete) annually, or more often upon reasonable request. Additionally, the Contractor shall update its utility maps within 180 calendar days for any major system changes to include new construction or demolition of system components. (See also Section C.5.1.5, *Record Drawings and Utility System Maps*). The Contractor shall coordinate with the COR to notify the DPW Real Estate office of the number of components (including linear feet of pipe) removed from or added to service, as well as the capacity changes concurrent with the annual map update submittals.

JA2.3.11 Disposition of Removed or Salvaged Materials

Disposition of facilities and material removed from a system shall be the responsibility of the Contractor. If the cost structure of this contract is dependent upon in-place value, the salvage value of equipment removed from service prior to the end of its useful life shall be deducted from the in-place value of the system.

JA2.3.12 Component Replacement

Infrastructure not used after construction can be abandoned in place, provided the abandoned infrastructure poses no immediate or future health, safety, operational, or environmental risks in compliance with industry standards and provided written approval is received from the COR. However, unsightly abandoned infrastructure may be required to be removed and disposed of properly as may be practical or common practice. Generally, aboveground infrastructure will require demolition and removal. Infrastructure owned by the Contractor and subsequently abandoned must be clearly marked on the utility maps. Contractor is not required to mark any utility maps with abandoned plant items that are note and never were owned by Contractor.

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JA2.3.13 Excavation Marking Process

JA2.3.13.1 Contractor-Provided Markings

The Contractor shall endeavor to mark all utilities within three (3) days of notification. In some cases, where non-metallic lines do not have tracer wires, it may take longer to locate the lines. In these instances, the Contractor shall make necessary notifications about a possible delay in the marking process. The Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the utility marking process. Generally, utility lines will be marked with pin flags or spray paint. Historically, Fort Jackson has processed 50 dig permits per month.

JA2.3.13.2 Contractor Excavation Requirements

The Contractor shall obtain digging permits from the DPW before any drilling, digging, or excavation is undertaken. Permits shall identify all underground utilities within 5 feet of the designated area. Since utility marking is an inherently imprecise process, excavation within 2.5 feet on either side of the marked utilities will be done by hand. The Contractor shall be responsible for all repairs, costs, and damages due to his excavations that fail to comply with the DPW digging permit process and the requirements listed herein; this includes excavations extending beyond areas that have been cleared for excavation. An approved REC is required from the Environmental Division prior to any excavation.

The Contractor shall be responsible for re-establishing vegetative turf at all disturbed locations within 30 days of work completion. If the project work is performed during a non-growing season, the Contractor shall provide erosion control measures until permanent vegetation growth can be established. Permanent vegetative growth shall be considered growth that matches or exceeds the quality and density of the immediate surrounding grounds. The Contractor shall inform the COR within 14 calendar days of the completion of work.

JA2.3.14 System Survey and Assessment / Utility Record Drawings

The Contractor shall initiate a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings. Production and maintenance of record drawings shall be in accordance with *Section C.5.1.5, Record Drawings & Utility System Maps*, and all work shall be compatible with the latest versions of SDSFIE (see JA2.3.9). The Contractor will provide georeferenced data in a format that can be readily used in GIS (widely used by DoD and external agencies). This effort will include a comprehensive record search, physical survey work, and may include some excavation to ascertain line location, type, and condition. The project to survey and update record drawings must be completed no later than one year after the contract start date. Changes or modifications thereafter, shall be submitted to the COR and DPW Fort Jackson annually, or more often upon reasonable request.

JA2.3.15 Computerized Model

The Contractor shall incorporate the privatized system into its computerized utility system model **to implement contingency studies, reliability and load analysis. The model shall reflect major system components and attributes. This model shall be of sufficient accuracy and detail to be used by the Contractor to support the Installation's engineering assessments and planning activities, contingency applications, long-range plans, analyzing system faults, and addition or deletion of new services. The**

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Contractor shall provide model screen shots or reports to the Government upon reasonable request. The project to incorporate the privatized system will be completed no later than two years after the contract start date.

JA2.3.16 Installation Design Guide

The purpose of the Army IDG is to provide Army standards and serve as a tool for implementing those standards. The design standards for site planning, buildings, vehicular and pedestrian circulation, landscaping, site elements (e.g. signage, utilities), force protection, and sustainable design are provided for incorporation at each Army installation. Force protection and security measures are required for every critical facility/infrastructure regardless of ownership in support of the Army mission in accordance with the memo from Army Deputy Assistant Chief of Staff for Installation Management (DACSIM); Subject: *Designation of Utilities as Mission Essential and Vulnerable Assets*, dated 1 March 2012, as included in the Technical Library and as may be updated throughout the life of the contract.

The Government's intention is for the Contractor to set its system design standards, consistent with industry standards. However, the Contractor shall follow the IDG for all work, where appropriate for consistency in architectural appearance and functionality. The Contractor shall provide any suggested updates, to include a summary of its unique specifications, to the COR for inclusion in the IDG with its applicable construction standards and specifications before the end of the contract transition period.

JA2.3.17 Cathodic Protection System Maintenance

In 2008 a new cathodic protection (CP) system using deep well tubular ceramic anodes was designed and implemented by the US Army Corps of Engineers under the direction of the Office of the Secretary of Defense Corrosion Prevention and Control Program. The new CP system was outfitted with remote monitoring units to enable monitoring the performance of the CP system in "drive-by" mode.

Fort Jackson has a severely corrosive environment year round. The soil types vary over a depth of 1 to 5 feet, with sand at a depth of about one (1) foot deep, to loam at two (2) feet, to clay from 3-5 feet deep. This variation in types of soil and the constant high wetness throughout the year, due to an average annual rainfall of 50 inches creates corrosion cells at interfaces between the soil types. The deep well anode chosen for Fort Jackson was therefore chosen to withstand this harsher environment. The variation of the depth that bedrock was encountered also impacted the placement of the deep well anodes. The mixed metal oxide (MMO) ceramic anodes were installed in three strategic locations 50–200 feet deep below the ground. At the first location, Hill and Hardee Streets (across from the Central Energy Plant No. 2), the maximum depth reached was approximately 65 feet before bedrock was found. Two holes were drilled approximately 50 feet apart. Two ceramic MMO tubular anodes were installed in each hole. At the second location, Washington Road and Hall Street (approximately 1,000 feet from Central Energy Plant No. 3), the maximum depth reached for two holes approximately 50 feet apart was 40 feet before bedrock was found. Two ceramic MMO tubular anodes were installed in each hole. The third site, Central Energy Plant No. 1, a final depth of 80 feet was achieved before hitting bedrock. No other locations were available for the drilling of a hole, so four ceramic MMO tubular anodes were installed in the single hole.

At all three (3) deep anode groundbed locations described above, perforated PVC casings and the ceramic MMO anodes were installed and the holes filled with fine granular, conductive carbon backfill (Loresco DW3® extra-high-grade, calcined fluid petroleum coke breeze). The transmitters

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and receivers (T/R) and anode junction boxes were mounted on pre-existing power poles at each site. Each T/R was rated at 60V/34A DC maximum output. Additionally, 120 VAC 60 Hz 1 Phase power fused disconnects with switches were installed on each power pole on the opposite side of the T/R.

The Contractor shall maintain the cathodic protection system and determine if additional protection is necessary. The Government reserves the right to review the Contractor's cathodic protection system records.

JA2.3.18 Fire Control and Safety

In all cases, the Contractor shall abide by Fort Jackson's fire protection requirements. Should the Contractor choose to construct an on-site facility to locate office space, warehouse, etc., the Contractor shall permit Fire Department personnel access to its facilities to perform fire inspections and emergency response. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall comply with all local, state, NFPA and OSHA safety requirements and regulations.

Changes in O&M processes and procedures affecting fire protection shall be coordinated through the DPW and the Fire Department prior to initiation.

JA2.3.19 Environmental Issues

The Contractor shall follow all environmental rules and regulations in accordance with RFP Section C., *Environmental Compliance*.

Endangered Species

U.S. Department of the Army Regulation (AR) 200-1, "Environmental Protection and Enhancement" implements federal, state, and local environmental laws and DOD policies for preserving, protecting, conserving, and restoring the quality of the environment. All Army organizations and activities comply with applicable federal, state, and local environmental laws, regulations, and executive orders (EOs) pertaining to environmental aspects. All Contractor personnel and activities shall comply with the applicable federal, state, and local environmental laws, regulations, and EOs pertaining to environmental aspects. Environmental aspects are elements of products, activities, or services that interact with the environment. Important environmental aspects are those that result in mission or environmental impacts including natural resource alteration, i.e. consumption or conservation, and ecological resource alteration, including wetland and endangered species protection or destruction.

Protection and recovery of imperiled species and the ecosystems upon which they depend is the purpose of the Endangered Species Act (ESA) (16 USC 35). The ESA is concerned with whether the species will be harmed, whether the habitat will be harmed and/or if the action / activity / project will aid or hinder the recovery of the listed species. The Fort Jackson Environmental Division, Conservation Branch, has developed Endangered Species Management Plans as part of the Installation's Integrated Natural Resources Management Plan to address the ESA species and species of concern found within the Installation. Biological surveys conducted at Fort Jackson reveal that the federally-listed endangered Red-cockaded Woodpecker, the Rough-leaved Loosestrife (flora), and the Smooth Coneflower (flora) inhabit locations on the Installation. Should the Contractor encounter (or suspect an encounter with) any of the listed species identified (or any species identified

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in the future) in the Endangered Species Management Plan, the Contractor shall immediately stop work and notify the Fort Jackson Public Works Environmental Division. All construction and/or maintenance activities of utilities will require an approved REC and consultation with the Wildlife Branch for potential impacts to the Red-cockaded Woodpecker.

JA2.3.20 Required Regulatory Reports

The Contractor shall be responsible for any reporting required by local, state and federal regulatory bodies. The Contractor shall provide the COR with timely information as requested to support reports required by the Department of the Army and other appropriate agencies.

JA2.3.21 Official Inspections

When the U.S. Environmental Protection Agency (EPA), South Carolina Department of Health and Environmental Control (DHEC), County Department of Health, the Public Service Commission, or Occupational Safety and Health Administration (OSHA) notifies the Contractor of any scheduled or unscheduled inspector visits to the Installation, the Contractor shall within one hour of notification inform the COR via e-mail or phone with subsequent e-mail confirmation.

JA2.3.22 First Response Investigation

Restoration of utility service is extremely important to DoD installations and expectations are generally covered well throughout the RFP. However, occasions do arise where it may not be immediately apparent who the responsible repair agency is. This frequently occurs where an apparent fault (e.g., line break, leak, etc.) is located near a point of demarcation. In these situations, the first responder may have to excavate to the actual fault to determine the precise location of the fault and who the appropriate repair agency is. The Contractor must plan to perform this type of "first response investigation" which may involve excavation. In these situations, the Contractor shall proceed toward fixing the problem until it is determined repair responsibility lies with another entity. The Contractor shall within one business day inform the COR of the status of the investigation via e-mail or phone with subsequent e-mail confirmation.

JA2.3.23 Response to Demand Maintenance Orders

The Contractor shall respond to demand maintenance orders, also known as service requests or service calls, issued by the Government. The Contractor shall have a telephone manned 24 hours/day, 365 days/year where the Government may call to report utility system problems. There shall be only one active phone number during duty hours and non-duty hours for the Government to call to report system problems. For all response times, the Contractor shall respond within the allotted time, take necessary corrective actions, order necessary materials, and schedule additional repairs. The Contractor's proposal shall include procedures for notifications of utility outages to the Contracting Officer or COR and the person(s) responsible for any buildings/facilities whose operations may be affected.

Additionally, the Contractor shall turn on and turn off natural gas services on the Contractor's side of the POD as requested by the Government at no additional cost to support new construction or maintenance activities. There will be a number of this type of request for turn on / turn offs over the next several years associated with new construction activity. Currently, there is one (1) turn on / turn offs each month.

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JA2.3.24 Utility Outage

Because of the critical nature of many Fort Jackson mission requirements, response to utility emergencies in and around the Installation area must be immediate. The Contractor shall respond with a knowledgeable individual to Priority 1– Emergency – Not Life or Death utility problems within 30 minutes of notification during duty hours (0700-1600, Monday – Friday) and within 1 hour during non-duty hours. Additionally, repair crews must be on scene within 1½ hours during duty hours and within 2 hours during non-duty hours. Work shall be continued until the problem is corrected or downgraded. The term "downgraded" means when the threat of loss of life or destruction of Government property has been alleviated. The above response times do not apply to conditions where inclement weather (tornadoes, ice/snow storms, major lightning storms, floods) prevents normal operation. It is recognized that extraordinary conditions will cause the response times to vary proportionally to the number and expanse of system outages, and the priority of service restoration.

The type of service request, priority and minimum response time for various service requests are furnished below.

EMERGENCY:

Emergency - Life or Death

"Life or Death" emergencies will typically be handled by Fort Jackson Emergency Response agencies, like the Military Police or Fire Department. These agencies or DPW will contact the Contractor. The Contractor shall respond immediately upon notification. Work shall be continued until the problem is corrected or downgraded.

Priority 1 - Emergency - Not Life or Death

Priority 1 requests arise due to situations that, if left uncorrected, will cause significant damage to a facility, or compromise security or safety, or negatively affect productivity. The Contractor shall respond to Priority 1 requests within 30 minutes of notification during duty hours and within 1 hour of notification during non-duty hours. Work shall be continued until the problem is corrected or downgraded.

URGENT:

Priority 2 – Health & Welfare

Priority 2 requests arise due to situations that, if left uncorrected will measurably reduce productivity, cause discomfort or inconvenience to the customer, waste resources, or create the need for additional minor repairs. The Contractor shall respond to Priority 2 requests within 24 hours. The Contractor shall complete the service orders within 5 business days unless there is a delay from the Government or the Contractor cannot procure the material.

ROUTINE:

Priority 3 – Productivity Inhibitor

Priority 3 requests arise due to situations that, if left uncorrected, will cause measurable discomfort or inconvenience to the customer, waste resources or create the need for additional minor repairs, is esthetically unpleasant or inconvenient. The Contractor shall respond to Priority 3 requests within 5 work days. The Contractor shall complete the service orders within 30 calendar days unless there is a delay from the Government or the Contractor cannot procure the material.

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JA2.3.25 Emergency Operations

The Contractor's proposal shall include its restoration priority listing for response to widespread disaster/contingency operations for all of its customers (including Fort Jackson and non-Fort Jackson customers). Restoration priorities for Fort Jackson customers shall be in accordance with Fort Jackson's emergency restoration plan. In no case will equipment and/or personnel normally dedicated or dispatched to Fort Jackson's utility system be pulled or withheld to serve the Contractor's external customers if utility service to Fort Jackson is experiencing an outage or outages that require its service. A minimal staff shall remain available to serve Fort Jackson at all times.

JA2.3.26 Planned Outages

The Contractor must coordinate any planned outages for construction or maintenance with the DPWCOR and affected customers. All outage requests shall be initiated a minimum of 14 days in advance of the outage. For outages requiring four or more hours of interruption to service, work shall be planned during off hours, such as in the evenings, weekends, or holidays depending on the customers affected.

JA2.3.27 Crisis Situations / Exercise Situations

Fort Jackson is subject to unannounced inspections and exercises that require practice evacuations of certain and/or all areas. Evacuation practices will be temporary in nature. The Contractor will be required to participate in these practice evacuation exercises as necessary. Participation in such exercises will be at no additional cost to the Government. The Contractor shall respond to these events as emergency service calls and respond to the emergency situation with qualified personnel and as soon as possible after notification during normal duty hours. In no case will response be longer than those requirements listed in Paragraph JA2.3.25. The Contractor shall advise and assist the on-scene commander until the event is terminated. The Contractor will receive advance notice of scheduled exercises. The Contractor shall expect to be involved in a maximum of four exercises per year.

JA2.3.28 Cost of Supporting Utilities

The Contractor may consume reasonable quantities of supporting utilities at no charge to include the Contractor's privatized infrastructure and administrative facilities. However, the Contractor shall fully support the Government with respect to energy / water conservation measures as described in RFP Section C, *Energy and/or Water Efficiencies and Conservation and Renewable Energy Generation*. The Contractor's usage may be separately metered by the Government to provide the Army with the capability to monitor the Contractor's use of these services and to ensure the Contractor is practicing energy conservation measures as prescribed by the Army through the U.S. Army Energy and Water Campaign Plan (AEWCP) (located at http://army-energy.hqda.pentagon.mil/programs/plan.asp).

JA2.3.29 Cultural Resources

Transfer of ownership of certain historic properties necessitates Government compliance with federal laws and regulations to meet historic preservation requirements. The final transfer documents will include an easement or covenant that includes adequate and legally enforceable restrictions or conditions to ensure long-term preservation of historic properties to meet these preservation requirements. As a result of this easement or covenant, the Contractor will likely be required to

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preserve and maintain transferred historic properties in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68).

The Contractor shall not remove or disturb any historical, archaeological, architectural or other cultural artifacts, relics, remains, or objects of antiquity.

Activities involving ground disturbance, construction, demolition, landscape modification, or alteration of the exterior or interior of a historic building have the potential to adversely affect cultural resources. Historic districts, buildings, landscape features, or archaeological sites considered eligible for the National Register of Historic Places that may be identified in the future shall be subject to the terms of this section.

The COR will coordinate with the Fort Jackson Cultural Resources Program to determine if consultation with the State Historical Preservation Office (SHPO) is required per 36 CFR 800. For non-emergency work, the COR will respond to the Contractor within 10 working days. Initial SHPO review requires 30 days and additional consultation may be required to avoid, minimize or mitigate any adverse effect. The Contractor shall not start work until notified by the COR.

In emergency situations, the Contractor is not required to consult with the COR in advance of actions to repair the utility distribution system. The Contractor shall notify the COR, who will notify SHPO, following execution of all emergency measures affecting historic properties. For emergency work, the Contractor may take steps to safeguard life and property, and restore service, but shall minimize impact to the site.

In the event archaeological materials are inadvertently encountered during construction or excavation activities, the activity must stop and the Contractor shall immediately notify the COR who will notify the Fort Jackson Cultural Resources Program.

Costs for mitigation of damage to cultural resources (restoration, repair, or replacement) due to the Contractor's failure to comply with historical and cultural preservation laws, regulations, or programs, that relate to or may arise under performance of this contract may be deducted or offset by the Government from any monies due to the Contractor with respect to the nature and severity of the damage. The Contractor shall take any corrective or remedial actions as directed by the Contracting Officer.

JA2.3.30 Standards and Regulations

The Contractor shall provide Fort Jackson with a digital copy of the Contractor's design and construction standards and regulations within 45 calendar days after the contract start date. Any updates to the standards and regulations shall be provided to Fort Jackson in electronic format on a quarterly basis.

JA2.3.31 Network Access Requirements

- Information Assurance (IA): Contractor personnel requiring access to U.S. Government Information Systems to fulfill their duties shall possess the required favorable security investigation, security clearance, formal access approval, and "need-to-know" prior to being granted access to any Government computer or computer network.
- Information Technology (IT)-I Level of Security Access is required for contractor personnel in IA positions working with infrastructure devices, IDSs, routers, System Administration or

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Network Administration, with privileged-level access to control, manage, or configure IA tools or devices, individual information systems, networks, and enclaves. At a minimum, such Contractor personnel shall require a favorably completed National Agency Check (NAC), initiation of Single Scope Background Investigation (SSBI), completion of Standard Forms SF85P, SF86, and Supplemental Questionnaire.

- IT-II Level of Security Access is required for contractor personnel in IA positions required to work with operating systems administration of common applications or enclaves, or back-up operators with limited privileged level access to control, manage, or configure information systems or devices. At a minimum, such Contractor personnel shall require a favorable review of local personnel, base / military, medical, and other security records as appropriate, initiation of a National Agency Check with Local Agency and Credit Check (NACLC), and completion of Standard Forms SF85P or SF86 and Supplemental Questionnaire.
- IT-III Level of Security Access is required for Contractor personnel in positions as normal users, power user on individual systems for configuration with non-privileged level of access to information systems and devices. At a minimum, such Contractor personnel shall require a favorable review of local personnel, base / military, medical, and other security records as appropriate, initiation of a NAC, and completion of Standard Form SF85P and the Supplemental Questionnaire.
- Contractor personnel shall not be granted access to any Government computer systems or networks until proof of compliance to the IA clearance requirements.
- Once Contractor personnel have complied with the IA requirements as reflected above, they will be granted the appropriate IT level of security access.
- Contractor personnel shall personally pick-up and sign for Government network user identification and password at the Information Assurance Office.
- Contractor employee(s) shall be solely responsible for the safeguarding of user passwords and shall immediately report any suspected compromise or loss of the password to the Information Assurance Office.
- The Contractor is responsible for notifying the COR and also the Information Assurance Office of any changes to their status or the status of their personnel.

JA2.3.32 Commercial Use

The Contractor shall obtain approval from the Government before using any utility system component and / or structure for commercial use.

JA2.4 Current Supply Arrangement

Fort Jackson is supplied natural gas by the local utility, South Carolina Electric and Gas Company. Gas supply for the Main Cantonment area enters the reservation boundary through a utility-owned and maintained, dual-metered, master service near the southwest area of the Installation and west of Gate 1 (Jackson Boulevard). Delivery pressures, according to the delivery contract, range from a high of 150 psi during low load periods to 50 psi during the heating season.

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JA2.5 Secondary Metering

Between the supply point of delivery of natural gas and the end-user points of demarcation, the Contractor shall own, operate and maintain the existing meters at locations throughout the Installation, as directed by the Contracting Officer in keeping with the guidance in RFP Section C, Sub-Metering.

In accordance with Energy Policy Act 2005, Executive Order 13423, and EISA 2007, the Army has implemented the AMP (Army Metering Program). The Contractor shall work closely with the ongoing AMP and its contractors to facilitate the installation of advanced metering equipment on existing meters with connectivity to the AMDS. This is a separate and distinct system from the Installation's UMCS (Utility Monitoring and Control System). Any meters not completed by the AMP (by award time) will subsequently be transferred upon work completion. The Contractor shall be responsible for installing new meters (per the Contracting Officer's request). For costing purposes a list of potential meters will be provided. The Contractor shall own, maintain, and replace all meters (existing and new installs), as part of this contract. Subject to the change provisions of the contract, an equitable adjustment will be negotiated between the Government and the Contractor for the ownership, maintenance and replacement of the new meters (installed by Contractor or other methods of installation). After award, any installation of new meters by other than the Contractor shall be coordinated with the UP Contractor and the Government. Information regarding new meter requirements and specifications is located in the Technical Library.

JA2.5.1 Meter Removal

Prior to the removal of an existing metering component, coordination shall be made with the Energy Management Branch to ensure proper disconnection (and reconnection) of the communication equipment connected to the metering components. Only under emergency condition shall any disconnection action occur without this coordination; notification shall be made to the COR within five calendar days.

JA2.5.2 Existing Meters

Included in **Table 3** are the existing meters (at the time of contract award) to be transferred to the Contractor. The Contractor shall provide operation, maintenance, and replacement for all meters (advanced and non-advanced) listed and all newly installed advanced meters. Operation and maintenance of advance meters shall allow communication and data collection by the UMCS. In addition, the Contractor shall provide meter readings for all non-advanced-type secondary meters in accordance with Paragraphs C, *Sub-Metering*, and Paragraph JA2.6, *Monthly Submittals*. If the Government suspects that any meter readings are erroneous, the Contractor will check the meter calibration after the government has made reasonable effort to identify why the consumption changed or justified why they think the reading is incorrect. There are currently 17 advanced meters and 21 non-advanced, manual read meters.

JA2.5.3 Required New Secondary Meters

At the present time, the Installation does not require any new meters to be installed. For any new installations, the Contractor shall adhere to the Government's specifications and installation instructions. New secondary meters shall be installed in accordance with RFP Section C paragraphs, *Future Meters* and *Operational Transition Plan,* and Fort Jackson's IDG. After

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installation, the Contractor shall maintain and read these meters in accordance with Section C, *Sub-Metering*, and JA2.6 below. For communication connection, the Contractor will coordinate with the Energy Management Branch. The Government is responsible for the equipment upstream and for the land connectivity of the system to the network.

JA2.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice.** Monthly invoices shall be submitted in accordance with the instruction in Section G.2, *Submission and Payment of Invoices*, of the contract.

2. **Outage Report**. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the COR, as identified in Section G.1, *DFARS 252.201-7000: Contracting Officer's Representative (Dec 1991)*,of the contract.

3. **Meter Reading Report**. The monthly meter reading report shall show the current and previous month's readings for all secondary meters that are not automatically read. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the Installation POC listed below:

Name:	Matt Gibbs (Energy Manager)
Address:	2601 Lee Road
	Fort Jackson, South Carolina 29207
Phone number:	803.751.6192
E-mail:	matthew.l.gibbs4.civ@mail.mil

JA2.7 Energy Saving Projects

There are currently no energy/water conservation projects underway affecting this utility privatization initiative in accordance with RFP Section C, *Energy and/or Water Efficiencies and Conservation and Renewable Energy Generation*.

JA2.8 Service Area

In accordance with RFP Section C, *Service Area*, the service area is defined as all areas within the Fort Jackson boundaries.

JA2.9 Off-Installation Sites

There are no off-installation sites / facilities included in this privatization action.

JA2.10 Specific Transition Requirements

There are no known new connection/disconnection requirements at this time.

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JA2.11 Government Recognized System Deficiencies

Table 6 provides a list of Government recognized deficiencies, the Government's approach to remedy the deficiency, and the time frame in which the deficiency should be remedied. The deficiencies listed may be physical, functional, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. In some cases, these requirements have not been quantified, nor are there project numbers assigned. They are provided to generally acquaint the Contractor with system needs, from the Government's perspective, that should be addressed over the next few years. The Contractor shall propose his approach to correct the recognized deficiencies, which may or may not be similar to the Government's approach.

TABLE 6
Recognized System Deficiencies
Natural Gas Distribution System, Fort Jackson, South Carolina

Deficiency No.	System Component	Recognized Deficiencies and the Government's Approach to Remedy	Year to be Completed
1	System Survey and Assessment / Utility Record Drawings (JA2.3.14)	Conduct a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings.	Within one year after contract start date
2	Computerized Model (JA2.3.15)	Update the existing model and maintain an accurate computerized model of the system to implement contingency studies, reliability, and load analysis.	Within two years after contract start date
3	Main Valves at SCE&G Meter Station	Install an aboveground main valve on both branches of the Government feed just outside the SCE&G Meter Station at Gate 1 (Jackson Boulevard). The Fort Jackson main valve should be located 5 feet outside the SCE&G meter regulating station. The valve should be secured by a concrete wall enclosure with chain link fence.	Within one year after contract start date
4	Coated & Wrapped Steel Pipe	Replace all coated and wrapped steel pipe and all 1965 vintage valves with PE. See Table 2 for quantities and sizes.	Within five years after contract start date
5	Facility Gas Regulators	Replace all facility gas regulators. See Table 2 for quantities and sizes.	Within five years after contract start date

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DLA Energy Utility Services

Quality Assurance Surveillance Plan

(QASP)

Template

(NOTE: In the final QASP document, delete the word "Template" above, and replace with contract number and description using the following format:

Contract No. SP0600-XX-C-XXXX

(Installation Name) – (Name of System(s))

System Owner: (Name of System Owner)

Do not include this note as part of the QASP document.)

17 May 2013

Version 1.0

Defense Logistics Agency Energy, Utility Services Division,

Internal Support Branch

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a. Operational Transition Plan *(NOTE: Remove link and insert "(removed)" after the word "Plan" after successful completion of the Operational Transition Plan…Do not include this note as part of the QASP document.)*

b. Service Interruption Contingency and Catastrophic Loss Plan

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Appendix E – CHECKLIST – Operational Transition Plan ***(NOTE: Upon successful completion of the Operational Transition Period, remove Appendix E links (including table below), and insert the text: "(removed)" after the word "Plan"…Do not include this note as part of the QASP document.)***

1. Initial Contract Documentation / Requirements	7. Joint Inventory
2. Conduct Post-Award Orientation Conference	8. Service Requirements
3. Permits and Leases/Easements	9. Records Management
4. Security Requirements	10. Environmental Compliance
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I. Introduction

a. Purpose:

1) This Quality Assurance Surveillance Plan (QASP) is an instructional/guidance document that will assist the Utility Services (US) Contracting Officer's Representative (COR) in technical observation and contract management duties on this US contract. The QASP also serves as an official document informing the System Owner (SO) of those areas of technical observation and contract management for which the COR will be involved. The QASP uses a combination of surveillance methods to adequately asses the technical and management requirements of this contract. This QASP is an attachment to the US contract. However, it is important to note that this QASP is living document that may change as needed or when the current contract is amended or if changes are needed outside the normal scope of the contract directives.

b. Government Roles and Responsibilities:

1) **Contracting Officer (KO):** Has overall responsibility for overseeing the SO's performance. The KO, through an assigned COR, monitors the SO's performance in the areas of contract compliance, contract administration, and cost control. The KO also reviews the quality of the COR's assessment of the SO's performance, to include resolving any differences between the COR's and the SO's version of events. The KO is the only individual authorized to direct the SO in the performance of his duties under the contract and to make interpretations of, and changes to, the contract that bind the Government. No payments will be made for any unauthorized supplies/services or for any unauthorized changes to the work specified herein. This includes any services performed by the SO of its own volition or at the request of an individual other than the duly appointed Contracting Officer. It is very important to remember that the Contracting Officer is the ONLY person that may obligate US Government for any changes to the contract.

2) **Contracting Officer's Representative (COR):** Has the responsibility for technical monitoring of the SO's performance, as well as assessing, recording, and reporting on the SO's compliance with the terms and conditions of the contract. The COR will ensure his/her availability to receive mandatory training prior to performing SO surveillance. The COR will maintain surveillance documentation and will notify the Installation Commander (through the KO) of any significant Performance deficiencies, and recommend

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improvements to the QASP and Performance Work Statement (PWS) throughout the life of the contract. The COR is appointed to represent the Contracting Officer on technical matters and has no authority to bind the government or direct performance not otherwise authorized and stipulated in this contract. This individual has primary responsibility for accepting, rejecting, or requiring correction of any deficiencies found in deliverables unless otherwise defined in this task order. In the event of rejection of any deliverable, the SO will be notified in writing by the Contracting Officer of the specific reasons why the deliverable was rejected.

3) **Other Key Government Personnel:** Contracting Specialist(s), US COR Program Manager and the US Contracting Team will provide contractual guidance and requirements when needed or appropriate. Any unforeseen or potential conflicts or problems can be addressed with the individuals listed but for any contractual changes, the Contracting Officer is the ONLY authority to make any change to the contract. If applicable, this QASP will be revised to include relevant POC information.

c. **System Owner (SO) Roles and Responsibilities:**

1) The SO has the responsibility for complying fully with the terms and conditions of the contract, participating as a member of the multi-functional team in the post-award management phase, maintaining and implementing a Quality Control Plan that complements the Performance Plan insuring that non-conforming contract services are identified and corrected. The SO will perform for the Government services that conform to the contract requirements and recommend changes to the contract that will provide more effective operations or eliminate unnecessary costs. The SO will be responsible for the execution of both the contractual and technical aspects of the contract performance. As the owner of the (insert type(s)) utility system(s), and performing under a utility services contract to the Government, the SO is responsible for all ownership, operations, maintenance, renewals/replacements/system deficiency corrections, and applicable compliance issues related to the system(s).

d. **General Areas to be Monitored During SO Performance:**

1) Quality of Services Provided

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i. Compliance with Contract Requirements
ii. Appropriateness of Personnel for the Task
iii. Technical Excellence

2) Timeliness of Performance / Adherence to Schedule

i. Responsiveness to Technical Direction
ii. Completion of Work Requirements
iii. Reliability

3) Cost Control

i. Demonstration of Daily Operational Efficiencies
ii. Execution of Scoped Renewal/Replacement/Upgrade Work
iii. Incorporation of Value-based Engineering Concepts
iv. Plan/Approach for Review of Contract Financial Status
v. Anticipation of Unquantified (yet reasonably expected) Utility-Related Issues
vi. Accuracy & Clarity of Billings

4) Business Relations

i. Management Effectiveness
ii. Flexibility
iii. Customer-focus
iv. Avoidance of Problems
v. Timeliness of Notification and Mitigation of Problems
   - Effectiveness of SO's Recommended Solutions
   - Effectiveness of Execution of Problem Resolution

5) Management of Key Personnel

i. Staffing Stability -- Levels and Key Personnel
ii. Qualifications & Relevant Experience of Personnel

(Note: The five general areas in I.d above may serve to provide helpful structure/direction to the COR when submitting input for the annual SO Performance Assessment and Rating System (CPARS) assessment required for the contract. Although the above represent major areas to be considered when monitoring SO performance, the list should not necessarily be considered all inclusive…Do not include this note as part of final QASP document.)

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Section II of this QASP provides further technical guidance and lists the specific operational plans associated with this Utility Services contract.

e. **Performance Standards**

1) The Description/Specifications/Work Statement identifies Government objectives and performance standards. The Government will use these standards to assess SO performance against these objectives to ensure performance is, at a minimum, satisfactory.

f. **Surveillance/Monitoring Methods**

1) Various methods exist to monitor performance. Below are examples of surveillance/monitoring methods the COR will use in the administration of this QASP. Regardless of the surveillance method, the COR will contact the SO's designated representative when a problem/defect is identified and provide the representative the details of the identified problem/defect. Examples of surveillance/monitoring methods include:

i. Direct Observation (e.g. real-time observation of utility system activities or meetings being performed by the SO)
ii. Assessment of Deliverables (e.g. verification of the timeliness and quality/sufficiency of required submittals, such as monthly outage reports and the Annual Corrections/Upgrades/ Connections/R&R Plan)
iii. Review of Invoices/Payments (e.g. verification of the accuracy of submitted invoices and payment receipts for all billable costs, to include travel and miscellaneous expenses)
iv. Sample Reviews (e.g. review of operation & maintenance procedures/plans at an unspecified/unannounced frequency)

The Inspection and Acceptance clauses (or other applicable clauses) become the basis for any actions that the Contracting Officer may deem appropriate when performance requirements are not being met or the quality is of an unsatisfactory level.

g. **Performance-Based Rating System to be Used**

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1) The SO will be annually assessed and rated for their performance and operation of the utility system listed per the contract. The Contractor Performance Assessment Reporting System (CPARS) will be utilized to perform this assessment:

    i. CPARS training can be accessed at: http://www.cpars.csd.disa.mil/ *(Use "Assessing Official Representative" role)* (Approx. 2 hrs. to complete)

The COR will establish an account in CPARS in order to officially contribute to the Government's annual assessment of the SO's performance. The COR's input will carry significant weight in the development of the Government's overall annual rating of the SO's performance under this contract. The COR will assign a rating to the SO's performance under the contract using the following table:

EXCEPTIONAL	• Performance exceeded many of the contract requirements to the Government's benefit. • Few minor problems resulted from the performance; any corrective actions taken were highly effective.
VERY GOOD	• Performance exceeded some of the contract requirements to the Government's benefit. • Some minor problems resulted from the performance; any corrective actions taken were effective.
SATISFACTORY	• Performance met all of the contract requirements. • Some minor problems resulted from the performance; corrective actions taken were satisfactory.
MARGINAL	• Performance did not meet some of the contract requirements, causing impact to the Government. • Serious problems resulted from the performance, but recovery was still possible; corrective actions taken were either marginally effective or not fully implemented.
UNSATISFACTORY	• Performance did not meet most of the contract requirements, causing impact to the Government. • Serious problems resulted from the performance, and recovery

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	was not considered likely; corrective actions taken were ineffective.

The COR's assessment and recommended rating will be reviewed by the DLA Energy Contract Specialist and Contracting Officer to ensure sufficient justification.

2) Upon completion of the Government's annual assessment and rating of the SO's performance, the assessment and rating will be officially recorded in the Past Performance Retrieval System (PPIRS). Information in PPIRS will serve as a valuable Government source of SO past performance information for future solicitations upon which the SO may offer.

   i. PPIRS training can be accessed at: http://www.ppirs.gov/webtrain/webtrain.htm

h. **Performance Documentation**

1) SO performance on this contract will be documented in the manner described below:

   ii. Acceptable performance. The Government will document performance that meets or exceeds minimum task order expectations. A Performance Report will be used for this documentation effort, and is to be used whenever the COR performs monitoring/surveillance (i.e. inspections, visits, etc.) on the UP contract. A template for this Report can be found at Appendix B. All Performance Report documentation will be placed in the COR file. It is important to note that these Performance Reports can become part of supporting documentation for appropriate actions taken under this contract.

   iii. Unacceptable performance. When unacceptable performance is observed, in addition to completing a Performance Report, the COR will complete a DD Form 2772, *Contract Discrepancy Report* (CDR). An example of this form can be found at Appendix C. This form serves as the official written notification to the SO of

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an observed contract discrepancy. *(Note: Only under unique circumstances will verbal communication be used to initially inform the SO of a potential contract discrepancy. However, in those cases, the COR will follow-up with written notification of the finding as soon as possible, coordinate it through the KO, and provide to the SO.)* As part of the CDR process:

- The SO shall acknowledge receipt of the CDR in writing.
- The SO will prepare a corrective action plan to document how the SO shall correct the unacceptable performance and avoid recurrence.
- The CDR will clearly indicate a due date by which the SO has to present this corrective action plan to the COR.
- The Government will review the SO's corrective action plan to determine acceptability.

iv. Summary of Methodology & Purpose for Performance Documentation. The reports & forms referenced in this QASP are designed to collectively serve as a traceable documented history of SO performance. These will also support recordkeeping requirements mandated by the DoD Contracting Officer's Representative Training (CORT) tool, as well as annual performance assessments mandated by CPARS. Specifically:

- **Performance Report** (Appendix B) -- Used by the COR whenever performing contract monitoring/surveillance on the UP contract. Both negative and positive aspects of the SO's performance are documented. The information recorded in Performance Reports can serve as a significant source of documented SO performance. This information can subsequently be used in developing the COR Monthly Report to the Contracting Officer.
- **DD Form 2772, *Contract Discrepancy Report* (CDR)** (Appendix C) -- Used by the COR whenever a contract discrepancy is found as a result of the COR's monitoring/surveillance activity. CDRs can serves as a significant source of documented deficient SO performance. Subsequently, CDRs can become part of supporting

documentation for appropriate Government actions taken under this contract regarding SO performance or failure to perform. CDRs, together with Performance Reports, should be used in developing the COR Monthly Report to the Contracting Officer.

- **COR Monthly Report to the Contracting Officer** (Appendix D) – Required to be produced by the COR and loaded onto the DoD CORT Tool every month. Report should serve as a compilation/summary of the results & observations from the CORs contract monitoring and surveillance activities from the past month. Both negative and positive aspects of the SO's performance are documented. The compilation of these monthly reports over the course of annual contract period of performance will serve as a significant source of documentation supporting the Government's annual CPARS assessment for the SO under this contract.

II. Specific Plans/Areas to Be Monitored Under the QASP

The QASP layout is generally structured to be consistent with the major plans that comprise the majority of the SO's tasks/responsibilities under this contract.

a. Operational Transition Plan

1) Purpose: This Plan contains the SO's approach and procedures demonstrating its ability to adequately and effectively maintain continuous utility service and minimize service impacts, while smoothly and effectively transferring responsibility and accountability for utility system capital assets, permits, personnel resources, administration, and other system responsibilities.

2) COR checklist for this Plan can be found at Appendix E.

b. Service Interruption Contingency and Catastrophic Loss Plan

1) Purpose: This Plan contains the SO's approach and procedures demonstrating its ability (during normal daily operations and during disaster/contingency situations) to receive service requests; to classify their severity; to

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appropriately respond to those requests; to provide status to the customer; and to access proper manning, materials, equipment, and vehicles.

2) COR checklist for this Plan can be found at Appendix F.

c. **Operations and Maintenance/Quality Management Plan**

1) Purpose: This Plan contains the SO's approach and procedures demonstrating its overall quality philosophy and the adequacy of procedures used to ensure that contract requirements are met (or exceeded) and that the system is being operated and maintained in a manner consistent with its long-term ability to provide reliable, cost-effective, and compliant service. The Plan also demonstrates the SO's ability to modify service practices and quality management actions as necessary to accommodate changes in legal requirements or industry standards.

2) COR checklist for this Plan can be found at Appendix G.

d. **Initial System Deficiency Corrections/Renewals and Replacements Plan**

1) Purpose: This Plan contains the SO's approach and procedures demonstrating the SO's ability to identify, plan and execute upgrade, renewal, and replacement activities to ensure a long-term efficient utility system. The Plan should demonstrate the comprehensiveness, feasibility, and effectiveness to which these activities are executed.

2) COR checklist for this Plan can be found at Appendix H.

e. **Other Areas to be Monitored**

1) In addition to the four major plans above, the QASP will also include applicable areas of responsibility/duties for which the COR – serving as the Contracting Officer's on-ground representative – should have oversight. These may include, but not be limited to, general activities such as 1) ensuring the appropriate information exchange occurs between the SO and appropriate Government representatives on contract/project-related issues, and 2) validating payment invoices submitted by the SO.

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2) COR checklist for this Plan can be found at Appendix I.

III. General Methodology Used in Building and Maintaining the Plan-Specific Checklists (Appendices D through H) in the QASP

(NOTE: As part of the final QASP document, it is beneficial to have a general discussion as to the methodology used in building its content. However, the text below will require modification prior to inclusion in the final QASP document used for a specific contract. Items a through d below, as currently shown, serves as a basis of instruction to aid the COR to initially construct the QASP document, as well as maintain thereafter…Do not include this note as part of final QASP document.)

A deliberate methodology is used to develop and maintain the content of the QASP. At any particular time, the QASP content should reflect the most current and representative areas that require government monitoring, surveillance, and/or coordination to ensure acceptable SO performance.

a. **Review Section L of the RFP**

1) This will provide an outline of the major areas to be included in each of the four main Plan-specific checklists (Appendices E though H). ***(Note: This will help build the initial structure of the checklists to be used in the template. Going forward, after the initial QASP is built, the COR should not have to refer to the RFP for structural guidance on maintaining the contract-specific QASP…Do not include this note as part of final QASP document.)***

2) Include those identified items in the appropriate Plan checklist(s).

b. **Review Section C of the RFP**

1) This will help identify potential surveillance/monitoring/coordination activities to be included in any one of the five QASP checklists, as applicable (Appendices E through I). *(Note: These "Section C" requirements become part of the actual contract upon award.)*

2) Include those identified items in the appropriate Plan checklist(s).

c. **Review the Utility-Specific Section JA Attachment**

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1) This will help identify potential Installation-specific surveillance/monitoring/ coordination activities to be included in any one of the five QASP checklists, as applicable (Appendices E through I) *(Note: These "Section J" requirements become part of the actual contract upon award.)*

2) Include those identified items in the appropriate Plan checklist(s).

d. **Review each of the four main Plans provided by the SO and included in the contract**

1) Review each of the Plans (using the general initial structure provided by Section L of the RFP – see Section III a. above) and identify any specific items that address products/activities/etc. required of the SO.

2) Include those identified items in the appropriate Plan checklist(s).

IV. QASP Maintenance/Review/Update

The QASP is a living document that will require periodic review and updating.

a. Revisions to this document may be necessary to adequately reflect associated changes in the contract. The Contracting Officer/Specialist and/or COR will bring to proper attention any potential QASP revisions necessary as a result of any changes in the contract.

b. As a standard, the QASP will be reviewed by the Contracting Officer at least annually. However, an out-of-cycle review may be accomplished if necessary or requested. A sample of a QASP Periodic Maintenance Review and Acceptance form can be found at Appendix A.

V. Summary

The QASP serves as an important guiding document, providing the framework for government monitoring, surveillance, and coordination of the SO's activities and responsibilities under this Utility Privatization contract. The typical long-life of a UP contract, its many moving parts, and the fact that the SO owns the utility system(s), requires a close, long-term partnership between the government and the SO. The deliberate and methodical approach to the development and maintenance of this QASP

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will help ensure this partnership continues to be nurtured, resulting in long-term quality utility service to (insert installation name).

Appendices

Appendix A – FORM – QASP Periodic Maintenance, Review & Acceptance
Appendix B – FORM – Performance Report
Appendix C – FORM – Contract Discrepancy Report (CDR) (DD Form 2772)
Appendix D – FORM – COR Monthly Report to the Contracting Officer
Appendix E – CHECKLIST – Operational Transition Plan ***(NOTE: Remove link and insert "(removed)" after the word "Plan" after successful completion of the Operational Transition Plan…Do not include this note as part of the QASP document.)***
Appendix F – CHECKLIST – Service Interruption Contingency and Catastrophic Loss Plan
Appendix G – CHECKLIST – Operations and Maintenance Plan
Appendix H – CHECKLIST – Initial System Deficiency Corrections / Renewals and Replacements Plan
Appendix I – CHECKLIST – Other Areas to be Monitored

APPENDICES

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Appendix A

QASP PERIODIC MAINTENANCE, REVIEW AND ACCEPTANCE

(NOTE: This Appendix serves as a recommended form to use in formally documenting the review, and acceptance, of the contents of the latest QASP version for the UP contract…Do not include this note as part of the QASP document.)

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The multi-functional team members' signatures below indicate their review and acceptance of the Quality Assurance & Surveillance Plan, dated _____ , for *(insert type utility system)* services provided at *(insert installation name)* under contract *(insert contract number)*. These signatures indicate coordination on this Government QASP at the time of *(insert "development" or "revision")* and will remain in effect until the Plan is modified.

_____

Signature/Date
(insert name of Government Contracting Officer)
(insert title and organization)

_____

Signature/Date
(insert name of COR)

_____

Signature/Date
(insert name of utility company rep)
(insert company name & title)

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Appendix B

PERFORMANCE REPORT

(NOTE: This Appendix illustrates the form to be used in the documentation of SO performance on the UP contract…Do not include this note as part of the QASP document.)
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The COR shall complete a Performance Report (shown below) whenever the COR performs contract monitoring/surveillance on the Utility Privatization contract.

Performance Report

COMPLIANCE: This document is in accordance with the Inspection of Services Clause FAR 52.246-4 and the Quality Assurance Surveillance Plan requirements.

1. CONTRACT NUMBER:

2. CONTRACTOR:

3. DATE & TIME OF OBSERVATION:

4. DETAILS OF OBSERVATION:

   a. Item/Area(s) Being Observed:

   b. Method(s) of Surveillance (ex: Direct Observation, Assessment of Deliverables, Review of Invoices/Payments, Sample Reviews):

   c. Frequency of Surveillance (ex: monthly, quarterly, unannounced, etc):

   d. Surveillance Results:

5. ADDITIONAL COR COMMENTS:

6. SIGNATURE: I hereby certify the accuracy of the observations/results noted above.

_____
CONTRACTING OFFICER'S REPRESENTATIVE SIGNATURE / DATE

Performance Report Form

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Appendix C

CONTRACT DISCREPANCY REPORT (CDR) (DD Form 2772)

(Used to formally document discrepancies)

(NOTE: This Appendix illustrates the form to be used in the formal documentation of specific SO performance discrepancies/problems on the UP contract, as they are encountered by the COR…Do not include this note as part of the QASP document.)

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The DD Form 2772, *SO Discrepancy Report* (CDR), shown below, will be prepared by the COR to formally notify the SO of a pending discrepancy. The purpose of the form is to allow the SO to correct discrepancies with minimal interference from the Government.

CONTRACT DISCREPANCY REPORT

1. CONTRACT NUMBER		2. REPORT NUMBER FOR THIS DISCREPANCY
3. TO *(Contractor and Manager's Name)*		4. FROM *(Name of QAE)*
5. DATES *(YYYYMMDD)*		
a. PREPARED	b. RETURNED BY CONTRACTOR	c. ACTION COMPLETE
6. DISCREPANCY OR PROBLEM *(Describe in detail. Include reference to PWS Directive; attach continuation sheet if necessary.)*		
7. SIGNATURE OF CONTRACTING OFFICER		
8a. TO *(Contracting Officer)*		b. FROM *(Contractor)*
9. CONTRACTOR RESPONSE AS TO CAUSE, CORRECTIVE ACTION AND ACTIONS TO PREVENT RECURRENCE. *(Cite applicable Q.C. program procedures or new Q.C. procedures. Attach continuation sheet(s) if necessary.)*		
10. SIGNATURE OF CONTRACTOR REPRESENTATIVE		b. DATE *(YYYYMMDD)*
11. GOVERNMENT EVALUATION *(Acceptance, partial acceptance, reflection. Attach continuation sheet(s) if necessary)*		
12. GOVERNMENT ACTIONS *(Reduced payment, cure notice, show cause, other)*		

13. CLOSE OUT

	NAME (1)	TITLE (2)	SIGNATURE (3)	DATE *(YYYYMMDD)* (4)
a. CONTRACTOR NOTIFIED				
b. QAE				
c. ACO				

DD FORM 2772, SEP 1998 REPLACES MT FORM 352-R, WHICH IS OBSOLETE. Reset Adobe Professional 8.0

A fillable version of this form can be found at:

http://www.dtic.mil/whs/directives/infomgt/forms/dd/ddforms2500-2999.htm

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Appendix D

COR MONTHLY REPORT TO THE CONTRACTING OFFICER

(DoD CORT Tool Reporting Requirement)

(NOTE: This Appendix illustrates the form to be used in the monthly summary of documented SO performance on the UP contract. This is a DoD CORT Tool requirement…Do not include this note as part of the QASP document.)

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The COR shall complete a COR Monthly Report to the Contracting Officer (shown below) to document both negative and positive aspects of the SO's performance for the UP contract. The report shall be submitted to the KO in accordance with a mutually established submittal schedule.

COR Monthly Report
(to the Contracting Officer)

1. CONTRACT NUMBER:

2. CONTRACT PERIOD OF PERFORMANCE:

3. CONTRACTOR:

4. METHOD(S) OF SURVEILLANCE *(ex: Direct Observation, Assessment of Deliverables, Review of Invoices/Payments, Sample Reviews)*:

5. COMPLIANCE: This document is in accordance with the Inspection of Services Clause FAR 52.246-4 (for non-regulated contracts) and the Quality Assurance Surveillance Plan requirements.

6. OVERALL ASSESSMENT: Complete items 6a through 6d below. Provide supporting detailed explanation in Item 8, as necessary. Attach additional documentation for supporting evidence if required.

   a. Quality of Work: ☐ *Exceptional** ☐ *Very Good* ☐ *Satisfactory* ☐ *Marginal* ☐ *Unsatisfactory**

   **(If answered "Exceptional" or "Unsatisfactory", provide explanation in Item 8a below)*

   b. Deliverables provided by the contractor this month (list them here):

   c. Was the contractor's performance timely? ☐ *YES* ☐ *NO***

   ***(If answered "NO", provide explanation in Item 8b below)*

   d. Are there any significant issues that should be brought to the contracting officer's attention?

   ☐ *YES**** ☐ *NO*

   ****(If answered "YES", provide explanation in the applicable item(s) in Section 8 below)*

   e. Is action being taken by contractor to correct discrepancies?

   ☐ *YES***** ☐ *NO***** ☐ *NA (no discrepancies this month)*

   *****(If answered "YES" or "NO", provide explanation in the applicable item(s) in Section 8 below)*

7. CUSTOMER COMPLAINTS:

   a. Number of customer complaints:

1

COR Monthly Report to the Contracting Officer (pg. 1)

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Appendix D

COR MONTHLY REPORT TO THE CONTRACTING OFFICER (cont'd)

b. Number of **VALID** customer complaints:

8. ADDITIONAL COR COMMENTS *(to support responses provided in Section 6 above, as necessary. COR Comments should be entered for the applicable area(s) listed below.)*:

a. Quality of Product or Service:

b. Schedule:

c. Cost Control:

d. Business Relations:

e. Management of Key Personnel:

f. Other Areas:

9. SIGNATURE: I hereby certify that services have been received and accepted, with any exceptions noted.

_____
CONTRACTING OFFICER'S REPRESENTATIVE SIGNATURE / DATE

2

COR Monthly Report to the Contracting Officer (pg. 2)

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Appendix E

OPERATIONAL TRANSITION PLAN -- CHECKLIST

(NOTE: This Appendix serves as a checklist to ensure actions necessary for sufficient monitoring of the SO's Operational Transition Plan – and the SO's associated demonstrated actions for compliance – are accomplished by the COR and other Government representatives. Upon successful completion of the Operational Transition Period, this appendix can be removed from future versions of the QASP…Do not include this note as part of final QASP document.)

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1. Initial Contract Documentation/Requirements:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**UP Contract Document** – DLA Energy Contracting Staff ensures that the UP Contract document, with any associated modifications, is provided to the COR/SO	SO ensures that the current/accurate UP Contract is received and provide written concurrence to this requirement	Initial	Contract Oversight –KO Acknowledgement and receipt of SO's written acknowledgement	All Contract Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Periodic Deliverables/Report Submittals** – COR will establish operational report requirements with the KO and SO • Establish mutual agreement with KO, Installation reps, and SO on the specific format of each required report, as well as confirming frequency of submittal.	SO will acknowledge and provide comments to report requirements	Initial	N/A	J/L/C Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix E

OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

c.	**Initial QASP Development & Implementation** – COR and KO will layout detailed plan for QASP implementation with the SO	SO and the COR will discuss all details for QASP guidance and how it relates to the current contract	As required	As required	J Section *(insert correct reference(s) to be consistent with actual contract)*		☐
d.	**Establishment of COR Areas of Inspection List** – COR ensures an initial list of representative areas of inspections (i.e. facilities and documentation) is developed. List is developed through meetings with the SO and appropriate Government representatives.	SO will work with COR and Government representatives to determine an initial array of mutually acceptable areas (facilities and documentation) from which SO performance can be reasonably assessed.	Initial	All	All Contract Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

2. Conduct Post-Award Orientation Conference:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Post-Award Orientation Conference and Agenda Development** – KO/COR organizes Post-Award Orientation Conference.	The SO prepares and organizes for the O&M Transition Meeting, to include provision of recommended meeting	Initial	N/A	C/L Sections *(insert correct reference(s) to be consistent with actual*		☐

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Appendix E

OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

	COR coordinates with SO to determine specific SO-recommended agenda items for discussion at conference.	topics to the COR. The SO ensures that all required personnel attend this meeting			*contract)*		
b.	**COR Review of Operational Transition Plan** – COR reviews the UP Contract Transitional Plan for accuracy	The SO verifies that the contract information is correct	As needed	Once a month	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
c.	**Utility System Conveyance Meeting** – COR sets up a future Utility System Conveyance Meeting between Installation Personnel and SO	SO will ensure that all key personnel are in attendance at this meeting.	Initial	COR will record a Memorandum for Record (MFR) for this action	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

3. Permits and Leases/Easements:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Identify Permits and Associated SO Responsibility** – Ensure SO provides specific listing of all permits for which it has responsibility in the	The UP SO provides a specific listing to the COR, along with status, of all permits the SO will be responsible for	As required	Assessment of Deliverables	Sections C.3, C.6, C.9. C.10, and L.4 *(insert correct reference(s) to be*		☐

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

	ownership, operation, maintenance, and/or upgrade of the specific utility system under the contract. • Coordinate this list with the appropriate Installation office(s) to ensure concurrence and mutual understanding of responsibilities.	under the contract.			*consistent with actual contract)*		
b.	**Permit/Lease Applications** – KO/COR ensures that the SO applies for applicable permits and leases. • The KO/COR provides guidance to the SO, as necessary, for obtaining the permits/leases.	The SO prepares all the required documentation for obtaining the specified permits/leases within the necessary timeframes to ensure/maintain compliance.	As required	As required	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
c.	**Line Locates Plan/Procedures** – KO/COR ensures all specific procedures associated with the SO's responsibilities for locating lines in support of the Installation Digging Permit Process are clarified and documented.	The SO verifies their understanding of the Installation's Digging Permit procedures, to include: • the Installation office(s) with which to coordinate line	Monthly Permit status reports	During and after the Post Award Orientation Conference	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

		locate actions • the maximum number of free line locate actions to be provided under the contract (i.e. threshold) • additional costs per locate action (if any) for providing line locates above the established threshold					
d.	**Review of Current Agreements for Appurtenances Attached to Utility System Infrastructure** – The COR ensures that all applicable Offices of Primary Responsibility (OPRs) identify to the SO all items that are current attachments to the SO's inventory (ex. Cable TV lines, Cell phone antennae, fiber optic lines, etc, that are attached through manholes or strung on top of power poles of the SO's Utility System Inventory). The appurtenances must be clearly identified and documented. The COR ensures that all current	The SO will: • confirm understanding of the current agreements and associated attachments • work with the applicable OPRs, as necessary, to identify any potential issues that may need to be addressed as part of any follow-on agreement (once current agreement expires).	After the Post award Orientation Meeting	As required	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

	agreements associated with each attachment are provided to the SO.						

4. Security Requirements:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Security Clearances** – COR verifies through the Security Office that all contracted personnel have the required JPAS verifications, security clearances and access badges.	The SO prepares and submits all required documentation for obtaining a Government Security Clearance; SO will ensure that security documentation is filled out correctly and submitted in a timely manner.	As required	As required	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**SO Vehicle Registration, Insurance, Installation Acces** – COR/KO review the SO confirmation that SO vehicles are registered, meet insurance requirements, and have access stickers for Installation	The SO ensures that their vehicles are currently registered, meet insurance requirements, and have access stickers for Installation access then notifies COR.	At the start of transition period; then for every change in vehicle and/or registration status	As required	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

			thereafter				
c.	**Physical Security and Restricting Access to Facilities** – COR ensures SO meets with and/or is provided applicable requirements from the Security Office pertaining to sufficient physical security of, and restrictive access to, utility system and associated facilities	Based upon discussions and/or information received from the Security Office, SO will demonstrate how it will satisfy the physical security requirements for its utility system and associated facilities.	As required	As required	Section C.5 *(insert correct reference(s) to be consistent with actual contract)*		☐

5. Budget/IT Requirements:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Summary Budget/ Expenditure Report Submittal** – COR will ensure that the SO provides summary budget/expenditure report to the KO	The SO will provide a summary budget/expenditure report to the KO.	As required	As required	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Initial IT Requirements Meeting** – The KO/COR conducts initial IT	The SO will inform the Govt of all IT requirements that will be	As required	As required	C/L Sections *(insert correct reference(s) to be*		☐

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

	Communications meeting w/SO to discuss the IT requirements for Communications under the Utility Services contract.	needed/required and specify all required IT software packages; SO confirms its IT Communications Plan does not interfere with the Installation's communications frequencies.			*consistent with actual contract)*		
c.	**IT/Communications Office Coordination** – The COR ensures appropriate coordination occurs between the SO and Base IT/Communications Office regarding the contract's Information Technology requirements	The SO and COR will discuss all IT requirements and collaborate on a suggested plan of action for the use of all IT systems and software; SO will demonstrate to the IT/Communication Office's satisfaction that its IT Communications Plan does not interfere with the Installation's communications frequencies.	As required	As required	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

6. SO Personnel Policies:

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Installation Personnel Policy** – KO/COR will inform the SO about personnel policies pertaining to SO personnel working on the Installation.	The SO will participate in discussions regarding applicable personnel policy requirements and will verify understanding of these policies.	Initial	Review and verification of personnel policies with SO	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Invoice & Payroll Procedures/ Documentation** – KO/COR will discuss and reach mutual understanding on procedures for accomplishing invoices and payroll-related documentation.	SO shall prepare invoices and payroll-related documentation in accordance with procedure established with the KO/COR. (Note: Any necessary re-submittals shall be accomplished by the SO at own expense.)	As required	Review and verification of samples/procedures submitted by SO	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

7. Joint Inventory:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Joint Inventory Review and Documentation** – The KO/COR will conduct and document a Government – SO Joint Inventory of Equipment and Property	The SO will ensure the all pertinent inventory information is captured and recorded and a full concurrence meeting with all parties occur as it relates to this inventory	Initial start of contact	Constantly	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Points of Demarcation (PODs)** – Ensure all PODs are identified, understood, and mutually agreeable. (Note: PODs identify the physical and geographic limits/boundaries of the utility system being transitioned to the new owner (i.e. SO)).	The SO will ensure the all pertinent POD information is captured and recorded and a full mutual concurrence is obtained.	Initial start of contract	Continuously	Attachment JAX of Contract *(insert correct reference(s) to be consistent with actual contract)*		☐
c.	**Reconciliation of Inventory** – The COR/KO will review, verify, and reconcile, as necessary, the SO's field verified listing of inventory data.	The SO will reconcile/adjust inventory listing, as necessary, to reflect mutually agreed inventory.	Initial start of contact	Joint Reconciliation between Govt/SO	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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8. Service Requirements:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Verification of Service Support Requirements** – KO/COR verifies all service requirements from the SO, i.e. trash, lighting, building location, telephone service, etc.	The SO submits a detailed list of all service requirements to COR and KO for review and appropriate action.	As required	As required	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

9. Records Management:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Availability of Government Utility System Records** – The COR will ensure that all CADD, GIS, Maintenance Records, Manuals, and As-Built drawings are made available to the SO upon request.	The SO will submit a detailed list of CADD, GIS, Maintenance Records, Manuals and as-built drawings requests to the COR through the KO.	As required	As required	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix E

OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

10. Environmental Compliance:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Initial Installation Environmental Meeting** – The COR arranges for an Installation Environmental meeting between SO and Government	SO will discuss all applicable environmental concerns/issues with Installation Environmental Personnel	Initial	N/A	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Identification of RCRA and CERCLA-listed Sites on the Installation** – The COR ensures the identification of all RCRA-listed sites (current "cradle-to-grave" operations managing generated hazardous wastes) and CERCLA-listed sites (contaminated from past operations) are clearly identified, documented, and communicated to the SO. • Arrange for an Installation Environmental meeting with the SO and Government representatives.	SO must acknowledge to COR the receipt of the Installation's RCLA and CERCLA listed site information (maps, site condition information, reports, site agreements, etc). SO will ensure the proper arrangements and precautions are taken when conducting daily operations in these areas.	After the Post Orientation Conference	Meeting minutes and follow-on memos/letters documenting transfer of the information/documentation.	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

	• COR ensures appropriate environmental information supplied by the Installation Environmental Office (maps, site condition information, reports, site agreements, etc) is provided/communicated to the SO.						

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

11. Contingency Operations:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Installation Contingency Operations Plan Briefing** – The COR/KO briefs the Installation Contingency Operations Plan to the SO and discusses specific, applicable support requirements for execution under the UP contract.	KO/COR and SO will discuss a plan of operations for support of Contingency Operations at the Installation	Initial start of contact	Continuous	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Installation Contingency Operations Formal Support Agreement** – The KO/COR will ensure an appropriate agreement is conveyed/developed describing all pertinent aspects of Operational Contingency Functions support that is required of the SO.	The SO will ensure that a detailed Contingency Checklist, consistent with the terms of the conveyed/developed support agreement, is developed, and coordinated with the KO/COR.	Initial	COR will ensure a Memorandum for Record (MFR) or other appropriate document is recorded for this action	C/J/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONAL TRANSITION PLAN -- CHECKLIST (cont'd)

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Appendix F

SERVICE INTERRUPTION CONTINGENCY & CATASTROPHIC LOSS PLAN -- CHECKLIST

(NOTE: This Appendix serves as a checklist to ensure actions necessary for sufficient monitoring of the SO's Service Interruption Contingency & Catastrophic Loss Plan – and the SO's associated demonstrated actions for compliance – are accomplished by the COR and other Government representatives…Do not include this note as part of final QASP document.)

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Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Receipt of Initial Service Interruption Contingency & Catastrophic Loss Plan** – KO/COR will ensure receipt of SO's initial Service Interruption Contingency & Catastrophic Loss Plan. *(Temporary Editor Note: Ensure yellow-highlighted COR action requirements are consistently displayed in Appendices E, G, and H for the other three major plans.)*	SO will ensure its initial Service Interruption Contingency & Catastrophic Loss Plan has been submitted to the COR.	Upon award of contract	COR/KO will perform review of all submitted documents	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Verification and Coordination of Initial Service Interruption Contingency & Catastrophic Loss Plan** – KO/COR will ensure initial Service	N/A (Internal Government activity)	Upon award of contract	COR/KO will perform review of all submitted documents	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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SERVICE INTERRUPTION CONTINGENCY & CATASTROPHIC LOSS PLAN -- CHECKLIST (cont'd)

	Interruption Contigency & Catastrophic Loss Plan is reviewed/verified by the appropriate Installation personnel and comments/feedback are gathered. Installation personnel may include, but not be limited to: • Fire & Law Enforcement • Safety • IT/Communications • Civil Engineering/DPW • Environmental • Installation Leadership • Hospital						
c.	**Feedback/Discussion of Initial Plan** – COR/KO ensures discussions/meetings are arranged with the SO (as necessary) to address any issues or questions related to the initial Plan. The appropriate Installation personnel will also participate in these discussions/meetings, as necessary.	SO will ensure it is available to discuss with Government representatives, as necessary.	Upon award of contract	Assessment of Deliverables	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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SERVICE INTERRUPTION CONTINGENCY & CATASTROPHIC LOSS PLAN -- CHECKLIST (cont'd)

d.	**Receipt of Proposed Changes to Service Interruption Contingency & Catastrophic Loss Plan** – KO/COR will ensure that any adjustments/revisions to the SO's Service Interruption Contingency & Catastrophic Loss Plan (proposed by the SO) are received from the SO.	SO will ensure any proposed adjustments/revisions to the Service Interruption Contingency & Catastrophic Loss Plan are submitted to the COR in a timely manner, accompanied with clear supporting rationale/justification.	As needed	Assessment of Deliverables	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
e.	**Feedback/Discussion of Proposed Changes to Service Interruption Contingency & Catastrophic Loss Plan** – COR/KO ensures discussions/meetings are arranged with the SO (as necessary) to address any issues or questions related to proposed changes to the Plan. The appropriate Installation personnel will also participate in these discussions/meetings, as necessary. Installation personnel may include, but not be limited to: • Fire & Law Enforcement	SO will ensure it is available to discuss with Government representatives, as necessary.	As needed	Assessment of Deliverables	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix F

SERVICE INTERRUPTION CONTINGENCY & CATASTROPHIC LOSS PLAN -- CHECKLIST (cont'd)

	• Safety • IT/Communications • Civil Engineering/DPW • Environmental • Installation Leadership • Hospital						
f.	**Oversight of Service Interruption Contingency & Catastrophic Loss Plan** – COR/KO will provide oversight of the Plan, to include the ongoing development of this action item checklist.	SO responded to service requests in accordance with response time requirements identified in the contract.	Upon award of contract	Sample Reviews	C/L Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
g.	**Coordination of Scheduled Utility Service Outages –** COR will verify each scheduled service outage is coordinated with all affected parties a minimum of two weeks in advance. In addition to the directly affected organization, ensure coordination with appropriate Installations reps (i.e. Fire Department, Engineering, etc).	SO will provide notification to affected parties IAW established policy as part of the contract.	As required	Direct Observation & Review of Invoices/Payments	Section C.X of Contract *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix F

SERVICE INTERRUPTION CONTINGENCY & CATASTROPHIC LOSS PLAN -- CHECKLIST (cont'd)

h.	**Re-scheduling of Work Requiring Service Interruption –** COR will verify, in writing, the SO's policy regarding the re-scheduling of service interruptions due to mission requirements. • If additional charges may result, determine the factors that would lead the SO to request for additional charges. • Review this policy with appropriate Installation reps (i.e. Fire Department, Engineering, etc.) as necessary. • Verify the proper dissemination of policy to affected parties/ organizations (including Facility Managers).	SO will provide notification to COR, and affected parties, of the date/time work can be re-scheduled. Also, SO will notify COR (with supporting rationale) if additional charges will be requested as a result of the re-scheduling.	As required	Direct Observation	Section C.X of Contract *(insert correct reference(s) to be consistent with actual contract)*		☐
i.	**Re-validation of SO's Service Request Procedures –**COR will annually coordinate a review of the SO procedures in place for receiving, processing,	SO will make available to the COR – and meet to discuss -- all necessary documentation related to	Annually	Assessment of Deliverables	Section C.X of Contract *(insert correct reference(s) to be*		☐

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SERVICE INTERRUPTION CONTINGENCY & CATASTROPHIC LOSS PLAN -- CHECKLIST (cont'd)

	managing, and acting upon service requests. • Review criteria/definitions used for classifying Service requests. • Confirm the completeness of typical information taken during initial receipt and follow-up of service call (i.e. the time of call, time of response, cause of the request, action taken, and time and date of completion) • Review service call log to assess track record on service call responses. o Identify any positive/negative trends. o Verify whether service calls are being resolved within established time limits.	the SO's service call operation.			*consistent with actual contract)*		

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Appendix G

OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST

(NOTE: This Appendix serves as a checklist to ensure actions necessary for sufficient monitoring of the SO's Operations & Maintenance / Quality Management Plan – and the SO's associated demonstrated actions for compliance – are accomplished by the COR and other Government representatives…Do not include this note as part of final QASP document.)

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1. Meetings:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Establish Post-Award Orientation Conference** – COR sets up a Post-Award Orientation Conference with the SO COR establishes subsequent follow-on meetings, as necessary.	The SO prepares and organizes for the O&M Transition Meeting, to include provision of recommended meeting topics to the COR.	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Final Inventory Reconciliation Meeting** – KO/COR will perform a final Inventory Reconciliation Meeting w/SO to ensure accuracy of system inventory being transferred to the SO prior to Contract Start Date.	The SO will reconcile all inventory discrepancies noted before activation of O & M plan commencement	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

2. Plans and Operation Initiatives:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**O&M Plan and Schedule** – KO/COR gives the SO gives the SO timeline for O&M plan and schedule	SO will prepare a detailed list of expected deliverables for O&M plan	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Verification of Periodic Deliverables/Report Submittals** – COR will ensure all deliverables/reports are submitted by the SO IAW established schedules • Verify timeliness of submitted deliverables/ reports • Verify sufficiency of deliverable/report content with appropriate Installation	SO will provide/submit all necessary deliverables/reports within the mutually agreed format and schedules.	Per mutually agreed schedules	Assessment of Deliverables	Sections C/J/L *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

	representatives. • If any changes are required (to either content or format), coordinate issues with the SO and the appropriate Installation reps. Arrange meetings as necessary to address.						
c.	**Utility System Capacity Analysis** – COR will establish a frequency with the SO in which the current capacity of the utility system is measured (based on best available utility system information) and reported to the appropriate Installation reps for Base Master Planning purposes. • Verify timeliness of system capacity analysis report • Verify sufficiency of report with appropriate Installation reps • If any changes are required (to either content or format), coordinate issues with the UP SO and the appropriate Installation	SO will provide the COR/KO a utility system capacity report within a mutually agreed format and schedules.	Per mutually agreed schedules	Assessment of Deliverables	Sections C/J/L *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

	representatives. Arrange meetings as necessary to address.						
d.	**Monitoring O&M Plan Progress** – KO/COR will monitor the progress of the SO's O&M plan	SO will start gathering all required documentation for the preparation of the O&M plan	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
e.	**O&M Performance Plan Review** – KO/COR will review the SO's O&M Performance Plan for the future Operation and Maintenance of the utility system	The SO will brief the KO/COR with execution of the Performance Plan for the utility system	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract*		☐
f.	**Review of O&M Performance Plan Requirements** – COR and KO will meet with the SO to discuss the requirements in O&M plan -Schedule Inspections -Maintenance and Repairs	The SO will prepare and submit a detailed plan for all operations and maintenance contract requirements	Initial activation of O & M plan and as needed thereafter	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

	-Predictive Maintenance -Annual Maintenance Plan						
g.	**Employee Training Plan Meeting** – COR will meet with SO to discuss the SO's Employee Training Plan	The SO will prepare a detailed plan for all employees training and the topics covered.	Initial activation of O & M plan and as needed thereafter	Assessment of Deliverables	*(insert correct reference(s) to be consistent with actual contract)*		☐
h.	**Quality Assurance Plan Review** – KO/COR will review the SO's Quality Assurance Plan	The SO will prepare and brief the KO/COR on the Quality Assurance Plan	Initial activation of O & M plan and as needed thereafter	Assessment of Deliverables	*(insert correct reference(s) to be consistent with actual contract)*		☐
i.	**OSHA-related Safety Plans** – KO/COR ensure applicable OSHA-related Safety plans undergo appropriate review by Government representatives. OSHA-related plans may include, but not be limited to, the following: • OSHA Generator Emergency Preparation Plan • OSHA Workplace Sanitation Plan	SO Submits applicable OSHA-related Safety plans to COR for review	Initial activation of O & M plan and as needed thereafter	Assessment of Deliverables	Sections C/J/L *(insert correct reference(s) to be consistent with actual contract)*		☐

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

	• OSHA Office Safety Plan • OSHA Personal Protective Equipment Safety Plan • OSHA Confined Space Plan • OSHA Fire/Electrical Safety/Seismic Plan • OSHA Safety Audit Checklist						
j.	**Other Plans** – KO/COR ensure applicable plans undergo appropriate review by Government representatives. These plans may include, but not be limited to, the following: • Hazardous Material Safety Plan • Hazardous Material Waste Handling Plan • Earthquake Preparation Plan • Storm Preparation Plan	SO Submits applicable plans to COR for review	Initial activation of O & M plan and as needed thereafter	Assessment of Deliverables	Sections C/J/L *(insert correct reference(s) to be consistent with actual contract)*		☐
k.	**Cost Proposals and Cost Performance Data Review** – COR reviews SO's cost proposals and cost performance data and provides comments to			Assessment of Deliverables (Note: Cost Proposal and Cost Performance Data may be appropriate for inclusion in the annual CPARS			

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Appendix G

OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

	the KO.			assessment.)			
l.	**Responsiveness to Government Inquiries** – COR will meet with SO to discuss their prompt responding to questions and concerns from Customer, COR, KO, and CS	SO will meet with COR to provide prompt response to COR, KO, and CS	As needed	Direct Observation (Note: Responsiveness to Government inquiries may be appropriate for inclusion in the annual CPARS assessment.)			

3. System Deficiency Corrections/Renewals/Replacements:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Scope Review of System Deficiency Corrections** – KO/COR will start the review of anticipated System Deficiency Corrections to the current UP System	SO will brief the KO/COR on all pending System Deficiency Corrections needed for current UP system	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Schedule Review of System Deficiency Corrections** – KO/COR will review future schedule for all anticipated System Deficiency Corrections from the SO	The SO will prepare a detail plan for the future plan in regards to the System Deficiency Corrections to the current UP System	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
c.	**Review of Renewals and**	The SO will brief the	Initial	Assessment of Deliverables	*(insert correct*		☐

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

	Replacements/Upgrades Projects – KO/COR will review all Initial Upgrades, Renewals and Replacement Projects	KO/COR on all proposed future Initial Upgrades, Renewals and Replacement Projects	activation of O & M plan and as needed	& Direct Observation (Weekly status meetings)	*reference(s) to be consistent with actual contract)*		
d.	**Service Connections/Disconnections Specifications** – COR will coordinate with SO to ensure design specifications for any service connection or disconnection are provided to the appropriate Installation representatives/third party entities at the appropriate time period. The purpose will be to eliminate potential disruption to design, funding, and/or construction processes related to the specific construction event, in advance of connection to the SO's utility system. • Arrange meetings as necessary to address.	SO will make readily available, within mutually agreed format and timetables, all applicable design specifications for service connections to be used on a facility/utility construction project that will ultimately connect to the SO's utility system.	Per mutually agreed format and schedules	Assessment of Deliverables	Sections C/J/L *(insert correct reference(s) to be consistent with actual contract)*		☐

4. Data Transfer:

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Maps, Building Drawings and Pertinent Facility Files** – KO/COR will ensure that the SO has the all required maps, building drawings and all pertinent facility files	The SO will ensure that all required maps, building drawings and all pertaining facility files are received	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**GIS Data** – KO/COR will provide the SO with all needed GIS data to support the O & M plan	The SO will ensure that a list of all required GIS requirements are submitted to the KO/COR	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐
c.	**Transfer of Permits, Documents, and Manuals** – KO/COR will complete the transfer of permits, documents and manuals	The SO will give the KO/COR a list of required permits, documents, and manuals that are needed	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐

5. Environmental Compliance:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check

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OPERATIONS & MAINTENANCE / QUALITY MANAGEMENT PLAN -- CHECKLIST (cont'd)

a.	**Environmental Compliance Plan** – KO/COR will review the SO's Environmental Compliance Plan	The SO will prepare and brief the KO/COR on the Environmental Compliance Plan	Initial activation of O & M plan and as needed	Assessment of Deliverables & Direct Observation (Weekly status meetings)	*(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix H

INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST

(NOTE: This Appendix serves as a checklist to ensure actions necessary for sufficient monitoring of the SO's Initial System Deficiency Corrections / Renewables & Replacements Plan – and the SO's associated demonstrated actions for compliance – are accomplished by the COR and other Government representatives…Do not include this note as part of final QASP document.)

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1. Project Review/Master Planning:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**Annual Submittal of Five - Year Plan** – Ensure the Five - Year Plan is submitted annually IAW the timeframe specified in the contract.	The SO will prepare a detailed Plan documenting all required System Deficiency Corrections and major renewals/replacements that will need to occur for the next 5 years; SO identifies and prioritizes all necessary improvements to reach the standards typical maintained by the SO on its utility system	Annually	Assessment of Deliverable	C.11.4 *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix H

INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST (cont'd)

b.	**Government Review of Five - Year Plan** – Ensure the appropriate Government representatives review the submitted Five -Year Plan (engineering, environmental, security, etc) to confirm consistency with identified long-term missions/initiatives within their areas of responsibility. • Ensure, as a minimum, all Government-identified requirements (i.e. upgrades, corrections, and R&R) are addressed by the SO	NA – Internal Government review activity	Annually	Assessment of Deliverables (Internal meetings/communications among Government representatives.)	C.11.4 *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix H

INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST (cont'd)

c.	**Government/SO Meeting to Review, Discuss & Approve Five -year Plan** – Ensure the appropriate Government representatives meet with the SO to review, discuss, & approve the submitted Five - Year Plan. Items include (but are not limited to): • Recently completed Upgrade/Correction/R&R activity • Upgrade/Correction/R&R Project Schedules & Scopes • Interface/compatibility w/ Installation Master Plan • Utility System capacity modeling (and recommended improvements/adjustments/studies) to address projected future load • Other related issues (ex: regulatory changes, energy conservation, etc)	The SO will prepare and present a priority plan for project execution and show the exact timeline for project execution; detailed schedules/scopes/costs will be presented for Year 1; generalized schedules/scopes/costs will be presented for Years 2 through 5 of the Plan	Annually, and as needed throughout year	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)* Contract Sections C.11.2.2 and C11.2.5 Contract Sections C.11.2.1/C.11.2.4		

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INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST (cont'd)

d.	**Prioritization of Projects in the Five-Year Plan** – The COR/KO will review the selection and Prioritization of Projects from the SO	The SO will prepare and present a priority plan for project execution and show the exact timeline for project execution	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐
e.	**COR/SO Information Gathering Meeting** – The COR will interface with the SO to help the SO gather all important utility system information from the current installation staff.	The SO will ensure that they extract and record all important data from the current Government personnel, for the turnover instruction of the current utility system	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐
f.	**COR/SO Meeting with Installation's Engineering and Planning Staff** – COR will coordinate with KO and SO to ensure that a Meeting takes place with the Installation's Engineering and Planning Staff	The SO will ensure that the Installation's Engineering Staff is available and proper coordination occurs with the Government staff for proper dissemination of information	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix H

INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST (cont'd)

g.	**Review of Applicable Installation Policies & Regulations Review Meeting** – KO/COR will ensure that all applicable installation policies & regulations -- with a potential to interface with associated utility project activities -- are covered and explained in detail to the SO.	The SO will ensure that all installation policies & regulations are followed, and compliance with these directives is mandated (and disseminated) to all contracted personnel	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐

2. **Specific Project Planning:**

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**ISDC/Upgrades Project Phase Timeline Review** – The Government and the SO will review the SO's plan for project phase timeline	The SO will prepare and present a yearly time phase project plan to the Government for review and concurrence	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**ISDC/Upgrades Project Review Meeting** – Government and the SO will review all Initial System Deficiency Correction (ISDC) and Upgrade projects identified	The SO will provide a detailed list of all ISDC and Upgrade projects to the Government for review and concurrence	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐

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INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST (cont'd)

c.	**Coordination/Transfer of Project-Specific Engineering/Technical Information** – Ensure the appropriate Government representatives and third parties (if applicable) meet with the SO to review, discuss, and transfer the appropriate engineering technical data related to a specific, upcoming project. Examples include (but are not limited to): • Review Existing and Planned Future Third-Party Service Connections – technical specifications to ensure compatible & acceptable connection to the SO's utility system. • Inspection Activities – Agreement on the level (and intervals) of construction inspection activities by the UP SO (in cases where a third-party construction agent is involved). • Material Submittals	The SO will be prepared to discuss with Government representative all appropriate engineering technical data related to specific upcoming projects in order to minimize disruptions during project execution.	As needed	Direct Observation (Joint meetings between Government personnel and the SO)	*(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix H

INITIAL SYSTEM DEFICIENCY CORRECTIONS / RENEWALS & REPLACEMENTS PLAN -- CHECKLIST (cont'd)

3. Post-Project Completion Actions:

Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	**O&M / R&R Monthly Rate Adjustment** – Ensure SO provides applicable equitable adjustments to the O&M and R&R monthly charge as a result of the completion of the project.	The SO will prepare and present a report which clearly details the changes to the utility system inventory, as well as the resulting increase/decrease to the monthly O&M / R&R service charge.	Upon completion of each capital project (i.e. system upgrades, R&R)	Assessment of Deliverables (SO-produced report and joint meetings between Government personnel and the SO)	Section C.11 of Contract *(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Update of As-Built Utility System Drawings and GIS Systems and System Utility Model** – Upon completion of each renewal and replacement/upgrade project, ensure SO provides updates to applicable system drawings according to the methodology and timelines specified in the Contract.	The SO will update all applicable utility system drawings (and any associated documents) within (*insert timeframe*) and provide the COR a copy of those drawings & documents within (*insert timeframe*)	As needed	Direct COR Observation Confirmation of Deliverables	C.5.1.5, Record Drawings *(insert correct reference(s) to be consistent with actual contract)*		☐

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Appendix I

OTHER AREAS TO BE MONITORED -- CHECKLIST

(NOTE: This Appendix serves as a checklist to ensure actions necessary for sufficient monitoring of other areas -- in which the SO must demonstrate compliant actions -- are accomplished by the COR and other Government representatives…Do not include this note as part of final QASP document.)

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Item #	COR Action / Requirement	SO Requirement	Frequency of Occurrence	Method of Surveillance/Monitoring	Contract Reference, Section/Paragraph	Remarks	Check
a.	COR/DLA Energy US COR Program Manager Initial Contact – The COR will establish initial contact with the DLA Energy UP COR Program Manager	The SO will contact the DLA Energy UP COR Program Manager for initial contact	Initial start of contact	N/A	*(insert correct reference(s) to be consistent with actual contract)*		☐
b.	**Post-Award Orientation Conference** – The COR will ensure: • Supporting logistics are arranged (i.e. date/time, agenda, conference room, attendees, etc) for the UP Post-Award Orientation Conference (NOTE: This meeting is the initial meeting between the Government and the SO -- the new owner of the utility system).	The SO will ensure that: • The proper SO personnel attend the Post-Award Orientation Conference • A recommended list of meeting agenda topics is provided to the COR for coordination with the KO.	Initial start of contact	N/A	*(insert correct reference(s) to be consistent with actual contract)*		☐

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OTHER AREAS TO BE MONITORED -- CHECKLIST (cont'd)

	• An agenda of initial meeting topics is developed and coordinated with the UP SO and KO						
c.	**Points of Demarcation (PODs)** – Ensure all PODs are identified/updated and mutually agreeable. (Note: PODs identify the physical and geographic limits/boundaries of the SO's utility system covered in this contract.	The SO will ensure that all pertinent POD update information is captured and recorded and a full mutual concurrence is obtained.	Annually	Assessment of Deliverables	Attachment JAX of Contract *(insert correct Attachment reference)* *(insert correct reference(s) to be consistent with actual contract)*		☐
d.	**SO Performance Assessment Rating System (CPARS) -- Establishment and Maintenance of Assigned Roles** – Ensure all appropriate Government and SO personnel are enrolled in CPARS upon award of the contract; Maintain the list of enrollees thereafter • Provide to the DLA Energy-FEE CPARS Focal Point the name(s) of installation-level Government personnel serving in the "Assessing Official Rep" role	The SO will provide a list of all personnel to serve in the "SO Rep" role in CPARS; SO will also provide updates to this listing as changes occur.	As needed	Confirmation of Deliverables	DFARS 242.1502 *(insert correct reference(s) to be consistent with actual contract)*		☐

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OTHER AREAS TO BE MONITORED -- CHECKLIST (cont'd)

	• Provide to the DLA Energy-FEE CPARS Focal Point the name(s) of SO personnel serving in the "SO Rep" role						
e.	**Re-affirm SO Responsibility for Permits (to include Submissions, Schedules and Associated Responsibilities)** – Ensure currency and accuracy of SO-provided listing of all permits for which it has responsibility in the ownership, operation, maintenance, and/or upgrade of the specific utility system under the contract. • Coordinate this list with the appropriate Installation office(s) to ensure concurrence and mutual understanding of responsibilities. • As necessary, COR confirms that the SO applies for any necessary permits at the required timeframes in	The SO provides an updated specific listing to the COR, along with status, of all permits for which the SO has responsibility under the contract. The SO provides an updated listing whenever there is a change to the consolidated listing. The SO prepares all the required documentation for obtaining the specified permits. Digging Permits and Procedures shall be included. The SO	Initially, Annually (minimum), or as required	Assessment of Deliverables	Sections C.3, C.6, C.9. C.10, and L.4 *(insert correct reference(s) to be consistent with actual contract)*		☐

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OTHER AREAS TO BE MONITORED -- CHECKLIST (cont'd)

	order to remain compliant.	awareness of the Contract's references for limitations of free line locates shall be acknowledged. The Contract's references for limitations of non-free line locates shall also be acknowledged.					
f.	**Update of Quality Metrics (Established List of COR Inspection Areas)** – COR ensures a list of representative areas of inspections (i.e. facilities and documentation) is maintained. List is developed through meetings with the SO and appropriate Government representatives.	SO will work with COR and Government representatives to maintain a mutually acceptable array of areas (facilities and documentation) from which SO performance can be reasonably assessed.	As required	All	All Contract Sections *(insert correct reference(s) to be consistent with actual contract)*		☐
g.	**Performance Deadlines** – COR should advise KO about the failure of SO to meet performance deadlines. *(Note: Complete a Contract Discrepancy Report (DD Form*	SO will work with COR and Government representatives to meet or exceed performance timelines.	As required	All	*(insert correct reference(s) to be consistent with actual contract)*		☐

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OTHER AREAS TO BE MONITORED -- CHECKLIST (cont'd)

	2772) if necessary)						
h.	**Safety Violations** – COR should advise KO about repeated safety violations. *(Note: Complete a Contract Discrepancy Report (DD Form 2772) if necessary)*	SO will work with COR and Government representatives to minimize or eliminate safety violations.	As required	All	*(insert correct reference(s) to be consistent with actual contract)*		☐
i.	**Poor Work Quality** – COR should advise KO about repeated incidents of SO's poor quality work. *(Note: Complete a Contract Discrepancy Report (DD Form 2772) if necessary)*	SO will work with COR and Government representatives to perform quality work.	As required	All	*(insert correct reference(s) to be consistent with actual contract)*		☐
j.	**Prolonged Delays** – COR should advise KO about prolonged delays. *(Note: Complete a Contract Discrepancy Report (DD Form 2772) if necessary)*	SO will work with COR and Government representatives to avoid prolonged delays.	As required	All	*(insert correct reference(s) to be consistent with actual contract)*		☐
k.	**Persistent Complaints** – COR should advise KO about persistent complaints from Government employees, inspectors, and subcontractor's site workers. *(Note: Complete a Contract Discrepancy Report (DD Form 2772) if necessary)*	SO will work with COR and Government representatives to resolve complaints from Government employees, inspectors, subcontractors, or site workers.	As required	All	*(insert correct reference(s) to be consistent with actual contract)*		☐

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OTHER AREAS TO BE MONITORED -- CHECKLIST (cont'd)

l.	**CDR Management** – COR should continuously monitor the status of all open/ongoing Contractor Deficiency Reports (CDRs), DD Form 2772. COR should maintain communication with KO and SO on all open/ongoing CDRs through their resolution.	SO will work with COR and Government representatives to resolve each CDR as quickly and effectively as possible.	As required	All	*(insert correct reference(s) to be consistent with actual contract)*		☐
m.	**COR Accessibility (End of the Fiscal Year)** – COR ensures their availability/ accessibility during the last two weeks of the fiscal year in order to assist the KO in the processing of end-of-year contracting actions (i.e. modifications, etc.). This is required to address any year-end developments that may occur, such as availability of project funding.	The SO will prepare necessary documents/information, as needed, to assist in the execution of contract-related end-of-year actions.	As required	All	All Contract Sections *(insert correct reference(s) to be consistent with actual contract)*		☐

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WD 15-4429 (Rev.-8) was first posted on www.wdol.gov on 07/17/2018

REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

Daniel W. Simms
Director

Division of Wage Determinations

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Wage Determination No.: 2015-4429
Revision No.: 8
Date Of Revision: 07/11/2018

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.35 for calendar year 2018 applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts

State: South Carolina

Area: South Carolina Counties of Calhoun, Fairfield, Kershaw, Lexington, Richland, Saluda

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		14.20
01012 - Accounting Clerk II		15.94
01013 - Accounting Clerk III		17.83
01020 - Administrative Assistant		23.54
01035 - Court Reporter		18.56
01041 - Customer Service Representative I		12.21
01042 - Customer Service Representative II		13.73
01043 - Customer Service Representative III		14.98
01051 - Data Entry Operator I		12.41
01052 - Data Entry Operator II		13.35
01060 - Dispatcher, Motor Vehicle		18.10
01070 - Document Preparation Clerk		13.10
01090 - Duplicating Machine Operator		13.10
01111 - General Clerk I		11.92
01112 - General Clerk II		13.00
01113 - General Clerk III		14.59
01120 - Housing Referral Assistant		19.24
01141 - Messenger Courier		11.13
01191 - Order Clerk I		16.45
01192 - Order Clerk II		17.94
01261 - Personnel Assistant (Employment) I		15.36
01262 - Personnel Assistant (Employment) II		17.19
01263 - Personnel Assistant (Employment) III		19.16
01270 - Production Control Clerk		23.23
01290 - Rental Clerk		12.42
01300 - Scheduler, Maintenance		15.43
01311 - Secretary I		15.43
01312 - Secretary II		17.27

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01313 - Secretary III	19.24
01320 - Service Order Dispatcher	15.99
01410 - Supply Technician	23.54
01420 - Survey Worker	15.22
01460 - Switchboard Operator/Receptionist	12.47
01531 - Travel Clerk I	13.55
01532 - Travel Clerk II	14.42
01533 - Travel Clerk III	15.33
01611 - Word Processor I	13.75
01612 - Word Processor II	15.43
01613 - Word Processor III	17.27
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	20.50
05010 - Automotive Electrician	18.95
05040 - Automotive Glass Installer	17.79
05070 - Automotive Worker	17.79
05110 - Mobile Equipment Servicer	15.47
05130 - Motor Equipment Metal Mechanic	20.03
05160 - Motor Equipment Metal Worker	17.79
05190 - Motor Vehicle Mechanic	20.03
05220 - Motor Vehicle Mechanic Helper	14.32
05250 - Motor Vehicle Upholstery Worker	16.60
05280 - Motor Vehicle Wrecker	17.79
05310 - Painter, Automotive	18.95
05340 - Radiator Repair Specialist	17.79
05370 - Tire Repairer	13.24
05400 - Transmission Repair Specialist	20.03
07000 - Food Preparation And Service Occupations	
07010 - Baker	11.22
07041 - Cook I	10.75
07042 - Cook II	12.37
07070 - Dishwasher	8.98
07130 - Food Service Worker	10.43
07210 - Meat Cutter	15.57
07260 - Waiter/Waitress	8.87
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	18.86
09040 - Furniture Handler	11.25
09080 - Furniture Refinisher	16.96
09090 - Furniture Refinisher Helper	13.33
09110 - Furniture Repairer, Minor	15.52
09130 - Upholsterer	15.06
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	10.08
11060 - Elevator Operator	10.08
11090 - Gardener	14.56
11122 - Housekeeping Aide	10.75
11150 - Janitor	10.75
11210 - Laborer, Grounds Maintenance	11.34
11240 - Maid or Houseman	9.23
11260 - Pruner	10.24
11270 - Tractor Operator	13.48
11330 - Trail Maintenance Worker	11.34
11360 - Window Cleaner	11.91
12000 - Health Occupations	
12010 - Ambulance Driver	15.83
12011 - Breath Alcohol Technician	16.98
12012 - Certified Occupational Therapist Assistant	28.79
12015 - Certified Physical Therapist Assistant	29.36
12020 - Dental Assistant	17.75
12025 - Dental Hygienist	29.85

12030 - EKG Technician		26.85
12035 - Electroneurodiagnostic Technologist		26.85
12040 - Emergency Medical Technician		15.83
12071 - Licensed Practical Nurse I		16.91
12072 - Licensed Practical Nurse II		18.92
12073 - Licensed Practical Nurse III		21.10
12100 - Medical Assistant		14.23
12130 - Medical Laboratory Technician		19.02
12160 - Medical Record Clerk		16.43
12190 - Medical Record Technician		18.38
12195 - Medical Transcriptionist		16.47
12210 - Nuclear Medicine Technologist		31.49
12221 - Nursing Assistant I		11.58
12222 - Nursing Assistant II		13.03
12223 - Nursing Assistant III		14.21
12224 - Nursing Assistant IV		15.95
12235 - Optical Dispenser		17.67
12236 - Optical Technician		16.91
12250 - Pharmacy Technician		14.88
12280 - Phlebotomist		14.39
12305 - Radiologic Technologist		23.23
12311 - Registered Nurse I		23.87
12312 - Registered Nurse II		29.19
12313 - Registered Nurse II, Specialist		29.19
12314 - Registered Nurse III		35.32
12315 - Registered Nurse III, Anesthetist		35.32
12316 - Registered Nurse IV		42.34
12317 - Scheduler (Drug and Alcohol Testing)		22.84
12320 - Substance Abuse Treatment Counselor		18.10
13000 - Information And Arts Occupations		
13011 - Exhibits Specialist I		19.11
13012 - Exhibits Specialist II		23.68
13013 - Exhibits Specialist III		28.96
13041 - Illustrator I		19.11
13042 - Illustrator II		23.68
13043 - Illustrator III		28.96
13047 - Librarian		26.22
13050 - Library Aide/Clerk		12.59
13054 - Library Information Technology Systems Administrator		23.68
13058 - Library Technician		16.20
13061 - Media Specialist I		17.08
13062 - Media Specialist II		19.11
13063 - Media Specialist III		21.31
13071 - Photographer I		17.08
13072 - Photographer II		19.11
13073 - Photographer III		23.68
13074 - Photographer IV		28.96
13075 - Photographer V		35.04
13090 - Technical Order Library Clerk		14.63
13110 - Video Teleconference Technician		16.41
14000 - Information Technology Occupations		
14041 - Computer Operator I		15.46
14042 - Computer Operator II		17.29
14043 - Computer Operator III		20.72
14044 - Computer Operator IV		23.08
14045 - Computer Operator V		25.51
14071 - Computer Programmer I	(see 1)	21.78
14072 - Computer Programmer II	(see 1)	26.99
14073 - Computer Programmer III	(see 1)	
14074 - Computer Programmer IV	(see 1)	

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14101 - Computer Systems Analyst I	(see 1)	27.38
14102 - Computer Systems Analyst II	(see 1)	
14103 - Computer Systems Analyst III	(see 1)	
14150 - Peripheral Equipment Operator		15.46
14160 - Personal Computer Support Technician		27.56
14170 - System Support Specialist		30.01
15000 - Instructional Occupations		
15010 - Aircrew Training Devices Instructor (Non-Rated)		27.63
15020 - Aircrew Training Devices Instructor (Rated)		33.43
15030 - Air Crew Training Devices Instructor (Pilot)		40.07
15050 - Computer Based Training Specialist / Instructor		27.38
15060 - Educational Technologist		30.46
15070 - Flight Instructor (Pilot)		40.07
15080 - Graphic Artist		20.07
15085 - Maintenance Test Pilot, Fixed, Jet/Prop		40.07
15086 - Maintenance Test Pilot, Rotary Wing		40.07
15088 - Non-Maintenance Test/Co-Pilot		40.07
15090 - Technical Instructor		20.17
15095 - Technical Instructor/Course Developer		24.67
15110 - Test Proctor		16.28
15120 - Tutor		16.28
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations		
16010 - Assembler		9.45
16030 - Counter Attendant		9.45
16040 - Dry Cleaner		11.65
16070 - Finisher, Flatwork, Machine		9.45
16090 - Presser, Hand		9.45
16110 - Presser, Machine, Drycleaning		9.45
16130 - Presser, Machine, Shirts		9.45
16160 - Presser, Machine, Wearing Apparel, Laundry		9.45
16190 - Sewing Machine Operator		12.29
16220 - Tailor		13.09
16250 - Washer, Machine		10.20
19000 - Machine Tool Operation And Repair Occupations		
19010 - Machine-Tool Operator (Tool Room)		21.80
19040 - Tool And Die Maker		25.78
21000 - Materials Handling And Packing Occupations		
21020 - Forklift Operator		14.44
21030 - Material Coordinator		23.23
21040 - Material Expediter		23.23
21050 - Material Handling Laborer		13.01
21071 - Order Filler		11.87
21080 - Production Line Worker (Food Processing)		14.44
21110 - Shipping Packer		14.11
21130 - Shipping/Receiving Clerk		14.11
21140 - Store Worker I		11.40
21150 - Stock Clerk		15.38
21210 - Tools And Parts Attendant		14.44
21410 - Warehouse Specialist		14.44
23000 - Mechanics And Maintenance And Repair Occupations		
23010 - Aerospace Structural Welder		27.25
23019 - Aircraft Logs and Records Technician		21.33
23021 - Aircraft Mechanic I		25.74
23022 - Aircraft Mechanic II		27.25
23023 - Aircraft Mechanic III		28.67
23040 - Aircraft Mechanic Helper		18.40
23050 - Aircraft, Painter		24.35
23060 - Aircraft Servicer		21.33
23070 - Aircraft Survival Flight Equipment Technician		24.35
23080 - Aircraft Worker		22.87
23091 - Aircrew Life Support Equipment (ALSE) Mechanic		22.87

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I	
23092 - Aircrew Life Support Equipment (ALSE) Mechanic II	25.74
23110 - Appliance Mechanic	20.80
23120 - Bicycle Repairer	15.04
23125 - Cable Splicer	27.54
23130 - Carpenter, Maintenance	19.20
23140 - Carpet Layer	19.86
23160 - Electrician, Maintenance	21.66
23181 - Electronics Technician Maintenance I	24.32
23182 - Electronics Technician Maintenance II	25.90
23183 - Electronics Technician Maintenance III	27.37
23260 - Fabric Worker	18.52
23290 - Fire Alarm System Mechanic	18.11
23310 - Fire Extinguisher Repairer	17.26
23311 - Fuel Distribution System Mechanic	26.72
23312 - Fuel Distribution System Operator	20.63
23370 - General Maintenance Worker	16.56
23380 - Ground Support Equipment Mechanic	25.74
23381 - Ground Support Equipment Servicer	21.33
23382 - Ground Support Equipment Worker	22.87
23391 - Gunsmith I	17.26
23392 - Gunsmith II	19.86
23393 - Gunsmith III	22.35
23410 - Heating, Ventilation And Air-Conditioning Mechanic	18.15
23411 - Heating, Ventilation And Air Contidioning Mechanic (Research Facility)	19.79
23430 - Heavy Equipment Mechanic	23.96
23440 - Heavy Equipment Operator	17.69
23460 - Instrument Mechanic	20.39
23465 - Laboratory/Shelter Mechanic	21.15
23470 - Laborer	13.01
23510 - Locksmith	18.55
23530 - Machinery Maintenance Mechanic	27.82
23550 - Machinist, Maintenance	22.13
23580 - Maintenance Trades Helper	13.66
23591 - Metrology Technician I	20.39
23592 - Metrology Technician II	21.59
23593 - Metrology Technician III	22.72
23640 - Millwright	24.63
23710 - Office Appliance Repairer	19.86
23760 - Painter, Maintenance	16.22
23790 - Pipefitter, Maintenance	23.35
23810 - Plumber, Maintenance	22.09
23820 - Pneudraulic Systems Mechanic	22.35
23850 - Rigger	22.59
23870 - Scale Mechanic	19.86
23890 - Sheet-Metal Worker, Maintenance	18.56
23910 - Small Engine Mechanic	17.34
23931 - Telecommunications Mechanic I	25.42
23932 - Telecommunications Mechanic II	26.93
23950 - Telephone Lineman	23.60
23960 - Welder, Combination, Maintenance	19.84
23965 - Well Driller	21.04
23970 - Woodcraft Worker	22.35
23980 - Woodworker	17.26
24000 - Personal Needs Occupations	
24550 - Case Manager	13.78
24570 - Child Care Attendant	9.40
24580 - Child Care Center Clerk	14.74

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24610 - Chore Aide	10.57
24620 - Family Readiness And Support Services Coordinator	13.78
24630 - Homemaker	15.00
25000 - Plant And System Operations Occupations	
25010 - Boiler Tender	22.35
25040 - Sewage Plant Operator	18.70
25070 - Stationary Engineer	22.35
25190 - Ventilation Equipment Tender	15.98
25210 - Water Treatment Plant Operator	18.70
27000 - Protective Service Occupations	
27004 - Alarm Monitor	14.80
27007 - Baggage Inspector	12.75
27008 - Corrections Officer	16.17
27010 - Court Security Officer	17.52
27030 - Detection Dog Handler	14.33
27040 - Detention Officer	16.17
27070 - Firefighter	18.04
27101 - Guard I	12.75
27102 - Guard II	14.33
27131 - Police Officer I	19.90
27132 - Police Officer II	22.11
28000 - Recreation Occupations	
28041 - Carnival Equipment Operator	12.18
28042 - Carnival Equipment Repairer	13.15
28043 - Carnival Worker	9.25
28210 - Gate Attendant/Gate Tender	14.00
28310 - Lifeguard	11.01
28350 - Park Attendant (Aide)	15.66
28510 - Recreation Aide/Health Facility Attendant	11.10
28515 - Recreation Specialist	17.89
28630 - Sports Official	12.47
28690 - Swimming Pool Operator	15.14
29000 - Stevedoring/Longshoremen Occupational Services	
29010 - Blocker And Bracer	23.01
29020 - Hatch Tender	23.01
29030 - Line Handler	23.01
29041 - Stevedore I	21.45
29042 - Stevedore II	24.46
30000 - Technical Occupations	
30010 - Air Traffic Control Specialist, Center (HFO) (see 2)	38.15
30011 - Air Traffic Control Specialist, Station (HFO) (see 2)	26.30
30012 - Air Traffic Control Specialist, Terminal (HFO) (see 2)	28.97
30021 - Archeological Technician I	16.95
30022 - Archeological Technician II	18.58
30023 - Archeological Technician III	22.82
30030 - Cartographic Technician	22.84
30040 - Civil Engineering Technician	27.15
30051 - Cryogenic Technician I	25.27
30052 - Cryogenic Technician II	26.53
30061 - Drafter/CAD Operator I	16.95
30062 - Drafter/CAD Operator II	18.58
30063 - Drafter/CAD Operator III	20.54
30064 - Drafter/CAD Operator IV	25.27
30081 - Engineering Technician I	14.83
30082 - Engineering Technician II	16.64
30083 - Engineering Technician III	18.61
30084 - Engineering Technician IV	23.07
30085 - Engineering Technician V	28.22
30086 - Engineering Technician VI	34.14
30090 - Environmental Technician	23.49

30095 - Evidence Control Specialist		21.69
30210 - Laboratory Technician		22.71
30221 - Latent Fingerprint Technician I		23.25
30222 - Latent Fingerprint Technician II		25.63
30240 - Mathematical Technician		23.81
30361 - Paralegal/Legal Assistant I		16.56
30362 - Paralegal/Legal Assistant II		20.51
30363 - Paralegal/Legal Assistant III		24.98
30364 - Paralegal/Legal Assistant IV		32.35
30375 - Petroleum Supply Specialist		26.53
30390 - Photo-Optics Technician		25.12
30395 - Radiation Control Technician		26.53
30461 - Technical Writer I		22.21
30462 - Technical Writer II		27.16
30463 - Technical Writer III		32.86
30491 - Unexploded Ordnance (UXO) Technician I		24.24
30492 - Unexploded Ordnance (UXO) Technician II		28.44
30493 - Unexploded Ordnance (UXO) Technician III		35.16
30494 - Unexploded (UXO) Safety Escort		24.24
30495 - Unexploded (UXO) Sweep Personnel		24.24
30501 - Weather Forecaster I		25.27
30502 - Weather Forecaster II		29.22
30620 - Weather Observer, Combined Upper Air Or Surface Programs	(see 2)	20.54
30621 - Weather Observer, Senior	(see 2)	22.82
31000 - Transportation/Mobile Equipment Operation Occupations		
31010 - Airplane Pilot		29.33
31020 - Bus Aide		9.85
31030 - Bus Driver		14.43
31043 - Driver Courier		13.44
31260 - Parking and Lot Attendant		12.13
31290 - Shuttle Bus Driver		14.52
31310 - Taxi Driver		11.15
31361 - Truckdriver, Light		14.52
31362 - Truckdriver, Medium		15.58
31363 - Truckdriver, Heavy		19.03
31364 - Truckdriver, Tractor-Trailer		19.03
99000 - Miscellaneous Occupations		
99020 - Cabin Safety Specialist		14.30
99030 - Cashier		8.83
99050 - Desk Clerk		9.97
99095 - Embalmer		23.93
99130 - Flight Follower		24.24
99251 - Laboratory Animal Caretaker I		11.37
99252 - Laboratory Animal Caretaker II		12.28
99260 - Marketing Analyst		27.85
99310 - Mortician		23.93
99410 - Pest Controller		16.93
99510 - Photofinishing Worker		12.74
99710 - Recycling Laborer		13.11
99711 - Recycling Specialist		16.25
99730 - Refuse Collector		13.20
99810 - Sales Clerk		12.56
99820 - School Crossing Guard		12.70
99830 - Survey Party Chief		19.05
99831 - Surveying Aide		12.77
99832 - Surveying Technician		17.50
99840 - Vending Machine Attendant		16.72
99841 - Vending Machine Repairer		20.78
99842 - Vending Machine Repairer Helper		16.72

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Service Contract Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is the victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $4.48 per hour or $179.20 per week or $776.53 per month

HEALTH & WELFARE EO 13706: $4.18 per hour, or $167.20 per week, or $724.53 per month*

*This rate is to be used only when compensating employees for performance on an SCA-covered contract also covered by EO 13706, Establishing Paid Sick Leave for Federal Contractors. A contractor may not receive credit toward its SCA obligations for any paid sick leave provided pursuant to EO 13706.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 8 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (See 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than $27.63 (or on a salary or fee basis at a rate not less than $455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541. 400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds $27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the

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conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or

(4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

** HAZARDOUS PAY DIFFERENTIAL **

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

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The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS **

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

** REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) **

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b)(2)(i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent

information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.

6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b)(2)(iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c)(1)).

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STANDARD FORM 98a Feburary 1973 **U.S. DEPARTMENT OF LABOR** EMPLOYMENT STANDARDS ADMINISTRATION	**NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE** (Attachment A)	11. NOTICE NO.

12. CLASSES OF SERVICE EMPLOYEES TO BE EMPLOYED ON CONTRACT		13. NUMBER OF EMPLOYEES IN EACH CLASS	14. HOURLY WAGE RATE THAT WOULD BE PAID IF FEDERALLY EMPLOYED
ACCOUNTING CLERK I	01011	1	GS-3
ACCOUNTING CLERK II	01012	1	GS-3
ACCOUNTING CLERK III	01013	1	GS-4
ACCOUNTING CLERK IV	01014	1	GS-5
GENERAL CLERK I	01115	1	GS-2
GENERAL CLERK II	01116	1	GS-2
GENERAL CLERK III	01117	1	GS-3
GENERAL CLERK IV	01118	1	GS-4
ORDER CLERK I	01191	1	GS-2
ORDER CLERK II	01192	1	GS-3
SCHEDULER, MAINTENANCE	01300	1	GS-4
SECRETARY I	01311	1	GS-4
SECRETARY II	01312	1	GS-5
SECRETARY III	01313	1	GS-6
SECRETARY IV	01314	1	GS-7
SECRETARY V	01315	1	GS-8
SERVICE ORDER DISPATCHER	01320	1	GS-4
SUPPLY TECHNICIAN	01400	1	GS-7
COMPUTER OPERATOR I	03041	1	GS-4
COMPUTER OPERATOR II	03042	1	GS-5
COMPUTER OPERATOR III	03043	1	GS-6
COMPUTER OPERATOR IV	03044	1	GS-7
COMPUTER OPERATOR V	03045	1	GS-8
MOTOR VEHICLE MECHANIC	05190	1	WG-10
MOTOR VEHICLE MECHANIC HELPER	05220	1	WG-5

STANDARD FORM 98a Feburary 1973 **U.S. DEPARTMENT OF LABOR** EMPLOYMENT STANDARDS ADMINISTRATION	**NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE** (Attachment A)	11. NOTICE NO.

12. CLASSES OF SERVICE EMPLOYEES TO BE EMPLOYED ON CONTRACT		13. NUMBER OF EMPLOYEES IN EACH CLASS	14. HOURLY WAGE RATE THAT WOULD BE PAID IF FEDERALLY EMPLOYED
CLEANER, VEHICLES	11030	1	WG-1
JANITOR	11150	1	WG-2
TOOLS AND PARTS ATTENDANT	21210	1	WG-1
CABLE SPLICER	23125	1	WG-10
FUEL DISTRIBUTION SYSTEM MECHANIC	23340	1	WG-10
GENERAL MAINTENANCE WORKER	23370	1	WG-8
HEAVY EQUIPMENT MECHANIC	23430	1	WG-10
HEAVY EQUIPMENT OPERATOR	23440	1	WG-10
LABORER	23470	1	WG-2
PIPEFITTER, MAINTENANCE	23790	1	WG-10
PLUMBER, MAINTENANCE	23800	1	WG-1
WELDER, COMBINATION, MAINTENANCE	23960	1	WG-10
SEWAGE PLANT OPERATOR	25040	1	WG-9
WATER TREATMENT PLANT OPERATOR	25210	1	WG-9
DRAFTER I	29061	1	GS-3
DRAFTER II	29062	1	GS-4
DRAFTER III	29063	1	GS-5
DRAFTER IV	29064	1	GS-7
ENGINEERING TECHNICIAN I	29081	1	GS-3
ENGINEERING TECHNICIAN II	29082	1	GS-4
ENGINEERING TECHNICIAN III	29083	1	GS-5
ENGINEERING TECHNICIAN IV	29084	1	GS-7
ENGINEERING TECHNICIAN V	29085	1	GS-9
ENGINEERING TECHNICIAN VI	29086	1	GS-11
ENVIRONMENTAL TECHNICIAN	29090	1	GS-7

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STANDARD FORM 98a Feburary 1973 **U.S. DEPARTMENT OF LABOR** EMPLOYMENT STANDARDS ADMINISTRATION	**NOTICE OF INTENTION TO MAKE A SERVICE CONTRACT AND RESPONSE TO NOTICE** (Attachment A)	11. NOTICE NO.

12. CLASSES OF SERVICE EMPLOYEES TO BE EMPLOYED ON CONTRACT		13. NUMBER OF EMPLOYEES IN EACH CLASS	14. HOURLY WAGE RATE THAT WOULD BE PAID IF FEDERALLY EMPLOYED
LABORATORY TECHNICIAN	29210	1	GS-6
TRUCKDRIVER, LIGHT	31361	1	WG-6
TRUCKDRIVER, MEDIUM	31362	1	WG-7
TRUCKDRIVER, HEAVY	31363	1	WG-8
ELECTRICIAN	47100	1	NONE
ELECTRICIAN, MAINTENANCE	23160	1	WG-10
INSPECTOR	99240	1	NONE
ELECTRICIAN/SECOND ELECTRICIAN	47102	1	NONE

AC-0120R Defense Civilian Personnel Advisory Service
Alexandria, Virginia 22350-1100 Issue Date: 21 July 2015

SUBJECT: Federal Wage System Regular and Special Production Facilitating Wage Rate Schedules for the Columbia, South Carolina (RUS) Wage Area

TO: Commanding Officers of Military Departments and DoD Component Installations in the Area

The schedules shown below have been established under authority of DoD Instruction 5120.39, dated September 10, 2008, subject to the limitations contained in CPM 2014-19, dated 19 December 2014. Rates are established as required by 5 USC 5343(d), if applicable, and are to be applied in accordance with the provisions of 5 CFR Part 532 to all employees whose official duty station is located within the geographic boundary of the wage area definition shown on the reverse side.

WG WL-WS Grade	WG-Rates 1	2	3	4	5	WL-Rates 1	2	3	4	5	WS-WD-WN Rates 1	2	3	4	5	WD-WN Pay Level
1	10.55	10.98	11.44	11.87	12.32	11.54	12.06	12.51	12.98	13.47	17.03	17.76	18.49	19.16	19.88	
2	11.73	12.24	12.70	13.24	13.70	12.94	13.48	14.00	14.57	15.09	18.27	19.03	19.80	20.59	21.32	
3	12.97	13.56	14.03	14.63	15.18	14.29	14.86	15.51	16.10	16.71	19.49	20.34	21.15	21.92	22.78	1
4	14.24	14.82	15.43	16.03	16.63	15.67	16.33	16.98	17.67	18.31	20.76	21.63	22.52	23.38	24.24	2
5	15.50	16.11	16.75	17.44	18.04	17.04	17.76	18.49	19.16	19.88	22.01	22.95	23.84	24.78	25.70	3
6	16.71	17.41	18.10	18.86	19.51	18.43	19.16	19.97	20.73	21.51	23.23	24.21	25.20	26.17	27.14	4
7	17.97	18.68	19.47	20.25	20.99	19.78	20.63	21.41	22.24	23.08	24.51	25.53	26.55	27.57	28.60	5 1
8	19.21	20.02	20.80	21.62	22.43	21.14	22.01	22.88	23.78	24.67	25.73	26.80	27.87	28.94	30.02	6 2
9	20.45	21.32	22.16	23.02	23.87	22.51	23.43	24.37	25.32	26.25	26.97	28.09	29.21	30.35	31.45	7 3
10	21.65	22.54	23.49	24.38	25.31	23.84	24.86	25.86	26.83	27.84	28.20	29.37	30.54	31.72	32.89	8 4
11	22.93	23.86	24.83	25.78	26.73	25.20	26.25	27.31	28.35	29.41	28.97	30.17	31.38	32.58	33.80	9 5
12	24.16	25.10	26.15	27.14	28.14	26.58	27.66	28.79	29.88	30.98	29.90	31.15	32.41	33.65	34.90	10 6
13	25.31	26.34	27.39	28.47	29.57	27.83	29.00	30.18	31.33	32.55	31.19	32.48	33.79	35.06	36.39	11 7
14	26.51	27.64	28.74	29.83	30.93	29.17	30.38	31.60	32.81	34.04	32.68	34.04	35.40	36.77	38.11	8
15	27.73	28.85	30.03	31.22	32.35	30.52	31.77	33.04	34.36	35.60	34.32	35.77	37.18	38.61	40.05	9
										WS-16	36.42	37.92	39.45	40.95	42.48	
										WS-17	38.75	40.35	41.99	43.58	45.22	
										WS-18	41.35	43.09	44.78	46.52	48.24	
										WS-19	42.39	44.16	45.93	47.69	49.46	

JAMES R. BRADY
Chief
Wage and Salary Division

Order Date: 19 May 2015
Effective Date: 26 July 2015
Supersedes Schedule Issued 22 July 2014

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SALARY TABLE 2016-RUS

INCORPORATING THE 1% GENERAL SCHEDULE INCREASE AND A LOCALITY PAYMENT OF 14.35%

FOR THE LOCALITY PAY AREA OF REST OF U.S.

TOTAL INCREASE: 1.17%

EFFECTIVE JANUARY 2016

Hourly Basic (B) Rates by Grade and Step
Hourly Overtime (O) Rates by Grade and Step

Grade	B/O	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
1	B	$ 10.05	$ 10.39	$ 10.72	$ 11.05	$ 11.39	$ 11.58	$ 11.91	$ 12.25	$ 12.26	$ 12.57
	O	*15.08*	*15.59*	*16.08*	*16.58*	*17.09*	*17.37*	*17.87*	*18.38*	*18.39*	*18.86*
2	B	11.30	11.57	11.94	12.26	12.40	12.76	13.13	13.49	13.86	14.22
	O	*16.95*	*17.36*	*17.91*	*18.39*	*18.60*	*19.14*	*19.70*	*20.24*	*20.79*	*21.33*
3	B	12.33	12.74	13.15	13.56	13.97	14.38	14.79	15.21	15.62	16.03
	O	*18.50*	*19.11*	*19.73*	*20.34*	*20.96*	*21.57*	*22.19*	*22.82*	*23.43*	*24.05*
4	B	13.84	14.30	14.76	15.22	15.69	16.15	16.61	17.07	17.53	17.99
	O	*20.76*	*21.45*	*22.14*	*22.83*	*23.54*	*24.23*	*24.92*	*25.61*	*26.30*	*26.99*
5	B	15.49	16.00	16.52	17.03	17.55	18.07	18.58	19.10	19.61	20.13
	O	*23.24*	*24.00*	*24.78*	*25.55*	*26.33*	*27.11*	*27.87*	*28.65*	*29.42*	*30.20*
6	B	17.26	17.84	18.41	18.99	19.56	20.14	20.71	21.29	21.86	22.44
	O	*25.89*	*26.76*	*27.62*	*28.49*	*29.34*	*30.21*	*31.07*	*31.94*	*32.79*	*33.66*
7	B	19.18	19.82	20.46	21.10	21.74	22.38	23.02	23.66	24.30	24.94
	O	*28.77*	*29.73*	*30.69*	*31.65*	*32.61*	*33.57*	*34.53*	*35.49*	*36.45*	*37.41*
8	B	21.24	21.95	22.66	23.37	24.07	24.78	25.49	26.20	26.91	27.61
	O	*31.86*	*32.93*	*33.99*	*35.06*	*36.11*	*37.17*	*38.24*	*38.76*	*38.76*	*38.76*
9	B	23.46	24.25	25.03	25.81	26.59	27.37	28.15	28.94	29.72	30.50
	O	*35.19*	*36.38*	*37.55*	*38.72*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*
10	B	25.84	26.70	27.56	28.42	29.28	30.15	31.01	31.87	32.73	33.59
	O	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*
11	B	28.39	29.33	30.28	31.23	32.17	33.12	34.07	35.01	35.96	36.90
	O	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*
12	B	34.03	35.16	36.29	37.43	38.56	39.70	40.83	41.97	43.10	44.23
	O	*38.76*	*38.76*	*38.76*	*38.76*	*38.76*	*39.70*	*40.83*	*41.97*	*43.10*	*44.23*
13	B	40.46	41.81	43.16	44.51	45.86	47.21	48.56	49.90	51.25	52.60
	O	*40.46*	*41.81*	*43.16*	*44.51*	*45.86*	*47.21*	*48.56*	*49.90*	*51.25*	*52.60*
14	B	47.81	49.41	51.00	52.59	54.19	55.78	57.38	58.97	60.56	62.16
	O	*47.81*	*49.41*	*51.00*	*52.59*	*54.19*	*55.78*	*57.38*	*58.97*	*60.56*	*62.16*
15	B	56.24	58.12	59.99	61.87	63.74	65.62	67.49	69.37	71.24	73.12
	O	*56.24*	*58.12*	*59.99*	*61.87*	*63.74*	*65.62*	*67.49*	*69.37*	*71.24*	*73.12*

Applicable locations are shown on the 2016 Locality Pay Area Definitions page: http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2016/locality-pay-area-definitions/

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Section 1.0

Service Interruption / Contingency and Catastrophic Loss Plan

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1.0 Service Interruption / Contingency and Catastrophic Loss Plan

SCE&G's Service Interruption / Contingency and Catastrophic Loss Plan explains the procedures for addressing natural gas delivery service interruptions and the methods for responding to emergency and other abnormal operating conditions that can affect the availability of natural gas service to Fort Jackson. The plan meets or exceeds all requirements specified in the Solicitation and is also consistent with SCE&G's standard operating procedures. The Company relies on these procedures, which are continually reevaluated and refined, to ensure safe and reliable service to existing industrial, institutional, commercial, government, and residential customers. The plan is an important part of the overall approach that will provide safe and reliable natural gas service to Fort Jackson and support its critical national defense mission.

This section begins with a statement of plan objectives, and is followed by a discussion of general and specific service request response procedures. Special contingency plan procedures are presented. The plan concludes with a discussion of general coordination matters.

The Service Interruption / Contingency and Catastrophic Loss Plan is reflective of procedures and policies that support all of SCE&G's natural gas retail service customers and, as such, are generally not dedicated solely to the support of the privatization effort.

SCE&G accordingly may implement non-material changes without notice to or approval by the Government. Exceptions are those that relate to unique Government service requirements (such as the name and contact numbers for the Project Manager). Such changes will be consistent with system-wide service standards and procedures and with applicable Federal, State and local laws, rules and regulations. SCE&G is nonetheless committed to continuous coordination and consultation with Installation personnel. This will include notification of procedural or policy changes that may materially affect Installation operations or service reliability, or is of relevant interest to Installation personnel.

1.1 PLAN OBJECTIVES AND OVERVIEW

As demonstrated in the sections that follow, SCE&G's plan provides for clear lines of communication between Fort Jackson and SCE&G. Open communication will ensure the high quality of service that the Installation requires and that SCE&G provides to its customers.

SCE&G's Service Interruption and Contingency Plan rests on the pillars of:

- ✓ Clear and unambiguous lines of communication;
- ✓ Established, well-documented procedures;
- ✓ Access to local personnel and equipment resources; and
- ✓ Knowledge of the Army's privatization program and related service needs.

These four elements are discussed in greater detail throughout this section.

Quality service and effective responses to Fort Jackson's natural gas distribution service needs are predicated on procedures and resources that SCE&G currently uses. They were developed

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through broad experience owning, operating and maintaining an extensive natural gas transmission and distribution system. Existing resources in the area include general purpose and specialized equipment as well as Title 49 compliant personnel.

Although much of this plan is based on standard SCE&G and industry operating practices, it recognizes a need to develop special procedures for outage and other emergency situations within Fort Jackson. Accordingly, a component of the plan is to develop related procedures during the Transition Period.

The Service Interruption / Contingency and Catastrophic Loss Plan is designed to ensure that SCE&G can respond quickly and efficiently to meet the service response objectives established in the Solicitation and to fulfill the Installation's needs by having highly trained personnel on-site, who are knowledgeable of both SCE&G's operating procedures and Fort Jackson's Emergency Restoration Plan. Elements of the SCE&G plan are summarized as follows and detailed below:

- Conveying information from Fort Jackson personnel to SCE&G relating to emergency and routine repair/service requirements;
- Identifying resources utilized to respond to the Installation's repair/service requirements;
- Determining the nature of the service requirement;
- Establishing the time frames within which SCE&G will respond, including times for initial response and inspection, temporary repair (if required), and the completion of the repair or service under emergency and routine conditions;
- Accommodating communication between the Installation and SCE&G; and
- Providing reliable natural gas distribution service under contingency circumstances (natural disasters, etc.).

The plan melds Fort Jackson's unique service requirements with standard practices by defining the types of service requests and their related urgencies. These are shown in Table 1-1. As shown in the table, SCE&G does not envision that the response will be materially different for emergency and urgent requests.

Section C.8.2 defines an emergency situation to include one that is "detrimental to the mission of the installation, significantly impacts operational effectiveness, or compromises the safety, health, and life of personnel" and indicates that a natural gas leak or outage may lead to an emergency condition. Section C.8.3 defines an urgent request as one that "significantly hinders performance of Installation activities and requires elimination of potential fire, health, and safety hazards" and refers to non-emergency utility leaks as an example of an urgent condition.

1.2 TIME FOR REESTABLISHMENT OF SERVICE

Table 1-1 provides objectives regarding the time for SCE&G to respond to emergency and other service conditions, and for a service technician to arrive at the gate and at the outage or other site, assess the situation, make the area safe and initiate service repairs, leak repairs and outage restoration. The Section C.8.2 of the Solicitation calls for a person "knowledgeable" of the system to be at the site of an emergency within one hour and for an "appropriately trained" repair crew to be at the site within approximately two hours. It also requires that service restoration and response times for a regulated utility shall at least be equivalent to those for similarly-situated customers. In addition, Section JA2.3.23 requires responses to emergency situations within 30 minutes during duty hours (one hour thereafter).

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The standard procedure for SCE&G is to "priority dispatch" a Gas Journeyman when there is an emergency service request. Journeymen have the experience and tools necessary to detect and locate natural gas leaks and to implement service repairs. They travel in service trucks that contain leak detection and other equipment needed to support repairs. This means that the first responder will locate the source of a leak and will either make the necessary repairs to restore service or will request dispatch of additional crew support.[1]

SCE&G understands the Installation's desire to assure timely responses to natural gas situations that might adversely affect mission-critical operations. With this in mind, SCE&G proposes to provide an initial acknowledgement to all emergency service requests, critical mission or otherwise. This initial acknowledgement will be provided by the SCE&G (emergency) Call Center and required resources will be dispatched.

- Emergency (and Urgent) Service Requests should be communicated to the Call Center. The Center will acknowledge the trouble notification, record the information and dispatch required resources. There accordingly will be an immediate response to such requests.
- For emergency and mission critical urgent service requests, the Center will "dispatch" or "priority dispatch" a local Service Technician or crew. The priority tag means that SCE&G's response personnel would proceed to the Post (or to the site if personnel are already within the Installation), as soon as they can make their current worksite safe to leave.
- For mission critical Emergency Service Requests, SCE&G will strive to have a first responder (i.e., a Service Technician or crew) at the service request site within 30 minutes during duty hours and 60 minutes thereafter.
- For non-critical mission Urgent Service Requests, SCE&G will provide service consistent with that provided to customers currently being served by SCE&G.

SCE&G also proposes the following additional measures that directly address the Installation's assumed fundamental concern that the privatized service provide highly reliable service that is compatible with its important national defense mission requirements:

- The Post's mission-critical loads and any other uniquely critical service requirements will be identified and discussed during the transition process.
- Information on the designated critical loads will be entered into SCE&G's system records.
- The transition training of SCE&G employees will address an awareness of and responses to critical mission requirements.

While personnel would not be dedicated, to the privatized service, it is anticipated that service personnel will often be working within the Installation. This especially would be the case during the initial years after the system ownership transfer on the Contract Start Date. The bulk of their work will be within the Installation as they respond to specific privatized service needs, implement authorized upgrades or perform maintenance on SCE&G facilities within the Installation.

The time to fully restore service will depend several factors, including the source of a gas leak (e.g., above ground at a riser or below ground at a main that is under a roadway or other paved area), soil conditions when underground lines are affected, excavation procedures and the degree of access to the outage site. Under normal circumstances, the expectation is to complete repairs and restore permanent service or downgrade the situation to a non-emergency status

[1] SCE&G understands that the first responders for many Government-owned systems, and for many non-regulated contractors, are not Title 49 qualified and certified workers. They accordingly are generally limited to assessing service conditions and determining whether a repair crew should be dispatched. A utility company's first responder, on the other hand, is a qualified worker who can initiate and often complete repairs without the need for further crew assistance.

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within a maximum of 24 hours. SCE&G's ability to perform certain repairs while the system is pressurized should minimize planned service interruptions. All repair work will be closely coordinated with Installation personnel.

It is important to emphasize that all temporary service restoration and permanent repairs will be performed in a manner that protects the safety of SCE&G and Fort Jackson personnel and assures service reliability. Any planned outages to make repairs or modifications to the system will be coordinated with Installation personnel. Included will be notifying affected building occupants in advance of a planned outage.

As a further point of clarification, the response times presented in the Table 1-1 and discussed elsewhere, are viewed as service objectives rather than firm contractual commitments. This is because SCE&G, like other regulated utilities, cannot provide service "guarantees" to individual customers (an exception to this effect is provided in the companion Volume III Contract Documentation Proposal).

SCE&G's ability to comply with the proposed response times can be assessed in the context of intent, capabilities and past performance, as addressed below.

Intent. SCE&G routinely affords consideration to classes of customers, as outlined in SCPSC approved tariffs, which serve broader community, health, and safety functions, including police stations, fire and rescue facilities, hospitals and residential customers. Because of the critical importance of the Fort Jackson's national defense missions, Fort Jackson will be treated similarly.

Capabilities. The proposal emphasizes that SCE&G's core capability is the operation and maintenance of an extensive natural gas transmission and distribution system. The substantial area resources are documented throughout the proposal.

The aggregate scope of the privatized system and the existence of substantial SCE&G-owned distribution facilities within and adjacent to Fort Jackson means that Company personnel either will be working within the Post or close by and thus will be available to respond to emergency and other service calls. It is SCE&G's standard practice that service technicians respond to an emergency situation quickly by making their current work area safe (if needed) and then immediately travel to the emergency work site.

Past Performance. SCE&G will document and track average emergency response times, in the same manner as used throughout the balance of the SCE&G system. Also directly germane is SCE&G's experience operating and maintaining the privatized Charleston AFB gas distribution system.

Also germane is SCE&G's corporate goals for the upstream system are to have a 60-minute response time and to make the site safe within two hours. Statistics for the period of January 1, 2016 through June 17, 2016 show that the response time goal was met 93 percent of the time, and that the "make safe" goal was met 98.4 percent of the time. Data for January and May of 2016 shows that the average arrival time was 39 minutes and "make safe" time was 62 minutes. The note performance data is for the entire system, many parts of which are in rural areas distant from service centers. It is reasonable to expect quicker responses for the privatized service because Fort Jackson is in a more urbanized area and is only five miles from the Shakespeare Road service center.

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Table 1-1. SCE&G Service Designations and Related Responses and Objectives
Emergency –Life or Death): Defined as: ✓ Any life or death emergency Standard Response: ✓ Typically be handled by Fort Jackson Emergency Response agencies, like the Military Police or Fire Department ✓ These agencies or DPW to contact SCE&G ✓ SCE&G to provide first response-type training for Installation personnel at no additional cost to the Government ✓ SCE&G will respond immediately upon notification, with work at the emergency site continued until the problem is corrected or downgraded
Priority 1 – Emergency – Not Life or Death): Defined as: ✓ Any situation that, if left uncorrected, will cause significant damage to a facility, compromise safety or security, or negatively affect productivity ✓ To include: - Any uninvestigated actual or suspected gas leak to any service location (standard response procedures include an assumption that a hazardous situation exists until proven otherwise) - A natural gas outage - Any condition that might detrimentally affect or significantly hinder the mission Standard Response: [1,2] ✓ Knowledgeable / repair person (First Responder or crew) to the outage / service site within 30 minutes during normal business hours if dispatched from within the Installation [1] ✓ Knowledgeable / repair person to the gate within 15 minutes during normal business hours (75 minutes after hours) from notice, if dispatched from outside the Installation ✓ Repair crew to the gate within 75 minutes (105 minutes after hours) from notice [2] ✓ Immediately make the site safe for Government and SCE&G personnel and the public ✓ Work continuously to resolve the situation or downgrade the emergency ✓ Resolve or downgrade (restore service) within 24 hours ✓ Initial emphasis on safety first, and service restoration and repairs second
Urgent Service Request (Priority 2): Defined as: ✓ Any situation that, if left uncorrected, will measurably reduce productivity, cause discomfort or inconvenience to the customer, waste resource, or create the need for additional minor repairs ✓ No outage to any service location Standard Response: ✓ Response within 24 hours ✓ Complete a service order within five business days (unless there is a delay from the Government or SCE&G cannot procure the materials)

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Routine Service Request (Priority 3): [3]

Defined as:

- ✓ Any situation that, if left uncorrected, will measurably cause discomfort or inconvenience the customer, waste resources or create the need for additional minor repairs, is esthetically unpleasant or inconvenient
- ✓ No outage of service to any service location

Standard Response:

- ✓ Initial response within five business days of service request
- ✓ Initial assessment of scope and approximate response cost (if any) within seven business days
- ✓ Completion of effort within 30 days (unless there is a delay from the Government or SCE&G cannot procure the materials)

Strategic Service Request:

Defined as:

- ✓ Any request that is not an emergency or an urgent or routine matter
- ✓ Includes requests for new, modified or relocated service (e.g., relocate a line to accommodate a road widening project or to provide a new natural gas service connection)

Standard Response:

- ✓ Initial response within five business days of service request
- ✓ Initial assessment of scope and approximate response cost within two weeks
- ✓ Completion of effort consistent with Government work authorizations.

[1] SCE&G expects often to have trained personnel within the Installation during normal business hours, performing routine maintenance or implementing authorized system upgrades or replacements, who could be dispatched in response to an emergency service request. If performing repair or maintenance work elsewhere at the time of the dispatch, standard SCE&G procedure is to make the work area safe and then proceed immediately to service request site. Otherwise, response personnel would be dispatched from off-Post locations. Here as well, they as necessary would make the area safe then proceed to Fort Jackson.

[2] In light of the close proximity of SCE&G service centers and service personnel to the Installation, First Responders should normally be able to arrive at Fort Jackson within 15 minutes of dispatch notification. Due to the Installation's security requirements, SCE&G could not reasonably predict how long it might take to clear equipment and personnel through entrance screens and checks. Emergency service response times, therefore, are generally predicated on when personnel will arrive at the gate and assumed 15 minutes to pass through security and arrive at the outage site. SCE&G nonetheless anticipates that appropriate procedures will be developed, in consultation with the Installation, to expedite the clearance process, especially as it relates to responses to emergency service requests.

[3] Routine service requests may include new or relocated service connections or a major upgrade or extension of the on-Post natural gas distribution system. While SCE&G routinely responds within five days of a routine request, completion of the work may take longer than 30 days. Completion depends on such factors as the scope and complexity of the project, the need for prior approval by the Installation, or the incorporation into a designated capital project that contains specific implementation schedules.

1.3 RESPONSE PROCEDURES

SCE&G relies on established and time-tested practices for responding to emergency / urgent (and routine) service requests to minimize the scope and duration of outages, assure public safety, and safeguard property. Its procedures will accommodate the Installation's specific requirements by incorporating elements of the Company's standard operating procedures (SOPs) and supplementing them with special elements tailored to the Installation's important mission needs. The Company will obtain and adhere to the Installation's Emergency Restoration Plan to ensure it is consistent with public safety requirements. Personnel working at the Post will be briefed on the restoration plans.

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1.3.1 Service Requests

The proposed service request procedure capitalizes on existing local and corporate resources. It minimizes the administrative and logistic burden on the Installation, and allows for ample flows of information (accompanied by consistent record keeping) between SCE&G and Fort Jackson. It also accommodates the framework necessary for a quick response to emergency conditions.

All non-routine natural gas distribution system service requirement notifications should be forwarded to SCE&G by first contacting the SCE&G Call Center (calls are automatically routed to the next available agent). Because the center operates 24 hours a day, 365 days a year, Fort Jackson will have continual and immediate access to trained SCE&G personnel. At the Installation's option, the Project Manager/Deputy may also be contacted directly regarding emergency situations.

Strategic routine service requests (such as those related to new connections or the general operation and reliability of the privatized system) should be directed to the Project Manager (or Deputy) during normal business hours.

At the option of the Installation, service calls can be initiated either by personnel in each service location or by a limited number of designated offices or positions. A possible benefit of centralized responsibilities is this might be consistent with historical internal practices where calls are routed to the Department of Public Works (DPW). This procedure may increase efficiency and reduce the potential for multiple requests being made for the same situation or, more seriously, notifications not being made under the assumption that another individual had already addressed the problem. Centralization also historically was a means to control service costs.

1.3.2 Points of Contact and General Response Procedures

Established points of contact will ensure that the proper information concerning the source and, if available, cause of an outage or gas leak communicated to SCE&G. Should the Post have a preference for a multiple contact approach, SCE&G will accommodate the request. SCE&G points of contact are provided in Table 1-2. The table will be updated as necessary to keep it current.

The information solicited from the Installation's representative making the call to the center will include, but not be limited to:

- The Installation's contact person and telephone number;
- Location of the occurrence or service requirement, including the building number;
- Description of the occurrence, including the length of time that the condition has been observed, any special considerations or circumstances of which Government personnel are aware that may bear on the situation, and other information designed to allow SCE&G to assess whether there is any immediate threat to safety or property;
- Designation as an Installation emergency or crisis situation (to include exercises for such situation) that necessitates a more rapid on-site response time; and
- Any special clearance requirements needed to gain access to the cause of the service request (if the site is within a restricted area, Government personnel will be asked to meet response personnel and expedite the clearance process).

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Table 1-2. Service Response Points of Contact and Order of Precedence	
South Carolina Electric & Gas Company:	
Emergency, Urgent & Routine Service Requests:	
Customer Call Center	(800) 815-0083
Strategic Service Requests:	
Dustin Hoey Project Manager	(803) 217-7346 (Telephone, business hours) (803) 260-6156 (Cell) dhoey@scana.com
Bill Eisele Deputy Project Manager	(803) 217-9220 (Telephone, business hours) (803 331-8708 (Cell) weisele@scana.com
Cynthia Ostrander Deputy Project Manager	(803) 217-9245 (Telephone, business hours) (803) 530-4135 (Cell) cynthia.ostrander@scana.com
Fort Jackson:	
(to be provided by the Government)	

Note: Routine and strategic service requests made during normal business hours can be forwarded to the Project Manager / Deputy. SCE&G prefers that the Call Center initially handle emergency and non-strategic requests to ensure their proper handling and documentation. After the necessary information on the nature of the request is obtained, the Installation may then directly contact the Project Manager / Deputy during normal working hours; however, internal communication channels typically result in both the Project Manager and Deputy being informed of routine service requests.

Non-emergency service requests are prioritized and scheduled according to the availability of resources. SCE&G will conduct safety inspections and routine adjustments to the privatized gas system at no additional charge to the customer.

Customer Call System. Service orders entered into SCE&G's Call Center system are tracked and monitored for completion in the system. SCE&G is continuously monitoring and tracking projects in an effort to provide the highest quality of service and make adjustments as needed.

When contacting the Call Center, a trained Customer Service Representative will take the information from the caller, including location, incident details, names and contact information of the caller. The Customer Service Representative will also provide the caller with instructions so the incident can be addressed safely and efficiently. The information is entered into the Customer Information System by the representative and processed on a real-time basis.

An electronic service order is generated, at which time it is prioritized and assigned. The service order documentation includes the time of the service call, nature of the request, and action taken, including the time and date when the service request was completed. Service records will be maintained using standard procedures, which include well-documented work orders, a sample of which is provided in Figure 1-1.

Records will be kept for at least two years and the Government will have access to such records upon reasonable notice.

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The Government will designate service requests as Emergency, Urgent or Routine. *In circumstances where the seriousness of the occurrence is unclear, SCE&G will categorize the circumstance at the higher level of urgency.* For example, if the information conveyed to SCE&G personnel is insufficient to assess conclusively whether a condition is routine rather than an emergency, the condition will be handled as if it is an emergency.

Service Request Status. The Government can obtain 24/7 access to the status of emergency requests by contacting the Call Center. The automated call system allows the caller to request a live operator. If the call is emergency-related, there will be an immediate live response or the caller will be placed at the head of the queue.

Updates to service requests are documented in Service Orders by field technicians on a real-time and as-needed basis. There is no set frequency, as the frequency and extent of updates very much depends on the situation at a particular service site. To clarify, updates are entered by the responding technician and then automatically incorporated into the related Service Order. Provided below is an example of a typical gas order.

In this example, the customer called about a gas leak. The order was taken at the call center and entered into the customer record. The order was processed and sent to the technician in less than one minute. The technician acknowledged the order one minute later, and immediately was on the way to the location arriving in 12 minutes. One benefit of the dispatching system is that it knows the location of all the technicians and the work they are performing. This allows the dispatcher to send the most available crew with the appropriate equipment.

In just over one hour from the time the call was made, the crew was dispatched, they arrived, took the required safety measures, identified and remediated the issue, spoke with the customer, and filed the final report. There is a high likelihood that the actual leak was resolved in much less than an hour. SCE&G treats all leaks as emergencies and responds immediately.

SCE&G response procedures also provide for direct contact between a customer and the duty supervisor/manager responsible for an emergency service request. The Government can request such contact, in which case the Call Center will page the supervisor/manager to request a call back. Depending on the nature of the emergency, the supervisor/manager may contact the customer directly to inform them of the status of the service request. It is SCE&G policy that the local technician should focus on making an area safe and implementing emergency procedures and repairs. As such, they should not be contacted directly by the customer.

Although field communications are generally via cell phones, it is possible that cell service might not be available during some, unpredictable times. Should this unusual circumstance arise, as-needed contact can be maintained on a face-to-face basis by having supervisory personnel drive to the service site, or by having field personnel drive to the local service center. SCE&G can uniquely provide this added capability because there is an extant service center in Columbia only five miles from Fort Jackson. Standard procedures also provide for the setup of a local Command Center, which usually would be at the nearby Columbia Service Center and its full service office and yard facilities.

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Request Type
EMER GAS WORK

Remark Type	Remark Date	Remark Time	Updated By	Remarks
COMPLETION	10/11/2017	11:38 AM		(10/11/2017) G: TURNED OF VALVE TO TANKLESS WATER HEATER ELIMINATING LEAK ON FLEX HOSE PLUMBER TO REPLACE HOSE
OVERRIDE	10/11/2017	10:30 AM		(10/11/2017) Person Not Listed:TOM FITZPATRICK Placed By Reason:GAS LEAK
SERVICE ORDER	10/11/2017	10:29 AM		CUST STATES ODOR INSIDE GARAGE /WILL BE HOME REST OF DAY

Request Type
EMER GAS WORK

Update Date	Update Time	Wanted Date	Scheduled Date	Type	State	Status	Panel Description
10/11/2017	11:38 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	POSTED	ORDER ERRORS
10/11/2017	11:38 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	METER INFO COMPLETE	FM TASKCOMP GAS
10/11/2017	11:38 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	COMPLETED	FM TASKCOMP GAS
10/11/2017	10:43 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	ON SITE	FM STATUS UPDATE
10/11/2017	10:31 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	IN ROUTE	FM STATUS UPDATE
10/11/2017	10:31 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	CAD DISPATCHED	SENT TO FLD MOBILITY
10/11/2017	10:30 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	CAD DISPATCHED	FM STATUS UPDATE
10/11/2017	10:30 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	CAD DISPATCHED	FM STATUS UPDATE
10/11/2017	10:30 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	PRINTED/SENT TO CAD	SENT TO FLD MOBILITY
10/11/2017	10:29 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	PRINTED/SENT TO CAD	INITIATION
10/11/2017	10:29 AM	10/11/2017	10/11/2017	EMER GAS WORK	ACTIVE	INITIATED	INITIATION

Figure 1-1. Service Orders are Used to Track Service Call Responses

Locating and Marking. SCE&G responds to requests for the locating and marking of its facilities according to the requirements of the South Carolina 811 One-Call system. South Carolina 811 serves as a clearinghouse where businesses and individuals planning underground work are able to make a single telephone call for any one of the three services to determine the location of all underground utility facilities. After receiving an inquiry, the clearinghouse notifies member utilities that have facilities in that area so the facilities can be marked appropriately. SCE&G can ensure that its facilities are marked in advance of the proposed digging to minimize the potential of service interruption to downstream customers. These same procedures, with their proven effectiveness, will be applied to Fort Jackson.

SCE&G field technicians or a qualified contractor visit the site of the request and use electronic locators and maps to verify underground line locations, and then paint, flag or stake line locations. There may be follow-up field visits by Company personnel to inspect natural gas facilities that are exposed by third-party excavators. Company personnel may also stand-by during backfill and compaction activity to ensure that the affected facilities are protected and properly supported. A "locate request call" response process is summarized as follows:

- Operators with underground facilities in the vicinity of the planned excavation are notified by the local one-call center. This includes natural gas and power utilities, communications companies and cities and towns.

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- Operator crews or their subcontractors either mark their underground facilities or tell the excavator they have no lines in the area.
- Excavators or homeowners can recognize the type of line marking on a site by using the following color code:
  - Red = Electric power lines, cables, conduit and lighting cables
  - Yellow = Natural gas, oil, steam, petroleum or gaseous materials
  - Orange = Communication, alarm or signal lines, cables or conduit
  - Blue = Potable water
  - Green = Sewer and drain lines
  - Pink = Temporary survey markings
  - White = Proposed excavation

Knowledge of Inventory Levels. SCE&G maintains a computerized material management system that identifies when materials at a local yard are at a minimum required level and then automatically orders restocking. As is the custom for large natural gas utilities, SCE&G has a master contract to secure its material supplies of pipe, meters, ball valves, check valves, actuators, couplings, fittings, cathodic protections and myriad other pipeline parts and accessories. The current contractor serves thousands of customers through hundreds of service locations. Although deliveries to SCE&G facilities are normally within two to five days, purchase orders as needed can be processed on a 24/7 basis, with deliveries within 24 hours.

1.3.2.1 Emergency Responses

SCE&G technicians are available 24 hours a day, 365 days a year for emergency response. Emergency requests would be initiated by Fort Jackson using the 24 hour SCE&G emergency number. Technicians then respond according to the job priority.

SCE&G's response to system outages and emergencies will begin immediately upon notification of the incident. The initial responder will follow SCE&G's standard practices and take whatever steps are necessary to safeguard life and property. If necessary, the first responder will call for additional support (e.g., a service supervisor, SCE&G engineering, heavy equipment or materials) and/or request Security, Police and/or Fire Department assistance. SCE&G personnel are also trained to work in conjunction with Federal, State and local emergency personnel, as required. After-hours, on-call supervisors and technicians are contacted via telephone.

SCE&G will activate all required resources, in an effort to maintain service during abnormal operating conditions. This equipment is centrally stored and can generally be mobilized and delivered to and within Fort Jackson within 24 hours.

Restoration priorities for Fort Jackson customers shall be in accordance with Fort Jackson's emergency restoration plan. In no case will equipment and/or personnel normally dedicated or dispatched to Fort Jackson's utility system be pulled or withheld to serve the Contractor's external customers if utility service to Fort Jackson is experiencing an outage or outages that require its service. A minimal staff shall remain available to serve Fort Jackson at all times.

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1.3.2.2 Routine Response

A routine service request is initiated by calling the SCE&G Call Center at any time or, if a strategic matter, the Project Manager/Deputy during normal business hours. This call initiates a work request, field review and the construction/installation/repair process. Factors such as timing, scale and complexity, required design and materials, environmental impact, access, and availability of personnel will determine the work schedule. SCE&G will address all requests quickly and efficiently.

Most routine service requests can be scheduled to commence within 30 days - after all required permits and approvals are obtained. The basis for the determination of a routine service request, as well as examples, is presented in Table 1-3.

Flexible Scheduling. SCE&G understands the necessity for flexible scheduling to ensure that the Installation's missions, operations and activities are not unduly disrupted and that the schedule of work does not present a burdensome inconvenience to Fort Jackson personnel. SCE&G is committed to open and continuous dialog with Fort Jackson personnel in an effort to minimize scheduling impacts for both parties.

SCE&G will coordinate the scheduling of routine work with the Installation and, if required, reschedule work to another business day, at no additional cost to the Government, if circumstances arise that place an undue burden on Fort Jackson or adversely interfere with missions, operations or activities. Routine work will be scheduled at least two weeks in advance if it will result in any interruption in natural gas distribution service, and such interruptions will be coordinated with the Contracting Officer's Representative. Fort Jackson may modify the work schedule to minimize inconvenience to the Installation. In general, all routine requests will be completed during normal business hours.

Table 1-3. Basis for and Examples of Routine Service Requests

Basis for Determination:

- ✓ A situation that does not pose an immediate threat to public health, safety, or property, or the normal workings of an Installation
- ✓ A situation that is not unjustly causing substantial costs
- ✓ A condition that is not expected to heighten to an urgent or emergency status

Examples of Requests:

- ✓ New service connections (including temporary) or disconnections
- ✓ Relocated service connections
- ✓ Installation of new service lines
- ✓ Locating and marking gas lines
- ✓ Repair of (Grade 2 and 3) leaks [1]

[1] A Grade 2 classification represents an indication of leakage recognized as being nonhazardous at the time of detection, but justifies scheduled repair based on probable future hazard. A Grade 3 classification represents an indication of leakage recognized as being nonhazardous at the time of detection and can be reasonably expected to remain nonhazardous.

New Connections and Disconnections. Requests for new hook-ups or for disconnections can be telephoned or emailed as outlined above, or the Installation can contact the Project Man-

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ager/Deputy directly. A SCE&G representative will visit with Installation personnel and determine gas requirements, time lines and estimated costs (if applicable). All new connections and disconnections will be coordinated with the Government. As discussed in Section 3.4 of this proposal, new, relocated or discontinued service connections will be provided for the convenience of the Government and, as such, would not be implemented without the Government's authorization.

SCE&G's facilities will be installed by SCE&G personnel or a qualified contractor and will be installed to meet or exceed SCE&G's standards. After installation, SCE&G will coordinate with Installation personnel to schedule the initial turn-on. A qualified Service Technician will then visit the new site to turn on the natural gas service.

Scheduled Outages. From time to time, it may become necessary to schedule a planned outage to perform maintenance or to expand the pipeline system. SCE&G will work with Installation personnel to minimize the impact, in accordance with SCE&G's standard practices, as described in the Section 2 Quality Management Plan. When scheduled outages are required, SCE&G will generally proceed as follows:

- Schedule coordination meetings with the Installation;
- The Contractor shall also notify building occupants in advance of an outage;
- Notify Installation personnel at least two weeks prior to an outage;
- Request that the Installation appropriately mark non-gas underground utilities;
- Confirm the mark-out and location of any conflicting SCE&G-owned utilities involved;
- Assist in notifying tenant and other service locations involved where appropriate; and
- Generally schedule outages to minimize impacts on the Installation's mission and the quality of life for its personnel.

With the available resources as described earlier in this proposal, SCE&G typically can schedule planned outages at times of minimum customer demand, and execute planned outages at times that cause minimal disruption. Scheduling considerations will take into account weekends, holidays or after normal working hours as necessary.

Strategic Service Requests. The Project Manager/Deputy will coordinate the arrangements for strategic service issues with Government personnel and arrange for coordination and scheduling with any affected buildings. Records will be maintained throughout the response, assessment, scheduling, and work performance phases to provide information related to contract performance metrics and to ensure and verify that the required work was completed properly and in a timely manner.

1.4 FORCE MAJEURE CONDITIONS, CATASTROPHIC LOSS & CONTINGENCY RESPONSE

The above discussion addresses emergency and routine service requests received in the normal course of business. However, there may be unpredictable events that may lead to major and widespread outages or may affect SCE&G's ability to comply with normal response procedures. The recovery process will begin immediately upon notification of a *force majeure* event.

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SCE&G also has long-standing relationships with subcontractors upon whom SCE&G may rely when appropriate and cost-effective. These subcontractors are available to SCE&G during times of serious and widespread emergencies to effectuate repairs and ensure the safety of life and property. *Force majeure* conditions are not unique to SCE&G or any other major utility system. The key is to recognize that such conditions may occur and to have established contingency mechanism in place to maintain an organized, structured response to any possible service disruption. In accordance with O&M Manual Section 306, *Natural Disasters*, service restoration generally will proceed based on the restoration priorities as follows:

- Town border stations;
- High pressure distribution lines;
- System regulating stations;
- Feeder mains; and
- Large volume meter and regulator stations.

Service will be restored to secondary mains and then service lines in accordance with the Installation's priorities.

SCE&G is aware that non-public utilities responding to privatization solicitations contend that they can supplement their invariably limited resources by contracting with a local public utility or area contractors. The potential availability of such resources should be viewed with appropriate skepticism.

In the event of a force majeure event, neither SCE&G nor other SCPSC regulated utilities can release <u>any</u> crews to restore service to non-SCPSC jurisdictional customers or other companies until service is restored to <u>all</u> jurisdictional customers. SCE&G and other regulated utility agreements with qualified local contractors also assure priority and, at times, exclusive access to such supplemental resources.

The very considerable extent of resources that SCE&G is able to amass ahead of a predicted storm is visually depicted in Figure 1-2. This capability would not be available to a non-regulated entity. Unlike for the electric system, there fortunately have been no recent actual catastrophic events that affected substantial portions of the gas system. Nonetheless, there continue to be at least annual mock exercises which mobilize resource in accordance with the *Natural Disasters* procedures. The responses are documented and analyzed and applied as a basis to update the response procedures in order to maintain a high level of readiness.

SCE&G also has long-standing relationships with area subcontractors on whom SCE&G may rely when appropriate and cost-effective. These subcontractors are available to SCE&G during times of serious and widespread emergencies to effectuate repairs and ensure the safety of property and the public.

<u>*Emergency Operations Center*</u>. SCE&G's Call Center, that always operates 24/7, routinely handles emergency and other service calls that occur on a daily basis and are a normal occurrence for a gas system. The service calls typically affect a single or small group of customers. For a widespread emergency situation, such as a severe storm or a heavy freeze, the Call Center will continue to operate and those resources are supplemented with additional personnel that have extensive experience in response and restoration management. During a recent hurricane, as an example, 26 personnel were shifted from their daily customer management responsibilities to the storm room and scheduled on rotating shifts to provide 24-

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hour support. Many employees in this group have over 20 years of experience managing these issues.

Figure 1-2. Example of Staging Equipment in Advance of a Storm Threat

Depending on the nature and scope of an emergency situation, SCE&G also may activate an Emergency Operations Center which would assume responsibility until the broad emergency situation is sufficiently downgraded. Depending on the circumstances, command centers may be set up in the field, at a local service center or at SCE&G's Cayce headquarters. Selected characteristics of EOC operations include:

- Personnel are assigned to the center on 24-hour rotating schedules;
- Local employees and/or contractors are called in as needed, as are resources from other regulated gas utilities under mutual assistance agreements; and
- There is active coordination with the media, local governments and large customers regarding the status of the emergency and the related service response.

Any transfer of responsibility between the Call Center and an Emergency Operations Center will be seamless and as such, transparent to the Post. When required and activated, SCE&G will designate a manager to be in charge of the activities of the Emergency Operations Center.

Procedures for the establishment of an Emergency Operation Center is provided in Attachment B, O*&M 307, Coordinating Emergency Response*. Please note in particular Section 1, which outlines situations when the Gas Emergency Control Center would be activated, how it is organized and where it is to be located.

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If requested, SCE&G will provide the position titles for senior personnel that might be called upon to supervise an EOC at the nearby Columbia Service Center and at the Cayce facility in the FRP.

News releases specific to the Fort Jackson natural gas system will be coordinated through and approved by Fort Jackson's Public Affairs Office.

Priority Level of Service. SCE&G follows a standard practice within the regulated utility industry of providing a "priority" dispatch service for important public safety and national defense customers. These include hospitals, police facilities and Department of Defense and other key Governmental installations. In the event that response resources are constrained, Fort Jackson would have a higher priority than, for example, an off-Post retail store or office building. A second distinction is that the response mechanisms must comply with all special privatized service contractual requirements regarding personnel with the Post that are authorized to initiate service requests, security and excavation procedures, coordination and other matters.

The restoration priority in response to a widespread contingency situation would proceed as described above. To clarify, service could not be restored to Fort Jackson if there was an outage to the upstream border station or high-pressure gas main (i.e., if gas cannot flow into Fort Jackson it cannot flow within the Installation). After the upstream service was restored, SCE&G would work within Fort Jackson by proceeding from the regulator stations to the individual service connections. As addressed in Table 4-3, it is envisioned that the Government would identify its emergency response restoration priorities during the Transition Period and this would be incorporated into the Company's emergency restoration plan for the Installation.

SCE&G is uniquely qualified to provide the highest level of response. If the demand exceeds the capability of SCE&G's local employees it has access to many more employees located on its system. If those resources aren't sufficient SCE&G has contractors that are dedicated to SCE&G in the event of a severe event. If the government were to contract with an entity other than SCE&G that contractor would have no back-up supply of resources because SCE&G would be utilizing those resources on its system.

> SCE&G's most recent severe event was the flooding that occurred in Columbia in 2015. During this event there were over 50 road washouts that impacted gas mains. Several trees were uprooted exposing and breaking gas lines. There also was one dam failure that broke a gas main, trees fell on gas meters causing leaks and meters were flooded by the rising water.
>
> SCE&G gas crews managed these issues with no harm to personnel or customers. For this and other emergencies Fort Jackson was (and will continue to be) considered a priority customer and as such will receive the highest level of priority such as is afforded to hospitals, police facilities and Department of Defense and other key Governmental installations.
>
> Treating the Installation as a priority customer will apply as well to the privatized service. The Post and any other personnel involved in privatization effort will have contact numbers for SCE&G. This will provide them direct access to knowledgeable personnel that can respond as necessary during an emergency situation.

Causes of Service Interruptions. The causation factors would be either planned or unplanned. Planned interruptions would result from routine system repairs or upgrades that may require a temporary cessation of service. Routine work will be scheduled at least two

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weeks in advance, and coordinated with the Contracting Officer's Representative, if it will result in any interruption in natural gas service.

The response to unplanned causes of service interruptions will be the same, for each classification of service response, regardless of the causation. For example, SCE&G will provide an immediate response to an Emergency – Life or Death based service request whether the emergency was due to a gas leak caused by third-party damage or natural forces. Possible causes may include the following classifications (which are based on annual reports provided to the Department of Transportation):

- Corrosion;
- Natural forces;
- Excavation damage;
- Other outside force damage;
- Materials or welds;
- Equipment;
- Incorrect operations or
- Other.

Call Centers. SCE&G operates four call centers located across the State. Personnel in these centers are trained to manage calls regardless of where the customer is located. The centers have approximately 164 employees that can handle approximately 1,500 calls per hour. It is rare for the system to hit a threshold where a customer receives a busy signal.

During periods of inclement weather, storms or other severe events SCE&G utilizes various methods to provide additional staffing. This begins with voluntary overtime and the use of designated storm teams. If the event is significant SCE&G changes to 12-hour shifts, utilizes additional on-call storm teams, utilizes personnel from other areas of the company, and can outsource the overflow calls to a third party. SCE&G also opens a designated storm room where the Large Customer Group, Customer Service Engineering and business managers operate 24/7 until the event is over. SCE&G utilizes an Avaya Site Administration system to automatically route calls to open phone lines,

In the event there is an unusual increase in service calls due to a natural disaster or other circumstance, SCE&G routinely extends shift times, cancels leaves, assigns supervisory personnel and takes other appropriate measures to enhance the capacity of the Call Center to handle service requests. SCE&G has four call centers and utilizes many forms of communication to facilitate customer contact. SCE&G transfers senior customer contact personnel to a designated storm room. All calls from priority customers are automatically routed to those personnel. Priority customers, like Fort Jackson, have special phone numbers for that purpose. The ability of the Post to contact SCE&G is not at all impacted by the severity of an event. The Post always has 24/7 direct access to SCE&G project team, management and other personnel.

Management Systems. Because SCE&G is the local gas provider it has and utilizes a comprehensive suite of resources to manage its daily business. The primary software for customer management is an internal Customer Information System (CIS). CIS is utilized to manage the customer records throughout the system. The hardware includes duplicate server

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farms located both on-site and off-site. The server farms are maintained, tested and operated by SCE&G personnel and vendor suppliers. The farms have back-up power supplies and are placed in secure locations. The primary system is located on one of the SCE&G campuses in a secure building behind security doors. The building is located in a fenced guarded limited-access facility, and has secure doors with a 24/7 security guard.

The software used by the Gas Dispatching group is called “CLICK.” With this system, the dispatchers assign and manage work crews. There is also a software program called Equipment Log. It is used to manage the maintenance, calibration, testing and other requirements of the equipment. Software systems will be used, the systems generate service orders, such as the example shown in Figure 1-1. Information related to a service requests flows through and is captured by a service order.

1.4.1 Acts of God or Public Enemy (Terrorism)

By selecting SCE&G as its privatized service contractor, Fort Jackson will have access to the wide range of existing equipment, personnel and other resources that can be mobilized under standard procedures to provide a superior contingency capability in response to acts of God or other emergency conditions. The Company periodically conducts contingency training and exercises related to acts of God, the public enemy or terrorism.

1.4.2 Natural Disasters

Natural disasters are covered under emergency response procedures, which are in place and continually reviewed and updated as needed.

1.4.3 Human Error

SCE&G relies on the use of personnel, documented service procedures, periodic training and specialized equipment to minimize the incidence of outages caused by human error. In the unlikely event that human error causes or extends an outage, SCE&G will dispatch the necessary additional resources to promptly rectify the situation.

1.4.4 Equipment Failure

The equipment that comprises the Fort Jackson natural gas distribution system is inventoried in Table 5 of Solicitation Attachment JA2. SCE&G reviewed the inventory and physically inspected a sampling of the major system components. SCE&G maintains material in stock that can be used as replacements for virtually all of the listed items. Additional items can be obtained or a substitute design completed to meet the Installation’s service requirement.

An exception may be if the system’s existing pipe sizes are not standard. SCE&G will work with vendors to acquire spare parts and fittings for use in effectuating minor repairs and replacements. New construction and larger (capitalized) pipe replacement efforts will use standard stock pipe sizes. SCE&G also will acquire fittings and other tools needed to work with the system’s non-standard piping.

1.4.5 Employee Strikes

SCE&G has had a good, long-standing relationship with both union leadership and union employees. Both Company management and union leadership understand the importance of

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providing an essential service to customers, which currently includes Fort Jackson. Providing continuous and reliable service is such a paramount issue that a no-strike clause is contained within the union agreement. The agreement also prevents the Company from locking out employees.

Nonetheless, SCE&G would follow the practices of other investor-owned utilities by implementing procedures whereby non-union personnel and contractors would be mobilized in the event of a work stoppage to provide critical system maintenance and to ensure the continued availability of reliable service. Because Fort Jackson is a current customer of SCE&G, these procedures would apply for service both to and within the Installation.

1.4.6 Default/Bankruptcy

SCE&G has never filed for default or bankruptcy. Each year an external firm audits SCE&G and there never have been concerns. While a default or bankruptcy is not considered even a remote possibility, SCE&G's status as a regulated public utility will effectively insulate Fort Jackson and our other customers from any adverse service impacts. Accordingly, no special procedures to address this very remote possibility are required.

It is nonetheless reasonable to assume that privatized service quality or costs would not be materially affected by default or bankruptcy. It is noted that this issue has not been relevant in the past for SCE&G's current natural gas delivery service to Fort Jackson and many other Federal customers, so it should not be relevant for service within the Installation. Accordingly, no special procedures to address this very remote possibility are required.

1.4.7 Cease and Desist

No known cease and desist orders have been issued to SCE&G regarding the provision of utility service to customers. In the unlikely event that a Cease and Desist Order that affects the provision of utility service is issued, SCE&G will fully comply with the terms and conditions of such order. The Government will be notified if such order materially affects the provision of the privatized service. This notice will describe the nature of the order and its potential impact on the privatized service, and will discuss planned compliance actions.

1.4.8 Notices of Violation

It is SCE&G policy to operate in full compliance with all applicable laws and regulations. A Notice of Violation (NOV) is an allegation by a regulatory agency that a violation of a law or rule might have occurred or might be occurring. An NOV by itself, however, does not constitute evidence or proof that a violation, in fact, occurred or is occurring.

No known NOVs have been issued that caused SCE&G to cease or significantly alter its operations. On those rare occasions when SCE&G receives an NOV, the Company's policy is to immediately correct the alleged non-compliant situation and to settle the NOV as expeditiously as possible. When necessary, SCE&G can apply for variances from certain environmental rules and permit conditions so that it can continue its operations while avoiding a possible NOV.

Per RFP Section C.10.6, copies of relevant NOVs will be provided to the Government within five days.

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1.4.9 Vandalism

SCE&G will report to the Government any known or suspected incidences of vandalism to contractor, Government or other property within the Installation.

1.4.10 Vehicular Damage

SCE&G similarly will report to the Government any known or suspected vehicular damage within the Installation, whether to or caused by Company-owned vehicles.

1.4.11 Public Information

News releases related directly or indirectly to the privatized service will be coordinated through and approved by the Fort Jackson's Public Affairs Office.

1.5 COORDINATION AND OTHER MATTERS

Presented in this section are coordination and other matters that are applicable to the Service Interruption and Contingency Plan, and may also apply to other work ranging from the implementation of a major capital upgrade project to routine preventive maintenance of the privatized system.

Access to the utility system will be in accordance with the right-of-access per Section C.6 of the Solicitation. SCE&G acknowledges that Access by the Contractor, its officers, employees, contractors of any tier, agents, and invitees is subject to such regulations and orders, and that access to the utility system is subject to all regulations and orders currently promulgated or which may be promulgated by lawful authority as well as all other conditions contained herein.

1.5.1 Sub-Metering (RFP Sections C.3.3 and JA2.5)

There is a requirement to provide monthly meter readings for secondary meters that are not connected to the Advanced Meter Data System (AMDS) or are not read by the system. There is a Volume III exception to this requirements. If not accepted, meter readings will be provided. Regardless of the disposition of the exception, SCE&G will own, operate, maintain and as necessary replace all secondary meters.

1.5.2 Contractor Facilities (RFP Sections C.5.1.4 and JA2.3.1 and JA2.3.2)

The Columbia Service Center, with its full service yard and office facilities, will have primary responsibility for the operation and maintenance of the Installation's privatized natural gas system. As needed support routinely also will be provided by other centers. Because SCE&G has yard resources in the immediate vicinity of Fort Jackson, the Company does not envision the need to site a permanent yard facility within the Installation. Prior Contractor Officer Representative approval will be requested for as-needed temporary facilities to support construction projections.

1.5.3 Record Drawings and System Maps (RFP Sections C.5.1.5 and JA2.3.9, 11 & 14)

Consistent with standard procedures, SCE&G will maintain current drawings for all privatized facilities for the duration of the service contract. An initial complete set of privatized system maps will be provided to the Installation (see Project T-3). Electronic or hard copies of the maps for all or selected portions of the system would thereafter be provided annually or as needed

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and upon reasonable request. An exception to this effect is provided in the Volume III proposal. Geographic Information System (GIS) data will be provided as well.

It is noted, however, that compatible systems invariably will require some form of data manipulation to transfer and/or load data from one system to another. The amount of manipulation that might be required cannot be determined at this time. SCE&G would take reasonable measures to provide compatibility and minimize data manipulation, after which the Government would be responsible for any additional related work efforts.

Regardless of the current general compatibility, SCE&G believes it would be inappropriate to commit to provide drawings, as required in Solicitation Section C.5.1.5, in the "electronic media formats using the latest release software compatible Government systems" for 50 years since that format might not be supportable at some time during the extended contract term. This might occur, for example, if Fort Jackson some years from now adopted a non-standard mapping system or did not update its software to a version that continued to be supportable or, if upon further analysis, the two systems lack the assumed current level of compatibility.

It would not be practicable for SCE&G to maintain two separate systems: one to support only Fort Jackson and the other to support SCE&G's hundreds of thousands of other customers and thousands of miles of pipelines. SCE&G in this instance would work with the Installation to make drawings available in an electronic format that is reasonable given the Company's current technology at the time of the request. SCE&G also would provide electronic copies of the files in PDF (or equivalent) format (see related Volume III exceptions).

1.5.4 Removed or Salvaged Materials (RFP Sections C.5.1.6 and JA2.3.11)

SCE&G will be responsible for the removal and/or disposition of SCE&G-owned facilities that are not used and useful for providing a privatized natural gas distribution service. Unutilized facilities after construction will be abandoned in place, provided the abandoned infrastructure poses no immediate or future health, safety, operational or environmental risks and is in compliance with SCE&G and gas industry standards. Any such abandoned facilities would be marked on system maps. This would generally apply to underground piping. Above-ground facilities that are abandoned, such as risers and regulators, generally would be removed by SCE&G.

To clarify, SCE&G assumes that the Attachment JA2 inventory is for facilities that are currently (i.e., prior to the system ownership transfer on the CSD) used and useful for providing a natural gas distribution service. The Company therefore would not acquire ownership of piping which in recent years was not pressurized and was not connected to service locations with natural gas load requirements as of the Contract Start Date / ownership transfer. SCE&G's mapping requirements related to abandoned, pre-existing gas lines will be limited to the confines of the excavation where the unmapped equipment is found.

1.5.5 Mortgage or Liens (RFP Section C.5.1.7)

SCE&G acknowledges and accepts that it will not engage in any financing or other transaction creating any mortgage upon any Government property, or place any liens or restrictions.

1.5.6 Personnel (RFP Section C.5.2)

SCE&G will not employ any person for work on the privatized system if such person is identified as a potential threat to the health, safety, security, general well-being or operational mission of

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Fort Jackson. Nor will SCE&G *knowingly* hire any person that would create a conflict interest or that is an affected Quality Assurance Representative. As necessary, employees will be able to read, understand, write and speak the English language. SCE&G's employees present a neat appearance and are readily recognizable as contractor personnel. Service vehicles are clearly identifiable. SCE&G employees comply with all applicable certification, licensing and medical requirements. Employees also will comply with applicable Installation regulations, directions and requirements.

SCE&G will provide a list, upon reasonable request, of the employees that routinely and materially will be engaged in providing a privatized service to the Installation. It is understood that the Government may deny access if it is determined that continued entry into Fort Jackson is not in the best interests of national security. It is further acknowledged that Military reservists and National Guard members employed by SCE&G may be subject to recall to active duty. SCE&G will not knowingly hire a U.S. employee if doing so would create a conflict of interest, nor knowingly hire Quality Assurance Representatives responsible for monitoring contractors or subcontracts awarded to SCE&G.

1.5.7 Controlled Access (RFP Section C.5.2.5)

Personnel requiring access to secured areas or restricted areas will comply with applicable regulations. SCE&G will work with Installation personnel to identify all such restricted areas, and ensure that dispatchers and other personnel are aware of the special requirements associated with work in these areas. SCE&G will comply with the Solicitation requirement to apply for personnel security clearances after the contract is awarded.

1.5.8 Service Contract Act and Davis Bacon Act (RFP Section C.5.2.9)

SCE&G is a regulated public utility that proposes to provide a regulated privatized service. The service will be regulated by the SCPSC. Service prices, therefore, will be set by law or regulation. As such, the Service Contract Act of 1965 is not applicable. The Davis Bacon Act (DBA) also does not apply to the proposed service, just as it does not apply to service to other Federal sector customers. Although the privatized system may be physically configured to only serve Fort Jackson, it nonetheless will become a part of the utility system that serves all of SCE&G's retail customers.

1.5.9 Contractor Vehicles (RFP Sections C.5.3 and JA2.3.5)

Service vehicles are clearly identifiable with Company markings.

1.5.10 Communications (RFP Section C.5.4)

SCE&G will obtain Installation Communications Group approval for acceptable frequency use before using communication devices on the Installation to support the privatized system. SCE&G also will follow Installation procedures for operating radios in accordance with DFARS 252.235-7003, *Frequency Authorization*. Because SCE&G routinely operates communication devices on or adjacent to Fort Jackson related to the operation of its existing upstream system, issues are not anticipated.

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1.5.11 Contractor Advertising (RFP Section C.5.5)

SCE&G acknowledges and accepts that it will not display advertising on Government property, but that reasonable marking on SCE&G property, including vehicles, is permissible.

1.5.12 System Access (RFP Sections C.6.1 and C.6.2)

SCE&G acknowledges and accepts the Section C.6 access provisions.

1.5.13 Repair Response Record Keeping (RFP Section C.8)

Consistent with standard practices, SCE&G will retain records for a minimum of two years and make them available for review by the Contracting Officer upon reasonable request and with reasonable notice. Maps of the privatized system will be retained indefinitely in accordance with DOT pipeline safety requirements. System maps, drawings and other records will be made available to the Installation upon reasonable request.

1.5.14 Construction and Site Restoration (RFP Section C.9.3)

Standard procedures are in place for the upstream system to address traffic control, work site notices and protection, storm flows and site cleanup and restoration. These will be applied on a seamless basis for contraction work within Fort Jackson. The procedures will, however, be modified as necessary to comply with the unique or different Government site requirements.

1.5.15 Excavation Permits (RFP Section C.9.3.1)

SCE&G will adhere to Fort Jackson's excavation permit process, including requirements to mark and locate all SCE&G-owned natural gas underground utilities and obtain a written excavation permit prior to commencing routine digging or excavation.

It will be necessary, however, to have expedited procedures in place when responding to an emergency (or urgent) service request. SCE&G will work closely with designated Installation personnel to arrange for the expeditious location of utilities owned by the Government. The Company will request expedited approval of excavation permits. Pending the marking, construction crews will hand dig the service area if necessary and locate affected utility lines.

1.5.16 Locating and Marking (RFP Sections C.9.3.2 and JA2.2.3.13)

SCE&G is a member of the South Carolina 811 One Call. South Carolina 811 serves as a clearinghouse where businesses and individuals planning underground work are able to make a single telephone call to determine the location of all underground utility facilities.

After receiving an inquiry, the clearinghouse notifies member utilities that have facilities in that area so that the facilities can be marked appropriately. SCE&G can ensure that its facilities are marked in advance of the proposed digging to minimize the potential of service interruption to downstream customers. These same procedures, with their proven effectiveness, will be applied to Fort Jackson.

The Post will be responsible for contacting "call before you dig" South Carolina 811 centers with marking requests, and SCE&G will then be responsible for the actual markings of the privatized

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natural gas system. SCE&G will also locate and map all active, privatized natural gas distribution facilities as part of the Section 3 Capital Plan.

Specifically, South Carolina 811 sends requests they receive for locating directly to SCE&G or their designated contractor via email. Upon receipt, the requests are logged and date stamped. Requests are to be completed within two working days. Completed requests are archived along with their date stamps.

SCE&G Service Technicians or their designated contractor visit the site of the request and use electronic pipe locators and maps to verify gas locations, then paint the locations on paving or use flags and/or stakes in non-paved areas. Company personnel may also stand by if necessary during backfill and compaction activity to ensure that gas facilities are protected and properly supported.

The Solicitation does not include a requirement that SCE&G mark “and confirm the depth” of privatized natural gas facilities. This is consistent with standard industry practices. Natural gas utilities in general and SCE&G in particular cannot guarantee or otherwise confirm the depth of underground facilities. Referencing the Section 2.2.11 New Construction Standards, properly installed mains should be at a minimum depth of 30 inches and there are related minimums for service lines and risers.

Requests for line locates generally will be responded to within three working days of the Installation’s request. SCE&G will notify the Installation and discuss appropriate alternative responses if the lack of tracer or other special considerations might require longer to locate gas lines.

1.5.17 Duty Hours (RFP Section C.9.4)

SCE&G acknowledges that normal duty hours are Monday-Friday (0730-1600). All routine work shall be accomplished during normal duty hours. The Government must approve deviations from these duty hours.

1.5.18 Coordination Meetings (RFP Section C.9.5)

SCE&G will be available for coordination meetings as reasonably required by the Contracting Officer and will promptly review and provide comment on meeting minutes prepared by the Contracting Officer. Coordination meetings also are addressed under the Section 4 Operational Transition Plan.

1.5.19 Exercises and Crisis Situations (RFP Sections C.9.6 and H.1)

SCE&G understands the important National Defense implications of the Sections C.9.6 and H.1 requirements, and will cooperate with the Government to respond to exercise and crisis situations that require utility support. This proposal amply demonstrates that SCE&G has existing local (and redundant) capabilities to respond to any conceivable future service requirement, regardless of circumstances. Per Section C.9.6 of the Solicitation, extra work effort under crises these circumstances may entitle SCE&G to an equitable adjustment or compensation.

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1.5.20 Crisis / Exercise Situations (RFP Section JA2.3.27)

In a somewhat related manner, Section JA2.3.26 requires that SCE&G participate in practice evacuations and crisis exercises as necessary and at no additional cost to the Government. The distinguishing characteristic of such activities is that they will be temporary in nature.

1.5.21 Government Operation (RFP Section C.9.7)

Work on a gas distribution system by unqualified and untrained personnel can pose a risk to public safety and property and to SCE&G, other utility and Government personnel. Just as the privatized service will be in accordance with known and accepted practices, the Government's performance rights under the referenced contract clauses must be pursuant to mutually agreeable terms and conditions. Such provisions should include circumstances under which the performance right might be exercised, proper notification provisions and adherence to SCE&G operations, maintenance and other standards.

Consistent with an overriding policy of safety first, SCE&G may elect not to perform a work function if it determines that work by Government employees would impose an unacceptable safety risk. Any such risks may be mitigated by having Government employees trained and certified in a manner that is acceptable to SCE&G. Any such Government operations must be fully compliant with DOT Title 49 and SCPSC pipeline safety and certification requirements. An exception to this effect is included in the Volume III Contract Documentation Proposal.

1.5.22 Plant Control & Environmental Compliance (RFP Sections C.9.8 & C.10)

SCE&G's operations are compliant with applicable Federal, State and local environmental laws and regulations. As an established local natural gas utility, with more than 90 years of operating history in South Carolina, SCE&G has considerable experience working in environmentally sensitive areas. Standard work practices will be modified as necessary to comply with Fort Jackson's applicable procedures and standards for work in and around environmentally sensitive areas or contaminated properties. SCE&G has the requisite capabilities and will conduct an environmental impact assessment, if required, in support of future system modifications.

SCE&G will provide the Government with advance notice of, and an opportunity to jointly participate in, meetings with environmental regulatory authorities regarding matters related to the privatized system and within the confines of the Installation.

1.5.23 Temporary Connections (RFP Section C.11.5.1)

SCE&G may make temporary connections at the request of either the Government or an on-Post contractor. As required, the work will be coordinated with the construction contractor or Contracting Officer's Representative (COR). All necessary information, including the name of the customer, duration of the connection and description of the connection, will be furnished to the COR. Any temporary connection will be approved by the COR prior to execution. SCE&G will work the connection until natural gas is available to the desired location(s).

1.5.24 Insurance Requirements (RFP Section H.2)

SCE&G maintains the requisite H.2 insurance coverage. A certificate of insurance will be provided after contract award. Please note that, like most public utilities, SCE&G is self-insured for natural gas distribution system losses.

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1.5.25 House System Leak Responses and Appliance Relighting

House system work is not included within the scope of the work for the privatized service. The Installation accordingly is responsible for relights and leak detection within buildings, as well as for checking appliances prior to relighting to make sure they are operating properly.

Nonetheless, safety consideration and adherence to standard operating practices will necessitate close coordination is response to suspected gas leaks or other emergency situations. The Section 4 Transition Plan accordingly provides for the development of a Memorandum of Understanding (MOU) with the DPW, housing privatization contractor and other interested parties to document appropriate response procedures. The suggested MOU approach is follows:

- Installation personnel (or others) suspect a gas leak (smells gas) and call the emergency Call Center;
- A SCE&G technician arrives at the site and does a leak survey;
- If an exterior leak is detected the necessary repairs are initiated;
- If no exterior leak is detected, the technician will enter the building with a Combustible Gas Indicator (CGI) and assess if there is an interior leak;
- If an interior leak is detected, the technician will cut off service to the building and contact the DPW (or designated service contractor); and
- Gas service is restarted after SCE&G is informed that the interior leak has been taken care of.

Compliance with applicable codes and procedures for gas system installation work for private parties also should include pressure testing and maintenance of related test results. The Government should review its records and/or contact its gas system installation contractors to obtain the documentation. SCE&G recognizes, however, that pressure testing and related documentation might not have been a specific deliverable for the Installation's contractors. The requisite documentation thus might not be (readily) available.

1.5.26 Planning and Programming (RFP Section JA2.3.7)

SCE&G routinely works collaboratively with its Department of Defense and other major customers to understand and plan for future service requirements. This will continue to be the case for the privatized system. Clarifying comments on the specific Section JA2.3.7 requirements are as follows:

- SCE&G will support the Section JA2.3.8 *Request for Action* processes (see discussion below).
- SCE&G will participate as necessary in pre-design, design, strategic planning, and other meetings related to the planning and implementation of MILCON and similar projects that impact the privatized systems. It is envisioned that the meeting will be face-to-face or telephonic, depending on scope of a particular meeting and the extent to which privatized facilities would be impacted.
- Because SCE&G is continually involved in planning for the growth and expansion of its existing system, a continuous capability to provide design and other support will be maintained.

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SCE&G will apply its in-house, computerized modeling capability as needed to support the planning process. Of note is an interactive "Synergi Gas" system which is an industry standard for modeling large, complex integrated multi-pressure level systems. The model is integrated with the Company's ESRI-based geographical information system software to convert maps with layers of facility information into hydraulic models with pipes, valves and regulators. Further integration with load and usage data from customer account records enables the modeling of gas flows and pressure.

SCE&G has six sets of models covering each of its functional gas areas. The privatized system will be included in the database for the Central Area. The model can then be used to assess flow and pressure data and be used to assess and plan for such things as new or modified loads.[2]

1.5.27 Request for Action Process (RFP Section JA2.3.8)

As with the planning and programming activities discussed above, SCE&G acknowledges the requirement to fully support the Request for Action (RFA) process. Two elements of the process warrant further elaboration:

- SCE&G's cost to operate and maintain the privatized system will be recovered as part of the Contract Rate, the O&M components of which will be based on system wide average costs. As discussed in the Volume IV Price Proposal, this means that there normally would be no need to consider potential contract modifications under the RFA process to account for added O&M costs.
- The RFA process seems to imply that the Government may make lump sum payments to SCE&G for expansions of or upgrades to the privatized system (for what is commonly referred to as a connection charge). Such payments would be treated as a Contribution-in-Aide-of-Construction (CIAC) under the Tax Reform Act of 1986, and as such there may be an added income tax gross up. This would not be an issue, however, if the lump sum payments instead were paid directly to a MILCON (or other) contractor and SCE&G afterwards purchased the newly-installed facilities from the Government for their fair market value (see related Volume III exception).

1.5.28 Pressure Testing of Existing Facilities

See Section 3.4.10, below.

1.6 CATASTROPHIC LOSS

SCE&G will be responsible for all costs associated with a catastrophic loss to the privatized natural gas distribution system. Recovery funds would be obtained from property loss insurance coverage, working capital and cash reserves. Obtaining the requisite funds will not be an issue because the privatized system will remain a relatively small portion of the total SCE&G system (see also Section 5.0, *Financial Capability*).

[2] This relates to the computerized model requirement in Section JA1.3.15 of the RFP. That requirement calls for annually providing an electronic and hard copy of the "model" to the Government. However, this is neither practical or meaningful because: (a) the Company's model is integrated with other SCE&G systems and thus cannot be exercised withy access to the data in these systems and (b) there must be some situation (e.g., new or modified load) to be modeled. SCE&G instead will provide appropriate screen shots or reports in support of specific planning projects. There is a related Volume III exception.

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SCE&G does not anticipate the need to rely on FEMA or other Governmental relief organizations for financial assistance in recovering from a catastrophic loss. As an integrated utility operating in three states, SCE&G can uniquely marshal resources from other areas (and as needed other states as well) to expeditiously restore service after a catastrophic loss.

1.7 SERVICE INTERRUPTION AND CONTINGENCY PLAN HIGHLIGHTS

SCE&G believes that the plan described above is responsive to all privatized service requirements. As noted above, the effectiveness of the Plan can be measured by the three pillars of intent, capabilities and past performance. While Plan elements are addressed in detail, provided below is a summary of some of its more salient features.

- *Communication line*. SCE&G's existing Call Center and privatization management team (who all are current employees) will be available 24/7 to respond the Government's emergency and routine service requirements.
- *Ease of submitting service requests*. Fort Jackson can submit requests, telephonically or electronically, by contacting either the management team or the Call Center.
- *Service center classifications*. Service requests will be classified in accordance with Table 1-1. The Company's ability to effectively classify and respond to all matters of service calls is a product of decades of experience operating an extensive utility system that surrounds Fort Jackson and extends into 35 South Carolina counties.
- *Response and remedy*. While the comprehensive maintenance procedures presented in Section 2.0 will minimize their frequency, outages nonetheless will be inevitable. The availability of trained and experienced local crews and resources will minimize related down times.
- *Service call status and feedback*. There is an existing electronic system for Fort Jackson or any other customer to track and determine the status of an outage or other service request. There also are established mechanisms for management to directly contact first responders in the field and communicate information to the customer.
- *Call center data collection*. As shown in Figure 1-1, Call Center systems obtain and retain detailed information on all service requests.
- *Location of call center*. SCE&G's existing Call Center is located a few miles from Fort Jackson in in nearby Cayce, South Carolina.
- *Cause of interruption*. Section 1.4 addresses a wide range of possible causes of service interruptions.
- *Coordination of scheduled outages*. Procedures to coordinate scheduled outages are addressed in Section 1.3.2.2. As with any outage, SCE&G has a strong (and unique) incentive to minimize outage times because a gas outage directly relates to a loss of revenue under tariff charges to deliver power to Fort Jackson.
- *Rescheduling of work*. Fort Jackson is a long-standing and important customer, and SCE&G recognizes that flexibility is crucial in supporting its Defense missions. That level of recognition will extend to the privatized service.

- *Real-time system monitoring*. There is an operational SCADA capability at SCE&G border stations that can detect pressure issues on the downstream system.
- *Qualification of Initial Responders*. All First Responders are Title 49 certified works who are trained to assess a service situation, initiate (and sometimes) complete repairs and, as-needed, request additional crew and resource support. Responders have the training and equipment necessary to work on a pressurize system.
- *Availability of management*. The project management team will be available 24/7.
- *Availability of materials*. Stores of every conceivable type of material is available at nearby service centers in Columbia. These resources can readily accommodate the relatively small incremental needs of the privatized service.
- *Availability of vehicles and equipment*. The existing local availability of materials extends as well to existing vehicles and equipment.
- *Emergency operations center*. There are existing, and detailed, storm and disaster response procedures which include setting up emergency operations center. The procedures are honed and modified as needed based on responses over to the years to actual emergencies coupled with mock drills.
- *Catastrophic loss*. An ability to effectively respond to potential catastrophic events is maintain through mock drills and regular reassessments of response procedures.

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Section 2.0

Operations and Maintenance / Quality Management Plan

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2.0 Operations & Maintenance / Quality Management Plan

The Operations and Maintenance / Quality Management Plan presented in this section represents an integration of SCE&G's standard operations and maintenance practices, design and construction standards and business / customer relationship practices with Fort Jackson's privatized natural gas service requirements. The plan also reflects SCE&G's Quality Management Philosophy, which encompasses service to the Company's customers as well as its relationships with employees, the community, shareholders, suppliers and governmental agencies.

Because the ownership and operation of an extensive local natural gas distribution system is a core business, its standard operating practices (SOPs) incorporate compliance with the Department of Transportation's pipeline safety regulations at Parts 191 and 192 of the Code of Federal Regulations and all other applicable Federal, State and local laws and regulations. The SOPs are documented in manuals (see, for example, Attachment A). Safety and service standards oversight by the SCPSC should give the Installation added assurance that compliance with the letter and spirit of applicable laws and regulations will be a constant throughout the extended term of the privatized service contract.

As a regulated natural gas utility, SCE&G procedures and practices are set up to be in compliance with all applicable Title 49 requirements, including the enforcement and related requirements under Part 190. A Quality Management Specialist and Manager of Gas Compliance and Quality Management Plans are responsible for filing all required reports, as well as handling queries from the SCPSC, DOT and other government agencies.

As with the Service Interruption/Contingency Plan, the Operations and Maintenance / Quality Management Plan procedures and policies presented herein generally are reflective of system-wide procedures and policies and therefore may be changed without notice to or approval by the Government. Exceptions are those that relate to unique Government service requirements (such as the need for excavation permits and approvals for new or modified service connections). Here as well, any plan changes will be consistent with system-wide service standards and procedures and with applicable Federal, State and local law.

2.1 QUALITY MANAGEMENT PHILOSOPHY

Two major aspects of SCE&G's business strategy influence its overall operating philosophy. They include safely managing growth and focusing on gas utility operations. SCE&G has experienced steady expansions in its customer base. For example, SCE&G in 2014 and 2015 added 19,000 new service connections to the upstream system. This is equivalent to a 50-fold replacement of the total number of the Fort Jackson privatized system service connections (see Table ES-1). South Carolina Electric & Gas Company also annually installed an average of almost 210 miles of new or replacement PE mains and services annually over the past four years. This is roughly equivalent to a five-fold replacement of the entire Fort Jackson system each year.

Delivering natural gas safely and reliably is what SCE&G does with excellence. The Company is committed to providing, safe and reliable natural gas service. This commitment is integrated into the SCE&G Quality Management Philosophy which:

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- *Meets customer needs.* SCE&G conducts annual customer surveys to better understand current and future customer needs, and how it can improve operations to better meet evolving customer requirements. SCE&G will use techniques consistent with other SCE&G service areas at Fort Jackson, to understand the Installation's special requirements and work diligently to meet them.
- Assures safety. Safety first is more than a slogan. It is an engrained service ethic. The privatized service will be characterized by the same overriding emphasis on safety that governs its current system operations.
- *Emphasizes reliability.* SCE&G strives to minimize system leaks and losses and to maintain gas pressures.
- *Plans for the future.* An expanding customer base and load growth means SCE&G must emphasize productivity enhancements to manage growth while still providing service under stable rates.
- *Anticipates, prepares for, and manages growth and industry changes.* SCE&G works closely with industry and monitors load growth to meet the needs of its customers and the community at large.
- *Incorporates Quality Control and Monitoring*. As shown in Table 2-1, SOPs applied to the privatized system will include four layers of quality control and monitoring.

Table 2-1. Layers of Control and Monitoring

Training and Oversight. Employees who work in specialties covered by local, State, or Federal laws are trained in the content and purpose of the laws, tested to determine understanding and then supervised by SCE&G management who are knowledgeable, dedicated and experienced.

Self-Audit by Local Supervision. Local supervisors conduct general oversight of all aspects of daily operations, concentrating on operations governed by local, state and federal laws. In addition, they periodically conduct detailed audits on personnel and contractors.

Corporate Internal Audit. At the corporate level, full-time auditors are employed to review SCE&G's level of compliance with Governmental regulations, from the SCPSC, OSHA, Air Quality and Water Quality Management Districts, Local Fire Departments, etc.

Governmental Agency Audit. SCE&G is subjected to ongoing compliance audits by the SCPSC. SCE&G is also visited by OSHA, Air and Water Quality District Inspectors, Environmental Protection Agency (EPA) Inspectors and City and County Fire Inspectors. Civil penalties are assessed for violations found, although these have been extremely rare at SCE&G.

2.2 PLAN IMPLEMENTATION PROCEDURES AND POLICIES

The implementation procedures and standards presented below are based on SCE&G's standard operating practices, as listed in the Attachment A Service Manuals, which are available for inspection upon reasonable request. This is important to the Installation because the SOPs reflect the experience gained from actual performance and are based on how the Company operates its local system and interacts with its existing, similarly situated customers.

SCE&G's standards, procedures and practices are documented in its operations, construction, safety and environmental manuals. These formal manuals, as well as the more informal work

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practices, will govern the work performed for Fort Jackson. The manuals are periodically modified as new and better materials and procedures become available or as regulatory requirements change.

SCE&G has a responsibility to be intimately familiar with standard and innovative operation and maintenance practices. Decades of experience have provided knowledge of which practices work best in different environments, including local weather, soil and other applicable operating conditions.

2.2.1 Reliability and Quality

Reliability. SCE&G provides safe and reliable retail natural gas utility service to 403,900 customers, and serves homes, schools and businesses, as well as many Federal facilities. It maintains consistently high levels of reliability by setting high standards throughout the organization and within each service area. SCE&G is able to provide this level of service by adhering to procedures and policies that comply with local, State and Federal regulations. These include:

- *Damage prevention program*. SCE&G puts markers over its high-pressure lines, patrols them, and subscribes to the South Carolina 811 locate-and-mark system.
- *Oversight*. Per internal policy, all gas handling operations, such as tie-ins and shutdowns, are supervised by employees trained in the proper procedures. Qualifications are documented and available for inspection.
- *Prompt investigation*. No matter how rare system outages are, they are thoroughly investigated by teams of SCE&G field and engineering personnel to determine the cause(s) and to implement preventative measures. Investigation results are then reviewed and findings are used to improve response procedures.
- *Government verification*. The SCPSC has broad authority to regulate and investigate the operations of SCE&G and other jurisdictional gas utilities. The SCPSC also imposes numerous reporting requirements, such as the filing of annual reports based on the FERC Form 2 and the DOT's Office of Pipeline Safety regulations.

Quality. SCE&G developed a stringent set of standards for the construction, operation and maintenance of distribution facilities. These standards are incorporated in the details and procedures shown in the Attachment A manuals. The manuals are based on accepted industry standard practices, and are designed to meet or exceed the requirements of Titles 191 and 192 of the CFR and have been tailored to reflect localized weather, customer needs, soil and other conditions. Using established standardized practices should assure Fort Jackson of up-to-date, high-quality standards and service. SCE&G's SOPs are further enhanced with the incorporation of other applicable industry standards, such as those for:

- American Gas Association (AGA);
- American National Standards Institute (ANSI);
- American Petroleum Institute (API);
- American Society of Mechanical Engineers (ASME);
- American Society for Testing and Materials (ASTM); and
- National Fire Protection Association (NFPA).

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The Company is subject to fines and civil penalties for non-compliance found by the SCPSC. Independent audits and enforcement uniquely applies to regulated natural gas utilities such as SCE&G.

Specific standards for the physical quality of gas distributed within Fort Jackson will be based on the standards for and physical characteristics of the gas delivered to the Installation and therefore will not be affected by the privatization initiative.

System Performance. SCE&G constantly monitors the natural gas system. At the highest level that occurs in the 24/7 gas control center. This is where any medium to large system disruption would be noted and where emergency calls or gas leak calls are answered. This office has the ability to immediately dispatch crews to any trouble area. Specific techniques that can indicate if the privatized system is performing in an unsatisfactory manner include:

- *SCADA*. The SCADA capability at SCE&G border stations would indicate a problem with the downstream system, caused most likely by a third-party damage to the privatized system. SCE&G also installs pressure monitors at known or suspected low pressure points. Our Synergy modeling software is used to identify these potential low pressure areas. After the Fort Jackson system is mapped and modeled, SCE&G will be able to determine any areas where the pressure has the potential to be low. SCE&G may install SCADA devices to monitor the system at those points. If the system were to begin performing in an unsatisfactory manner these would be the first locations that it would be noticed. SCADA devices are powered with solar panels with battery backup, and communicated with through the cellular system.

- *Leak Surveys*. Consistent with standard practices, an annual leak survey will be conducted. In addition to identifying leaks, the survey inspects risers, valves, meters and other above-ground facilities. Survey results are documented and remedial action is scheduled in accordance with standard practices for Grade 1, 2 or 3 leaks. The results also are assessed to evaluate the overall condition of the system. For example, an inordinately high number of non-third-party caused leaks might indicate a problem with pipe material or installation practices, especially for facilities which were not installed by SCE&G and/or continuously maintained and documented in accordance with Title 49.

- *Regulator Stations*. Regulator station pressure readings will be used to verify that the system is operating consistent with the established MAOPs, and adjusted as needed.

- *Inspections*. There are numerous other types of inspections that occur on a regular basis. A couple of these are Atmospheric Corrosion (done every 3 years) and Cathodic Protection System checks which are done quarterly and annually depending upon the type of system.

2.2.2 Recurring and Preventative Maintenance

Preventative maintenance of the privatized natural gas distribution system will be a continuous and ongoing process involving both field and engineering personnel and outside contractors. SCE&G's existing transmission and distribution system consists of plastic and steel components that are generally similar to those of the Fort Jackson system. Therefore, SCE&G's personnel are experienced in the types of operations, maintenance and repair work that will routinely be performed at the Installation. SCE&G's inventoried materials also are generally compatible with material at Fort Jackson.

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SCE&G's operating and maintenance practices comply with the requirements of DOT Title 49 CFR, Part 192.605 "Procedural Manual (Plan) for Operations, Maintenance, and Emergencies." These practices contain elements that cover preventative maintenance, corrective maintenance, system design and reporting requirements. Selected practices are summarized below.

- *Preventative Maintenance*. All facilities are examined periodically to determine whether or not they are functioning within established parameters. Table 2-2 lists elements of the SCE&G preventative maintenance program, along with the appropriate standard. When substandard conditions are found, follow-up remediation must occur.
- *Pipeline Repairs and Operations*. All operations, maintenance and repairs to the pipeline must be in accordance with DOT Title 49 CFR, Part 192, Subpart M.
- *Corrosion Control*. Corrosion must be controlled and reported in accordance with the requirements of DOT Title 49 CFR, Part 192, Subpart I.
- *Maps and Records*. Construction records, maps and operating history must be kept current, and made available to appropriate operating personnel. Maps and location reports can be made available to the Installation upon reasonable request.
- *Reporting Incidents*. Data needed for reporting incidents as defined in Title 49 CFR, Part 192 must be gathered in a timely and effective manner.
- *Pipeline Start-up and Shutdown.* Starting up and shutting down any part of the pipeline must be in a manner designed to assure operation within maximum allowable operating pressure limits.
- *Isolation and Purging.* Compressor stations and pipelines must be maintained, isolated, and purged according to DOT Title 49 CFR, Part 192, Subpart L.
- *Current Procedures.* Procedures must be periodically reviewed to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance. Modifications must be made when deficiencies are found.
- *Excavations.* Adequate precautions must be taken in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas.
- *Safety Reports.* Safety-related condition reports and instructions must be issued as needed. These enable O&M personnel to recognize dangerous conditions.
- *Surveillance, Accidents and Emergencies.* Surveillance is undertaken when certain third party activity is occurring near SCE&G facilities, such as excavation around steel or iron mains. The level of surveillance varies with the nature of the excavation, the facility involved and the reliability of the excavator. Emergency response and accident investigations must comply with Title 49.
- *Correcting Other Deficiencies.* The gas distribution system serving Fort Jackson may, from time to time, perform in an unsatisfactory manner, as measured against normal service standards. This may be due to factors such as aging infrastructure, or load growth rendering a need for system upgrade or reconfiguration. In these instances, qualified engineers, designers and field personnel will analyze the system to determine appropriate solutions and implement corrective actions. This type of work is routinely handled by SCE&G's professional staff in accordance with established and recognized engineering design standards.

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- *Manage Inspection Data and Repair Work*. Inspection data is collected and uploaded into database applications. Such databases are used to generate reports relative to maintenance statistics, inspection program status and repair / replacement work back-logs. Equipment conditions found to be critical from a reliability, safety, or environmental risk are corrected immediately. Other maintenance follow-up work is planned and scheduled for future implementation.

Table 2-2. Description of Gas Service Programmed Maintenance

Element	Maintenance Performed
Valve Inspections	Performed in accordance with DOT 49 CFR 192. Critical valves are tested annually by a crew for access, leakage, lubrication and functionality.
Pipeline Patrol	Performed in accordance with DOT 49 CFR 192. High pressure mains are patrolled on cycles varying from quarterly to annually, depending on location, and checked for access, erosion, signage and nearby construction activity.
Leakage Survey	Performed in accordance with DOT 49 CFR 192. Gas mains, service, lines and meter sites are checked for leakage using a combustible gas indicator. Cycles vary from annual to every five years.
Exposed Pipeline Inspection	Performed in accordance with DOT 49 CFR 192. Exposed pipelines (i.e. bridges, river crossings, spans, etc.) are checked for signage, tampering and paint / coating.
Gauge Calibration	Performed in accordance with DOT 49 CFR 192. Pressure recording gauges are calibrated for accuracy annually.
Cathodic Protection	Performed in accordance with DOT 49 CFR 192. Buried steel pipelines have their levels of protection tested on cycles ranging from every two months to ten years, depending on the type of protection applied. Above ground pipelines are inspected at least once every three years.
Regulator Stations	Performed in accordance with DOT 49 CFR 192. System regulator stations are checked for functionality, condition and repaired/serviced annually. Service regulators are inspected as needed.
Industrial Meter Sites	Performed in accordance with SCE&G operations and maintenance standards.

2.2.3 Maintaining System Pressure

Adequate SCE&G system pressures are controlled through a network of gas mains, district regulator stations and border stations. Minimum pressures are maintained through routine monitoring, competent original design and computer simulation of gas flows and pressures. The Company's facilities also are designed with compliant over-pressure protection devices.

Verification of minimum pressure is accomplished through the use of recording gauges at the Installation's regulator stations. The gauges are read regularly to ensure adequate system configuration and capacity. SCE&G also adheres to Title 49 requirements and SCE&G procedures related to MAOP and monitoring system pressure.

SCE&G will operate the privatized system in a similar manner, and will apply the following to maintain proper system pressure:

- System modeling;

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- Frequent system surveillance and facility inspections;
- Temporary connections to upstream systems;
- Annual leak surveys and cathodic protection reads will be performed in certain designated areas. All other leak surveys will be performed within the established time periods (i.e., three or five years); and
- Coordination with the upstream transmission system.

System Modeling. Key distribution systems for each SCE&G region are being modeled to evaluate pressure-flow relationships to assist operating personnel in maintaining system pressures. The model is periodically updated to determine what upgrades are required to maintain normal system operating pressures. Similar evaluations will be performed for the acquired system.

Leak Surveys. All mains are surveyed for leaks or other hazardous conditions that could affect system pressure in accordance with 49 CFR (i.e., every one, three, or five years, depending on the type of pipe and area).

Regulator Station Inspections. District regulators and district gate stations will be inspected once per year. Proper facility maintenance increases the probability that adequate pressure will be maintained throughout the system (see, also, Section 2.2.3).

Cathodic Protection Reads. Annual cathodic protection reads show the corrosive potential of buried steel pipes. This monitoring will be extended to steel facilities.

Temporary Connections. Pipeline damage often can be worked “hot” (i.e., while pressurized), thereby minimizing interruption of service to customers. Any temporary connection will be approved by the COR prior to execution. Permanent connections will be approved by the Contracting Officer.

Increasing Operating Pressure. As discussed below in Section 3.1.1, an established and documented MAOP for the privatized gas system in accordance with 49 CFR, Part 192 was not systematically evident from a review of Technical Library information. Absent such documentation, the current operating pressure for any existing subsystem or section of existing piping will become the de facto MAOP until one can be established per code for the privatized system and will not be exceeded unless and until a higher MAOP is established. The de facto MAOP cannot exceed 60 psig on the PE subsystems (due to uncertainties whether the pipe is medium or high density PE).

It is possible that new or modified loads may warrant consideration of a higher operating pressure as an alternative to a physical expansion of the system. Take for example a hypothetical new load connecting to a 2-inch PE subsystem currently operating satisfactorily at 30 psig. The capacity of such a subsystem normally would be 11 mcfh. If that pressure could not accommodate the new load, uprating the system to operate at 45 or 60 psig might avoid the need to replace the existing pipe with, for example, 4-inch mains. For example, the capacity of a 2-inch PE main operating at 60 psig is 19 mcfh.

Elevating the operating pressure for the existing subsystem would require pressure testing to establish a higher MAOP. Contracting Officer (KO) approval will be requested prior to initiating testing to establish a higher MAOP.

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2.2.4 Demand and Distribution Capacity

Demand and distribution capacity requirements are met by the combination of distribution system modeling and implementing required upgrades based on model results. The modeling forecasts natural gas demand, enabling SCE&G to determine what system improvements and new expansions are required to efficiently and cost-effectively meet future customer demand.

The Fort Jackson system will be folded into the Central South Carolina area distribution system model to assure the adequacy of the system, given the Installation's service requirements. The modeling analysis described above is performed periodically to ensure that the models reflect the most current conditions.

2.2.5 Relighting Appliances

House system work is not included within the scope of work for the privatized service. The Government or other entities, and not SCE&G, accordingly will be responsible for checking appliances prior to relighting to make sure they are operating properly. If an appliance is not functioning properly or there is a problem of some nature, the inspector should valve off the unit and write up a repair tag. After repairs have been made, the tag can be removed and the appliance relit. SCE&G will closely coordinate scheduled gas service outages with the Installation to facilitate the availability of resources for the relighting process (see, also, related Section 1.5.21 discussion).

2.2.6 Corrosion Control and Cathodic Protection

Corrosion control is practiced by maintaining a direct current protective electric current on properly coated pipelines and facilities. Depending on the vintage, steel pipe is coated with either a fusion bonded epoxy coating, tar coating, tape or grease wrap. Valves and fittings are coated with a mastic or hot wrap. Above ground facilities are primed and painted and insulated from belowground facilities. All coatings are applied in accordance with SCE&G's established specifications and standards.

Cathodic protection refers to the method of preventing corrosion in natural gas pipelines by using an electric voltage to slow or prevent corrosion. SCE&G conducts cathodic protection surveys in accordance with CFR Part 192. Below ground facilities are protected by rectifiers and/or anodes, which are installed in accordance with SCE&G's specifications and standards. Rectifiers are inspected bi-monthly, and above ground facilities are visually inspected on a regular basis for atmospheric corrosion. Piping is insulated from the gas distribution system at or before the point of demarcation in order to prevent electric shorts caused by a customer's fuel line piping (i.e., inside the point of delivery demarcation indicated in the Solicitation).

2.2.7 Minimization of Leaks and Losses

SCE&G minimizes leaks and losses by complying with the leak survey requirements of Part 192, having a trained work force experienced in repairing leaks, and having the necessary equipment to detect leaks and quickly and efficiently repair them. The effective management of pressure control systems also minimizes leaks.

Being proactive in leakage control has proven beneficial for SCE&G. For example, system losses were 1.03 percent in 2015. The reported utility loss factors tend to overstate actual system losses because they include "unaccounted for" gas, which takes into account metering

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losses, unauthorized takes, etc. In fact, a major utility recently conducted a comprehensive evaluation of its lost and unaccounted for gas and concluded that actual system losses (i.e., from leakage) were only about 0.1 percent. The remainder was attributed to metering errors (especially from meters used by other utilities to measure wholesale gas deliveries from that utility) and unauthorized takes (e.g., where a user illegally taps into the gas system).

> Leak percentages can be calculated when a system is comprehensively metered, as is the case for SCE&G's non-privatized service where revenue meters are installed at each service location. Although secondary (non-revenue) meters eventually will be installed at many (if not most) of the Fort Jackson service locations, they are not required for all (e.g., Executive Order 13421 does not require individual gas meters for building with less than 29,000 square feet). SCE&G accordingly will not be able to calculate system losses for the privatized system.

When the above procedures are applied to the acquired system, and the facilities are fully upgraded to SCE&G standards, the Installation can expect loss rates to be similar to SCE&G's system average. Notwithstanding a commitment to minimize losses, the reality is that leaks will occur. In the event of a severe leak or damage to the distribution facilities by a third party, SCE&G's crews are prepared to react to service requests and initiate repair procedures.

2.2.8 Safety of Government Personnel and Property

Safety is of paramount importance to SCE&G. SCE&G maintains strict safety standards and all personnel follow the safety procedures found in SCE&G's service manuals and 49 CFR. SCE&G also understands that the best safety precaution is accident prevention.

SCE&G foresees the necessity of working with Government personnel to provide instruction on safety measures and to promote safe practices. For example, in the event of excavation work conducted by Installation or other personnel, the procedures to ensure that gas main or service lines are not disturbed will be addressed.

The Company's safety practices and policies are routinely updated and consistently enforced. The Company is subject to an annual review of records and procedures by the SCPSC, which, among other actions, checks to make sure that the SCE&G manuals and practices comply with 49 CFR Parts 191, 192 and 199.

Another factor contributing to the safety of Government personnel and property is the comprehensive training of SCE&G personnel. All company employees are updated on safety regulations and receive training on gas repair and maintenance procedures law. Company employees must also adhere to drug and alcohol policies in accordance with 49 CFR and the substance abuse prevention programs of the State of South Carolina. *The same rules that apply to full time employees apply to SCE&G approved contractors.*

2.2.9 Service Connection Standards and Specifications

The type of service connection will depend on the material makeup of the main and service lines. Most new services will be polyethylene and will include tracer wire. At the end of a service (normally a building wall), a riser will be installed. This riser pipe generally is a prefabricated anodeless riser and will be attached to the service below ground and turn upward, extend-

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ing above ground. In accordance with 49 CFR 192.383, all new or relocated single family residence service lines must have an excess flow valve (installed at the main connection). Regulators and any secondary meter sets will be installed downstream of the shut-off valve. New or replacement meters may have a soft bypass to enable meter change outs without cutting off service.

All connections and riser installations will be in accordance with SCE&G's detailed specifications and standards. The points of demarcation between the external distribution system to be privatized, and the internal, Government-owned gas distribution facilities (i.e., house lines) will be in accordance with the specifications set forth in Attachment JA2. The installation of valves may be required to more clearly delineate the unique points of demarcation within the housing areas. Materials and installation procedures will comply with applicable State and Federal codes.

2.2.10 Leak Surveys

In response to the Attachment JA2 specific service requirements, and to comply with applicable South Carolina and Federal codes, the Company will conduct leakage surveys, using established SCE&G standards, of the gas distribution system, conduct patrols along pipeline rights-of-ways and maintain records of these tasks for the privatized system for the purpose of leak detection requirements.

The Leak Survey and Patrol Program is designed to provide a continuous and active surveillance of all facilities by prescribing various gas leakage surveys and/or patrols (see Table 2-3). District regulators and border stations also will be inspected in accordance with Part 192. Proper facility maintenance increases the probability that adequate pressure will be maintained throughout the system. The system also will be surveyed for atmospheric corrosion (if applicable).

The results of all leak surveys will be used to assess the priority for system upgrades and replacements, and any identified capital requirements will be incorporated into SCE&G's five-year capital upgrade plan. SCE&G will employ specialized equipment to assure comprehensive and accurate leak detection. Such special equipment can sense gas levels of approximately fifty parts per million (ppm) and other specialized equipment can detect ethane as opposed to methane (i.e., sewer gas).

The Company will submit copies, if required, to the Contracting Officer of all submittals and correspondence to Federal, state and local agencies concerning leakage testing for the privatized system. Copies will be submitted within thirty working days, if required, following submittal to the respective agency.

Table 2-3. Description of Leak Survey Procedures

Element	Description
Business District Gas Leak Survey	Survey designated business districts and continuous paved areas by checking each main, service, available opening, and meter set within the business district
Residential Area Gas Leak Survey	Survey distribution pipelines outside the designated business district by checking each main, service, and meter set

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High-Occupancy Building Gas Leak Survey	Survey designated high-occupancy buildings outside the business district by checking each main, service line, available opening and meter set within the area of the high-occupancy building(s)
Transmission Line Leak Survey	Survey transmission lines along the rights-of-ways of these facilities
Transmission Line Patrols	Patrol transmission lines to observe surface conditions on and adjacent to the pipeline right-of-way for evidence of leakage, construction activity and other factors affecting safety and operation
Distribution Line Special Location Patrols	Survey and/or patrol distribution mains at selected locations to observe surface conditions for evidence of gas leaks, construction activity, and other factors affecting safety and operation
Inside Meter Set Gas Leak Survey	Survey of inside meter sets and service lines
Other Selected Gas Leak Surveys and Pipeline Patrols	Survey and/or pipeline patrol conducted as determined by the situation such as: leak history, construction activity, paving, acts of nature, and Integrity Management requirements, etc.

2.2.11 New Construction Standards

All new construction for mains, services, regulator stations, meter sets and other facilities will be in accordance with manufacturer and SCE&G's standards and specifications. Facilities will be placed at depths that meet or exceed the minimum Part 192 requirements. All facilities will be designed to comply with all applicable Federal, state and local requirements. Prior to being placed in service, all distribution facilities are pressure tested using air, nitrogen, or water.

> As with other elements of SCE&G's operations, procedures for the installation of pipe and facilities meet or exceed the minimum requirements of Part 192. For example, SCE&G standards state preferred cover for distribution mains is 30" with a minimum of 24" (with some documented exceptions). Service lines shall be installed in a straight line and perpendicular to the street (main). Each buried service line is to be installed with at least 12" of cover in private property and at least 18" of cover in streets and roads". In addition, renewals installed by insertion may be at a depth less than 24".

Supplementing the specific construction standards are programs for safety awareness and the application of best management practices. These include semiannual welding and annual plastic fusion qualifying for Company and contractor personnel who install gas distribution facilities.

2.2.12 Commissioning Standards

The detailed procedures in SCE&G's service manuals will be applied as the commissioning standards for all new facilities installed within Fort Jackson. These standards include the following elements:

- Installed facilities are pressure-tested with air, nitrogen or water at 1 and 1/2 times the maximum operating pressure of the system or a minimum of 100 pounds per square inch gauge (psig) for medium pressure facilities (i.e., less than 60 psig) and 1 and 1/2 times the maximum operating pressure for higher pressure systems;

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- Natural gas is put into the facilities only after the pressure test is completed and the facilities have passed inspection;
- The facilities will not be connected to the Installation's house lines (i.e., downstream of the points of demarcation identified in Attachment JA2 to the Solicitation) until natural gas has been put into the distribution facilities; and
- Natural gas is turned on only after the services and mains have gas, the regulator / meter (if required) is in place, the house fuel line is approved by Fort Jackson, and the facilities are connected to the house lines (i.e., Government-owned facilities downstream of the points of demarcation with the SCE&G-owned privatized system).

2.2.13 Color Identification and Markings

Beginning in the 1990s, medium density polyethylene pipe manufacturers changed the color of their pipe to yellow to match the new natural gas industry standard. Yellow polyethylene pipe identifies the pipe as a natural gas carrying pipe, and all of SCE&G's polyethylene pipe manufactured since the 1990s is yellow. Although not commonly used on the SCE&G system, black with a yellow stripe is the standard color used for high density PE gas pipe. Line location markings also use yellow to indicate natural gas facilities.

2.2.14 System Inspections

SCE&G inspects facilities within the distribution system as required by the DOT pipeline safety regulations at Part 192 of CFR Part 49 and the Company's service manuals. Inspection records are maintained in compliance with SCPSC and DOT requirements.

2.2.15 Meter and Equipment Calibration

Secondary (non-revenue) meters will be calibrated for accuracy in accordance with standard operating practices, to include but not be limited to SCE&G Tariff Section 9 measurement standards and related rules and regulations. Tariff Section 9.02.04 provides that a customer may request that the SCE&G test the accuracy of a meter. A meter is deemed accurate if the recording inaccuracy is not greater than two percent. A tariff-based fee, which is currently $40, shall be assessed if the tested meter accuracy is within limits. While this rule technically applies to revenue meters, it would be applied as well to secondary meters within Fort Jackson. If the meter is not a type that SCE&G can reasonably calibrate it will be changed-out to a common stock unit.

SCE&G does not read a customer's non-revenue (secondary) meter. There is a related Volume III exception to exclude meter reading from the privatized service requirements. Alternatively, SCE&G would only read commercial-type (non-residential) meters that are not connected to the Installation's Advance Meter System (AMS). Meter reading reports will be submitted monthly if required.

2.2.16 Service Interruption Frequency

Service interruption generally occurs for one of two reasons. First, an interruption can occur when service is intentionally interrupted by SCE&G for maintenance or safety reasons. Service may be interrupted during meter change-outs or during main or service relocation work. Installing a bypass around the main or service area to be relocated can avoid interruptions. This

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last procedure may be used when Government personnel inform SCE&G that mission requirements for a building or group of buildings necessitate uninterrupted service. SCE&G anticipates that such situations will be limited to when maintenance work on lines serving the designated buildings cannot be completed outside of normal business hours or in facilities where 24-hour operations are being conducted (and there are no exercises or other activities that necessitate a higher level of service).

> The use of bypasses and SCE&G's ability to hot tap pipe (which allows the Company to conduct work while gas remains flowing) are two of the reasons why Fort Jackson can expect similar minimal service interruption frequency rates as are experienced on SCE&G's existing system. It is doubtful that a non-utility or non-local utility would have ready access to hot tap equipment, especially for use on larger diameter pipe.

The second major cause of interruption is when there is damage to utility facilities by a third party. The gas distribution system will be mapped as part of SCE&G's initial Capital Plan. It is hoped that coordination with other utilities and Government personnel, coupled with the Installation's strict enforcement of its excavation permit process, use of South Carolina 811 one-call and use of pipeline markers can minimize third party damage to gas facilities. Here as well, SCE&G recognizes that interruptions may nonetheless occur. The close proximity of SCE&G crews and yard facilities should minimize associated losses and the duration of the interruption.

2.2.17 Operating Permits

SCE&G complies with all city, county, state and Federal permit requirements as related to new construction. All environmental, cultural resource and other permits as may be applicable are applied for as needed.

2.2.18 Employee Certification and Training

All individuals performing tasks or activities on a pipeline facility must be qualified pursuant to 49 CFR 192.801-809. SCE&G's Operator Qualification Program, complies with the 49 CFR Part 192.801-809 requirements, and assures that all staff will meet the CFR standards.[1] As applicable, the Company's operating employees have the following certifications:

- Registered Professional Engineers;
- National Association of Corrosion Engineers;
- Department of Transportation Operator Qualification;
- Occupational Safety and Health Administration (OSHA) Class 3 O&M Asbestos Worker;
- OSHA Competent Person (Shoring/Excavation);
- Self-Contained Breathing Apparatus;
- Hazardous Waste Management;
- Steel Welding;
- Plastic Fusion;

[1] The privatized system may contain high density polyethylene (HDPE) pipe. Because the SCE&G system predominantly uses medium density polyethylene (MDPE) pipe, some HDPE refresher training may be required for personnel assigned to the Project Office (see Project T-1).

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- First Aid/CPR; and
- Leak Survey.

2.2.19 Disaster Recovery

Please see Section 1.4.

2.2.20 Environmental

There are no known environmental permits that will be required to acquire and operate the privatized system. Should there be a need for such permits in the future, SCE&G would be the party of record.

2.2.20.1 Environmental Standards and Procedures

SCE&G's SOPs comply with applicable operational, safety, environmental and health requirements. SCE&G's QMP is thus predicated on applying these same SOPs to the privatized service. Independent regulation and oversight by the SCPSC should give the Installation added assurances that the compliance plan will be adhered to in all respects.

Environmental Compliance. SCE&G will operate and maintain the system in compliance with applicable environmental and occupational health and safety requirements. These include:

- Comprehensive Environmental Response, Compensation & Liability Act (CERCLA);
- Federal and State Clean Air Acts;
- Federal and State Clean Water Acts;
- Federal Resource Conservation and Recovery Act (RCRA);
- Emergency Preparedness Community Right to Know Act (EPCRA);
- Toxic Substances Control Act (TSCA);
- Federal Safe Drinking Water Act (SDWA);
- Federal and State Endangered Species Acts;
- National Environmental Policy Act (NEPA);
- Federal Rivers and Harbors Act;
- Federal Coastal Zone Management Act;
- Migratory Bird Treaty Act;
- Eagle Protection Act;
- Marine Mammal Protection Act;
- Native Plant Protection Act;
- National Historic Preservation Act; and
- Archeological Resources Protection Act of 1979.

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SCE&G assumes that the Government will be liable for pre-existing environmental conditions in accordance with applicable laws and regulations. However, SCE&G may be required to perform, but not be responsible for the cost of, remediation for pre-existing environmental conditions (with the exception of asbestos and lead-based paint) as a result of its activities.

Occupational Safety and Health Requirements. Providing a safe and healthy workplace for all employees is one of SCE&G's highest priorities. Its policies and procedures are designed to meet this challenge and minimize work-related hazards. The success of SCE&G's program is based on the active support of all employees. All employees are expected to use reasonable care in the performance of their duties, and act in such a manner as to assure safety and health to themselves, their coworkers and the public. Managers are required to implement and maintain injury and illness prevention programs in each work area under their jurisdiction. SCE&G continuously works with its employees to develop and implement effective safety policies.

Spill Prevention Control and Countermeasure Plan. SCE&G will adopt the Government's *Installation Spill Contingency Plan*.

Hazardous Material and Waste Minimization. SCE&G will comply with applicable laws and regulations in the handling of hazardous materials, including the Material Safety Data Sheet and other requirements detailed in Section C.10.5 of the Solicitation. As with the upstream system, hazardous materials would not be used in the operation and maintenance of the privatized system. SCE&G will comply with the hazardous material and waste minimization requirements in RFP Section C.10.5 if hazardous materials are used during the contract term.

2.2.20.2 Asbestos and Lead Paint

SCE&G intends to meet all local, state and federal regulations regarding the handling of equipment that does or may contain asbestos or lead. Monitoring/sampling will be conducted according to regulatory requirements or when not specifically required, according to prudent practice consistent with state of the art knowledge. Equipment shall be maintained such that asbestos or lead will not present a hazard to humans or the environment.

SCE&G has a license with the state regulatory agency (DHEC) to abate asbestos. The employees are trained and certified, and receive annual refresher training for both asbestos and lead paint management. They also have relevant experience addressing lead paint and asbestos issues on the upstream distribution system. SCE&G understands and accepts that it cannot make any improvements or engage in any construction on Government property which contains asbestos-containing material (ACM), without prior approval of the Contracting Officer or designated representative.

2.2.20.3 Historic Preservation

SCE&G understands the importance of historic preservation and has significant experience complying with historic and archeological preservation regulations. SCE&G will immediately cease activities at the site and immediately notify the contracting officer and protect the site and the material from further disturbance until the contracting officer gives clearance to proceed**.**

2.2.20.4 Condition of the Property

SCE&G understands and accepts that the access provisions are provided in an "as is, where is" condition. In accordance with RFP Section C.6.2.6, the system components shall be removed

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upon the expiration of the contract, provided that the Government would not unreasonably deny a request to abandon in-place underground portions of the system. Aboveground components also may be abandoned in-place at the Government's discretion.

At the Installation Commander's request, the parties will prepare and sign a Physical Condition Report to reflect the condition of affected property prior to ground-disturbing activities. The condition of system rights-of-way prior to the Contract Start Date also will be documented in the Project T-5 Environmental Reconnaissance Report. Upon abandonment and required removal, the land upon which the system was located will be restored to a condition satisfactory to the Installation Commander.

2.2.21 Specialty Training

The Solicitation does not include any SCE&G-provided specialty training requirements for Government personnel. However, SCE&G provides basic "first response" training to selected customers which focuses on proper procedures for shutting off service valves in the event of gas leak, fire or other emergency situation. This service will be provided to a limited number of Installation personnel at no additional cost to the Government. Among other things, the training addresses what actions are acceptable and what are not. For instance, closing a valve that controls gas flow to a burning building would be acceptable. Operating system valves for other purposes would not be acceptable.

2.2.22 Equipment Removals

After the ownership transfer, SCE&G generally will be responsible for facilities and material removed from the privatized system. An exception would be for removals that contain latent preexisting hazardous materials, for which the Government is responsible in accordance with existing law and regulations. SCE&G does not envision the removal of equipment prior to the end of its depreciated (booked) life except when such removal is at the request and for the convenience of the Government (e.g., to relocate existing equipment to accommodate a MILCON effort). In this case, the removal would likely be covered under the termination provisions addressed in the Volume III price proposal, which specifically provides for the crediting to the Government of the salvage value of removed equipment.

In accordance with standard practices, unneeded and unutilized privatized infrastructure may be abandoned in place, if to do so does not pose an immediate or future health, safety, operational, or environmental risk. This generally would apply to underground equipment, as it is standard practice to remove unused overhead facilities.

In accordance with Section JA2.3.12, *Component Replacement*, infrastructure can be abandoned in place only with the written approval by the COR. When a project is being discussed, SCE&G will inquire if in-place abandonment is desired/authorized. If not, the removal cost will be included in the project.

2.2.23 Technology Awareness

The Company maintains currency in applicable laws and regulations, as well as new technologies that might be applied to the system. Awareness of new technologies is maintained through membership in the American Gas Association, attending technology conferences and networking with contacts at other utilities, universities, research organization and vendors. SCE&G will operate the privatized system according to standard practices and procures. This means that a

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new technology that is implemented for the upstream system should apply and may be the basis for discussion leading to changes as may be appropriate.

An example of a recent technology implementation was the use of "smart pigs" which are inserted into pipes to inspect pipe material, identify dents, assess corrosion and facilitate mapping. The pigs are usually used in larger-diameter transmission lines and can be used for some smaller-diameter applications.

2.2.24 Special Service Requirements

Presented in Table 2-4 is a summary of SCE&G's response to the special service requirements set forth in Section JA2.3 of the Solicitation. The table supplements related discussions of all or elements of the special requirements that are addressed elsewhere in this proposal. The Company also acknowledges that if there is a conflict between requirements described below and those described in Section C, the Section JA2.3 requirements take precedence.

Table 2-4. Response to Attachment JA2 Special Service Requirements

Requirement	Response
1. On-Site Contractor Facility	• Due to the close proximity of SCE&G yards and other service resources (e.g., SCE&G's Columbia Service Center is within five miles of Fort Jackson), the Company can meet the response time criteria without the need for, or expense of, and on-site facility.
2. Temporary Contractor Facilities	• Agreed.
3. Restricted access areas	• Agreed.
4. Limited access	• Agreed.
5. Vehicles	• Agreed.
6. Coordination requirements	• Agreed.
7. Planning and programming	• Agreed.
8. Request for action process	• SCE&G will comply with the Request for Action (RFA) process, as it may change from time-to-time. • Regarding the "general" description of the RFA process, Step 7 involves providing funds to the KO and Step 11 involves contractor invoicing for an authorized project. New or upgraded permanent connections generally would not be paid as a lump sum. Connection and other capitalized work related costs would instead be financed by SCE&G and recovered under the proposal Contract Rate Charge.
9. Mapping requirements	• SCE&G's mapping systems are compatible with the stated Government standards (and mapping personnel have substantial SDSFIE experience applied to Army installations). • Regarding Contracting Officer approval of as required, future deviations, there is a related Volume III exception that Army KO approval of deviations shall not be unreasonably denied.

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Table 2-4. Response to Attachment JA2 Special Service Requirements	
Requirement	**Response**
10. Updated utility maps	• SCE&G's standard plant accounting and quality control procedures are such that it normally takes a number of months after construction is completed to record mapping system changes. • There is a related Volume III exception to (a) require electronic copies annually (or more often as needed) instead on semi-annually and (b) provide updates within 180 (rather than 30) days.
11. Disposition of removed or salvaged material	• Agreed.
12. Component replacement	• Agreed. Infrastructure owned by SCE&G and subsequently abandoned will be marked on system maps. • There is a related Volume III exception that SCE&G would not responsible for mapping natural gas lines abandoned prior to the contract start date (i.e., not part of the privatized system and not owned by SCE&G).
13. Excavation marking / digging process	• Agreed. There is a related transition period task to develop expedited procedures to secure required excavation permits related to emergency service requests.
14. System Survey and Assessment / Utility Record Drawings	• Agreed. See, also, related response to #9.
15. Computerized model	• The privatized system will be incorporated into SCE&G's GIS and other systems and thereby be able to analyzed using the existing SysDist computerized model (see Section 1.5.26). • There is a related Volume III exceptions related to annually providing an electronic and hard copy of the model.
16. Installation design guide	• SCE&G recommended changes to the IDG will be provided within 45 days of the CSD. • The Government and SCE&G will work together to resolve conflicts with the IDG.
17. Cathodic Protection System Maintenance	• The CP system will be maintained until the steel mains and service lines have been replaced (see Project C-1) • The Government ,may review CP records upon request
18. Fire control and safety	• Agreed.
19. Environmental issues	• Agreed.
20. Required regulatory reports.	• Agreed.
21. Official inspections	• The SCPSC and other agencies at times contact SCE&G on an informal basis to indicate they might or plan to inspect SCE&G facilities. • There is a related Volume III exception that the required one hour notice would be provided after SCE&G receives official notification of an inspection.
22. First response investigation	• Agreed. It is further specifically acknowledged that SCE&G shall proceed toward fixing a gas system problem occurring near a point of demarcation when the appropriate repair organization is not immediately apparent.

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Table 2-4. Response to Attachment JA2 Special Service Requirements	
Requirement	**Response**
23. Response to Demand Maintenance Orders (service calls / requests)	• SCE&G will respond to service call requests in accordance with the Section 1.0, Service Interruption / Contingency / Catastrophic Loss Plan, procedures. • Agreed regarding no additional cost for turn on/off services.
24. Utility outage	• Requirements are consistent with the Section 1.0 Service Interruption / Contingency / Catastrophic Loss Plan. SCE&G will immediately respond to all emergency service. That initial response will, among other things, include priority dispatching a Service Technician / knowledgeable person to the service site. The plan further calls for a knowledgeable person to be physically at the emergency service site within 30 minutes during normal duty hours. • There is a related Volume III exception that the response times shall be considered service objectives rather than contractual requirements. This is because regulated utilities such as SCE&G are not allowed to provide service guarantees to individual customers. SCE&G nonetheless has the capability to meet all Section 1 response time objectives.
25. Emergency operations	• Restoration priorities are addressed in Section 1.0. • Although substantial SCE&G resources at times predominantly will work on the privatized system (e.g., during the initial years of the proposed Capital Plan), such resources will not be dedicated per se to the Installation. There is a Volume III exception to this effect.
26. Planned outages	• Agreed.
27. Crisis situations / exercise situations	• Agreed.
28. Cost of supporting facilities	• Agreed.
29. Cultural issues	• Agreed.
30. Standards and regulations	• The privatized system will generally be operated and maintained in accordance with SCE&G system-wide standards. Such standards are continually updated as required. • There is a related Volume III exception that such standards may be inspected at SCE&G facilities, but hard or electronic copies normally would not be provided.
31. Network access requirements	• Agreed.
32. Commercial use	• Agreed.

2.3 STAFFING PLAN

While Fort Jackson will have access to all of SCE&G's extensive natural gas distribution resources, primary responsibility for the privatization effort will be assigned to the Columbia Service Center. This facility is located at 6011 Shakespeare Road and is about five miles from Fort Jackson.

Because SCE&G operates an extensive distribution system that adjoins and is within the Installation, and has considerable personnel, equipment, supply and other resources in the general

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vicinity of the Installation, there are no plans to change its staff to accommodate the Fort Jackson privatization project. Rather, all work, both routine and emergency, will primarily be handled by existing customer service, engineering and line personnel assigned to the Columbia Division.[2]

2.3.1 Project and Corporate Organization

Corporate Organization. **Mr. Jimmy Addison** is the Chief Executive Officer of SCANA Corporation. **Mr. Don (Rusty) Harris** is the Senior Vice President of SCANA, as well as the Senior Vice President, Gas Operations, for SCE&G. Reporting to Mr. Harris is **Ms. Felicia Howard**, who in her capacity Vice President, Gas Operations, is responsible for all natural gas distribution system engineering, construction, maintenance and operation activities for the Company.

Reporting to Ms. Howard is **Mr. Greg McGlohorn**, who is the General Manager for Construction, Operations and Maintenance. In this capacity, he is responsible for the operations and maintenance of SCE&G distribution facilities that surround and adjoin Fort Jackson. Mr. McGlohorn was involved in the preparation of privatization proposal and has assured the proposed Project Manager that the full range of Company resources will be available so all privatized service objectives can be satisfied in a timely and cost-effective manner.

Reporting to Ms. Howard is **Mr. Dustin Hoey**, who is the General Manager for Engineering and System Planning. In this capacity, he is responsible for the engineering of SCE&G distribution facilities. Mr. Hoey was involved in the development of the privatization proposal and is aware of its requirements.

***Privatization Project Organization*.** SCE&G's Natural Gas Privatization Project Organization is shown in Figure 2-1. As noted, operational responsibility for the privatized system will be assigned to the Columbia Service Center.

Mr. Richard Johnson is the proposed Project Manager, and will be responsible for implementing the privatized service as outlined in this proposal. Operating from the nearby Shakespeare Road Service Center, Mr. Johnson is the Company's Columbia Division Manager of Engineering and Construction. His responsibilities include engineering, construction coordination and operation and maintenance of the Company's natural gas distribution system. He will be responsible for mobilizing the full capabilities of SCE&G to meet the requirements of the privatized service contract. He will be particularly active during the transition from Government to SCE&G ownership of the system.

[2] To clarify, SCE&G will adjust its personnel and other resources to accommodate the collective customer growth and related service requirements throughout its system in general and the Central South Carolina Region in particular. The acquisition of the privatized system will represent a relatively small portion of the many new customers added to its system annually. The need for expanded resources would thus be predicated far more on other system needs than the specifics of the privatized service.

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Mr. Johnson will be supported by two Deputy Project Managers. ***Mr. Bill Eisele*** is Manager, Government Accounts and Services. In this position, he is the liaison to SCE&G's governmental customers. Mr. Eisele for a number of years has been the customer service representative for Fort Jackson, so he also is fully knowledgeable about the Post, its personnel, and its natural gas service requirements. Mr. Eisele will focus on customer relationship issues and generally will make sure that the transition from Government to SCE&G ownership of the system is as seamless as possible. The other deputy is Ms. Cynthia Ostrander, who is the Central Division Manager of Gas Operations.

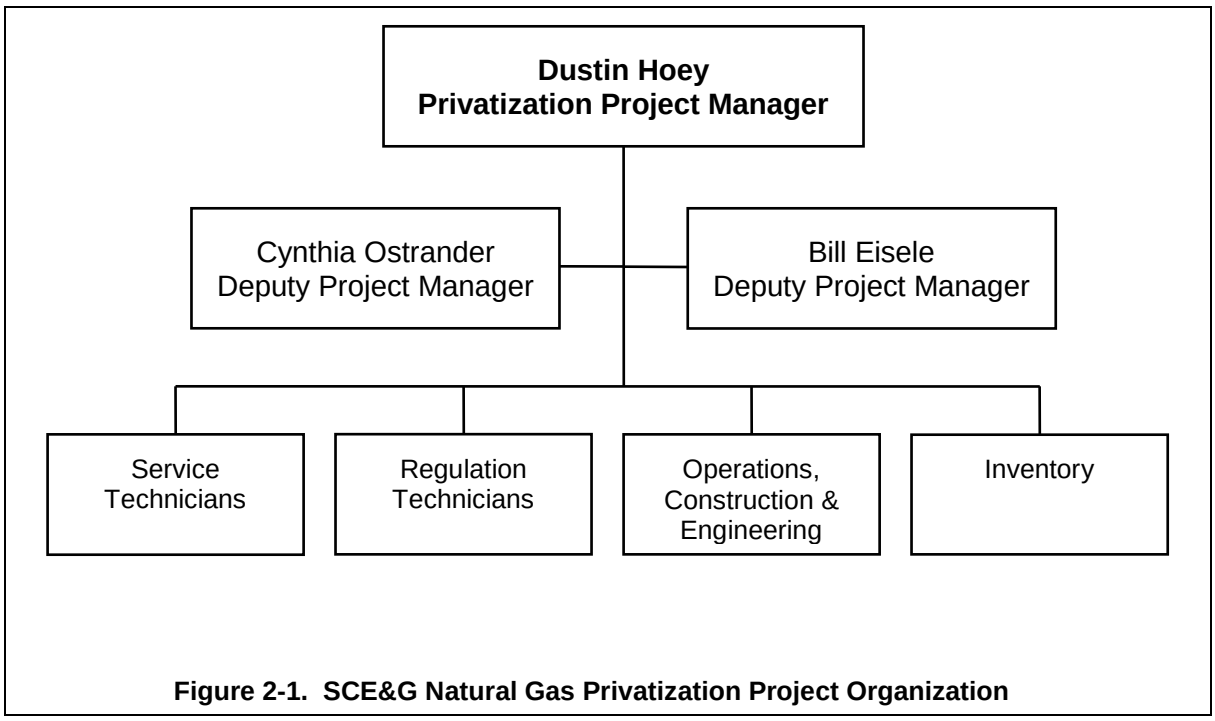

Figure 2-1. SCE&G Natural Gas Privatization Project Organization

Crew and Other Personnel Qualifications. While the above-described project team will direct and manage the overall privatization effort, day-to-day work on the system generally will be performed by first response and other crew personnel that are assigned to the Columbia or other nearby operation centers. Natural gas distribution resources available to support Fort Jackson include 395 SCE&G gas operations personnel. Position descriptions for distribution field and service center personnel are as follows:

- *Distribution Foreman* shall be employees highly skilled in the service, operations maintenance and construction of distribution system facilities who have demonstrated the ability to plan and direct the work of others in a safe, reliable and efficient manner. A Foreman must be physically able and will be required to perform the work of those they supervise, when necessary.
- *Welders* shall be skilled workers who have experience at the trade and have demonstrated their aptitude and ability to pass the company "A" or "B" welding certification requirement tests.
- *Contract Inspectors (temporary)* shall be skilled Foremen, Combination Welders, Welders, Boring Equipment Operators, and Distribution Journeyman who shall be temporarily assigned to inspect work performed by contractors on the Company's gas systems.

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They shall be qualified by either work experience or specific training on the type of work being inspected and have a working knowledge of contracts.

- *Outside Journeyman* shall be qualified Distribution Journeyman, to perform customer service, service investigations, leak investigations, perform surveys, inspections, and tests as required in the area assigned. They shall demonstrate the ability to work with limited supervision and direct the work of others within their area. They shall have the ability to promote good public relations and community involvement.

- *Boring Equipment Operator II* shall be highly skilled Distribution Journeyman with the ability to operate boring equipment, defined as the equipment used to directional bore and capable of boring under surfaces that are not to be disturbed by normal excavation. Boring Equipment operators shall be expected to work as Distribution Journeyman when not required to operate boring equipment. This equipment would be above the capabilities of rubber tired backhoes and trenching equipment normally associated with gas line installation.

- *Boring Equipment Operator I* shall be highly skilled Distribution Journeyman with the ability to assist the Boring Equipment Operator II in the use of directional boring equipment. The Boring Equipment Operator I shall be expected to work as Distribution Journeyman when not required to assist in the operation of boring equipment. This equipment would be above the capabilities of rubber tired backhoes and trenching equipment normally associated with gas line installation.

- *Distribution Lead Journeyman* shall be upgrade positions to be used only when two (2) or more employees are working together isolated from the direction of the foreman and is responsible for the successful completion of the work, fill out the completion paperwork, time tickets, or logs into the current operation system for job completion. This position is meant for construction work not including compliance work.

- *Distribution Journeyman* shall be skilled workers who possess the required knowledge, skill and physical ability to perform construction and maintenance work, remove, install and read gas meters, service and leak investigations, surveys, inspections and tests which they may be called upon to perform on the Company's gas distribution and gas service lines. They will be required to operate all types of equipment associated with their job, following equipment specific training. Must have personal characteristics suitable for making contacts with customers and the public which are necessary in their line of work.

- *Crew Dispatchers* shall be qualified through knowledge, training and experience to perform accurately completed clerical bookkeeping and accounting-type work in accordance with established Company procedures and to dispatch Company employees to emergency and non-emergency situations. They shall have a working knowledge of the distribution system in their related locations. They must have personal characteristics suitable for making contact with customers and the public, which routinely occur in their line of duty.

- Service Dispatcher are responsible for the office function of the operating center and shall be qualified through knowledge, training and experience to perform accurate completed clerical, bookkeeping and accounting-type work in accordance with established Company procedures. They must have personal characteristics suitable for making contacts with customers and the public which are necessary in their line of duty. Other duties pursuant to the classification with the exception they may be required to occasionally

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deliver material when other non-supervisory field employees who normally perform those duties are not readily available.

- *Meter Readers* shall be qualified through knowledge, experience, training and physical ability to read gas and electric meters, operate the ITRON system, check for theft and diversion, recognize signs of gas leakage and work collections. They must have personal characteristics suitable for making contacts with customers and the public, which necessary in their line of work.

- *Utility Clerks* are responsible for the office functions of the service center and shall be qualified through knowledge, training and experience to accurately complete clerical, bookkeeping and accounting work in accordance with established Company procedures. They shall be able to assist employees performing design work as required. Utility Clerks shall have the knowledge, experience and qualifications to take customer requests, send and receive locates, service orders and dispatch information and personnel to emergency and non-emergency situations. A Utility Clerk shall be proficient in using a computer, and current operating software, time tickets and other duties as assigned.

2.3.2 Management Approach

SCE&G's general management approach is to apply the same standard operating practices that have been used to provide safe and reliable and cost-effective service to SCE&G's 634,100 other retail service customers. These methods also have resulted in consistently high levels of customer satisfaction and documented high levels of service reliability. They also are compliant with applicable Federal, State and local laws and regulations, including the Department of Transportation gas pipeline regulations codified in Title 49, Parts 191 and 192, of the CFR.

Applying SCE&G's SOPs means that work crews will use the same types of equipment and apply the same procedures on and off of the Installation. For this reason, the particulars of the contract, for matters other than special clearance, permitting and security concerns, will be largely transparent to the crews. This is the case when field personnel are dispatched from within or to the Installation in response to an emergency or routine service request.

Many of the privatized operations and maintenance activities will thus proceed on a more or less automatic basis, and will follow established work dispatch procedures. The role of the Project Manager (or Deputy) with regard to these routine and recurring O&M matters is thus to set up the processes, be generally informed about the work, and respond to the Installation's service concerns and/or changing service requirements.

The Project Manager or Deputy will have a more active role, however, with respect to non-routine and strategic work, which includes implementing initial upgrade projects and responding to strategic service requests, such as a new or modified service connection or the major expansion of the natural gas distribution system. For these activities, they will closely coordinate the work with Post personnel, clearly define the work scope, marshal the needed resources, and generally manage the work. They will be responsible for ensuring that the work is performed on time and to scope, complies with SCE&G's exacting standards, and is responsive to the Post's service requirements. With the above in mind, SCE&G's management approach to the major functional scope of work activities is presented in Table 2-5.

Regarding the management of technical information directly related to the privatized service (as distinguished from general SCE&G system information), the primary mechanism to obtain and

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store such information is the use of trouble orders (see Section 1.3.2). The required annual plan provides a structured and recurring forum to disseminate and discuss pertinent information.

Information can be provided on an interim basis upon reasonable request. The privatization management team also will disseminate pertinent information to the Fort Jackson when available and when useful. This is much the same process as is used for SCE&G's current service to the Installation, so the Government should be aware of, and presumably is comfortable with, current procedures.

While SCE&G proposes to apply its standard operating procedures, this does not mean that SCE&G intends to treat the Installation exactly as it would any other commercial or industrial customer. The Company will work cooperatively to meet the Installation's often unique service requirements and provide service that recognizes, and is responsive to, the Installation's critical Defense mission.

Table 2-5. Management Approach for Major Functional Work Activities

Functional Activities	Management Approach
System Operations and Maintenance:	
Service Requests	✓ Call to the 24-hour SCE&G Call Center by Fort Jackson or by SCE&G employees aware of an emergency or other condition ✓ Center to dispatch response crews ✓ Type and extent of dispatched resources to depend on the nature of the service request ✓ Tracking and monitoring of work using Work Orders
Emergency Service Responses	✓ Dispatched by the Call Center ✓ Assess the situation, make the area safe, initiate repairs and request additional crew resources as required ✓ Effectuate repairs and work the site until it is safe & service restored
Routine Distribution System Operations, Maintenance, Preventive Maintenance and Inspections	✓ IAW SCE&G's standards and procedures (see Attachment A) ✓ For example, leak surveys conducted annually for commercial systems IAW 49 CFR, pressure recording gauges are calibrated annually, and critical valves are inspected annually
Recurring Capital Replacements and Enhancements (Planned and Scheduled)	✓ Performed as required ✓ Needs and schedules based on diagnostics (pressure tests, etc.), results of system inspections and leakage surveys, and feedback from response crews ✓ Also based on Project Management Team reviews of work orders, outages reports, etc. ✓ Reflects feedback from Fort Jackson personnel from coordination and other meetings
Recurring Capital Replacements and Enhancements Unscheduled)	✓ Normally initiated by service request call and need identified by response crews ✓ Crews dispatched to install replacements IAW SOPs
Line Locates	✓ Initiated by SCE&G for repair work ✓ Initiated by the Installation or other contractors by contacting South Carolina 811 One Call System at (888) 721-7877, or dial "811"
Leak Survey	✓ Performed IAW 49 CFR requirements

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Table 2-5. Management Approach for Major Functional Work Activities	
Functional Activities	**Management Approach**
	✓ Automatically scheduled by the Leakage Survey Inspection Scheduling System (see Section 2.2.10) ✓ Comprehensive reporting to the SCPSC and DOT
System Construction:	
Upgrade Projects	✓ Implement project scope and schedule per Transition Plan ✓ Work schedules and effort closely managed by Project Management Team ✓ Integrated with other work to minimize impact on the Installation's mission, control cost and maximize system reliability
New Connections and Disconnections	✓ Requirements generally based on requests / information provided by Installation personnel ✓ Treated as routine service requests
Contract Administration:	
Cost Accounting	✓ Use of FERC USOA to track and characterize costs (e.g., expensed or capitalized) ✓ Direct costs accounted for using work orders and time sheets ✓ Periodic cost reviews
Coordination with the Installation	✓ Weekly meetings prior to and initially after contract start ✓ General coordination meetings as-needed
Service Invoicing	✓ Monthly invoicing

2.3.3 Available Resources

While the Installation will have access to all of SCE&G's extensive gas distribution resources, primary responsibility for the privatization effort, as noted, will be assigned to the Columbia Service Center, with its office and full-service yard facilities. Crews and equipment from the Columbia Center or other SCE&G service areas also may be assigned to the Installation to accommodate any extraordinary work requirements, such as the initial upgrade projects and other transitional requirements or future major system upgrades or expansions. Importantly, the resources from all service centers will be available to respond to emergency service needs.

Because SCE&G owns and operates an extensive natural gas transmission and distribution system that adjoins and connects with the Installation's distribution system, it already has considerable personnel, equipment, supply and other resources in the general vicinity of the Installation. These resources can readily accommodate the transition and other work elements. Existing local resources that will be routinely available to support the privatization effort are described below.

Existing local crews. SCE&G has local service professionals who are on call 24 hours a day, 365 days a year to respond to the needs of its customers. Forty employees are currently assigned to the Columbia Service Center, 30 of whom are field personnel.

Subcontractor Resources. Although all of the required work could be performed using SCE&G's abundant resources and therefore the use of subcontractors is not required, subcontractors are nevertheless routinely used. It was not possible at this time to identify specific work that may be performed by any specific subcontractor, but contractors are typically used for pipeline

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construction, the installation of new mains and services, line locating, leak surveys and atmospheric corrosion surveys. SCE&G uses a combination of SCE&G personnel and contracted inspectors to monitor and supervise the work of its contractors. SCE&G intends to use contractors for this type work at Fort Jackson. SCE&G uses its internal resources for engineering, metering, system maintenance and repair, emergency response and other activities.

SCE&G has established contracts with local contractors. Subcontractor employees involved in pipe installation and maintenance are DOT operator qualified workers. As with SCE&G personnel, they are certified based on rigid testing and on-the-job training protocols. Subcontractors must follow all applicable Company procedures, are properly insured and adhere to drug testing polices. There is an automated reporting system whereby SCE&G managers are informed of the current status of each workers qualifications. Subcontract agreements also establish span of control policies that delineate work that can performed independently or under direct SCE&G supervision.[3]

Specialized equipment and operational characteristics. SCE&G locally maintains a wide range of specialized equipment that can be dispatched to minimize service outages (see Table 2-6 and Figure 2-2). Much of this equipment is available only from large local utilities such as SCE&G.

Existing local yard. SCE&G maintains a working inventory of service lines, gas mains, regulators, valves and other necessary natural gas distribution system materials. In addition, the Company's nearby Columbia yard contain a wide assortment of standard and specialized equipment that can be readily dispatched to respond to routine and emergency service requests.

SCE&G maintains a computerized material management system that identifies when materials at a local yard are at a minimum required level and then automatically orders restocking. Local yard and other managers can access the system and assess inventory levels at any time.

Existing 24-hour Call Center. SCE&G operates a 24-hour Call Center to handle emergency situations. SCE&G's personnel are familiar with the Company's resources and can readily dispatch local service crews when and where needed.

2.4 CUSTOMER FEEDBACK

Frequent contact with SCE&G customers, especially large customers such as Fort Jackson, is a routine ongoing activity. Feedback also is routinely reviewed with local and corporate management as operating and other changes are made, as required. SCE&G follows a standard regulated utility practice of assigning a senior account representative to large commercial, industrial and institutional customers. The account representative meets with assigned customers on a regular basis to discuss current and future service needs, pending rate proceedings, industry trends and other matters. Management personnel are then briefed on the results of the meetings. The SCE&G Account Manager for Fort Jackson is on the base or

[3] Per 49 CFR Part 192.805, *Qualification Program*, each operator shall have and follow a written qualification program. The program shall include provisions to ensure through evaluation that individuals performing covered tasks are qualified. Individuals working on Company facilities are evaluated to ensure that those performing covered tasks are properly qualified. The Company also has a process for assessing the performance of covered tasks by subcontractors while on the job site. This process is designed to ensure a qualified workforce is performing covered tasks on SCE&G pipeline facilities.

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has contact with base personnel 2-4 times each month, and the Fort Jackson personnel have a 24-hour contact phone number for SCE&G.

SCE&G understands that communication with Fort Jackson will critically affect the quality of service that it will be able to provide. SCE&G's standard operating methods, applicable to other large industrial and commercial customers, rely on frequent contact to ensure that customer needs are identified and are being met. The special requirements regarding feedback, communications and coordination will be satisfied through a similar approach that is specifically modified to accommodate the Installation.

Table 2-6. Equipment and Supplies to Support Natural Gas Service Requests

- ✓ Crew trucks (with backhoes), including:
  - PE tools for 1/2" to 8" pipe
  - Forced air breathing equipment for hazardous environment
  - Air Compressor
  - Jackhammer, Clay Spade, Tamp and Rock Drill
  - Pressure Control equipment for tapping hot lines
  - Pipe locator
  - Valve keys for 2" thru 12" gas valves
  - Gas Scope Combustible gas indicator
- ✓ Backhoe with trailer and hydraulic ram/pavement breaker
- ✓ Dump truck (10 ton)
- ✓ Gas powered AC generators
- ✓ PE pinchers to control up to 8" plastic pipe
- ✓ Meter & regulator trucks equipped to maintain/service large meters and stations
- ✓ Steel squeeze off up to 2"
- ✓ No-blow equipment 1" and 1-1/4"
- ✓ Emergency clamps up to 12" diameter
- ✓ Lincoln Ranger welder
- ✓ 4" TDW stop-off machine
- ✓ 4-6" beveling machine
- ✓ TDW T101 short stop machine
- ✓ Ranger CGI (gas detection equipment)
- ✓ Expansion plug tool up to 2" for emergency stop
- ✓ PE butt, saddle and electrofusion equipment
- ✓ Water pump and shoring equipment
- ✓ Pneumatic and electric drills for barhole survey

Note: Representative of SCE&G equipment that is typically available only to large natural gas utilities. It is doubtful that a non-utility would own all of these items, especially in SCE&G's range of sizes and configurations. Their availability of the equipment on short notice to meet critical service requirements would be questionable. Fort Jackson will benefit from immediate equipment access and reasonable costs that are allocated among thousands of jurisdictional customers.

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Designated Lines of Communication. Fort Jackson, through available designated points of contact, will be able to request specific services or to convey any suggestions for improvement under the contract.[4] The Fort Jackson Project Manager/Deputies will respond to suggested service requirements and, as needed, coordinate with other SCE&G personnel to effectuate responses. In the case of a strategic service request, the Project Manager/Deputy will be responsible for arranging the necessary personnel, equipment and materials needed to implement the request.

Equipped Gas Maintenance Vehicle

Equipped Gas Maintenance Vehicle

Welding Truck

Gas Service Truck

Figure 2-2. Examples of Standard and Specialized Equipment

Scheduled Meetings. During the initial transition phase of the contract, in person or telephonic meetings with SCE&G and Fort Jackson personnel will be conducted as required to ensure that the transition proceeds smoothly and that issues are addressed quickly and efficiently. Thereafter, general coordination meetings will be scheduled approximately once a month, as needed, to

[4] For control purposes, emergency service requests should be directed to the 24-hour SCE&G Call Center to assure the immediate dispatch of service personnel and tracking of service responses.

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provide Post personnel information regarding upcoming projects and the status of projects in progress. These would be in addition to as required meetings to discuss specific capital upgrade, replacement or new connection projects or to discuss specific issues of interest to either party. The coordination meetings also will provide a forum for:

- Feedback from the Installation regarding SCE&G's performance under the contract;
- As needed participation in the Request for Action process; and
- Discussions regarding Installation planning and other issues that could impact future work schedules or the order of precedence of repair and replacement work being performed.

The frequency of the regularly scheduled meetings will be adjusted as dictated by the needs of the Post to ensure the continued and timely flow of information, while at the same time minimizing the amount of time expended on meetings. For meetings, it is suggested that the Contracting Officer's Representative (COR) will prepare minutes documenting discussions, resolutions and action items. Copies of the minutes will be distributed to the Administrative Contracting Officer and SCE&G. The Project Manager will review the minutes for completeness and ensure completeness and accuracy.

The monthly meetings will also serve as a time to discuss, coordinate and schedule work. For example, routine work, (e.g., scheduled repair, replacement, or removal of system components) that could entail a service interruption, will be coordinated with the COR at the monthly meetings, to ensure the Installation has as much advanced prior notice as possible. Additional formal meetings will be scheduled on an as-needed basis.

SCE&G recognizes that there may be instances where such coordination will need to be conducted outside of the regularly scheduled monthly meetings to facilitate the timely completion of work. In such cases, SCE&G will coordinate directly with the COR to arrange for work that will be performed consistent with notification requirements.

SCE&G will also schedule informal meetings with Installation personnel as frequently as needed to assure that all work and mission requirements are fulfilled. For example, the Company expects that informal meetings will be commonplace as SCE&G completes the system replacement and other major upgrade projects identified in the Section 3 Capital Plan.

2.5 QUALITY AWARDS AND CERTIFICATIONS

Perhaps the most important certification is SCE&G's various certificates of public convenience and necessity and franchise agreements, which authorize the provision of retail natural gas utility service within SCE&G's service territory. SCE&G's long-term certificates and agreements are indicators of its reputation for quality service; providing safe and reliable service under rates that are cost-based and reasonable.

2.6 PERFORMANCE METRICS, INSPECTIONS AND RECORD KEEPING

SCE&G's goal is to operate the on-Post system as safely and efficiently as the comparable SCE&G system. This will help ensure the Installation receives extraordinarily reliable natural gas service. SCE&G will apply its standard service practices to the privatized system. Such practices and standards are described in SCE&G's numerous internal Gas Standards, which

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are available for inspection. The Company also will meet or exceed customer service levels prescribed in applicable laws, rules and regulations.

SCE&G utilizes a number of metrics to monitor and improve overall system performance. Some of these are:

- Accident Frequency Rate (recordable injuries per 100 employees per year);
- Preventable Vehicle Accident Ratio;
- Number of Unrepaired Grade 2 Leaks > 6 months old (goal is zero);
- Overall Excavation Damage Ratio (excavation damages per 1,000 locate tickets);
- Operator At-Fault Damage Ratio;
- Meter Installation Goals (90% on same day or next business day)
- New service line installations (90% within 10 business days)
- Emergency Response Times (arrive within 1 hour 90% of the time)
- Grade 1 Leak Make Safe Times (make safe within 2 hours 95% of the time), and
- Percent Unaccounted-for Gas (typically around 1%).

The privatized system will be incorporated into the upstream SCE&G system such that incidents / responses within the Installation will be included in the calculation of system-wide metric values. However, many of the listed metrics do not have applicability to a stand-alone portions of the overall SCE&G system.

A prime example is the unaccounted-for-gas percentage, which is measured by comparing metered gas flowing into the system with meter readings at customer sites. The calculation cannot be applied to Fort Jackson unless all service locations are metered by SCE&G. As for emergency response times, the privatization goals are more stringent than those for the entire system (which as noted in the proposal include rural sites much further away from SCE&G service centers than Fort Jackson).

SCE&G will apply the goal of zero Grade 2 leaks unrepaired after six month.

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Section 3.0

System Deficiency Corrections / Upgrades / Connections and Renewals and Replacements Plan

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3.0 Initial System Deficiency Corrections / Upgrades / Connections and Renewals and Replacements Plan

An Initial System Deficiency Corrections (ISDCs) / Upgrades / Connections and Renewals and Replacements Plan (Capital Plan), which is based on sound utility practices and an understanding of the Installation's total service requirements, is an important element of an integrated service concept. When combined with the Service Interruption/Contingency and Catastrophic Loss Plan and the Operations and Maintenance and Quality Management Plan developed on a similar basis, the Capital Plan serves the following important functions:

- Provides a formal mechanism for the parties to periodically identify and coordinate the need for and timing of system renewals, replacements and upgrades;
- Gives the Government insight, for budgetary and other planning purposes, into how its privatized service costs might change (up or down) in response to changing regulatory and service requirements;
- Incorporates the results of system inspections and other diagnostic studies to identify opportunities to improve overall system reliability, as well as capital investment planning efficiency; and
- Provides for assessment and implementation of new or revised standards that require upgrades or impact system operations.

The Capital Plan reflects the results of a review of the information provided in the Solicitation in general and Attachment JA2 in particular, as well as applicable records, information contained in the Technical Library and the results of SCE&G's pre-proposal site visit. These elements necessarily formed the basis for the Capital Plan because it was not possible to perform system testing or conduct a visual inspection of all aboveground or any of the underground components of the distribution system. A revised plan will be submitted each year by May 31st for review and comment.

3.1 INITIAL SYSTEM DEFICIENCY CORRECTIONS AND OTHER IMPROVEMENTS

Three categories of initial upgrade projects are proposed for the system. The first addresses safety and other upgrades needed to conform the acquired system to SCE&G and industry standards. SCE&G also proposes upgrades to enhance service reliability. The second addresses pressure testing in order to establish a compliant maximum allowable operating pressure (MAOP). The third addresses transition requirements, as ownership and operational responsibility for the natural gas distribution system is transferred from the Government to SCE&G.

Capital projects will be capitalized ("C") and the installed costs will be included in the ratebase for the Contract Rate Charge as the projects are completed (i.e., used and useful). This generally will occur when the natural gas assets are pressurized. Project costs will be recovered as part of the Contract Rate Charge. Transition activities ("T") will be expensed and the costs will be recovered by one-time connection charges. As needed, post-ownership pressure testing

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costs will be expensed ("E") and also recovered by one-time charges as each authorized pressure test for a given line and/or subsystem is completed. The projects are identified as follows and are described in the subsections that follow:

- Capitalized Upgrade Projects:
  - C-1: Replace Steel Pipe
  - C-2: Miscellaneous Station Repairs
  - C-3: Meter Replacements
- Expensed Transition Projects:
  - T-1: Transition Planning and Management
  - T-2: Initial Leak Survey
  - T-3: System Mapping, Inspection, Inventory and Minor Repairs
  - T-4: System Potholing
  - T-5: Environmental Reconnaissance Study

Expensed transition projects will be completed during the transition period. As required CLIN 0006 pressure testing of existing lines will be performed as authorized by the Government. The associated project costs will be expensed (i.e., not capitalized). The capitalized projects addressed in the plan would be completed within the first ten contract years. The installed costs would be reflected in the plant-in-service values for the Contract Rate Charge by year eleven. Although the projects would be completed within ten years, the costs are not booked until the work is completed and the facilities are used and useful (pressurized). There also typically is a time lag before all costs are entered into SCE&G's accounting programs and then booked to plant-in-service.

There are three broad considerations affecting the scope of the proposed capital projects. The first is that the Attachment JA2 system inventory indicated that steel piping accounts for 54.0 percent of the privatized system. Much of this pipe will be 54 years old when SCE&G acquires ownership of the system on the Contract Start Date (CSD).

Second, and perhaps more significant than age, is the incomplete records, which are to be retained for the life of the asset, regarding the Title 49 requirements for the establishment of MAOPs, leak survey, repair records and cathodic protection inspections.

Additionally, gas utilities are required to prepare and implement a comprehensive Distribution Integrity Management Plan (DIMP).[1] SCE&G ranks the sources of system risk and focuses on the areas with the highest ratings. The current plan focus is on minimizing excavation caused pipe breaches and leaks, primarily due to a failure to request gas line marking (using the Dial 811 system) or ignoring markings. Unlike a number of other utilities, there is no current program to replace the upstream system's extant steel pipe. This in part is because the Company has an excellent and comprehensive cathodic protection program. The acquired Fort Jackson system will be incorporated into SCE&G's DIMP.

Given the above-noted considerations, the Capital Plan scope includes the replacement of all iron and the 1965-vintage steel piping within ten years of the Contract Start Date.

[1] SCE&G and other gas utilities are subject to United States Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations, including pipeline integrity-management regulations. The Pipeline Safety Improvement Act of 2002 requires pipeline companies operating high-pressure pipelines to perform integrity assessments on pipeline segments.

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3.1.1 Summary of Due Diligence Basis for Proposed Capital Plan

SCE&G's pre-proposal due diligence assessment of the gas distribution was primarily based on the Attachment JA2 system description and the limited amount of current information in the Technical Library. Of particular note was the PBS&J *Gas Utilities Assessment Technical Report*, March 2010 (hereinafter referred to as the 2010 Assessment Report). The basis also reflects the results of the pre-proposal site visit.

Since the piping system is underground, SCE&G's site visit precluded a physical inspection of mains and service lines to assess condition and determine whether they appeared to have been properly installed. This would have particularly applied to PE pipe fusions, the steel pipe coating material and the extent of possible steel pipe corrosion. Another area of concern involves whether plastic pipes was consistently installed with tracer wire and warning tapes. And if initially installed, the Attachment JA2 assessment noted that there were broken or cut locate wires within the PE system.[2]

The due diligence assessment also noted that proper and continuous compliance with Title 49 procedures and documentation, due perhaps to limited resources or other reasons, was not evident. This seems to have resulted from not using the 49 CFR 192 maintenance and record keeping requirements as guidance, but resources may not have always allowed strict adherence. For example, leakage surveys and cathodic protection monitoring have not adhered to the schedules prescribed in 49 CFR 192.

There are three issues of additional particular concern. The first is the Government-recognized lack of continuity or "locatability" within the gas system, that:

> "… prevented successful locating of underground pipe in most areas of the system. As such, validation of the system maps was not possible in most instances unless excavation to examine buried facilities was allowed."

The second is corrosion. Assessment reports recognized problems with the cathodic protection system and maintenance of facilities (especially rust removal and painting of metallic facilities). It was noted that measures were taken to address system deficiencies. These included the installation of rectifiers in 2008 and a post-2008 wire brushing and painting. Notwithstanding these efforts, it must be assumed that the lack of continuous catholic protection degraded the condition of the steel piping. And once degraded, the process cannot be reversed.

Additional observed and anecdotal issues with the system are:

- There was no evident documentation to support a maximum allowable operating pressure. It is understood that the newer pipe installations were generally pressure tested. It is not known, however, if the older pipe was tested or if the test records are obtainable.
- While a utility standard is to operate and maintain all valves annually, there seemed to be little such effort within the Installation such that many valves are in poor condition.

[2] Gas system descriptions for other Army installations indicated that not all of the PE pipe had tracer wire. Absent accurate and up-to-date maps, however, it would be difficult to determine which sections of pipe have or do not have tracer wires. And without comprehensive records, it similarly would be difficult to identify the portions of PE pipe with broker or cut tracer wire.

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Examples of deficiencies included valves repaired with duct tape and grease stops that can be easily removed.[3]

- Leak detection surveys were not performed at the required intervals. For example, Attachment JA2 indicated that a survey was performed in August 2011 and another was scheduled for late 2015.
- There are locations with obvious gas odors. This means that there is system leakage and the leaks have not been identified and repaired in a timely manner.[4] It is believed that the lack of proper and periodic main valve maintenance is the cause of a number of suspected leaks.
- Of the inventoried 376 regulators, the 2010 Assessment Report classified 29 percent (109 units) and 22 percent (82 units) as in fair and poor condition, respectively.
- The 2010 Assessment Report also classified all but three of the pressure reducing stations as in fair to poor condition.
- There were a number of minor issues at many of pressure reducing stations. These included:
  - A missing regulator;
  - PE piping out of and into the ground;
  - Lack of structural support or barriers;
  - Absence of main valves to enable the gas shut offs; and
  - Absence of bleed values (to reduce pressure when doing maintenance).
- Excess flow valves (EFVs) were not evident. Title 49 requires EFVs for all new or replaced residential services and there is a pending rulemaking to extend the requirement to commercial services.[5]
- There were instances of improper repairs to service regulators. For example, tape with a hardening agent was used. This method does not provide a proper seal and often leads to gas leakage.
- There are some isolated instances where exterior piping seemed to be installed by a plumber rather than a certified gas installed. The proper installation methods and the quality of the facilities are therefore questionable. In at least one instance, interior pipe was laid.

[3] Section 208 in SCE&G's O&M Manual states that each valve that may be necessary for the safe operation of a system must be maintained at least once each year. The process begins with locating the valve using GIS and digital compliance records. Sealant/lubricant is injected by a qualified individual if a valve does not properly operate. The Company's Failure Investigator is contacted if the valve still does not properly operated.

[4] SCE&G's leak response procedures provide that: "when investigating a gas leak, it must be assumed that a hazardous conditions exists unless proven otherwise. Therefore, prompt action is required."

[5] Section 1020 in SCE&G's Design and Installation Manual requires an EFV for all new or replaced residential services. EFVs also should be installed on commercial services when practical. This generally applies to all commercial ¾" and 1 ¼ services. Curb valves should be used for services of 2" and above.

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Notwithstanding the above discussion, the Attachment JA2 condition assessment concluded that:

> The Installation's natural gas system provides an acceptable quality of service. DPW personnel did not indicate any significant problems with the gas system other than typical age-related problems and leakage.

SCE&G does not completely concur with this characterization. If a gas system is properly installed and maintained, the age alone of facilities would not be a primary factor in the quality or reliability of the service. And the combination of past corrosion and valve issues create the potential for reliability issues. The lack of material records, test reports, lack of design certification and the application of the numerous other requirements for a natural gas system indicate that the system is not Title 49 compliant.

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> "… prevented successful locating of underground pipe in most areas of the system. As such, validation of the system maps was not possible in most instances unless excavation to examine buried facilities was allowed."

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Additional observed and anecdotal issues with the system are:

- There was no evident documentation to support a maximum allowable operating pressure. It is understood that the newer pipe installations were generally pressure tested. It is not known, however, if the older pipe was tested or if the test records are obtainable.
- While a utility standard is to operate and maintain all valves annually, there seemed to be little such effort within the Installation such that many valves are in poor condition. Examples of deficiencies included valves repaired with duct tape and grease stops that can be easily removed.[6]
- Leak detection surveys were not performed at the required intervals. For example, Attachment JA2 indicated that a survey was performed in August 2011 and another was scheduled for late 2015.

[6] Section 208 in SCE&G's O&M Manual states that each valve that may be necessary for the safe operation of a system must be maintained at least once each year. The process begins with locating the valve using GIS and digital compliance records. Sealant/lubricant is injected by a qualified individual if a valve does not properly operate. The Company's Failure Investigator is contacted if the valve still does not properly operated.

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- There are locations with obvious gas odors. This means that there is system leakage and the leaks have not been identified and repaired in a timely manner.[7] It is believed that the lack of proper and periodic main valve maintenance is the cause of a number of suspected leaks.
- Of the inventoried 376 regulators, the 2010 Assessment Report classified 29 percent (109 units) and 22 percent (82 units) as in fair and poor condition, respectively.
- The 2010 Assessment Report also classified all but three of the pressure reducing stations as in fair to poor condition.
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  - Absence of bleed values (to reduce pressure when doing maintenance).
- Excess flow valves (EFVs) were not evident. Title 49 requires EVFs for all new or replaced residential services and there is a pending rulemaking to extend the requirement to commercial services.[8]
- There were instances of improper repairs to service regulators. For example, tape with a hardening agent was used. This method does not provide a proper seal and often leads to gas leakage.
- There are some isolated instances where exterior piping seemed to be installed by a plumber rather than a certified gas installed. The proper installation methods and the quality of the facilities are therefore questionable. In at least one instance, interior pipe was laid.

Notwithstanding the above discussion, the Attachment JA2 condition assessment concluded that:

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SCE&G does not completely concur with this characterization. If a gas system is properly installed and maintained, the age alone of facilities would not be a primary factor in the quality or reliability of the service. And the combination of past corrosion and valve issues create the potential for reliability issues. The lack of material records, test reports, lack of design certification

[7] SCE&G's leak response procedures provide that: "when investigating a gas leak, it must be assumed that a hazardous conditions exists unless proven otherwise. Therefore, prompt action is required."

[8] Section 1020 in SCE&G's Design and Installation Manual requires an EFV for all new or replaced residential services. EFVs also should be installed on commercial services when practical. This generally applies to all commercial ¾" and 1 ¼ services. Curb valves should be used for services of 2" and above.

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and the application of the numerous other requirements for a natural gas system indicate that the system is not Title 49 compliant.

***Inventory Quantities*.** Attachment JA2 requires that proposals be based on the Table 3 system inventory and use the site inspections as well as information included in the Technical Library as reference points for developing other aspects of a proposal. Accordingly, the scope (and related Volume IV prices) of this Capital Plan is based on the inventory quantities and other information.

As noted above, the Attachment JA2 inventory did not differentiate main from service pipes or the pipe material for the listed valves. SCE&G accordingly assumed the following system characteristics:

- System piping (LF):
  - Service lines: 40,200
  - Main lines: 175,800
  - Total pipe: 216,000
- (Main) valves (number):
  - Steel: 193
  - PE: 230
  - Total valves: 423

Of particular note is the privatized system's inordinately large portions of larger-diameter mains. As noted above, about 13 percent of the mains consists of 8- and 10-inch pipe. This is significantly higher than the 0.94 percent of mains with diameter of 8 inches or more on the upstream SCE&G distribution system. About 29 percent the mains are 6 to 10 inches in diameter.

***Pipe Material*.** Attachment JA2 did not indicated if the system contains medium density polyethylene pipe (which is the standard for the upstream and many Army installations) or high density pipe (which is less commonly used). It is even possible that the system contains a mix of medium and high density pipe.[9] Exposed PE pipe observed during the site visit was yellow, which is for MDPE pipe. It accordingly is believed that MD pipe was used for recent upgrades and replacements.

As is the norm within the gas utility industry, SCE&G generally uses MD polyethylene pipe for both distribution mains and service lines. One reason is that pipe fusions are easier when using the same kind of material.

While it is not uncommon to join HD and MD pipe, relatively more care must be taken to make sure that the fusions and other work is properly performed. This concern would normally be addressed by using properly certified personnel to perform the work, coupled with a vigorous quality control (QC) inspection regime as is standard for the upstream SCE&G system. The historical level of QC by Installation personnel is uncertain.

[9] The Army's 2010 Gas Utilities Assessment Technical Report noted that the Fort Jackson system is "a combination of steel and polyethylene (PE) pipe or high density polyethylene (HDPE) pipe."

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***Maximum Allowable Operating Pressure*.** The existing Government-owned system is served from a single, master-metered connection with the upstream SCE&G upstream system. The Fort Jackson pipeline system is operated at two distinct pressures: 75 and 25 psig. These pressure levels are generally consistent with readings from observed regulator station.

The privatized gas system must have an established and documented MAOP for compliance with 49 CFR, Part 192. Such documentation was not systematically evident from a review of Technical Library information. This is not to say, however, that pressure testing records do not exist. To the contrary, it is reasonable to assume that PE pipe installed within the past ten years, and more likely within the past year or so, was properly tested. It is instead uncertain where the test records were retained (e.g., with the installation contractor, a MILCON or other general contractor, the Corps of Engineers or Fort Jackson's DPW) and if they can be retrieved during the Transition Period. The following criteria will be applied to the privatized system.

- *Piping With Adequate Material and Proper Pressure Test Documentation*. The MAOP will be as documented for those portions of the privatized system for which there is Title 49 compliant pressure testing records and sufficient as-built information as to verify the integrity of the installed components. Gas distribution pipe is pressure tested up to 150 percent of an established MAOP. No additional testing would be required.

- *Iron and Steel Piping*. A fully documented MAOP for the steel piping is important even though it will be replaced within five years from the Contract Start Date. To the extent records are available, they will be reviewed to verify operating pressures. Absent such records, the de facto MAOP for such piping will be the operating pressures on the CSD, provided that it does not exceed 60 psig. Any unverifiable piping would result in the MAOP being no higher than 60 psig or the current operating pressure, whichever is lower.

- *PE Piping Without Test Documentation*. The operating pressures on the CSD would serve as an interim, not to exceed, de facto MAOP for PE piping lacking proper Title 49 documentation. Pressure testing, if determined to be necessary and/or beneficial to further substantiate the establishment of a higher MAOP, would be completed for affected facilities as authorized by the Government.

- *PE Replacement Piping*. The need for replacements would be largely condition driven, such as if piping is found to have improper fusions, excessive cracking, shallow installation depth, high leakage rates or otherwise not to have been properly installed. It is doubtful that such piping could be successfully pressure tested, given safety hazards and other considerations. Here, as well, the interim, not to exceed, de facto MAOP would be the operating pressures on the CSD, provided that they do not exceed 60 psig or the design capability of the subsequently identified material and wall thickness.

- *60 psig Maximum MAOP for PE*. Safety considerations resulting from the uncertainty regarding which mains are high or medium density, coupled with the apparent lack of sustained record keeping, would necessitate a 60 psig MAOP for all PE segments unless it can be verified that the piping is HDPE, the installation records and as-builts support a higher MAOP and the lines are successfully pressure tested to establish a higher MAOP, provided that the system install records are sufficiently detailed to provide assurance the material can withstand a higher operating pressure. SCE&G would follow the current O&M standards for uprating and establishing MAOPs.

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There are no known current requirements to increase system operating pressures. There may, however, be an as yet undefined need to conduct pressure testing of existing facilities to establish a higher MAOP on portions of the privatized system, especially those operated at lower pressures. Should such testing be required in the future (e.g., to accommodate load growth), SCE&G generally would "uprate" the existing pressurized facilities in small increments to establish a higher MAOP. SCE&G would follow the Section 107, *Uprating Pipelines*, procedures in the Company's Operations and Maintenance Manual.

The cost for post-conveyance pressure testing, or other MAOP related intervention, would be capitalized if conducted as part of an approved capitalized system upgrade project. Cost recovery would be under the Contract Rate Charge. It is possible; however, that pressure testing or other interventions may be required at the request of the Government with no related capitalized upgrade. In this case, the cost would be expensed and recovered under an equitable price adjustment.

***Steel System*.** The Attachment JA2 Table 3 system inventory indicates that that steel piping accounts for 54.0 percent of the privatized system. As indicated above, proper and continuous cathodic protection documentation, which was required by DOT 192 starting in 1970, was not evident and it was uncertain whether there is adequate documentation on other important aspects such as establishing an MAOP or proper maintenance and corresponding records as required by Title 49. Additional related considerations regarding whether and when to retain or replace the steel piping were:

- *Lowest Total Cost*. SCE&G estimates the cost of replacing steel piping versus the cost required to bring an existing system segment up to industry standards. By replacing a segment, many required activities, such as correcting functional deficiencies to provide reliable service, are accomplished in a much more efficient manner.
- *Piping Materials*. SCE&G is concerned with the condition of the steel pipe, especially since all facilities did not seem to have complete and sustained cathodic protection.
- *Installation Specifications*. Due to the unavailability of comprehensive and continuous records, SCE&G was unable to determine if the facilities were properly installed and maintained in accordance with standard industry practices.
- *Cathodic Protection*. Retention of the steel facilities would necessitate the maintenance and/or replacement of cathodic protection systems. Replacing the steel with PE piping would generally avoid this considerable expense.
- *Maximum Allowable Operating Pressure*. Given the age and condition of the steel facilities, it is doubtful that the segments could be pressure tested in an economical manner, if at all. There are likely to be numerous leaks as the system pressure is elevated. The testing would then have to stop until the leaks are repaired. An inordinate number of pressure test iterations would be required. Replacement of the steel facilities would avoid what is likely to be a largely unproductive and futile process.
- *System Rationalization*. Replacing a sizable quantity of steel piping, especially if coupled with a higher operating pressure, should result in a degree of rationalization of the system to minimize potential excess capacity and circuitous pipe routings.
- *System Mapping*. Replacement piping will have accurate maps.

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- *Distribution Integrity Management*. Required replacements of steel piping would be consistent with the SCPSC's DIMP requirements and the Attachment JA2 Government-recognized system deficiencies.

In light of the above, SCE&G proposes to replace all of the steel piping within five years of the Contract Start Date (see Project C-1). Relatively small segments of existing steel piping may be replaced with steel pipe for code compliance, which requires the use of steel pipe when crossing steam lines and certain roadways. Cathodic protection for these pipe segments, as well as for steel risers and regulators, would be provided by localized anodes rather than from a "system" that provides protection for an extended run of steel pipe.

There is anecdotal information that, notwithstanding issues cited in the noted corrosion report, parts of the system are in good, or even great, condition. For example, SCE&G crews were recently called to the Post to install a hot tap on a six-inch steel main. An excavation pit was dug to expose the pipe and crew personnel took off the coating off about 8 foot of pipe. That pipe was characterized as in great condition. However, it was noted that an adjacent valve was covered in duct tape.

Since a substantially part of the system will have to be replaced, SCE&G will use this opportunity to assess the system as an integrated unit (see proposed Project E-3) and develop a comprehensive plan that addresses current and future requirements. The physical layout of the rebuilt facilities also will be addressed with the aim of minimizing run lengths. A particular focus will be opportunities to rationalize the system by increasing the low pressure portion of the system to operate at SCE&G's standard 60 psig. This will enable a reduction in pipe size while still providing needed throughout with an adequate margin to accommodate future load growth. For example, the capacity of a 4" main operated at 60 psig would be comparable to the capacity of a 6" main operated at 20 psig.

SCE&G also can uniquely explore opportunities to provide a second point of delivery by tapping into Company-owned distribution lines near the north side of the Post. Besides the added reliability of an alternate supply source, if feasible this option could reduce the length of long pipe runs within the Installation.

***Service Regulators, Risers and Valves*.** The same inspection of the system during the site visits did not identify significant numbers or types of deficiencies. A sample of related observed deficiencies include.

- The lack of paint and resultant rusting was somewhat common on the older sections of the system. It is possible that some of the facilities lacked paint for an extended period of time, in which case there may be deep pitting and require replacement.
- A few regulators and vent pipes were sited near windows, doors and building air intakes and electrical sources (such as an air conditioning unit or electric panel, which could create sparks/arcs and an ignition risk).

Regulators (and risers) associated with steel service lines will be replaced as part of Project C-1. This would account for about 263 units, which is considerably in excess of the 191 regulators classified in the 2010 Assessment Report as in fair to poor condition. Minor rusting would be addressed in the interim before replacement as an as-needed, expensed maintenance item and therefore would not be included in the scopes of the ISDCs. Although it is possible that some

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regulators connected to PE service lines also may need replacement independent of pipe replacements, this would be addressed as needed as part of SCE&G's approach to renewals and replacements.

The Attachment JA2 system inventory identified 423 valves, all of which are believed to be main valves. This equates to about 17 valves per mile of main. The number of main valves thus seems excessive. For example, a typical gas utility distribution system might contain two to three valves per mile.

The apparent excess number of installed valves also seems consistent with the Army's standard operating practices for gas systems which generally state that successful operations of a gas system depend largely on the number of strategically located valves. Valves also usually are installed so that sections of the system or individual lines can be isolated without disturbing adjacent sections."

Applying SCE&G's standards to the general configuration of the Fort Jackson system would generally call for an average of no more than two or three valves per main mile. Any main replacements would include the installation of main valves at a conservatively estimated average of 3.0 valves per main mile.

Pressure Reducing Stations. The Table 3 inventory lists 27 regulator stations, all of which were installed in 1965. SCE&G was unable to visit all of the stations included in the Attachment JA2 system inventory. An initial observation was that many of the stations have been or were in the process of being rebuilt. None of the rebuilds, however, were consistent with SCE&G and industry standards such that some upgrades or repairs most likely will be needed for most if not all of them. Related additional observations are:

- Perhaps the most serious deficiency was that some of the upgraded stations used PE instead of steel pipe for the vertical runs out of higher pressure and into the lower pressure underground pipe. At a minimum, this results in an unsteady structure that is more prone to damage from being struck by vehicles. This risk can be mitigated by installing steel pipe and/or constructing bollards (i.e., steel posts). PE pipe also degrades when exposed to sunlight and exposed pipe is not allowed by code.
- A pressure relief valve was closed.
- One station is located near a housing area. It should be fenced in to minimize vandalism or accidental damage.
- Threaded flanges were utilized and welded.
- One station is missing a gas regulator.
- The stations did not include needle valves that would allow maintenance on the regulator without significant risk to the worker.
- Station equipment generally was painted. There was some observed rust. Such minor rusting would be addressed as an as-needed expensed maintenance item.

Given the absence of material issues with observed stations, and the apparent on-going replacement effort, there was no observed need to completely replace one or more stations. There is, however, a capitalized project to implement a number of individually minor repairs and upgrades.

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***Cathodic Protection*.** Notwithstanding the above-noted issues, impressed current cathodic protection will not be needed after the system's steel piping has been replaced. While corrosion damage to steel pipe is irreversible, the corrosion process is relatively slow.

However, an initial cathodic protection survey will be performed in the transition period to determine the state of the cathodic protection on identified steel sections. This will assist in prioritizing the replacement of the system, and in verifying that no immediate action is necessary to install large numbers of anodes as a protective measure as well as providing additional assurance that the proposed ten year term is appropriate. Passive, sacrificial anodes will be replaced as necessary.

The Title 49 code requires that all steel installed underground after 1970 be coated, cathodically protected and routinely monitored. Annual monitoring of pipe-to-soil potential measurements is required and generally anything reading less than -0.850 mV is considered to be inadequately protected and out of compliance. Prompt remedial action is required on any steel not having adequate protection as indicated by testing.

***Propane Air System*.** The Attachment JA2 system description states that the Post will retain ownership and operation of the propane air system. For safety, liability and other reasons, SCE&G will not allow the injection of propane air into the privatized natural gas distribution system. The reasons for this restriction include the following:

- Propane (unlike natural gas) is heavier than air and, as such, tends to accumulate in low areas (such as basements or other below-grade areas of buildings). Accumulated propane may ignite, thereby presenting a serious public safety (and mission) risk.
- Gas burning equipment does not always work properly when fired using propane air mixes. In some instances, a pilot flame may be extinguished without the knowledge of a building occupant. This could inordinately increase SCE&G's O&M cost due to increased pilot relight service calls. There also is a serious risk that leaking propane may accumulate in the low areas of a building, thereby creating an explosion risk.
- The propane leakage risk is exacerbated because the Post does not adhere to the same building codes that apply to SCE&G's other service customers. For example, there may be instances where gas regulators and other distribution system equipment are located within enclosed areas.
- Improper propane-air mixtures can accelerate the degradation of PE piping, thereby increasing SCE&G O&M and replacement costs to levels in excess of the revenues generated under the formula rate.

There should not be an identifiable commodity cost impact because the plant could not be operated for the past few years and there is no expectation that it would operate as envisioned in the future. The Installation was unable to curtail its gas commodity deliveries, and this resulted in very significant (millions of dollars) in transportation service penalties. It is noted as well that discussions are ongoing with the Government and SCE&G to convert the Installation from an interruptible to a firm service customer.

Notwithstanding the above, SCE&G would work with the Post and discuss possible means to safely utilize the propane still in the storage tanks. The Government may decide to run a dedicated line from the air blender to the central plant.

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It should be noted that SCE&G may be willing to allow the operation of the propane plant if the Government would provide sufficient indemnification and adhere to strict operating guidelines stipulated by SCE&G. The Government previously indicated, however, that such indemnification could not be obtained. SCE&G accordingly believes it is in the Governments best interest to not attempt to inject propane into the distribution system due to the unreliable history of the plant, the cost of plant maintenance, the ongoing training that is required for plant operators and the significant financial penalties for not adhering to gas curtailments when served on an Interruptible rate.

***Government Recognized /Deficiencies*.** The Government Recognized System Deficiencies are identified in Table 6 of the Attachment JA2 natural gas system description. SCE&G's proposed responses are summarized in Table 3-1.

Table 3-1. Comparison of Atch JA2 Deficiencies and SCE&G's Capital Plan

System Component	Attachment JA2 Description	Capital Plan Reference
1. System survey & record drawings	Conduct a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings (1 year from CSD)	The system survey and comprehensive mapping (as well as an actual inventory) will be completed during the Transition Period (see Project T-3).
2. Computerized model	Develop and maintain an accurate computerized model of the system to implement contingency studies, reliability, and load analysis (2 years from CSD).	The modeling effort will be completed within two years of the Contract Start Date.
3. Main valve at SCE&G meter station	Install an aboveground main valve on both branches of the Government feed just outside the SCE&G Meter Station at Gate 1 (Jackson Boulevard). The Fort Jackson main valve should be located 5 feet outside the SCE&G meter regulating station. The valve should be secured by a concrete wall enclosure with chain link fence. (2 years from CSD).	The purpose of the valves is to shut off gas flowing into the Installation. The Company-owned meter station already contains such a valve, so SCE&G ownership of the privatized system obviates the need to install additional valves (see, also, clarifying discussion below). The valves will be installed when the steel pipe is replaced.
4. Steel pipe and valves	Replace all coated and wrapped steel pipe and all 1965-vintage valves with PE. (5 years from CSD)	All steel pipe will be replaced within five years under ISDC Project C-1, with replacements prioritized based on Transition Period inspection and survey results. All valves connected to steel piping likewise will be replaced. As-required PE valve replacements will be covered under the Section 2.11 levelized R&R. [10]

[10] The material and installation cost for a ball valve and related box and couplings ranges from about $300 to $525 for a 4" and 6" valves, respectively. The installed cost of a residential or small commercial service regulator ranges from about $200 to $250. SCE&G's base year annual R&R spending is estimated at about $22,000. This amount therefore would accommodate a considerable number of as-needed valve and regulator replacements during the first five ownership years.

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Table 3-1. Comparison of Atch JA2 Deficiencies and SCE&G's Capital Plan		
System Component	**Attachment JA2 Description**	**Capital Plan Reference**
5. Gas regulators	Replace all facility gas regulators. (5 years from CSD)	All regulators connected to steel services will be replaced as part of the Project C-1. As-required replacements of regulators connected to the PE system will be covered under the Section 2.11 levelized R&R.

Referencing the suggested main valve at the meter station per #3 above, there is a 10-inch pipe sourced from the upstream system with a valve that can cut off service to the entire installation in the very unlikely event this would be required. There are two Government-owned pipe branches into the privatized system. The installation of shut-off valves would require trenching to gain access to the pipe. Gas service would have to be cut off and each line purged before the valves could be inserted. Gas service within Fort Jackson would have to be interrupted during this process.

A more economical, and less disruptive, approach is to use a combination of repairs, replacements and relocations to properly valve off gas mains in accordance with standard industry practices. Properly placed valves can limit service disruptions. SCE&G also will annually inspect all valves to make sure they can be properly worked. In the event new valves are nonetheless desired, this should be coordinated with the steel pipe replacements. This would include installing the noted two main valves.

Regarding the steel replacement schedule, it is possible that some of the pipe is in good condition and some replacements can be programmed for beyond five, or possibly even ten, years. SCE&G periodically performed work on the system and has found pipe in acceptable condition but that work was in small areas. It may be that the pipe in these areas was acceptable but the same pipe in other areas may not be acceptable. This will be determined during the system inspection and records review.

***Other Deficiencies*.** There were other indications from the pre-proposal site visits and Technical Library documentation that the system may not have been properly maintained on a comprehensive and sustainable basis. The potential system deficiencies include inadequate operational documentation as required by the Title 49 pipeline safety regulations. These deficiencies will be addressed as either part of the initial Capital Plan or as elements of SCE&G's standard operating practices. The potential deficiencies and related remedial actions are summarized in Table 3-2.

Table 3-2. Response to Potential Gas System Maintenance Deficiencies	
Deficiencies	**Action Required**
DOT 49 CFR Part 191:	
Notification of certain gas incidents in accordance with DOT Title 49 CFR Part 191.9	SCE&G has a reportable incident system in place; will be expanded to include Fort Jackson incidents.
Submission of an annual report on its gas distribution system in accordance with DOT Title 49 CFR Part 191.11	SCE&G already files an annual report; will be expanded to include Fort Jackson statistics.
DOT 49 CFR Part 192, Subpart D:	

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Table 3-2. Response to Potential Gas System Maintenance Deficiencies	
Deficiencies	**Action Required**
Inadequate placement of valves at each regulator station in accordance with DOT Title 49 CFR Part 192.181	SCE&G will design and install properly spaced isolation valves at each of the Installation's regulator stations.
DOT 49 CFR Part 192, Subpart F:	
Written procedures for joining pipe in accordance with DOT Title 49 CFR Part 192.273	SCE&G has in place a comprehensive set of standards and written procedures including pipe joining procedures that meet DOT 49 CFR Part 192 requirements. Additional procedures for new materials and components will be added as necessary.
DOT 49 CFR Part 192, Subpart G:	
Plastic pipeline buried with tracer wire in accordance with DOT Title 49 CFR Part 192.321	SCE&G will install tracer wire with all new replacement piping. If there is existing piping without tracer wire, it will be mapped, located or replaced.
DOT 49 CFR Part 192, Subpart H:	
Accessible service valves. Must be accessible in accordance with DOT Title 49 CFR Part 192.365	SCE&G will review all service valves required for proper system operation to insure they are located and accessible in accordance with DOT Title 49 CFR Part 192.365.
DOT 49 CFR Part 192, Subpart I:	
Operable cathodic protection (CP) to protect buried steel pipeline systems and components	SCE&G will protect all buried steel components and pipelines that remain with adequate CP systems in accordance with DOT Title 49 CFR Part 192 Subpart I.
Monitoring of CP systems in accordance with DOT Title 49 CFR Part 192.465	All buried steel pipelines and components will be monitored by SCE&G in accordance with DOT Title 49 CFR Part 192.465.
DOT 49 CFR Part 192, Subpart J:	
Proper records on tests performed on steel pipelines	SCE&G currently keeps comprehensive pipeline records on all pipelines (including steel) for the life of the pipeline. SCE&G will expand its record system to include all information on all pipelines (of all materials) it tests, upgrades, replaces, or installs on the Installation in accordance with DOT 49 CFR Part 192.517.
DOT 49 CFR Part 192, Subpart L:	
Procedural manuals	SCE&G has a comprehensive set of written procedures and standards for operating and maintaining its pipelines. These will cover most procedures performed within the Post. New, written procedures will be developed as necessary covering installation and O&M on any new materials or components in accordance with DOT 49 CFR Part 192.605.
Program of continuing surveillance / patrolling the pipeline in accordance with DOT 49 CFR Part 192.613 and 721 (b)	SCE&G has a program for pipeline surveillance and patrolling that complies with all regulations; will expand the program to the Installation and keep reports on file.
Damage Prevention Program (DPP) in accordance with DOT 49 CFR 192.614	SCE&G has a DPP. The only added cost will be the initial locating and marking of Fort Jackson facilities. SCE&G will expand the coverage of its existing program and provide ongoing line locating and marking of the natural gas distribution pipelines as appropriate.
Written emergency plan in accordance with DOT 49 CFR 192.615	SCE&G has written emergency plans in place; the coverage of the plans will be expanded to include the Installation.

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Table 3-2. Response to Potential Gas System Maintenance Deficiencies	
Deficiencies	**Action Required**
Pressure testing pipelines without adequate documentation to verify the MAOP will satisfy the DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) requirement in 49 CFR 192.619.	SCE&G has procedures and a program in place for pressure testing to comply with the notification from PHMSA to have reliable, traceable, verifiable and complete documentation of transmission pipeline MAOP. The pressure test will prove up the existing MAOP value on the line and validate how SCE&G operates its system. Pressure tests also act as a go-no go assessment that addresses threats in the integrity management program, such as the stability of manufacturing and construction threats. The pressure testing of pipeline will determine the fitness for use of the entire length of the pipeline tested, inside and outside of HCA.
Public education program.	SCE&G has a public education program in place; the program coverage will be expanded to include the Installation.
Procedure for investigation of failures	SCE&G has procedures and a program in place for investigation of failures; will be expanded to include the Installation.
DOT 49 CFR Part 192, Subpart M:	
Marking of buried pipelines	SCE&G will install pipeline markers where appropriate on Post pipelines in accordance with DOT Title 49 CFR Part 192.707.
Leakage surveys	SCE&G performs pipeline leakage surveys at intervals required under DOT Title 49 CFR, Part 192.723. Following the initial special leak surveys, regular surveys will be performed in accordance with this regulation.
Periodic inspection of regulator stations	SCE&G has an established O&M inspection program for its regulator stations; will expand program coverage to regulator stations on the Installation. Maintenance will be performed in accordance with DOT Title 49 CFR Part 192.739.
Telemetering of recording gauges at regulating stations	SCE&G maintains electronic pressure recording gauges (EPRs) at some 120 locations throughout its service territory. EPRs continually monitor actual operating pressures in SCE&G's distribution system. EPRs will be added as necessary and in accordance with DOT Title 49 CFR Part 192.741.
Testing of relief devices at regulation stations	SCE&G tests all overpressure protection devices in its regulator stations at regular intervals as part of its regulator station O&M. Overpressure protection devices will be tested in accordance with DOT Title 49 CFR Part 192.743.
Maintenance of valves	SCE&G regularly maintains all valves necessary for the safe operation of the system at regular intervals; will locate and identify similar valves on the Installation. They will be maintained and records kept in accordance with DOT Title 49 CFR Part 192.747.

***Installation Methods*.** In accordance with the Section 2 Operations and Maintenance and Quality Management Plan, new and replacement construction will be in accordance with SCE&G's standard service practices. This means that the same techniques and methods that are applied upstream on the 13,400 mile utility distribution system within South Carolina will be applied as well within the Installation. These methods have proven to be cost effective and result in safe and reliable service.

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- *Directional Boring*. It is expected that directional boring will be used as a common installation method. Because of the potential difficulty in verifying locations of existing underground facilities and/or subsurface conditions, special precautions must be taken when installing underground natural gas facilities by any method of boring (e.g., directional, pneumatic, etc.). These precautions are intended to ensure as well as verify that proper clearance from other underground structures is maintained.

- *Open Trench Excavation*. This is also a common installation method and would tend to be used in congested areas where boring was less practical or when connecting main and service lines. Trenching is the preferred method for service line installation.

All PE pipe is installed with tracer wires and buried warning tape placed with at least a 6 to 12-inch separation from pipe. Tracer wire facilitates pipe location and markings. Buried warning tape helps prevent inadvertent damage to pipe during excavations. Excess flow valves will be installed for all (new) or replacement residential and smaller commercial service lines.

SCE&G's access to specialized equipment and crew resources, coupled with close coordination with Installation personnel, will help reduce the extent and duration of surface disruption, as compared to historical construction practices within Fort Jackson.

***Third-Party Construction*.** Section C.11.5.3 of the Solicitation addresses third-party constructed natural gas infrastructure that may be connected to the privatized system. Such construction would be in accordance with SCE&G's standards, and require an SCE&G inspector to monitor and observe the construction to ensure quality and compliance with SCE&G's construction standards. Thorough and complete construction as-builts and pressure testing records would also be required (see, also, related Section 2.10.4 discussion). At the Government's option, SCE&G may take ownership of system components constructed by a third party.

3.1.2 Natural Gas System Capitalized Improvements

Consistent with SCE&G's standard method of service, the Government will be responsible for the installed cost of capital upgrades to the privatized system. There would be no up-front payment requirements because the installed cost will be added to the plant-in-service component of the Contract Rate Charge. Cost recovery would be accomplished as part of the bundled Contract Rate Charge. Replaced risers, regulators and other above-ground facilities would be removed. Mains and service lines would be capped, purged and generally abandoned in place.

3.1.2.1 Project C-1: Replace Steel Facilities

The scope of this project is to replace the 116,700 LF (22.1 miles) of 1965-vintage steel mains and services, along with related valves and regulators (except instances where steel pipe is required to be installed at steam line crossings). It is envisioned that the installation of the replacement facilities will be phased in over five years.

The five-year term is consistent with Attachment JA2, which called for replacing the coated and wrapped steel within five years. The 5-year requirement seemed to be predicated primarily on the age of the piping (i.e., installed in 1965 and thus currently 53 years old). Neither SCE&G nor other utilities replace gas facilitates based solely on their age. Properly installed and maintained coated and wrapped steel pipe can and does have an in-service life lasting for 60, 70 or more years.

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SCE&G does not base valuations or the need for replacements on (theoretical or assumed) component design lives. It is noted that the depreciation life for steel (and PE) mains is 60 years versus an Attachment JA2 design life of 40 years. As noted elsewhere, in-service life of system components invariably would be longer than the depreciation life because the latter reflects facilities removed from service due to pipe relocations, a customer's termination of gas service or other reasons not related to the age or condition of the facilities. It would thus seem reasonable to assume that the useful life of steel mains should be longer than the 60 year deprecation life.

Nonetheless, and consistent with the December 2017 discussions at Fort Jackson, the proposal calls for completing the steel pipe replacements within five years.

As noted above, SCE&G will prioritize the replacements based on the results of the Transition Period inspections and studies. There also will be discussions with Installation personnel regarding mission changes and other activities that may affect the need, capacity, location and timing of the replacements. SCE&G may accelerate portions of the replacement project if warranted by safety, reliability or non-compliance concerns, or to accommodate Government requests for upgrades, expansions or other changes. The converse also might be the case if conditions justify delaying some of the replacements, especially after the most critical needs were met.

Construction techniques will be applied to minimize costs and disruption. The installed costs will be added to the plant-in-service component of the CRC when the charge is updated. Existing underground segments of replaced steel piping will then be capped, purged and abandoned in place. The number of main valves to be replaced is based on an average of two valves per 1,500 LF of main (about seven per mile).

The scope of this project is presented below.

***Mains (*LF)**	
• <2 inch	28,000
• 2-3 inch	32,700
• 4-5 inch	12,400
• 6 inch	8,100
• 8 inch	4,000
• 10 inch	3,500
• Subtotal	88,500
Services (LF):	28,200
• Total Piping	116,700

Service regulators (and other ancillary equipment, such as risers) will be replaced incidental to the replacement of the service lines. The project scope is expected to encompass 232 services (28,200 LF ÷ 107 ≈ 232), so it also includes replacing 240 risers and regulators.

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3.1.2.2 Project C-2: Miscellaneous Station Repairs

As discussed above, SCE&G understands that the Installation is in the process of replacing all or many of the 27 pressure stations. Notwithstanding this effort, there were a number of issues with the new installations that will need to be remedied. There was no apparent need to replace for implement substantial repairs at any given station. SCE&G instead envisions that a number of individually minor but collectively major repairs will be needed. These are estimated to be equivalent to the cost to replace to stations.

3.1.2.3 Project C-2: Meter Replacements

The Attachment JA2 inventory identified 38 secondary meters, 17 of which are advanced-type units that were installed in 2009. The 21 others are analog meters installed in 1987. It is possible that some of the older meters will need to be replaced. This especially would be desirable if an existing meter showed signs of excessive rust or had other issues, and the service line was to be replaced. It is also reasonable to assume that perhaps 25 percent of the meters would warrant replacement as part of an ISDC. The scope and estimated project cost is as follows:

Size	Number	No Replace
0.75”	9	2
• 1-1.25”	7	2
• 2.0” +	5	1
• Total project	21	5

3.1.3 Deleted.

3.1.4 Expensed Natural Gas System Transition Projects

A number of administrative, reliability based, and code compliance activities will have to be implemented to conform the system to SCE&G and industry standards and to comply with applicable laws and regulations. All of the expensed transition projects would be completed during the Transition Period.

3.1.4.1 Project T-1: Transition Management and Planning

The efficient transition from Government to SCE&G ownership of the natural gas utility system will initially necessitate very close coordination with base personnel and other non-recurring management and technical efforts. Project activities are described below.

Develop and Manage the Project Plan. All transition activities must be coordinated in detail with the Installation. This part of the transition plan allows for overall planning and management of upgrade and transition projects. SCE&G will also create a compliance plan that documents all facilities, their condition and plans to correct compliance problems.

Review Government Records. The DOT requires that many records regarding gas distribution facilities be kept for the life of the asset. SCE&G needs to obtain these records, if they exist. In addition, the records and maps contain large amounts of data that are very useful to new own-

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ers in assessing future activities and establishing maintenance records. For example, the customer is responsible for pressure testing "houseline" facilities (i.e., piping within a building). It is noted that a houseline system that could not be successfully pressure tested would be an indication of gas leaks within a building.

Update Initial Capital Upgrades. It will be necessary to identify and ascertain the status of Government-funded capital upgrade and / or replacement projects that may be on-going or completed during the interval from when the Attachment JA2 system inventory was prepared, this proposal was submitted and the date of the contract award. SCE&G proposes to meet with appropriate Government personnel and, if authorized by the Installation, Government and housing privatization contractor personnel, to arrange for an orderly transition of the responsibility for system operations, maintenance, repairs and replacements to SCE&G. The scope of and timing for identified initial capital upgrades would be modified appropriately. This would especially include establishing a preliminary schedule for the phased replacement of the iron and steel facilities.

Assess Potential New or Modified Service Requirements. SCE&G personnel will similarly meet to discuss potential long-term service requirement changes and related impacts on gas system configurations and capacities. Here as well, the scope and timing of identified initial capital upgrades would be modified appropriately.

Setup Records System. The DOT also requires that all maintenance on critical gas distribution system facilities is documented and available for audits. Compliance audits occur with regularity and certainty. SCE&G has computer systems to schedule and record compliance information, but all of the individual components identified during the transition must be organized and entered into the computer systems.

The privatized natural gas system will contain many hundreds of individual risers, regulators, valves and pipeline segments. Since each component will be inspected on a regular basis, SCE&G must carefully plan the new inspections so that the work is as level as possible throughout the year. This requires looking at the totality of the workload to achieve a well-balanced plan. The plan must be complete before the records can be input into the computer systems. Once entered, all data must be audited for accuracy.

Develop Emergency Response Plan. SCE&G will work with the Installation to identify and introduce all key personnel, and to document all emergency contact information. Procedures for handling emergencies must be documented and agreed upon. Some training of SCE&G personnel will be needed, and Installation access procedures must be well understood. With the Installation's concurrence, SCE&G would also like to test the procedures by including at least one emergency exercise during the transition period. Additional elements of the plan include:

- Documenting emergency contact information and special emergency response procedures and service priorities within the Installation; and
- Executing a Memorandum of Understanding (MOU) with the Fire Department to identify the need for fire suppressant equipment and clarify emergency response responsibilities.
- Executing an MOU with the housing privatization contractor (and DPW as appropriate) regarding house system relighting responsibilities and procedures.

*System Studie*s. Capacity studies will be performed by incorporating the privatized facilities into SCE&G's distribution system models. Input data will include materials, lengths and diameters of

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pipelines, as well as any restrictions, such as regulators, valves, reducers and crossovers that may exist. In a similar vein, modeling selected systems will facilitate the design of new connections or other enhancements that may be needed to meet the Installation's evolving gas service requirements over the extended term of the contract. Although the modeling will be initiated during the Transition Period, the studies would be completed on a preliminary basis within two years of the CSD, but would require fine-tuning over many years, in order to more comprehensively reflect near and mi-term load growth, mission changes and other considerations.

HDPE Refresher and Other Training. It is uncertain if the Fort Jackson system contains HDPE pipe. Because SCE&G uses HDPE pipe in its system on a very limited basis, service personnel who may regularly be assigned to work within the Post may need some refresher training regarding HDPE installation and repairs (e.g., for pipe crimping and fusion techniques). They also will need some training regarding Fort Jackson's unique security, site access, excavation permitting and other requirements.

Bill of Sale. SCE&G will work with designated Government agencies and personnel to negotiate the Deed of Sale. It is recognized that the Government will require at least 60 days from the completion of the Project T-3 final inventory to complete the Deed of Sale.

3.1.4.2 Project T-2: Initial Leak Survey

The experience of SCE&G and other regulated utilities working with Government-owned gas systems is that the survey may identify a meaningful number of leaks. This is consistent with the records review section in the 2010 Assessment Report which noted one below-ground Grade 2 leak and 77 above-ground leaks, most of which were characterized as Grade 2. While the report presented dated survey information, the expectation of leakage also is consistent with the above-noted gas odors at various places within the Installation. It is thus reasonable to assume that an initial SCE&G survey would identify an unknown number of Grade 1 and/or Grade 2 leaks.

The initial leak survey generally will comply with the standard and documented procedures which present a comprehensive and integrated approach for responding to identified natural gas system leaks. This will particularly apply to procedures for SCE&G's classification of identified leaks as Grade 1, 2 or 3 leaks. Some of the procedures, however, will have to be modified to reflect unique Transition Period responsibilities regarding such ancillary matters as leak monitoring, building evacuation and repair responsibilities for a system that is owned by, and under the operational control of, the Government.

This especially will be the case if the initial survey identifies Grade 1 leaks that require immediate and continuous action to eliminate an identified hazardous condition. SCE&G accordingly proposes that special coordination be discussed and documented in a Leak Survey and Repair Memorandum of Understanding (MOU) to be executed by SCE&G and the Government prior to the initiation of the leak survey. Among other things, the MOU should address:

- Procedures for SCE&G to recommend and the Government to implement required continuous action to eliminate a hazardous condition by, for example, closing valves, squeezing off the pipe or venting the area.
- Expedited procedures for the Installation to determine if needed leak repairs are to be performed by the Government or SCE&.

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- Procedures to immediately notify the Installation if building evacuations are needed and instances, if any, in which SCE&G would be authorized to directly call for evacuations).
- Procedures for the Government to re-check, verify and/or clear leaks and provide as required continuous monitoring of Grade 1 leaks.
- Procedures to comply with related necessary and proper recordkeeping requirements.

The initial comprehensive leak survey will be conducted based on the maps provided. All leaks found, both below ground and above ground will be classified as either Grade 1, 2 or 3 leaks, based on SCE&G's Section 303, *Gas Leaks, Damage, Failure Notification*, criteria (see Attachment C).

SCE&G personnel typically leak survey about 1,000 to 1,250 linear feet of natural gas piping per hour. However, the average for the Installation may be less due to the lack of familiarity with the Fort Jackson system, comprehensive nature of the survey and unknown accuracy of the system maps and other considerations.

3.1.4.3 Project T-3: System Inspection, Inventory, Mapping and Minor Repairs

This project includes an inventory of components of the system to be privatized. Existing facilities must be identified so that routine O&M and project planning can occur. This information will be incorporated into SCE&G's distribution database. SCE&G will use the information from the system walk-down to create maintenance inspection schedules. Once the data is collected, the privatized system will be added to SCE&G's primary maps and maintenance and inspection system. The system inventory provided in Attachment JA2 will be verified and updated as needed to reflect the scope of the system prior to the ownership transfer. A final (joint) inventory will be prepared for incorporation into the Deed of Sale.

Critical components of the natural gas distribution system will be evaluated as part of the system inspection. The project also includes identifying and, as necessary, cleaning out valve boxes, exercising and lubricating critical main valves to confirm that they can be properly operated. It is possible that the project will identify the need to replace and/or relocate some of the valves on PE mains that are not replaced. Such needed valve replacements will be a capital expenditure and the installed cost will be incorporated into the Contract Rate Charge.

In conjunction with the Project T-1 review of Government records and Project T-4 system potholing, a particular focus of this effort will be to assess the relative condition of the steel piping. This assessment will be used to develop a preliminary prioritization of the Project C-1 pipe replacements. To the extent practicable, SCE&G will consider such parameters as pipe grade, construction practices, proximity to buildings, depth of pipe, location and condition of service line regulators, pipe casings and coatings and the extent of pipe corrosion.

Another area of emphasis will be to assess the location of PE piping that was installed without tracer wires or have cut wires. Lightly congested and/or dirt areas should have relatively few marking requirements and SCE&G may be able to apply special methods, such as the use of vacuum excavator, to uncover the buried pipe. Conversely, pipe located in high traffic areas with congested utilities and operations might require the installation of markers or, in some instances, necessitate replacements.

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3.1.4.4 Project T-4: System Potholing

SCE&G will conduct a number of pothole system inspections to confirm the condition of the PE portions of the system or to identify the type of pipe material (e.g., steel, HDPE or MDPE). Such matters as burial depths, material, size, coating condition, and fusion welds will be a primary focus of the inspection. This also will help ascertain the overall condition of key elements of the system. Since a variety of pipe materials may have been installed on the existing system, potholing will also help determine the points of demarcation between and among pipe material groups (e.g., steel versus PE).

Potholing should not be required for the PE mains (2.5 miles) and services (six) that were installed in 2016. Installation records for this piping should be obtainable from the Government or the installation contractors.

Pothole inspections are also required in order to create accurate maps. In the process of discovering or repairing leaks, pothole excavations may be required to gain necessary access to the pipe. SCE&G reviewed available system maps to estimate the number of pothole inspections that would be needed. It is estimated that five pothole inspections per mile of main pipe, as well as a sample of five percent of the estimated service lines, will be needed to assess the location and condition of the gas system. This equates to about 111 total potholes as follows:

	Mains	Services
• Main miles / no. of services:	33.3	376
• Less 2016 installations:	- 2.5	- 6
• Subtotal:	30.8	370
• Potholes per mile / percent:	x 5.0	x 5.0%
• Subtotal	154	19
• Total potholes:	173	

SCE&G proposes to assign a two-person crew to perform the inspections over a three-month period. Depending on site conditions (e.g., pavement versus dirt) and other considerations, a crew can normally perform two to three inspections in a work day. Another key consideration is the ability to secure excavation permits and other approvals in an efficient and timely manner. Depending on pipe conditions uncovered during the initial inspections, SCE&G may also change the mix of main versus service inspections.

3.1.4.5 Project T-5: Environment Reconnaissance Study

SCE&G proposes to prepare an Environmental Reconnaissance Study, the scope of which would include the following:

- Document results of a review of the Government's environmental literature;
- Conduct and record general observations from a reconnaissance of the natural gas system rights-of-access (which would focus on areas that are generally 13 feet from the center line of gas mains and in vicinity of the regulator stations);
- Document identified locations that do or might contain unexploded ordinance, and determine if they are areas traversed by the privatized system;

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- Document identified areas with asbestos or lead paint along the pipeline system, so SCE&G would not inadvertently disturb or damage these areas;
- Identity areas of special interest, such as wetlands, historical preservation or archeological sites, and coastal areas, that might require special authorizations from the Installation or the use of special maintenance and repair practices;
- Identify other environmental issues, if any, and bring them to the attention of the Government;
- Provide input for a Physical Condition Report or similar document if required by the proposed easement.
- Conduct limited sampling, if warranted by unexpected site conditions; and
- Videotape all or selected portions of the system right-of-access (to the extent permitted by the Installation).

A possible benefit of the study would be to address future right-of-access related issues, such as a possible need to restore a portion of the right of access that is no longer required (used and useful) to its original condition at the time of contract award. If the study identifies major issues or concerns, its scope would need to be expanded to include additional investigation and/or sampling requiring a separate task or an adjustment to the fixed price for this task. Consistent with the scope and intent of the study, it warrants emphasis that it should not be construed as equivalent, or in lieu of, an environmental baseline study, environmental impact statement or assessment, Phase I or II assessment, or other type of standard environmental study.

3.2 CONCEPTUAL METHODOLOGY TO SCHEDULE RENEWALS AND REPLACEMENTS

As with the other components of the privatized service, SCE&G's conceptual methodology to schedule renewals and replacements (R&R) is predicated on standard operating procedures, which include the application of best practices through custom and, specifically, comprehensive written standards such as those in the Attachment A manuals.

3.2.1 General Approach

The conceptual methodology for R&R activities will be initiated from two perspectives. One is where the Post may contact SCE&G to discuss the need for a special service requirement. An example is a need for added capacity to support new or modified missions or a new service connection. After consultation with the Installation to fully understand the nature of the new requirement, the matter will be referred to the engineering department for analysis and recommendations. The analysis also would consider potential impacts on other upgrades, either planned or already authorized, and recurring R&R activities.

Changes to the scopes of the proposed upgrade or other capital projects would be suggested and reviewed with the Post. Consistent with the Section 3.4 division of responsibilities, upgrades not required for health, safety or reliability, or not consistent with SCE&G's standard service methods, would not be implemented without the Government's prior authorization.

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Equipment / material that either fails or is in an unsafe condition will be replaced if it cannot be repaired in a timely or cost-effective manner, or if a future failure is predictable. Additional R&R criteria are as follows:

- New material and equipment that becomes available from vendors will be evaluated and used as replacements if they are more reliable and cost efficient on a life cycle basis.
- SCE&G will apply its standard practice of pressure testing new or replacement piping to 100 psig. The piping will thus be capable of operating at SCE&G's 60 psig standard even if other considerations necessitate that it operate at a current, lower pressure level.

SCE&G's standard procedures will be used to determine when a particular facility should be repaired (and thus covered under operations and maintenance) or replaced (and thus covered as a renewal or replacement). The accounting treatment will be in accordance with SCE&G standards and FERC accounting methods.

3.2.2 System Rationalization

SCE&G believes that portions of the existing system may have excess capacity. The Attachment JA2 inventory shows that about 13 percent (23,100 LF) of the mains consist of 8- and 10-inch pipe. This is significantly higher than the 0.94 percent of mains with diameter of 8 inches or more on the upstream SCE&G distribution system. About 29 percent (50,700 LF) of the mains are 6-10". In view of the historical loads (as measured from the SCE&G meter station) and current operating pressures, it appears that the loads could be adequately served from smaller diameter (i.e., 4 to 6-inch) pipe if operated at higher pressures. A review of the system maps also indicates that some of the 27 regulator stations could be eliminated. The maps also seemed to indicate a less than optimal layout of the piping.

There are also programmatic reasons why the scope of the privatized system might be reduced over time. It is assumed that the Fort Jackson system was incrementally installed and upgraded based primarily on funding from MILCON projects. One aspect of the MILCON process is that appropriated funds must be used for the designated project purpose and should not be used to support other projects. The result is the system may not be constructed on an optimized basis and with full consideration to future system requirements.

For example, the MILCON for a planned new mission might include extending a gas main to the load site. That main would invariably be sized, configured and routed just for the covered mission. A similar process would apply to other missions. With privatization, SCE&G would propose designs for system upgrades, replacements or expansions on a more holistic basis.

3.3 50-YEAR RENEWALS AND REPLACEMENTS (R&R) SCHEDULE

The operation of the privatized system will be integrated into SCE&G's natural gas utility system. This integration will include upgrading the acquired system to SCE&G's standards and maintaining the system in accordance with standard operating practices.

For this reason, the R&R schedule is predicated on a standard estimation method. This method is based on applying an historical replacement factor to the replacement cost of the acquired system and adjusting the factor to reflect "known and measurable changes" (e.g., the upgrade projects) as well as the general age and condition of the privatized system. The result is levelized replacement rates. There are two reasons for this approach.

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First, it is not possible to develop, with an acceptable level of certainty, a meaningful long-term schedule for specific capital upgrades, renewals and replacements beyond the ISDC projects described in Section 3.1.2. Public utilities such as SCE&G replace or upgrade facilities based on maintenance observations, failure analysis, and on-going risk assessments. These assessments address a number of criteria, such as leakage and outage histories, new or modified connected loads, regulatory requirements, and the age, condition and composition of facilities as evidenced from comprehensive documentation and actual inspections. While the age and condition of facilities certainly is an assessment consideration, SCE&G does not replace facilities solely on these criteria.

Second, the levelized approach is consistent with how historical costs are tracked and future spending levels are budgeted, both for internal use and as support for a SCPSC filing to adjust standard tariff rates.

With the above in mind, the R&R requirement will only apply to the PE components of the system. This is because all steel main d service pipe will be replaced within five years with PE mains and services (with the noted exception where steel is needed when crossing steam lines). As noted previously, the in-service life for PE pipe can last 70 or more years so there should not be a need for further replacements during the 50-year contract term.

A considerable amount of the system's PE pipe was installed in the past few years. The inventory shows that 15,000 LF of PE pipe was installed in 2011 and an additional 28,200 LF was installed in 2016. These together account for 43.4 percent of the total PE piping, and given the extended useful life replacements also should not be needed during the contract term. This assumes that records and data can be located to meet Title 49 certification requirements. The R&R projection accordingly will only apply to the approximately 70,000 linear feet of PE pipe installed in 1983. The estimated annual R&R replacements are summarized in the table below and detailed in the Attachment D Price Data Sheet 2. Note that all of the 1983-vintage PE pipe would be replaced during the contract term.:

Levelized Renewals and Replacements Projections					
R&R by Year	**Inventory Quantity (LF)**	**Years 1–30 0.50%**	**Years 31-40 4.5%**	**Years 41+ 1.25%**	**Contract R&R**
Annual PE Mains	87,300	440	3,930	1,090	63,400
Annual PE Services	12,000	60.	540	150	8,700
Total	99,300	15,000	44,700	12,400	72,100

A consideration in developing the noted R&R percentages is the possibility the inspections conducted during the transition period (to include potholing) may identify the need for limited replacements. Some piping may be discovered to have inadequate depth of cover and be too shallow. Other possible issues also may be found, such as the lack of tracer wire, which will require the replacement of some PE pipe. This is due to the difficulty in protecting, locating, mapping and marking the facilities in a timely, accurate and comprehensive manner. This would especially be the case in areas with a large amount of expected new construction or rebuilds (and hence related line marking requirements). Pipe replacements also would be required for facilities that could not be successfully pressure tested, evidence excessive leakage or have an inordinate number of service calls.

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The reasonableness of the proposed R&R percentages can be viewed from a number of perspectives. The average booked life for the system's distribution mains and services is 60 years. Booked depreciation rates, however, take into account equipment that is removed from service for reasons other than failure or damage. These include relocations to accommodate road widening projects and removals after customers relocate, scale back operations, shut down or otherwise no longer require the same level of utility service, if required at all.

One could develop a more tailored projection based in part on the depreciation rates for each accounting code. Yet this would have no meaningful impact either on the reasonableness of SCE&G's overall proposal or a reasonable perception of the Government's service risk. SCE&G accordingly did not provide such a breakout.

3.4 UPGRADE AND RECAPITALIZATION PROCEDURES AND RESPONSIBILITIES

SCE&G will correct future system deficiencies and implement system upgrades as required and consistent with the same standards and procedures that are applied to the rest of the 20,800-mile natural gas distribution system.

3.4.1 Design, Installation, and Operations Procedures

All upgrade projects will be implemented consistent with SCE&G's standard operating procedures (see Attachment A manual summaries), special privatization contract requirements, and the technical approaches presented in Section 1 (Service Interruption Plan), Section 2 (O&M and Quality Management Plan) and Section 4 (Operational Transition Plan) of this proposal. These approaches collectively will assure that impacts (in terms of construction activities, planned outages, etc.) on the operation of the Installation are minimized.

3.4.2 Upgrade Costs and Site Impacts

The costs associated with this initial Capital Plan are presented in the Volume IV Price Proposal. SCE&G plans to finance the upgrade and transition projects internally using available cash resources. SCE&G is in sound financial condition, and can adequately finance all elements of the privatized service.

Although the collective scope of the identified upgrade projects is quite broad, the site impacts are not expected to be material. Mitigation measures include the following:

- The projects will be implemented in phases over the ten-year construction term;
- To the extent possible, the replacement piping will be installed adjacent to roads and in existing utility corridors;
- Required service outages associated with the change over to the replacement system will be carefully coordinated with Installation personnel; and
- Directional boring will be used as a measure to minimize disruption to roads and other areas of the Installation when appropriate.

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3.4.3 SCE&G Responsibilities

SCE&G will be responsible for installing and financing all capital costs associated with future upgrades, renewals, and replacements to the privatized system. The Government's financial responsibility will be limited to paying the Contract Rate Charge. All capital work during the performance of the utility service contract will be at SCE&G's discretion, and required to:

- Comply with applicable laws, regulations, and standards. For example, a modification to a gas regulator may be needed due to a change in the DOT's Title 49.
- Protect the health and safety of Government and SCE&G personnel and the general public. An example is to replace an extended section of gas mains incidental to the repair of a Grade 1 or a Grade 2 leak.
- Provide reliable service consistent with the Company's standard method of service. An example would be to replace a gas regulator that required excessive maintenance or otherwise was not operating within acceptable design parameters.

SCE&G's established system-wide definitions of what constitutes a "capital" item will assure that "expensed" costs are not included in the ratebase. The plant-in-service component of the ratebase will include only work that is classified as a "capital item" in accordance with SCE&G's accounting standards and the FERC Uniform System of Accounts.

There are a number of existing controls to assure that capital improvements and replacements are proper and performed on a best value basis. The privatized service will be provided in accordance with SCE&G's standard operating practices that are applicable to a broad base of more than 403,900 natural gas service customers. These relate to maintenance standards, methods of service, accounting procedures, equipment inventory pricing and more.

3.4.4 Installation Responsibilities

It is standard utility service procedure that capital improvements for the customer's convenience will be installed only at the discretion of the Government. This would generally apply to mission changes within the Installation that require new or relocated service connections. It also would apply to improvements that the Installation may desire in order to achieve a level of service that is more reliable, or otherwise different, than it would be under SCE&G's standard method of service.

After an authorization to proceed with a discretionary project is obtained, the installed cost will similarly be added to the contract ratebase, with reductions to account for net book value of removed or abandoned equipment and additions for its removal costs.

The above responsibilities for capital projects are the same as those that are applied by virtually every regulated public utility in the United States. SCE&G is not aware of any utility that delegates its responsibilities concerning health, safety, and reliability matters to its jurisdictional retail service customers. This is due in part to the industry's regulated status and its unique obligation to provide service to all customers within authorized service territories.

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3.4.5 Coordination and Consultation

Notwithstanding the above division of responsibility, SCE&G will regularly consult with the Installation regarding the need, scope and timing of capital upgrades and replacements. The consultative process will be a combination of mandated activities (the submittal of the required Annual Plan) and as-required formal meetings and informal day-to-day contacts.

Very close coordination will be required for major system work. Examples of such work include major line replacements, relocations or extensions. It may also include the future up-rating of a segment of the system so that it can operate at a higher pressure and thereby serve additional connected load without the need for a physical expansion of the system.

Coordination is needed for SCE&G to properly prioritize the work and to assure that replacement facilities are properly sized and sited to meet the Installation's current and future service requirements. On the other hand, advance notice to and coordination with Fort Jackson will necessarily be much more limited for emergency replacements. The emphasis here instead will be ensuring the safety of Fort Jackson and SCE&G personnel and restoring service as expeditiously as possible.

The need for close coordination is especially important to ensure integration with the Installation's on-going construction activities. Obtaining information on the scope and current status of these activities is a specific agenda topic for the first formal transition period kickoff meeting (see Table 4-3 checklist). SCE&G will promptly review all provided information and inform the Installation of any special planning requirements or unique concerns.

A special area of coordination will apply to secondary meter replacements and new installations. As indicated previously, the Installation desires that meters be installed at all service locations. SCE&G accordingly will seek guidance from the Government regarding whether new meters should be installed when replacing service lines (it is generally more economical to replace/install meters, regulators and other ancillary facilities when installing new or replacing existing service connections).

3.4.6 Third Party Construction

SCE&G will participate as reasonably necessary in pre-design, design, strategic planning and other meetings related to the planning and implementation of MILCON and similar projects that impact the privatized system. It is envisioned that the meeting will be either face-to-face or telephonic, depending on the scope of a particular meeting and the extent to which privatized facilities would be impacted.

Various third-party contractors may be responsible for the construction of natural gas distribution facilities that may connect to or become part of the privatized system. There is no analogous process as might apply to water or wastewater utility systems whereby a developer is responsible for the installation of an area's utility infrastructure that will then connect to a utility's backbone system. SCE&G instead is always responsible for the design and installation of all natural gas mains, service lines, regulators and other distribution facilities. The responsibility of the customer (or developer) is usually limited to arranging for a plumber to connect the service line to an internal house system at the outlet of the meter.

In accordance with the requirements of Section C.11.5.3., *Third Party Construction*, SCE&G will provide interested parties, upon reasonable request, specifications for gas distribution facilities

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that might connect to the privatized system. SCE&G shall have the right to inspect the third party contractor's construction of system components for which SCE&G will take ownership. All applicable documentation required for Title 49 and other regulatory compliance must be provided before SCE&G can accept ownership, including but not limited to pressure testing results and detailed, thorough as-builts. Any physical connections to the privatized system upstream of designated points of demarcation also will be SCE&G's exclusive responsibility.

At the Government's option, SCE&G would acquire ownership of properly constructed and documented distribution facilities. SCE&G would purchase such facilities for their fair market value, which normally would be based on the construction cost. The purchase price would be paid in the form of a bill credit, to be applied over up to the remaining term of the privatized service contract, in much the same manner as for the initial system acquisition. The acquisition price would then be added to the plant-in-service component of the Contract Rate Charge.

Ownership acquisition at other than fair market value would be deemed a contribution-in-aide-of-construction (CIAC) in accordance with Tax Reform Act of 1986. CIACs are treated as taxable income to SCE&G and other investor-owned utilities, and customers are responsible for the related income tax liabilities. A lump sum payment by the Government for facilities installed by SCE&G would similarly be deemed a CIAC with attendant tax liabilities.

3.4.7 Upgrade Financing

SCE&G will self-finance the Initial System Deficiency Corrections and all future system upgrades, expansions, or replacements. Obtaining the requisite funds will not be an issue because the privatized system is and will remain a very small percent of the total SCE&G system.

Upgrade cost recovery will be initiated by adding the installed cost of capitalized work to the plant-in-service component of the Contract Rate Charge (CRC), which generally would be recalculated on an annual basis. The Contract Rate Charge includes a provision for depreciation expenses, which is for the return of capital. After a capital item is fully depreciated, it is no longer reflected in the CRC ratebase.

3.4.8 ISDC and Connection Amortization

As explained in detail in the Volume IV Price Proposal, the costs for all authorized capitalized work, to include initial system deficiency corrections, new or modified service connections, system upgrades and repairs and replacements, will be included in the plant-in-service component of the proposed Contract Rate Charge. Cost recovery will through the depreciation expense component of the CRC. There accordingly will be no amortization as envisioned in Solicitation Section C.11.2 and no associated amortized payment buy down.

3.4.9 Connections and Disconnections

SCE&G will provide and install material/equipment required to provide service to new connections or disconnections identified by the Government during the contract term. Other than those covered by the identified capital projects, there are no known connection requirements that have been finalized and funded, and the Solicitation did not include any other requirements for disconnections or new connections at Fort Jackson. To the extent there are new connection or disconnection requirements, they will be appropriately coordinated with the COR and approved by the Contracting Officer.

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As noted above, the existing system will be inventoried and mapped. The system maps will be modified to reflect new, relocated, or removed connections or other changes in the location or configuration of system facilities. As-built drawings will also be compiled and maintained. SCE&G will provide copies of system drawings to the Government upon reasonable request.

Temporary connections will be provided consistent with SCE&G's standard practices. As directed in the Solicitation, SCE&G will contact affected Government contractors and make arrangements directly with them for temporary connections.

Although there are no identifiable plans to do so at the present, there may be future opportunities for SCE&G to utilize available system capacity within the Installation to serve off-site customers. SCE&G's would do so only with the concurrence of the Installation, and only after an agreement was reached regarding the appropriate compensation for the use of system capacity.

3.4.10 PE Pressure Testing

As discussed above, the privatized gas system must have an established and documented maximum allowable operating pressure for compliance with 49 CFR, Part 192. The de facto MAOP for piping without proper documentation will be the less of the operating pressure on the Contract Start Date or 60 psig. Pressure testing will be required as necessary to establish a permanent, and higher, MAOP. Required pressure testing will be in accordance with SCE&G's O&M Manual Section 106 (Testing Pipelines) and Section 107 (Uprating Pipelines). The uprating process will generally proceed as follows:

- A leak survey will be conducted and any potentially hazardous leaks will be repaired (the initial leak survey will be conducted as part of the Project T-2 survey for the entire privatized system);
- The main or service line will be physically disconnected (isolated) from any adjacent facilities that will continue to operate at a lower pressure;
- Regulators appropriate for the higher pressure will be installed;
- The line pressure will be increased in stages, each of which will elevate the line pressure by 10 psig or 25 percent of the total pressure increase (whichever would require the fewest test increments); and
- The line will be leak surveyed after each pressure increment and leaks (if any) will be repaired).

The total number of test increments will depend on the current operating pressure and whether or not an increase in the interim, de facto MAOP is required or desirable to accommodate higher connected loads. For example, increasing an MAOP for a 40 psig line would normally require two test iterations of 10 psig each in order to test up to 60 psig. Since the privatized system currently operates between 10 to 60 psig, it is unclear based on the information provided if pressure testing to retain the de facto MAOP would be required or if existing records are sufficient to document that the current operating pressure is the de facto MAOP.

Because isolating the main from connected loads will require a scheduled service outage, usually occurring during normal duty hours, the timing for any as-required uprating will be developed in close consultation with Installation personnel.

There are no current requirements to increase the operating pressure of any existing lines at this time. Any such testing in the future would be for the convenience of the Government and would be initiated after the Government's related review and approval. As a point of clarification, pressure testing will be performed for all new or replacement facilities, the cost of which is included in the Volume IV unit prices.

3.5 CONTRACTOR RECOMMENDED UPGRADES AND IMPROVEMENTS

Based on an assessment of the scope and condition of the Installation's distribution system, SCE&G does not envision the need for, nor any system upgrades or improvements, other than those included as Section 3.1 initial upgrade projects.

3.6 ENERGY EFFICIENCY AND CONSERVATION PROJECTS

SCE&G will actively promote energy conservation projects and will support the Government in every way possible to reduce the Installation's energy consumption. SCE&G will not take any action that will negatively impact energy conservation efforts without prior notice.

3.7 COMMODITY SUPPLY

In accordance with Section C.3.5 of the Solicitation, SCE&G acknowledges that the natural gas commodity is not included in the contract. The provision of a SCE&G natural gas delivery service, provided under applicable SCPSC-authorized tariffs, would not be affected by the contract.

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Section 4.0

Operational Transition Plan

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4.0 Operational Transition Plan

The Operational Transition Plan presented in this section builds upon SCE&G's extensive local experience in expanding its natural gas distribution system to meet the needs of current customers, as well as the thousands of new residential, commercial and industrial customers and hundreds of new natural gas lines SCE&G adds each year.

Many new customers are homeowners in the region's new residential developments. SCE&G is responsible for the natural gas utility infrastructure in these developments, which can range from a few dozen homes to hundreds of home sites. The subdivisions are similar to the privatization initiative, especially with respect to transitional planning and implementation. SCE&G initially works with site developers to lay out the utility system consistent with the pace and scope of site work. SCE&G then must carefully time the connection to the house service lines as its customer becomes the new homeowner.

Because of the Company's extensive experience with customers who are individually and collectively comparable in size and scope to the Fort Jackson electric distribution system, the Installation can be assured that this plan is predicated on sound principles and established procedures. SCE&G also has ample existing local and regional personnel, equipment and other resources to manage and implement the plan. This means the Installation should have confidence that the transition from Government to SCE&G operational responsibility for and ownership of the system will be seamless, efficient and on schedule. A nine-month transition period accordingly is proposed.

4.1 TRANSITIONAL PHILOSOPHY

The Operational Transition Plan will be implemented consistent with a set of clearly defined objectives that collectively embody SCE&G's transitional philosophy (see Table 4-1). SCE&G's philosophy is built upon two fundamental objectives: a commitment to safe and reliable service, and an orderly transition of ownership of and responsibility for the Installation's gas utility system.

Referencing Table ES-1, the privatized system will represent only about a 0.3 percent incremental expansion of SCE&G's existing 15,600-mile utility system. The estimated 376 gas system service connections also represent only about a 0.1 percent increase in the number of total SCE&G gas service customer connections. Therefore, the acquisition generally can be accommodated and integrated into SCE&G's South Carolina operating area.

Table 4-1. SCE&G's Operational Transition Plan Philosophy

Primary Objectives:	√ Commitment to sustainable safe and reliable service
	√ Orderly transition from Government to SCE&G ownership
Supporting Objectives:	√ Operational integration into SCE&G's local distribution system
	√ Eliminate safety hazards
	√ Foundation for sustainable system improvements
	√ Open and frequent communication with the Installation

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System integration means that the same exacting standards and procedures SCE&G uses off-Post will be applied on-Post. These standards and procedures will be applied to the short-term transitional capital upgrades, and the ongoing operation, maintenance and recapitalization of the privatized system.

Applying SCE&G's comprehensive operational standards will ensure that the acquired system is frequently inspected and its operation monitored continually. The Company will apply sound principles of sustainable, preventive maintenance to minimize unplanned outages and the need for emergency repairs. Performing modeling, mapping and inspections will provide useful information for the review and, as necessary, update to the five-year capital improvement plans. This will be part of the foundation for sustainable upgrades that, when coupled with an active preventive maintenance program, will keep the acquired system in sound operating condition.

The final element of SCE&G's plan is frequent and open communication with the Installation. Communication should be two-way. SCE&G will inform the Installation of its activities and will solicit information from Fort Jackson on its evolving service requirements. Open dialogue will inevitably lead to better planning and lower costs.

4.2 OPERATIONAL TRANSITION PLAN MILESTONES

Table 4-2 presents SCE&G's milestone schedule for the Operational Transition Plan. A transition checklist also is provided in Table 4-3. It is recognized, however, that the schedule is subject to change to reflect the transitional objectives and priorities of the Installation. Changes also may be required to reflect SCPSC regulatory review timelines and requirements.

4.2.1 Recurring Activities

Consistent with its objective to have open and frequent dialogue with Fort Jackson, SCE&G proposes to meet with the Administrative Contracting Officer (ACO) and other involved Installation personnel on at least a weekly basis during the entire transition process. Based on the experience for other privatized systems, more frequent meetings may be needed, especially as they might relate to the Request for Action process associated with new infrastructure developments.

Topics addressed at the meetings will include transition preparation, implementation and coordination with Government functions. The meetings will be coordinated with the Contracting Officer's Representative.

4.2.2 Contract Award and Regulatory Filing

In accordance with the Section L.7.6.1 proposal preparation instructions, it is acceptable for regulated utilities to submit an offer that is subject to regulatory approval. SCE&G will not be able to formally submit the special contract and tariff for review until it is finalized and signed by both parties. Therefore, the transfer plan provides that the regulatory approval process would be initiated at the date of contract award and that formal contract performance necessarily would be deferred until SCPSC regulatory approval is obtained. The transition plan assumes that perhaps three months will be required to prepare the regulatory filing and secure SCPSC approval.[1]

[1] It is possible that regulatory approval can be obtained earlier if the SCPSC staff does not raise substantive issues and other parties do not intervene in the approval process. SCE&G nonetheless assumes two

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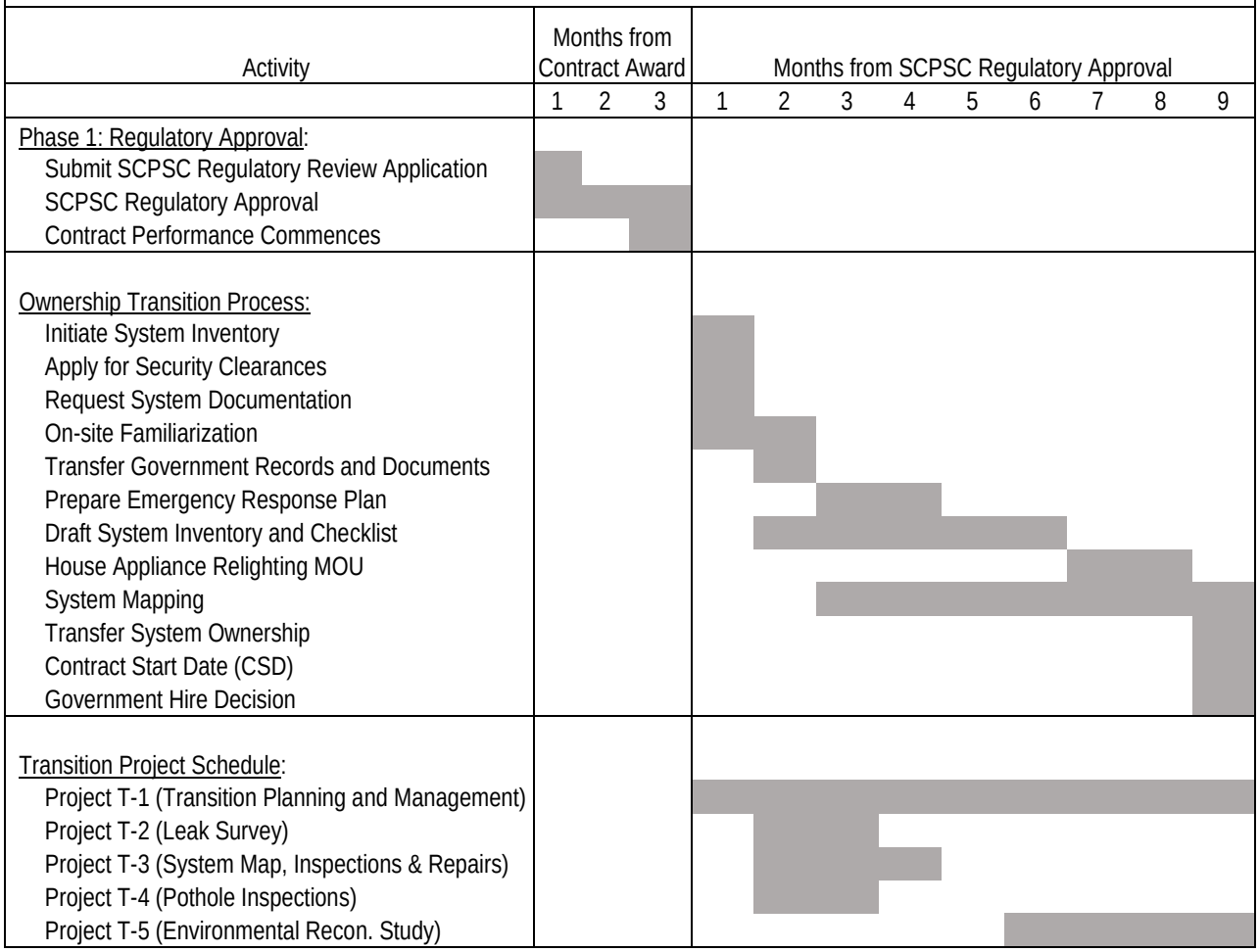
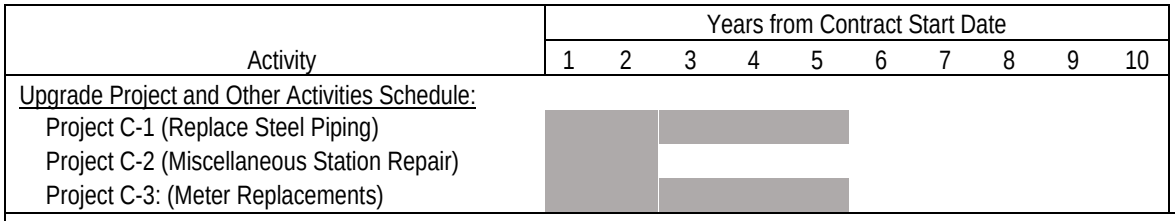
Table 4-2. Transition Plan Milestone Schedule





Notes:
1. Weekly Coordination Meetings as needed from contract award to the CSD.
2. Contract Rate Service Invoicing monthly from CSD.
3. The CSD and related contract performance occurs after the transition period ends, the parties complete joint inventory and due diligence, and the Bill of Sale is executed, and on the first day of the immediately following month.

months to prepare the SCPSC filing and a six-month approval process and provides for the possible termination of the contract in the (unlikely) event regulatory approval is not obtained within 12 months of contract award.

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Table 4-3. Transition Plan Checklist
☐ Schedule formal transition kick-off meeting
☐ SCE&G to notify Post of meeting agenda additions or modifications
☐ Installation to notify SCE&G of meeting agenda additions or modifications
☐ Kick-off meeting agenda items
☐ Review transition objectives and timelines
☐ Provide transition points of contact
☐ Table 1-1 service response points of contact (POCs)
☐ Installation Fire Department
☐ Security
☐ Contracting Officer's Representative
☐ Provide and discuss system documentation (as available)
☐ Gas distribution system drawings
☐ As-built drawings
☐ Service logs
☐ System inspection, test or diagnostics (including pressure testing)
☐ Environmental baseline survey and record of decision
☐ Available information related to hazardous substances and contamination
☐ Identify and discuss major system changes implemented since contract negotiation
☐ New or modified service connections
☐ New or modified secondary meter connections
☐ Completed or funded system upgrades, replacements, or expansions
☐ Buildings or loads with special power quality / reliability requirements
☐ Mission-critical circuits and / or building loads
☐ Discuss critical safety and reliability issues
☐ Grade 1 & 2 leak repair responsibility and authorization procedures
☐ Identify and discuss special Installation service requirements
☐ New or modified service connections
☐ New or modified secondary meter connections
☐ Planned mission changes
☐ Planned or pending MILCON projects
☐ Buildings or loads with special pressure / reliability requirements
☐ Review security procedures
☐ Explain access requirements under various threat levels
☐ New or modified service connections
☐ Determine appropriate number / type of SCE&G personnel requiring ID badges
☐ Review radio frequencies

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Table 4-3. Transition Plan Checklist
☐ Submit SCE&G frequencies to Installation Communications Group(s)
☐ Discuss radio use IAW DFARS 252.235-7003, *Frequency Authorization*
☐ Schedule follow-on actions and meetings
☐ Conduct on-site familiarization
☐ Review special system characteristics (e.g., low pressure problems)
☐ Inspect non-standard equipment, if any
☐ Inspect areas / equipment with special service requirements
☐ Field verify or modify spare equipment or tools to be transferred (if any)
☐ Document results and schedule follow-on inspection(s), as required
☐ Prepare Physical Condition Report (if required)
☐ Clarify purpose, content and preparation responsibility
☐ Execute (preliminary) report
☐ Update to reflect Project T-5 study results
☐ Submit applications for National Agency Checks
☐ Provide other required documentation
☐ Material Safety Data Sheet
☐ Spill Containment and Countermeasure Plan
☐ Certificate of Insurance
☐ Develop emergency response plan
☐ Identity restoration priorities
☐ Integrate restoration priorities into SCE&G's system response plan
☐ Execute memorandum of understanding (MOU) with fire department
☐ Execute MOU regarding housing area service requests and relighting responsibilities
☐ System inspection and inventory
☐ Detailed inspection of entire distribution system
☐ Prepare draft system inventory
☐ Review inventory with Installation
☐ Develop and submit final inventory to the Installation
☐ Execute purchase document(s) and remove equipment from Government custody
☐ Prepare final bill of sale
☐ Incorporate final inventory
☐ Incorporate purchase of spare equipment
☐ Adjust fair market value (FMV) based purchase price (as / if required)
☐ Review excavation process
☐ Line markings
☐ Expedited permits for emergency service response

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Table 4-3. Transition Plan Checklist
☐ Joint meter reading (prior to transition / if required)
☐ Ownership transfer ☐ Execute bill of sale ☐ Execute easement agreement ☐ Initiate SCE&G system ownership and operational responsibilities (i.e., Contract Start Date)

The Volume III list of proposed exceptions accordingly includes the following additional contract clause:

> **H.16. South Carolina Public Service Commission (SCPSC) Regulatory Approval**
> The contract award shall be conditioned upon the South Carolina Public Service Commission's (SCPSC) review and approval of this utility services contract. Upon the receipt of a bilaterally executed copy of the contract, the Contractor shall expeditiously prepare a filing with the SCPSC for such review and approval. The Government shall cooperate by providing a declaration or other such reasonable documentation that might be needed to support the regulatory approval process; provided that the Contractor shall provide appropriate guidance on the need for and content of such documentation. This condition shall be removed and contract performance shall commence on the effective date of the SCPSC's approval. Should the SCPSC impose any substantive conditions on its regulatory approval that are unacceptable to either the Government or the Contractor, the parties shall negotiate in good faith to modify the contract to alleviate any objectionable provisions. Either party may terminate the contract, upon 30 days written notice, without penalty or added costs, in the event (i) SCPSC approval is not obtained within twelve (12) months from the date of contract award or (ii) the parties are unable to alleviate any objectionable provisions imposed incidental to the SCPSC's approval within four (4) months from the date of the SCPSC's final approval of the contract.

While the application for the contract approval finding is pending at the SCPSC, SCE&G proposes to meet with Government officials and initiate the requisite security application and approval processes. The Company also will work with the Government to develop workable interim site access procedures that will facilitate transition activities.

4.2.3 Installation and System Documentation

Fort Jackson should provide available Installation and gas system documentation to SCE&G as soon as possible after contract award. This would include but not be limited to:

- Fort Jackson Comprehensive Plan.
- Fort Jackson Design Guide.
- Fort Jackson Natural Gas Distribution System Drawings and/or GIS data, including system specifications.
- As-Built Drawings for the Natural Gas Distribution System.
- Construction Work Order Support Documentation (pressure test records, material installation records, contractor, qualifications, etc.)
- Pertinent Operation and Maintenance Manuals and records for the privatized system equipment, to include but not be limited to:
  - Leak surveys;
  - Pressure test records;

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- Cathodic protection tests;
- Pressure gauge test records

- Funded MILCON project descriptions, specifications, progress reports and other pertinent information related to gas system upgrades or expansions.
- Environmental studies and assessments of relevance to the privatized system.
- The following available information related to hazardous substances and contamination (if any):
  - Maps showing where contaminants exist in relation to the underground components of the natural gas distribution system;
  - Identify the type and location of specific contaminants of concern and the source of the release(s);
  - Contaminant concentrations (soil and/or groundwater);
  - Vertical and horizontal extent of the contamination (soil and/or groundwater);
  - Depth to groundwater in each area; and
  - Information regarding the actual length and depth of system sections that are potentially impacted in each area of concern.

4.2.4 On-site Familiarization and Joint Operations

The primary purpose of the on-site familiarization this activity is to determine if there are any recent changes in the Installation's service requirements and to identify any changes from the pre-bid scope and condition of the electric distribution system. System maps will be reviewed for changes. The familiarization process also will focus on identifying any unique or unusual service requirements for any of the service locations connected to the privatized system.

It is understood that Government employees may not be available after contract award due to work transfers, retirements or other reasons. For this reason, SCE&G can reduce the time for on-site familiarization to two or perhaps no more than three months. Knowledge of the system and the availability of local resources means that joint operation of the system is not required.

4.2.5 Joint Inventory and System Transfer

The joint system inventory developed under this activity will be incorporated into the Bill of Sale. It therefore will have a more limited scope and level of detail than the system inventory and mapping effort to be accomplished under Project T-3.

The system inventory will be accomplished by a combination of a review of the Attachment JA2 (Table 3) system inventory, system maps, the physical inspection of selected components of the natural gas distribution system and discussions with Fort Jackson personnel. SCE&G will focus, in particular, on any changes to the scope of the privatized system that may have occurred during the interval between proposal submittal and the anticipated CSD that were not addressed during pre-award discussions. A draft joint inventory should be prepared, which would be finalized after discussions with the Government.

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The formal transfer of system ownership can be accomplished at Fort Jackson or SCE&G's Shakespeare Road office. SCE&G personnel who are authorized to sign for the transfer of property are identified in Section 4.0 of the Volume III Contract Documentation Proposal.

4.2.6 Consideration of Employees for Hire

SCE&G has sufficient personnel resources to accommodate the operational integration of the privatized facilities into the upstream natural gas utility system. Nonetheless, SCE&G is receptive to hiring qualified applicants to fill job openings as they might occur. Interested Government personnel should submit resumes to the Company's career section on the website as soon as possible during the transition period to apply for external open positions. SCE&G will promptly evaluate all qualifying employment offers. The evaluation and hiring of qualified applications will be in accordance with SCE&G's hiring policy.

SCE&G will not knowingly hire any person if to do so would create a conflict of interest, nor will the Company hire Quality Assurance Representatives.

4.3 OTHER TRANSITION REQUIREMENTS

4.3.1 Required Connections

SCE&G does not propose, nor does the Government identify, any new connections to be provided during the Transition Period.

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4.3.2 New Meter Requirements

No new meter installation requirements were identified in Attachment JA2.

4.3.3 Initial Meter Readings

The Volume III proposal includes an exception that the Government, and not SCE&G, would be responsible for reading secondary meters that are extant or might be installed at a later date. If this exception is not accepted, SCE&G will provide required meter readings beginning with the first calendar month after the Installation provides a list of meters that are neither connected to nor read by the AMS.

4.3.4 System Condition Work

There is no currently identifiable system condition work that should be performed prior to the CSD. However, the Project T-2 leak survey may identify Grade 1 and/or Grade 2 leaks that require immediate or scheduled repairs. As discussed above, SCE&G is indifferent whether leak repairs are performed by the Company or the Government.

4.3.5 Permits and Procedures

Other than filing the awarded contract with the SCPSC, SCE&G does not anticipate that any permits or certifications are required for SCE&G to acquire ownership of the privatized system.

4.3.6 Authorized Personnel and Point of Contact

The following person is authorized to sign for the property transfer:

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Name: Mr. Don Harris
Office: South Carolina Electric & Gas Company
Title: Senior Vice President Gas Distribution
Address: 100 SCANA Parkway
Cayce, SC 29033
Phone: 803-217-7055
Cell: 803-605-9420
Fax: 704-810-3171
Email: RHarris@scana.com

The following person(s) are the designated points of contact for work to be performed under the contract:

Privatization Project Manager:
Name: Mr. Richard Johnson
Office: South Carolina Electric & Gas Company
Title: Manager, Engineering and Construction
Address: 6011 Shakespeare Road
Columbia, SC 29223
Telephone: (803) 217-6145
Cell: (803) 315-8524
Email: rpjohnson@scana.com

Privatization Deputy Project Manager:
Name: Mr. Bill Eisele
Office: South Carolina Electric & Gas Company
Title: Account Manager
Address: 220 Operation Way, B102
Cayce, SC 29033
Telephone: (803) 217-9220
Cell: (803) 331-8708
Email: weisele@scana.com

Privatization Deputy Project Manager:
Name: Ms. Cynthia Ostrander
Office: South Carolina Electric & Gas Company
Title: Manager, Gas Operations
Address: 6011 Shakespeare Road
Columbia, SC 29223
Phone: (803) 217-9245
Cell: (803) 530-4135
Email: cynthia.ostrander@scana.com

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Section 5.0

Financial Capability

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5.0 Financial Capability

Although not specifically required by the Solicitation, this section summarizes SCE&G financial capability to provide a privatized service.

SCE&G is in excellent financial condition and has the financial capability to purchase the Fort Jackson natural gas distribution system, as well as to provide all aspects of a privatized service. Underlying SCE&G's financial capability is the size (by any relevant measurement) of its natural gas utility system relative to the size of the privatized system and its related service requirement. This is documented in the Table ES-1 statistics and related discussions, including the following.

- SCE&G owns and operates a natural gas distribution system that contains 18,175 circuit miles of lines. By comparison, the Post's natural gas distribution system contains about 41 miles of main and service pipes.
- SCE&G's natural gas service area covers 13,400 square miles. The Fort Jackson Military Reservation by contrast covers about 10 square miles.
- The estimated unadjusted replacement value of the Post's natural gas system is about $7.2 million. This is less than 1.0 percent of the Company's $1.0 billion natural gas utility plant.
- SCE&G's annual natural gas capital expenditures are about $53 million. This is enough to completely replace the Post's utility systems sevenfold.

SCE&G's 2016 stable and strong financial condition is documented in the financial information provided in Table 5-1. The Company's financial health and stability is evidenced further by the following current credit ratings for senior unsecured debt:

- Standard & Poor's (S&P): A
- Moody's: A3
- Fitch: A+

All of SCE&G's senior unsecured debt ratings are investment grade. Rating agencies incorporate a number of qualitative and quantitative factors into their analyses, some of which relate to financial ratios of a company, while others relate to more general market conditions and operating environment.

As a final consideration, SCE&G is the Installation's current natural gas utility service provider, as it is to hundreds of other Federal customers. This regulated current service is provided under SCPSC-authorized tariff terms and conditions, as would be the privatized service.

It would seem axiomatic that if SCE&G is financially fit to provide its current utility service to the Installation, it likewise would be fit to provide a privatized service within the Installation.

Table 5-1. SCE&G Consolidated Financial Information ($ Millions)						
	2015	2014	2013	2012	2011	Unconditionally Qualified Criteria [1]
Financial Data:						
A: Funds from Operations (FFO)	1,078	641	852	674	655	
B: Interest Expense	248	228	217	211	204	
C: Total Debt	5,189	4,989	4,306	4,171	3,753	
D: Total Capitalization	9,810	9,027	8,496	7,600	6,995	
E: Pretax Operating Income	934	830	737	717	654	
F: Disaster Recovery Cash Requirement [2]	1.1	1.1	1.1	1.1	1.1	
Financial Ratios:						
G: Interest Coverage (E ÷ B)	3.77	3.64	3.40	3.40	3.21	2.5x or greater
H: FFO to Interest Ratio (A ÷ B)	4.35	2.81	3.93	3.19	3.21	2.75x or greater
I: FFO to Debt Ratio (A ÷ C)	.21	.13	.20	.16	.17	20% or greater
J: Debt to Total Capital Ratio (C ÷ D)	.53	.55	.51	.55	.54	Below 50%
K: Disaster Recovery Ratio (F ÷ D)	>0.1	>0.1	>0.1	>0.1	>0.1	75% or less

[1] The criteria for unconditionally qualified ranked were excerpted from a privatization RFP recently issues by the Army's Space Command.

[2] Based on 15% of the unadjusted RCN value (i.e., RCN x 15% ≈ $1.1 million). The percentage applies to systems that are "mostly overhead." A 75% factor applies to systems, such as the Installation's, that are mostly overhead.

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Attachment A:

South Carolina Electric & Gas Company
Service Manuals

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SCE&G Manual Summaries

South Carolina Electric & Gas Company maintains comprehensive service manuals that are periodically updated to incorporate new or revised standards and practices. The manuals are too expansive to detail herein. Provided instead is the table of contents for the Design and Installation Manual and the Operations and Maintenance Manual, which should indicate their broad scope. The manuals are available for inspection at SCE&G facilities upon reasonable request.

Operations and Maintenance Manual (Table of Contents)

Section 1 – Operations
101 – Procedures Manual
102 – Continuing Surveillance
103 – Damage Prevention
104 – Failure and Human Factor Incident Investigation
105 – Maximum Allowable Operating Pressure
106 – Testing Pipelines
107 – Uprating Pipelines
108 – Odorization
109 – Tapping and Stopping Pipelines
110 – Purging Pipelines
111 – Gas Meter Inspections
112 – Odorant Injection
113 – Management of Change

Section 2 – Maintenance
201 – Patrolling Pipelines
202 – Leakage Surveys
203 – Pipeline Markers
204 – Working on Pipelines
205 – Abandoning Pipeline Facilities
206 – Inspecting Regulating Stations
207 – Monitoring System Pressures
208 – Valve Operation and Maintenance
209 – Vault Maintenance
210 – Preventing Accidental Ignition

Section 3 – Emergency Plans
301 – Preface
302 – Handling Emergency Calls
303 – Gas Leaks, Damage, Failure Notification
304 – Fires and Explosions
305 – Overpressure and Underpressure
306 – Natural Disasters
307 – Coordinating Emergency Response
308 – Working With Public Officials
309 – Emergency Shutdown
310 – Restoring Service Outages
311 – Employee Training
312 – Public Awareness

Section 4 – Corrosion Control
401 – General Requirements
402 – Examination of Exposed Pipelines

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403 – Protective Coatings
404 – Cathodic Protection
405 – Monitoring Cathodic Protection
406 – Electrical Isolation
407 – Test Stations
408 – Test Leads
409 – Interference Currents
410 – Internal Corrosion Control
411 – Atmospheric Corrosion Control
412 – Remedial Measures

Section 5 – Miscellaneous
501 – Records
502 – Reporting Incidents
503 – Starting Up and Shutting Down Pipelines
504 – Turning On and Turning Off Meters
505 – Reviewing Work
506 – Working in Natural Gas Atmospheres
507 – Safety-Related Conditions
508 – Customer Notifications
509 – Instrument Calibrations
510 – Asbestos Removal
511 – Requisitioning and Transferring Meters
512 – Meter Tests
513 – Customer Service
514 – Irregular Conditions - Customer's Facilities
515 – Carbon Monoxide
516 – Lead Paint Removal
517 – Excess Flow Valves
518 – Trenching and Excavation Safety
519 – Pre-Job Safety Briefings
520 – Squeezing Off Pipelines

Design and Installation Manual (Table of Contents)

Section 1 – Construction
1010 – Construction Specifications
1011 – Hydroseeding
1015 – Horizontal Directional Drilling (HDD)
1018 – New Gas Install Service Order Processes
1020 – Service Lines
1023 – Installation of Customer Metering Facilities
1025 – Excess Flow Valve (EFV)
1030 – Valves
1035 – Pipe Markers
1040 – Steel Pipe and Fittings
1050 – Testing Pipelines

Section 2 – Equipment and Fittings
2100 – Design

Section 3 – Plastic Pipe
3010 – General Procedures
3020 – Fusion Procedures
3030 – Mechanical Joining Procedures

3040 – Qualifying Persons to Join Plastic Pipe
3050 – Installation of Plastic Pipe
3060 – Installing Plastic Pipe by Plowing

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Attachment B:

O&M 307,
Coordinating Emergency Response

(O&M 307 is provided in a separate Word file)

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Attachment C:

Leak Investigation, Classification and Repair Schedule

(Leak Investigation, Classification and Repair Schedule
procedures are provided in a separate Word file)

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Section 4.0

Operational Transition Plan

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4.0 Operational Transition Plan

The Operational Transition Plan presented in this section builds upon SCE&G's extensive local experience in expanding its natural gas distribution system to meet the needs of current customers, as well as the thousands of new residential, commercial and industrial customers and hundreds of new natural gas lines SCE&G adds each year.

Many new customers are homeowners in the region's new residential developments. SCE&G is responsible for the natural gas utility infrastructure in these developments, which can range from a few dozen homes to hundreds of home sites. The subdivisions are similar to the privatization initiative, especially with respect to transitional planning and implementation. SCE&G initially works with site developers to lay out the utility system consistent with the pace and scope of site work. SCE&G then must carefully time the connection to the house service lines as its customer becomes the new homeowner.

Because of the Company's extensive experience with customers who are individually and collectively comparable in size and scope to the Fort Jackson electric distribution system, the Installation can be assured that this plan is predicated on sound principles and established procedures. SCE&G also has ample existing local and regional personnel, equipment and other resources to manage and implement the plan. This means the Installation should have confidence that the transition from Government to SCE&G operational responsibility for and ownership of the system will be seamless, efficient and on schedule. A nine-month transition period accordingly is proposed.

4.1 TRANSITIONAL PHILOSOPHY

The Operational Transition Plan will be implemented consistent with a set of clearly defined objectives that collectively embody SCE&G's transitional philosophy (see Table 4-1). SCE&G's philosophy is built upon two fundamental objectives: a commitment to safe and reliable service, and an orderly transition of ownership of and responsibility for the Installation's gas utility system.

Referencing Table ES-1, the privatized system will represent only about a 0.3 percent incremental expansion of SCE&G's existing 15,600-mile utility system. The estimated 376 gas system service connections also represent only about a 0.1 percent increase in the number of total SCE&G gas service customer connections. Therefore, the acquisition generally can be accommodated and integrated into SCE&G's South Carolina operating area.

Table 4-1. SCE&G's Operational Transition Plan Philosophy

Primary Objectives:	√ Commitment to sustainable safe and reliable service
	√ Orderly transition from Government to SCE&G ownership
Supporting Objectives:	√ Operational integration into SCE&G's local distribution system
	√ Eliminate safety hazards
	√ Foundation for sustainable system improvements
	√ Open and frequent communication with the Installation

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System integration means that the same exacting standards and procedures SCE&G uses off-Post will be applied on-Post. These standards and procedures will be applied to the short-term transitional capital upgrades, and the ongoing operation, maintenance and recapitalization of the privatized system.

Applying SCE&G's comprehensive operational standards will ensure that the acquired system is frequently inspected and its operation monitored continually. The Company will apply sound principles of sustainable, preventive maintenance to minimize unplanned outages and the need for emergency repairs. Performing modeling, mapping and inspections will provide useful information for the review and, as necessary, update to the five-year capital improvement plans. This will be part of the foundation for sustainable upgrades that, when coupled with an active preventive maintenance program, will keep the acquired system in sound operating condition.

The final element of SCE&G's plan is frequent and open communication with the Installation. Communication should be two-way. SCE&G will inform the Installation of its activities and will solicit information from Fort Jackson on its evolving service requirements. Open dialogue will inevitably lead to better planning and lower costs.

4.2 OPERATIONAL TRANSITION PLAN MILESTONES

Table 4-2 presents SCE&G's milestone schedule for the Operational Transition Plan. A transition checklist also is provided in Table 4-3. It is recognized, however, that the schedule is subject to change to reflect the transitional objectives and priorities of the Installation. Changes also may be required to reflect SCPSC regulatory review timelines and requirements.

4.2.1 Recurring Activities

Consistent with its objective to have open and frequent dialogue with Fort Jackson, SCE&G proposes to meet with the Administrative Contracting Officer (ACO) and other involved Installation personnel on at least a weekly basis during the entire transition process. Based on the experience for other privatized systems, more frequent meetings may be needed, especially as they might relate to the Request for Action process associated with new infrastructure developments.

Topics addressed at the meetings will include transition preparation, implementation and coordination with Government functions. The meetings will be coordinated with the Contracting Officer's Representative.

4.2.2 Contract Award and Regulatory Filing

In accordance with the Section L.7.6.1 proposal preparation instructions, it is acceptable for regulated utilities to submit an offer that is subject to regulatory approval. SCE&G will not be able to formally submit the special contract and tariff for review until it is finalized and signed by both parties. Therefore, the transfer plan provides that the regulatory approval process would be initiated at the date of contract award and that formal contract performance necessarily would be deferred until SCPSC regulatory approval is obtained. The transition plan assumes that perhaps three months will be required to prepare the regulatory filing and secure SCPSC approval.[1]

[1] It is possible that regulatory approval can be obtained earlier if the SCPSC staff does not raise substantive issues and other parties do not intervene in the approval process. SCE&G nonetheless assumes two

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Table 4-2. Transition Plan Milestone Schedule

Activity	Months from Contract Award	Months from SCPSC Regulatory Approval							
	1 2 3	1 2 3 4 5 6 7 8 9							
Phase 1: Regulatory Approval:									
Submit SCPSC Regulatory Review Application									
SCPSC Regulatory Approval									
Contract Performance Commences									
Ownership Transition Process:									
Initiate System Inventory									
Apply for Security Clearances									
Request System Documentation									
On-site Familiarization									
Transfer Government Records and Documents									
Prepare Emergency Response Plan									
Draft System Inventory and Checklist									
House Appliance Relighting MOU									
System Mapping									
Transfer System Ownership									
Contract Start Date (CSD)									
Government Hire Decision									
Transition Project Schedule:									
Project T-1 (Transition Planning and Management)									
Project T-2 (Leak Survey)									
Project T-3 (System Map, Inspections & Repairs)									
Project T-4 (Pothole Inspections)									
Project T-5 (Environmental Recon. Study)									

Activity	Years from Contract Start Date									
	1	2	3	4	5	6	7	8	9	10
Upgrade Project and Other Activities Schedule:										
Project C-1 (Replace Steel Piping)										
Project C-2 (Miscellaneous Station Repair)										
Project C-3: (Meter Replacements)										

Notes:
1. Weekly Coordination Meetings as needed from contract award to the CSD.
2. Contract Rate Service Invoicing monthly from CSD.
3. The CSD and related contract performance occurs after the transition period ends, the parties complete joint inventory and due diligence, and the Bill of Sale is executed, and on the first day of the immediately following month.

months to prepare the SCPSC filing and a six-month approval process and provides for the possible termination of the contract in the (unlikely) event regulatory approval is not obtained within 12 months of contract award.

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Table 4-3. Transition Plan Checklist
☐ Schedule formal transition kick-off meeting
☐ SCE&G to notify Post of meeting agenda additions or modifications
☐ Installation to notify SCE&G of meeting agenda additions or modifications
☐ Kick-off meeting agenda items
☐ Review transition objectives and timelines
☐ Provide transition points of contact
☐ Table 1-1 service response points of contact (POCs)
☐ Installation Fire Department
☐ Security
☐ Contracting Officer's Representative
☐ Provide and discuss system documentation (as available)
☐ Gas distribution system drawings
☐ As-built drawings
☐ Service logs
☐ System inspection, test or diagnostics (including pressure testing)
☐ Environmental baseline survey and record of decision
☐ Available information related to hazardous substances and contamination
☐ Identify and discuss major system changes implemented since contract negotiation
☐ New or modified service connections
☐ New or modified secondary meter connections
☐ Completed or funded system upgrades, replacements, or expansions
☐ Buildings or loads with special power quality / reliability requirements
☐ Mission-critical circuits and / or building loads
☐ Discuss critical safety and reliability issues
☐ Grade 1 & 2 leak repair responsibility and authorization procedures
☐ Identify and discuss special Installation service requirements
☐ New or modified service connections
☐ New or modified secondary meter connections
☐ Planned mission changes
☐ Planned or pending MILCON projects
☐ Buildings or loads with special pressure / reliability requirements
☐ Review security procedures
☐ Explain access requirements under various threat levels
☐ New or modified service connections
☐ Determine appropriate number / type of SCE&G personnel requiring ID badges
☐ Review radio frequencies

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Table 4-3. Transition Plan Checklist
☐ Submit SCE&G frequencies to Installation Communications Group(s)
☐ Discuss radio use IAW DFARS 252.235-7003, *Frequency Authorization*
☐ Schedule follow-on actions and meetings
☐ Conduct on-site familiarization
☐ Review special system characteristics (e.g., low pressure problems)
☐ Inspect non-standard equipment, if any
☐ Inspect areas / equipment with special service requirements
☐ Field verify or modify spare equipment or tools to be transferred (if any)
☐ Document results and schedule follow-on inspection(s), as required
☐ Prepare Physical Condition Report (if required)
☐ Clarify purpose, content and preparation responsibility
☐ Execute (preliminary) report
☐ Update to reflect Project T-5 study results
☐ Submit applications for National Agency Checks
☐ Provide other required documentation
☐ Material Safety Data Sheet
☐ Spill Containment and Countermeasure Plan
☐ Certificate of Insurance
☐ Develop emergency response plan
☐ Identity restoration priorities
☐ Integrate restoration priorities into SCE&G's system response plan
☐ Execute memorandum of understanding (MOU) with fire department
☐ Execute MOU regarding housing area service requests and relighting responsibilities
☐ System inspection and inventory
☐ Detailed inspection of entire distribution system
☐ Prepare draft system inventory
☐ Review inventory with Installation
☐ Develop and submit final inventory to the Installation
☐ Execute purchase document(s) and remove equipment from Government custody
☐ Prepare final bill of sale
☐ Incorporate final inventory
☐ Incorporate purchase of spare equipment
☐ Adjust fair market value (FMV) based purchase price (as / if required)
☐ Review excavation process
☐ Line markings
☐ Expedited permits for emergency service response

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Table 4-3. Transition Plan Checklist
☐ Joint meter reading (prior to transition / if required)
☐ Ownership transfer ☐ Execute bill of sale ☐ Execute easement agreement ☐ Initiate SCE&G system ownership and operational responsibilities (i.e., Contract Start Date)

The Volume III list of proposed exceptions accordingly includes the following additional contract clause:

> **H.16. South Carolina Public Service Commission (SCPSC) Regulatory Approval**
> The contract award shall be conditioned upon the South Carolina Public Service Commission's (SCPSC) review and approval of this utility services contract. Upon the receipt of a bilaterally executed copy of the contract, the Contractor shall expeditiously prepare a filing with the SCPSC for such review and approval. The Government shall cooperate by providing a declaration or other such reasonable documentation that might be needed to support the regulatory approval process; provided that the Contractor shall provide appropriate guidance on the need for and content of such documentation. This condition shall be removed and contract performance shall commence on the effective date of the SCPSC's approval. Should the SCPSC impose any substantive conditions on its regulatory approval that are unacceptable to either the Government or the Contractor, the parties shall negotiate in good faith to modify the contract to alleviate any objectionable provisions. Either party may terminate the contract, upon 30 days written notice, without penalty or added costs, in the event (i) SCPSC approval is not obtained within twelve (12) months from the date of contract award or (ii) the parties are unable to alleviate any objectionable provisions imposed incidental to the SCPSC's approval within four (4) months from the date of the SCPSC's final approval of the contract.

While the application for the contract approval finding is pending at the SCPSC, SCE&G proposes to meet with Government officials and initiate the requisite security application and approval processes. The Company also will work with the Government to develop workable interim site access procedures that will facilitate transition activities.

4.2.3 Installation and System Documentation

Fort Jackson should provide available Installation and gas system documentation to SCE&G as soon as possible after contract award. This would include but not be limited to:

- Fort Jackson Comprehensive Plan.
- Fort Jackson Design Guide.
- Fort Jackson Natural Gas Distribution System Drawings and/or GIS data, including system specifications.
- As-Built Drawings for the Natural Gas Distribution System.
- Construction Work Order Support Documentation (pressure test records, material installation records, contractor, qualifications, etc.)
- Pertinent Operation and Maintenance Manuals and records for the privatized system equipment, to include but not be limited to:
  - Leak surveys;
  - Pressure test records;

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- Cathodic protection tests;
- Pressure gauge test records

- Funded MILCON project descriptions, specifications, progress reports and other pertinent information related to gas system upgrades or expansions.
- Environmental studies and assessments of relevance to the privatized system.
- The following available information related to hazardous substances and contamination (if any):
  - Maps showing where contaminants exist in relation to the underground components of the natural gas distribution system;
  - Identify the type and location of specific contaminants of concern and the source of the release(s);
  - Contaminant concentrations (soil and/or groundwater);
  - Vertical and horizontal extent of the contamination (soil and/or groundwater);
  - Depth to groundwater in each area; and
  - Information regarding the actual length and depth of system sections that are potentially impacted in each area of concern.

4.2.4 On-site Familiarization and Joint Operations

The primary purpose of the on-site familiarization this activity is to determine if there are any recent changes in the Installation's service requirements and to identify any changes from the pre-bid scope and condition of the electric distribution system. System maps will be reviewed for changes. The familiarization process also will focus on identifying any unique or unusual service requirements for any of the service locations connected to the privatized system.

It is understood that Government employees may not be available after contract award due to work transfers, retirements or other reasons. For this reason, SCE&G can reduce the time for on-site familiarization to two or perhaps no more than three months. Knowledge of the system and the availability of local resources means that joint operation of the system is not required.

4.2.5 Joint Inventory and System Transfer

The joint system inventory developed under this activity will be incorporated into the Bill of Sale. It therefore will have a more limited scope and level of detail than the system inventory and mapping effort to be accomplished under Project T-3.

The system inventory will be accomplished by a combination of a review of the Attachment JA2 (Table 3) system inventory, system maps, the physical inspection of selected components of the natural gas distribution system and discussions with Fort Jackson personnel. SCE&G will focus, in particular, on any changes to the scope of the privatized system that may have occurred during the interval between proposal submittal and the anticipated CSD that were not addressed during pre-award discussions. A draft joint inventory should be prepared, which would be finalized after discussions with the Government.

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The formal transfer of system ownership can be accomplished at Fort Jackson or SCE&G's Shakespeare Road office. SCE&G personnel who are authorized to sign for the transfer of property are identified in Section 4.0 of the Volume III Contract Documentation Proposal.

4.2.6 Consideration of Employees for Hire

SCE&G has sufficient personnel resources to accommodate the operational integration of the privatized facilities into the upstream natural gas utility system. Nonetheless, SCE&G is receptive to hiring qualified applicants to fill job openings as they might occur. Interested Government personnel should submit resumes to the Company's career section on the website as soon as possible during the transition period to apply for external open positions. SCE&G will promptly evaluate all qualifying employment offers. The evaluation and hiring of qualified applications will be in accordance with SCE&G's hiring policy.

SCE&G will not knowingly hire any person if to do so would create a conflict of interest, nor will the Company hire Quality Assurance Representatives.

4.3 OTHER TRANSITION REQUIREMENTS

4.3.1 Required Connections

SCE&G does not propose, nor does the Government identify, any new connections to be provided during the Transition Period.

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4.3.2 New Meter Requirements

No new meter installation requirements were identified in Attachment JA2.

4.3.3 Initial Meter Readings

The Volume III proposal includes an exception that the Government, and not SCE&G, would be responsible for reading secondary meters that are extant or might be installed at a later date. If this exception is not accepted, SCE&G will provide required meter readings beginning with the first calendar month after the Installation provides a list of meters that are neither connected to nor read by the AMS.

4.3.4 System Condition Work

There is no currently identifiable system condition work that should be performed prior to the CSD. However, the Project T-2 leak survey may identify Grade 1 and/or Grade 2 leaks that require immediate or scheduled repairs. As discussed above, SCE&G is indifferent whether leak repairs are performed by the Company or the Government.

4.3.5 Permits and Procedures

Other than filing the awarded contract with the SCPSC, SCE&G does not anticipate that any permits or certifications are required for SCE&G to acquire ownership of the privatized system.

4.3.6 Authorized Personnel and Point of Contact

The following person is authorized to sign for the property transfer:

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Name: Mr. Don Harris
Office: South Carolina Electric & Gas Company
Title: Senior Vice President Gas Distribution
Address: 100 SCANA Parkway
Cayce, SC 29033
Phone: 803-217-7055
Cell: 803-605-9420
Fax: 704-810-3171
Email: RHarris@scana.com

The following person(s) are the designated points of contact for work to be performed under the contract:

Privatization Project Manager:
Name: Mr. Richard Johnson
Office: South Carolina Electric & Gas Company
Title: Manager, Engineering and Construction
Address: 6011 Shakespeare Road
Columbia, SC 29223
Telephone: (803) 217-6145
Cell: (803) 315-8524
Email: rpjohnson@scana.com

Privatization Deputy Project Manager:
Name: Mr. Bill Eisele
Office: South Carolina Electric & Gas Company
Title: Account Manager
Address: 220 Operation Way, B102
Cayce, SC 29033
Telephone: (803) 217-9220
Cell: (803) 331-8708
Email: weisele@scana.com

Privatization Deputy Project Manager:
Name: Ms. Cynthia Ostrander
Office: South Carolina Electric & Gas Company
Title: Manager, Gas Operations
Address: 6011 Shakespeare Road
Columbia, SC 29223
Phone: (803) 217-9245
Cell: (803) 530-4135
Email: cynthia.ostrander@scana.com

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Attachment C:

Socioeconomic Plan

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SCE&G Socioeconomic Plan

SCE&G has sufficient internal resources to fulfill all routine privatized service requirements and therefore does not plan to rely on the use of subcontractors for the day-to-day provision of the privatized service. This would include routine system inspections and maintenance activities and responses to emergency and other service requests. Additional information on small business contracting is provided in SCANA's Subcontracting Plan for Small Businesses, Small Disadvantaged Business (SDB), HUBZone, Veteran-Owned Small Businesses and Women-Owned Small Business Concerns.[1]

Criterion 1: Extent of Small Business Participation

The 2018 annual SCE&G goals for small, small disadvantaged, women-owned small business, HUBZONE owned small business and service disabled veteran-owned small business concerns, expressed in terms of percentages of the total planned dollars stated above, are provided below.[2] This level of spend represents 36% of the total corporate budgeted spend.

	GOALS	
Subcontracting Goals:	**Percent**	**Dollars**
SCANA and its Subsidiaries Small Business Concerns (SB) (includes SB, WOSB,HBCU/MI, HUBZone SB, VOSB, and Service-Disabled VOSB)	23%	$255,642,850
Small Disadvantaged (SDB) Concerns	1.25%	$13,893,633
Woman-Owned Small Business (WOSB) Concerns	2.5%	$27,787,266
HUBZone Small Business (HUBZone SB) Concerns	0.2%	$2,222,981
Veteran Owned Small Business (VOSB) Concerns	1.2%	$13,337,888
Service-Disabled Veteran Small Business Concerns	0.10%	$1,111,491

Criterion 2: Commitment to Use Small Businesses

SCANA for many years has had, and will continue, a strong corporate commitment for the utilization of small business concerns throughout the natural gas (and electric) utility systems and for other corporate activities... An indication of the extent of this commitment is the current 23% subcontracting goal. As with the Small Business Plan, the Socioeconomic Plan is applied Company-wide. Efforts to maximize small business participation therefore will be unaffected by and independent of the Fort Jackson privatization effort.

[1] Procurement activities are centralized within SCANA. The GSA Small Business Plan and related diversity and socioeconomic actives therefore apply to SCE&G and other operating companies.

[2] The Federal government previously told SCE&G that HBCUs/MIs did not apply to utility subcontracting plans and SCE&G accordingly ceased tracking those activities.

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SCANA accordingly will continue to promote the inclusion of diverse businesses in its operations. Broadly, these efforts include the following activities:

- Maintain a program designed to locate capable small business sources for current and future subcontracting opportunities.
- Review company policies and procedures to ensure and encourage equitable opportunities for small business concerns in subcontracting opportunities.
- Ensure that participation of small business concerns is accurately reported.
- Coordinate inquiries and requests for advice from small business concerns.
- Identify commodities/services suitable for acquisition from small business concerns.
- Facilitate training and orientation sessions for all procurement agents.
- Provide opportunities for suppliers to qualify for a share of the company's current or long-term purchase contracts.
- Maintain and augment a database that identifies small business concerns by product or service to assist in meeting subcontracting goals and to provide additional contracting opportunities
- Help small businesses who need additional assistance in understanding SCANA's business operations and how to do business with SCANA and its subsidiaries.
- Continue to utilize small business concerns where practicable, consistent with the efficient performance of all contracts or subcontracts.

Criterion 3: Variety and Complexity of Work

The broad range of services, supplies, and other support required to operate and maintain an integrated electric utility system are covered in SCE&G's Subcontracting Plan prepared in accordance with the requirement of the company's Areawide Contract with the General Services Administration (GSA). The principal products and services planned to be subcontracted and identification of the types of business concerns are summarized in the table below.

Subcontracting Products / Services	SB	SDB	WOSB	HUB Zone	VOSB	SDVOSB	Other than SB*
Advertising	X	X	X		X		X
Architectural/Engineering Services	X	X	X		X		X
Automobiles, Parts, & Services	X	X	X	X	X		X
Bottled Water	X				X		X
Casual Labor – Office	X	X	X		X	X	X
Casual Labor – Other	X	X	X		X	X	X
Chemicals	X		X		X		X
Clothing – Uniforms, etc.	X	X	X		X		X
Coal	X		X		X		X
Coal Handling Equipment	X		X		X	X	X
Computers, Parts, & Services	X	X	X		X	X	X
Construction Equipment & Parts	X	X	X	X	X		X
Construction Services	X	X	X		X	X	X
Consulting Services	X	X	X		X	X	X
Contractor, General	X	X	X		X		X

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Contractor, HVAC	X			X	X		X
Cross Arms	X		X		X		X
Electric Meters	X	X	X	X	X		X
Electric Motors & Repairs	X	X	X		X		X
Engineering Services – Fossil	X	X	X		X		X
Engineering Services - Nuclear	X	X	X		X		X
Environmental Services	X		X		X		X
Fasteners	X	X			X		X
Filters	X	X	X		X		X
Gas Meters	X		X		X		X
Gasoline	X						X
Guard Services	X						X
Hauling Services	X		X		X		X
Industrial Supplies	X	X	X		X		X
Insulators	X		X		X		X
Interior Design Work	X		X		X		X
Janitorial Services	X	X	X		X		X
Janitorial Supplies	X	X	X		X		X
Lawn Maintenance/Landscaping	X		X		X	X	X
Material Handling	X	X	X		X	X	X
Natural Gas	X	X	X		X		X
Office Equipment & Supplies	X	X	X	X	X		X
Overhead Electric Line Work	X				X		X
Painting Services	X				X	X	X
Paving Services	X		X		X		X
Pipe Installation	X	X					X
Plastic Products	X	X	X	X	X		X
Pole Line Hardware	X	X	X	X	X		X
Power Plant Maintenance & Modification	X		X		X		X
Printing	X	X	X		X		X
Pumps	X	X	X		X	X	X
Purchased Power	X	X			X	X	X
PVC Conduit	X				X		X
Rail Transportation	X	X	X	X	X		X
Safety Equipment & Supplies	X	X	X		X		X
Steel Pipe	X	X	X		X		X
Steel Poles	X		X		X		X
Switchgear	X	X	X		X		X
Telecommunications, Parts, Services	X	X	X		X	X	X
Transformers, Parts, & Services	X	X	X		X		X
Trash Removal Services	X						X
Travel Planning	X	X					X
Tree Trimming & Removal	X	X	X			X	X
Trucks, Parts, & Services	X	X	X	X	X		X
Underground Electric Line Work	X	X	X	X	X		X
Valve Maintenance	X		X	X		X	X
Welding Supplies & Services	X	X		X			X

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Wire & Cable	X	X	X	X	X		X
Wood Poles	X			X	X		X

* Other than SB includes large business, non-profit organizations, state and local governments.

Vendor lists maintained by SCE&G contain thousands of companies, many of which are small and disadvantaged businesses. Provided in the table below is a representative list subcontractors that have been used by SCE&G and that may be used to provide a portion of SCE&G's privatized service support.

Representative List of SCE&G Diversity Subcontractors		
Name	**Product/Service Description**	**Business Type**
Spherion Corporation	Temporary Staffing	Small, Woman
Canzater Construction Inc	Gas Pipeline Construction Contractor Services	Small, Minority
Latex Construction	Gas Pipeline Construction Contractor Services	Small
MIP Inc	Contractor Services at Generation Plant	Small, Veteran
Crist Enterprises, LLC	Consulting for Manager Operations at Generation Plant	Small, Veteran
CCS of South Carolina Inc	Janitorial Services	Small, Minority
Pinnacle Consulting LLC	Technology Consulting Services	Small, Minority
Diversified Supply Inc	Maintenance Repair and Operations Products	Small, Minority
Whitestone Utility Services LLC	Contractor Services for Electric Distribution Projects	Small, Woman
MSI Construction Company Inc	Contactor Services and Material for Generation Plant Projects	Small, Woman
Earl Tindol Ford Inc	Automotive Truck Purchases for North Carolina Operations	Small, HubZone
Millers	Office Furniture	Small, HubZone
Precision Valve Group	Maintenance and Valve Repair at Generation Plants	Small, Disabled Veteran
Devoco LLC	Operations and Training Consulting at Generation Plant	Small, Disabled Veteran
Sirius Computer Solutions Inc.	Consulting, Maintenance, and General Services for Computer Hardware and Software	Small, Veteran

Criterion 4: Methods to Identify Small Business Contracting Opportunities

SCANA continues to participate in external activities to identify available resources for providing products and services. SCANA's personnel continue to communicate with local and national organizations that house pertinent vendor capabilities such as the System for Awards Management (SAM.gov) and the South Carolina Chamber of Commerce Directory. The company advocates the use of diverse vendors through its active participation in such organizations as the Women's Business Enterprise National Council (WBENC), Edison Electric

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Institute (EEI) Minority Development Committee, the National Minority Supplier Development Council (NMSDC) and the NMSDC regional affiliate, the Carolinas-Virginia Minority Supplier Development Council (CVMSDC). Moreover, SCANA is pleased that its Manager of Supplier Strategy continues to serve on the CVMSDC's Board of Directors and its Regional Advisory Committee.

Beyond its involvement in CVMSDC, SCANA's commitment to the inclusion of small business concerns in its operations is evidenced in its work with industry leaders (Duke Energy, Southern Company, Dominion, and Tennessee Valley Authority) to host joint meetings with diverse suppliers entitled "Energizing Powerful Connections". At this event, suppliers were greeted by officials from each company, given information about doing business with each company, and provided an opportunity to speak directly with procurement representatives. Representatives from prime suppliers also met with the small business concerns.

In addition to external efforts, SCANA continues to facilitate vendor symposiums that allow suppliers to meet face-to-face with SCANA procurement personnel responsible for securing commodities and services. SCANA's Strategic Sourcing personnel continue to hold internal meetings focusing on the development of new ideas and strategies to enhance opportunities available to small business concerns.

We've succeeded in bringing one of these new ideas to fruition by implementing a new information technology platform that optimizes our efforts to identify potential diverse suppliers as well as aids in providing opportunities to those diverse suppliers currently in our database.

This year we began crafting a SCANA mentor protégé program to provide training and additional procurement access to help newly established companies become essential providers within our supply chain. The end results should consist of more familiarization with SCANA's internal systems, procurement, insurance, and accounts payables processes.
Key points contributing to the growth of the Supplier Diversity Program include:

- Developing and implementing small business development strategies with internal stakeholders
- Developing new branding and marketing materials
- Enhancing supplier diversity communications and training plans
- Continuing to grow and conduct specialized vendor symposiums
- Engaging with community-based supplier diversity organizations
- Providing supplier education and development to enable success with SCANA as well as in respective markets
- Scheduling supplier introduction meetings with Strategic Sourcing management
- Developing relationships with third party providers who can assist small businesses with developing business plans and strategic alignments for infrastructure growth

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Criterion 5: Performance Data

SCE&G will maintain subcontracting information consistent with the requirements of its GSA Areawide Contract and related Subcontracting Plan.

Criterion 6: Past Performance Information

The following table shows the SCE&G goals and actual spend with small business.

	2016 Subcontracting Goal	2016 Spend Attainment	2017 Subcontracting Goal	2017 Spend Attainment
Small	$368,206,761	$354,033,875	$421,647,489	$305,416,985
Minority	$18,410,338	$17,472,907	$21,082,374	$14,840,291
Female	$36,820,676	$29,798,439	$42,164,749	$30,391,748
HUBZone	$9,021,066	$5,505,495	$10,330,363	$1,699,596
Veteran	$36,820,676	$28,399,047	$42,164,749	$13,676,606
Service Disabled Veteran	$2,761,551	$3,875,818	$3,794,827	$450,781

Criterion 7: Responsible Individual

Name: Mammie C. Price
Manager, Supplier Strategy
Address: 100 SCANA Parkway, D211
Cayce, SC 29033
Phone: (803) 217-9118
Email: mprice@scana.com

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SUBCONTRACTING PLAN

FOR

SMALL,

SMALL DISADVANTAGED,

WOMEN-OWNED,

VETERAN-OWNED,

SERVICE DISABLED VETERAN-OWNED,

AND

HUBZONE SMALL BUSINESS CONCERNS

SUBMITTED BY: SCANA Corporation and its Subsidiaries

GSA CONTRACT NO.: Public Utility Contract Successor to GS-00S-28658

DATE OF PLAN: January 1, 2018 through December 31, 2018

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SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, HUBZONE SMALL BUSINESS AND WOMEN-OWNED SMALL BUSINESS CONCERNS SUBCONTRACTING PLAN

(Commercial Products Plan)

Pursuant to Chapter 2, Section 211. Section 8(d) of the Small Business Act, this plan is submitted for the consideration of:

Public Utilities Division, Public Buildings Service
General Services Administration
(Contracting Activity)

by
SCANA Corporation and its subsidiaries
(Offeror)

This commercial products plan will be in effect for the period January 1, 2018 through December 31, 2018 (Offeror's Fiscal Year) and covers all the offeror's planned subcontracting on a company-wide basis.

1. Total Procurement Dollars Planned to be Subcontracted:

SCANA and its Subsidiaries		**$1,111,490,650**
Purchased Power for Resale	_____	
Fuel for Electric Generation	_____	
Operation & Maintenance	**$404,611,676**	
Capital Improvement Projects	**$706,878,974**	

2. SUBCONTRACTING GOALS: The following goals for small, small disadvantaged, women-owned small business, HUBZone small business, veteran-owned small business and service disabled veteran-owned small business concerns are expressed in terms of percentages of the total planned subcontracting dollars stated in (1) above.

	GOALS	
Subcontracting Goals:	**Percent**	**Dollars**
SCANA and its Subsidiaries		
Small Business Concerns (SB) (includes SB, WOSB,HBCU/MI, HUBZone SB, VOSB, and Service-Disabled VOSB)	**23%**	**$255,642,850**
Small Disadvantaged (SDB) Concerns	**1.25%**	**$13,893,633**
Woman-Owned Small Business (WOSB) Concerns	**2.5%**	**$27,787,266**
HUBZone Small Business (HUBZone SB) Concerns	**0.2%**	**$2,222,981**
Veteran Owned Small Business (VOSB) Concerns	**1.2%**	**$13,337,888**
Service-Disabled Veteran Small Business Concerns	**0.10%**	**$1,111,491**

NOTE: The goal percentages above are calculated against SCANA's overall projected budget excluding labor, purchased power, fuel costs and internally generated costs. In prior years, SCANA was engaged in the construction of two new nuclear units. However, on July 31, 2017, SCANA made a decision to abandon construction of those units. Consequently, the total dollars planned to be subcontracted in 2018 has decreased significantly in relation to previous years. Compared to the 2017 Subcontracting Plan, total dollars planned to be subcontracted is approximately $1 billion less. This projected reduction in spend is reflected in the company's subcontracting goals with small business concerns for 2018. SCANA's 2018 budget is a projection that is subject to change and, as such, any changes may directly or indirectly impact the level of actual procurement spend.

The principal products and services planned to be subcontracted and identification of the types of business concerns are as follows:

Type of Business Concern
(Check appropriate column(s) for each product or services)

Subcontracting Products/Services	SB	SDB	WOSB	HUBZone	VOSB	SDVOSB	Other than SB*
Advertising	X		X				X
Architectural/Engineering Services	X	X	X		X		X
Automobiles, Parts, & Services	X		X				X
Bottled Water	X		X		X		X
Casual Labor – Office	X	X	X		X		X
Casual Labor – Other	X	X	X	X	X	X	X
Chemicals	X		X		X		X
Clothing – Uniforms, etc.	X	X	X		X		X
Coal	X						X
Coal Handling Equipment	X	X	X				X
Computers, Parts, & Services	X	X	X	X			X
Construction Equipment & Parts	X	X	X				X
Construction Services	X	X	X				X
Consulting Services	X	X	X		X	X	X
Contractor, General	X	X	X	X	X	X	X
Contractor, HVAC	X						X
Cross Arms	X						X
Electric Meters	X		X				X
Electric Motors & Repairs	X						X
Engineering Services – Fossil	X	X	X		X		X
Engineering Services - Nuclear	X		X		X		X
Environmental Services	X	X	X				X
Fasteners	X	X					X
Filters	X	X	X		X	X	X
Gas Meters	X	X	X				X
Gasoline	X		X		X		X
Guard Services							X
Hauling Services	X						X
Industrial Supplies	X	X	X	X	X	X	X
Insulators	X	X	X				X
Interior Design Work							
Janitorial Services	X	X	X				X
Janitorial Supplies	X	X	X				X

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Subcontracting Products/Services	SB	SDB	WOSB	HUBZone	VOSB	SDVOSB	Other than SB*
Lawn Maintenance/Landscaping	X		X		X		X
Material Handling	X	X	X	X	X	X	X
Natural Gas	X						X
Office Equipment & Supplies	X	X	X		X		X
Overhead Electric Line Work	X						X
Painting Services	X						X
Paving Services	X		X				X
Pipe Installation	X	X					X
Plastic Products	X	X	X				X
Pole Line Hardware	X	X	X	X	X		X
Power Plant Maintenance & Modification	X	X	X		X		X
Printing	X	X	X		X		X
Pumps	X	X	X		X	X	X
Purchased Power	X						X
PVC Conduit	X				X		X
Rail Transportation							X
Safety Equipment & Supplies	X	X	X		X		X
Steel Pipe	X						X
Steel Poles							X
Switchgear	X		X		X		X
Telecommunications, Parts, & Services	X		X		X		X
Transformers, Parts, & Services	X						X
Trash Removal Services	X		X				X
Travel Planning	X	X					
Tree Trimming & Removal	X	X	X		X	X	X
Trucks, Parts, & Services	X	X	X				X
Underground Electric Line Work	X		X	X	X		X
Valve Maintenance	X	X	X		X		X
Welding Supplies & Services	X	X	X		X		X
Wire & Cable	X	X	X		X	X	X
Wood Poles	X			X			X

*"Other than SB" references large businesses.

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3. Describe the method used to develop subcontracting goals.

Members of SCANA's Strategic Sourcing team collaborated on an approach that included both quantitative and qualitative methods to develop the aforementioned subcontracting goals. First, current and historical attainment data was compiled and analyzed to help pinpoint key factors impacting the 2018 annual small business goals. Then, after identifying specific issues, the group:

- Defined the Small Business Administration (SBA) and General Services Administration's (GSA) expectations of SCANA and its subsidiaries
- Analyzed the products/services which were purchased from diverse suppliers in 2017
- Reviewed the company's overall projected budget for 2018
- Determined what contracts will be expiring, renewed, or issued in 2018
- Assessed what small business concerns will be affected by these contracts
- Evaluated current strategies used to identify small business concerns for solicitation purposes.

After these efforts, SCANA's overall percentage of spend goals for the various small business concern categories were developed.

Finally, a draft of SCANA's 2018 Subcontracting Plan for Small Businesses was submitted to the leadership of Strategic Sourcing for approval.

The subcontracting goals in this plan are set forth as a percentage of the total procurement dollars (excluding labor, purchased power, fuel costs and internally generated costs) to which SCANA projects it will commit during the calendar year January 1, 2018 through December 31, 2018. SCANA's 2018 budget is a projection that is subject to change and, as such, any changes may directly or indirectly impact the level of actual procurement spend.

It is worth noting that SCANA spent more than $20 million through long-term contracts with large minority suppliers in 2017, some of whom established a relationship with SCANA when they were categorized as a small disadvantaged business. Additionally, twenty-seven of SCANA's prime contractors reported over $39 million for Tier II spend during fiscal year 2017.

4. Describe the method used to identify potential sources for solicitation purposes.

SCANA's Supplier Strategy group utilizes a number of mechanisms to identify and recruit small and diverse business concerns. In 2017, the following databases and organizations were utilized:

Systems / Databases / Lists

- Carolinas-Virginia Minority Supplier Development Council Regional Database
- Certified HUBZone Concerns listing from the Small Business Administration
- Company Source Lists
- Contacts initiated by small business concerns
- Edison Electric Institute Minority Business Listing
- Minority Business Information Resources Directory
- Other Utilities' Minority Supplier Directories
- SBA Minority Business Directory
- South Carolina Chamber of Commerce Directory
- SCANA's PowerAdvocate Supplier Intelligence Database and Vendor Files
- SCANA's Enterprise Business Solution system that tracks vendors' business classifications
- Survey questionnaires
- System for Award Management (SAM.gov)
- South Carolina Department of Commerce Resource Database

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External Organizations

- Business Opportunity Trade Shows & Fairs
- Carolina Black Contractors Association
- Columbia Business Network Association
- Columbia Chamber of Commerce's Women and Minority Business Council
- Columbia Minority Business Development Center
- National Minority Supplier Development Council
- South Carolina Governor's Office of Minority & Small Businesses
- South Carolina Statewide Minority Development Center
- University of South Carolina Small Business Development Center
- South Carolina Business Development Center
- South Carolina Department of Commerce
- Veterans Administration of Business Development

5. Indirect Costs (check one):

[ ] have been included [✔] have not been included

If indirect costs have been included, describe below the method used to determine the proportionate share of indirect costs to be incurred with (i) small business, (ii) small disadvantaged business, (iii) HUBZone small business and (iv) women-owned small business concerns.

6. The following individual employed by the company will administer the subcontracting program:

Name: Mammie C. Price
Title: Manager, Supplier Strategy

Address: 100 SCANA Parkway, MC D211
Cayce, SC 29033

Telephone Number: (803) 217-9118
E-mail Address: mprice@scana.com

The subcontracting plan administrator's duties are as follows:

- Ensuring the preparation and submittal of subcontracting reports.
- Recruiting and identifying qualified small business concerns through the sources listed above in Item 4 and including them in bid solicitations.
- Encouraging corporate-wide participation in the overall efforts to increase opportunities for small business concerns.
- Monitoring attainment of small business concern goals.
- Overseeing the maintenance of SCANA's internal database of small business concerns.

7. Describe the efforts the offeror will make to assure that small, small disadvantaged, veteran, service-disabled veteran, HUBZone and women-owned small business concerns will have an equitable opportunity to compete for subcontracts:

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SCANA continues to promote the inclusion of diverse businesses in its operations. Broadly, these efforts include the following activities:

- Maintain a program designed to locate capable small business sources for current and future subcontracting opportunities.
- Review company policies and procedures to ensure and encourage equitable opportunities for small business concerns in subcontracting opportunities.
- Ensure that participation of small business concerns is accurately reported.
- Coordinate inquiries and requests for advice from small business concerns.
- Identify commodities/services suitable for acquisition from small business concerns.
- Facilitate training and orientation sessions for all procurement agents.
- Provide opportunities for suppliers to qualify for a share of the company's current or long-term purchase contracts.
- Maintain and augment a database that identifies small business concerns by product or service to assist in meeting subcontracting goals and to provide additional contracting opportunities for those concerns.
- Help small businesses who need additional assistance in understanding SCANA's business operations and how to do business with SCANA and its subsidiaries.
- Continue to utilize small business concerns where practicable, consistent with the efficient performance of all contracts or subcontracts.

More specifically, SCANA continues to participate in external activities to identify available resources for providing products and services. SCANA's personnel continue to communicate with local and national organizations that house pertinent vendor capabilities such as the System for Awards Management (SAM.gov) and the South Carolina Chamber of Commerce Directory. The company advocates the use of diverse vendors through its active participation in such organizations as the Women's Business Enterprise National Council (WBENC), Edison Electric Institute (EEI) Minority Development Committee, the National Veteran-Owned Business Association (NaVOBA), the National Minority Supplier Development Council (NMSDC) and the NMSDC regional affiliate, the Carolinas-Virginia Minority Supplier Development Council (CVMSDC). Moreover, SCANA is pleased that its Manager of Supplier Strategy continues to serve on the CVMSDC's Board of Directors and its Regional Advisory Committee.

Beyond its involvement in CVMSDC, SCANA's commitment to the inclusion of small business concerns in its operations is demonstrated through its work with industry leaders (Duke Energy, Southern Company, Dominion, Tennessee Valley Authority, Entergy and LG&E) to host joint meetings with diverse suppliers entitled "Energizing Powerful Connections". At the 2017 event, suppliers were given the opportunity to build connections with the sponsoring utilities and speak directly with procurement representatives. The event also consisted of several panel discussions on business growth that covered various sectors of the utility business, i.e., nuclear, transmission and distribution, corporate services, natural gas, etc. Representatives from prime suppliers also met with the small business concerns.

In addition to external efforts, SCANA continues to facilitate vendor symposiums that allow suppliers to meet face-to-face with SCANA procurement personnel responsible for securing commodities and services. SCANA's Strategic Sourcing personnel continue to hold internal meetings focusing on the development of new ideas and strategies to enhance opportunities available to small business concerns. In 2015, SCANA implemented an information technology platform that optimizes procurement personnel's efforts to identify potential diverse suppliers. To date, over 2,300 suppliers have been added to the database.

SCANA continues to support the Mentor Protégé Program, which is designed to provide training and additional procurement access to new companies and more established companies that have potential for growth, thereby creating a path to become essential providers within the supply chain. We partnered with the South Carolina Business Development Center to help prospective vendors develop a five-year business plan, organize internal bookkeeping processes, set up new bookkeeping software, and improve various office policies and procedures.

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Key points contributing to the success of the Supplier Diversity Program include:
- Developing and implementing small business development strategies with internal stakeholders
- Developing new branding and marketing materials
- Enhancing supplier diversity communications and training plans
- Continuing to grow and conduct specialized vendor symposiums
- Engaging with community-based supplier diversity organizations
- Providing supplier education and development to enable success with SCANA as well as in respective markets
- Scheduling supplier introduction meetings with Strategic Sourcing management
- Developing relationships with third party providers who can assist small businesses with developing business plans and strategic alignments for infrastructure growth
- Developing an in-house reverse trade show for suppliers to meet with procurement personnel and learn about future procurement opportunities
- Reactivating the company's Supplier Diversity Advisory Committee to include additional key leadership representation

SCANA's Supplier Diversity Advisory Committee consists of key leadership from each business unit. The membership has proactively set accountability, sustainability and reliability measures throughout the organization that will grow and enhance subcontracting goals and objectives.

In 2018, SCANA will continue hosting, coordinating meetings, and utilizing proactive business processes that seek to provide all suppliers equal access to its procurement opportunities.

8. The offeror assures that the clause entitled "Utilization of Small Business Concerns" will be included in all subcontracts that offer further subcontracting opportunities, and all subcontractors (except small business concerns) who receive subcontracts in excess of $700,000 ($1,500,000 for construction of any public facility) will be required to adopt a plan similar to this plan.

9. The offeror assures that it will (i) cooperate in any studies or surveys as may be required, (ii) submit periodic reports in order to allow the Government to determine the extent of compliance by the offeror with the subcontracting plan, (iii) submission of the Summary Subcontract Report (formerly Standard Form 295) via the Electronic Subcontracting Reporting System (eSRS). Ensure that large business subcontractors with subcontracting plans agree to submit the ISR and SSR.

10. The offeror agrees to maintain the following types of records to demonstrate procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists, and a description of its efforts to locate small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns and award subcontracts to them:
    (a) Source lists, guides, and other data that small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns.

    (b) Organizations contacted in an attempt to locate sources that are small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns.

    (c) Records on each subcontract solicitation resulting in an award of more than $150,000, indicating whether small business concerns were solicited and if not, why not; and, if applicable, the reason award was not made to a small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns.

    (d) Records of outreach efforts to contact trade associations, business development organizations, conferences and trade fairs to locate small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business sources.

    (e) Records of internal guidance and encouragement provided to buyers through workshops, seminars, training; and monitoring performance to evaluate compliance with the program's requirements.

SUBCONTRACTING PLAN

FOR

SMALL,

SMALL DISADVANTAGED,

WOMEN-OWNED,

VETERAN-OWNED,

SERVICE DISABLED VETERAN-OWNED,

AND

HUBZONE SMALL BUSINESS CONCERNS

SUBMITTED BY: SCANA Corporation and its Subsidiaries

GSA CONTRACT NO.: Public Utility Contract Successor to GS-00S-28658

DATE OF PLAN: January 1, 2018 through December 31, 2018

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SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, HUBZONE SMALL BUSINESS AND WOMEN-OWNED SMALL BUSINESS CONCERNS SUBCONTRACTING PLAN

(Commercial Products Plan)

Pursuant to Chapter 2, Section 211. Section 8(d) of the Small Business Act, this plan is submitted for the consideration of:

Public Utilities Division, Public Buildings Service
General Services Administration
(Contracting Activity)

by
SCANA Corporation and its subsidiaries
(Offeror)

This commercial products plan will be in effect for the period January 1, 2018 through December 31, 2018 (Offeror's Fiscal Year) and covers all the offeror's planned subcontracting on a company-wide basis.

1. Total Procurement Dollars Planned to be Subcontracted:

SCANA and its Subsidiaries		**$1,111,490,650**
Purchased Power for Resale	_____	
Fuel for Electric Generation	_____	
Operation & Maintenance	**$404,611,676**	
Capital Improvement Projects	**$706,878,974**	

2. SUBCONTRACTING GOALS: The following goals for small, small disadvantaged, women-owned small business, HUBZone small business, veteran-owned small business and service disabled veteran-owned small business concerns are expressed in terms of percentages of the total planned subcontracting dollars stated in (1) above.

	GOALS	
Subcontracting Goals:	**Percent**	**Dollars**
SCANA and its Subsidiaries		
Small Business Concerns (SB) (includes SB, WOSB,HBCU/MI, HUBZone SB, VOSB, and Service-Disabled VOSB)	**23%**	**$255,642,850**
Small Disadvantaged (SDB) Concerns	**1.25%**	**$13,893,633**
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Service-Disabled Veteran Small Business Concerns	**0.10%**	**$1,111,491**

NOTE: The goal percentages above are calculated against SCANA's overall projected budget excluding labor, purchased power, fuel costs and internally generated costs. In prior years, SCANA was engaged in the construction of two new nuclear units. However, on July 31, 2017, SCANA made a decision to abandon construction of those units. Consequently, the total dollars planned to be subcontracted in 2018 has decreased significantly in relation to previous years. Compared to the 2017 Subcontracting Plan, total dollars planned to be subcontracted is approximately $1 billion less. This projected reduction in spend is reflected in the company's subcontracting goals with small business concerns for 2018. SCANA's 2018 budget is a projection that is subject to change and, as such, any changes may directly or indirectly impact the level of actual procurement spend.

The principal products and services planned to be subcontracted and identification of the types of business concerns are as follows:

Type of Business Concern
(Check appropriate column(s) for each product or services)

Subcontracting Products/Services	SB	SDB	WOSB	HUBZone	VOSB	SDVOSB	Other than SB*
Advertising	X		X				X
Architectural/Engineering Services	X	X	X		X		X
Automobiles, Parts, & Services	X		X				X
Bottled Water	X		X		X		X
Casual Labor – Office	X	X	X		X		X
Casual Labor – Other	X	X	X	X	X	X	X
Chemicals	X		X		X		X
Clothing – Uniforms, etc.	X	X	X		X		X
Coal	X						X
Coal Handling Equipment	X	X	X				X
Computers, Parts, & Services	X	X	X	X			X
Construction Equipment & Parts	X	X	X				X
Construction Services	X	X	X				X
Consulting Services	X	X	X		X	X	X
Contractor, General	X	X	X	X	X	X	X
Contractor, HVAC	X						X
Cross Arms	X						X
Electric Meters	X		X				X
Electric Motors & Repairs	X						X
Engineering Services – Fossil	X	X	X		X		X
Engineering Services - Nuclear	X		X		X		X
Environmental Services	X	X	X				X
Fasteners	X	X					X
Filters	X	X	X		X	X	X
Gas Meters	X	X	X				X
Gasoline	X		X		X		X
Guard Services							X
Hauling Services	X						X
Industrial Supplies	X	X	X	X	X	X	X
Insulators	X	X	X				X
Interior Design Work							
Janitorial Services	X	X	X				X
Janitorial Supplies	X	X	X				X

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Subcontracting Products/Services	SB	SDB	WOSB	HUBZone	VOSB	SDVOSB	Other than SB*
Lawn Maintenance/Landscaping	X		X		X		X
Material Handling	X	X	X	X	X	X	X
Natural Gas	X						X
Office Equipment & Supplies	X	X	X		X		X
Overhead Electric Line Work	X						X
Painting Services	X						X
Paving Services	X		X				X
Pipe Installation	X	X					X
Plastic Products	X	X	X				X
Pole Line Hardware	X	X	X	X	X		X
Power Plant Maintenance & Modification	X	X	X		X		X
Printing	X	X	X		X		X
Pumps	X	X	X		X	X	X
Purchased Power	X						X
PVC Conduit	X				X		X
Rail Transportation							X
Safety Equipment & Supplies	X	X	X		X		X
Steel Pipe	X						X
Steel Poles							X
Switchgear	X		X		X		X
Telecommunications, Parts, & Services	X		X		X		X
Transformers, Parts, & Services	X						X
Trash Removal Services	X		X				X
Travel Planning	X	X					
Tree Trimming & Removal	X	X	X		X	X	X
Trucks, Parts, & Services	X	X	X				X
Underground Electric Line Work	X		X	X	X		X
Valve Maintenance	X	X	X		X		X
Welding Supplies & Services	X	X	X		X		X
Wire & Cable	X	X	X		X	X	X
Wood Poles	X			X			X

*"Other than SB" references large businesses.

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3. Describe the method used to develop subcontracting goals.

Members of SCANA's Strategic Sourcing team collaborated on an approach that included both quantitative and qualitative methods to develop the aforementioned subcontracting goals. First, current and historical attainment data was compiled and analyzed to help pinpoint key factors impacting the 2018 annual small business goals. Then, after identifying specific issues, the group:

- Defined the Small Business Administration (SBA) and General Services Administration's (GSA) expectations of SCANA and its subsidiaries
- Analyzed the products/services which were purchased from diverse suppliers in 2017
- Reviewed the company's overall projected budget for 2018
- Determined what contracts will be expiring, renewed, or issued in 2018
- Assessed what small business concerns will be affected by these contracts
- Evaluated current strategies used to identify small business concerns for solicitation purposes.

After these efforts, SCANA's overall percentage of spend goals for the various small business concern categories were developed.

Finally, a draft of SCANA's 2018 Subcontracting Plan for Small Businesses was submitted to the leadership of Strategic Sourcing for approval.

The subcontracting goals in this plan are set forth as a percentage of the total procurement dollars (excluding labor, purchased power, fuel costs and internally generated costs) to which SCANA projects it will commit during the calendar year January 1, 2018 through December 31, 2018. SCANA's 2018 budget is a projection that is subject to change and, as such, any changes may directly or indirectly impact the level of actual procurement spend.

It is worth noting that SCANA spent more than $20 million through long-term contracts with large minority suppliers in 2017, some of whom established a relationship with SCANA when they were categorized as a small disadvantaged business. Additionally, twenty-seven of SCANA's prime contractors reported over $39 million for Tier II spend during fiscal year 2017.

4. Describe the method used to identify potential sources for solicitation purposes.

SCANA's Supplier Strategy group utilizes a number of mechanisms to identify and recruit small and diverse business concerns. In 2017, the following databases and organizations were utilized:

Systems / Databases / Lists

- Carolinas-Virginia Minority Supplier Development Council Regional Database
- Certified HUBZone Concerns listing from the Small Business Administration
- Company Source Lists
- Contacts initiated by small business concerns
- Edison Electric Institute Minority Business Listing
- Minority Business Information Resources Directory
- Other Utilities' Minority Supplier Directories
- SBA Minority Business Directory
- South Carolina Chamber of Commerce Directory
- SCANA's PowerAdvocate Supplier Intelligence Database and Vendor Files
- SCANA's Enterprise Business Solution system that tracks vendors' business classifications
- Survey questionnaires
- System for Award Management (SAM.gov)
- South Carolina Department of Commerce Resource Database

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External Organizations

- Business Opportunity Trade Shows & Fairs
- Carolina Black Contractors Association
- Columbia Business Network Association
- Columbia Chamber of Commerce's Women and Minority Business Council
- Columbia Minority Business Development Center
- National Minority Supplier Development Council
- South Carolina Governor's Office of Minority & Small Businesses
- South Carolina Statewide Minority Development Center
- University of South Carolina Small Business Development Center
- South Carolina Business Development Center
- South Carolina Department of Commerce
- Veterans Administration of Business Development

5. Indirect Costs (check one):

[ ] have been included [✔] have not been included

If indirect costs have been included, describe below the method used to determine the proportionate share of indirect costs to be incurred with (i) small business, (ii) small disadvantaged business, (iii) HUBZone small business and (iv) women-owned small business concerns.

6. The following individual employed by the company will administer the subcontracting program:

Name: Mammie C. Price
Title: Manager, Supplier Strategy

Address: 100 SCANA Parkway, MC D211
Cayce, SC 29033

Telephone Number: (803) 217-9118
E-mail Address: mprice@scana.com

The subcontracting plan administrator's duties are as follows:

- Ensuring the preparation and submittal of subcontracting reports.
- Recruiting and identifying qualified small business concerns through the sources listed above in Item 4 and including them in bid solicitations.
- Encouraging corporate-wide participation in the overall efforts to increase opportunities for small business concerns.
- Monitoring attainment of small business concern goals.
- Overseeing the maintenance of SCANA's internal database of small business concerns.

7. Describe the efforts the offeror will make to assure that small, small disadvantaged, veteran, service-disabled veteran, HUBZone and women-owned small business concerns will have an equitable opportunity to compete for subcontracts:

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SCANA continues to promote the inclusion of diverse businesses in its operations. Broadly, these efforts include the following activities:

- Maintain a program designed to locate capable small business sources for current and future subcontracting opportunities.
- Review company policies and procedures to ensure and encourage equitable opportunities for small business concerns in subcontracting opportunities.
- Ensure that participation of small business concerns is accurately reported.
- Coordinate inquiries and requests for advice from small business concerns.
- Identify commodities/services suitable for acquisition from small business concerns.
- Facilitate training and orientation sessions for all procurement agents.
- Provide opportunities for suppliers to qualify for a share of the company's current or long-term purchase contracts.
- Maintain and augment a database that identifies small business concerns by product or service to assist in meeting subcontracting goals and to provide additional contracting opportunities for those concerns.
- Help small businesses who need additional assistance in understanding SCANA's business operations and how to do business with SCANA and its subsidiaries.
- Continue to utilize small business concerns where practicable, consistent with the efficient performance of all contracts or subcontracts.

More specifically, SCANA continues to participate in external activities to identify available resources for providing products and services. SCANA's personnel continue to communicate with local and national organizations that house pertinent vendor capabilities such as the System for Awards Management (SAM.gov) and the South Carolina Chamber of Commerce Directory. The company advocates the use of diverse vendors through its active participation in such organizations as the Women's Business Enterprise National Council (WBENC), Edison Electric Institute (EEI) Minority Development Committee, the National Veteran-Owned Business Association (NaVOBA), the National Minority Supplier Development Council (NMSDC) and the NMSDC regional affiliate, the Carolinas-Virginia Minority Supplier Development Council (CVMSDC). Moreover, SCANA is pleased that its Manager of Supplier Strategy continues to serve on the CVMSDC's Board of Directors and its Regional Advisory Committee.

Beyond its involvement in CVMSDC, SCANA's commitment to the inclusion of small business concerns in its operations is demonstrated through its work with industry leaders (Duke Energy, Southern Company, Dominion, Tennessee Valley Authority, Entergy and LG&E) to host joint meetings with diverse suppliers entitled "Energizing Powerful Connections". At the 2017 event, suppliers were given the opportunity to build connections with the sponsoring utilities and speak directly with procurement representatives. The event also consisted of several panel discussions on business growth that covered various sectors of the utility business, i.e., nuclear, transmission and distribution, corporate services, natural gas, etc. Representatives from prime suppliers also met with the small business concerns.

In addition to external efforts, SCANA continues to facilitate vendor symposiums that allow suppliers to meet face-to-face with SCANA procurement personnel responsible for securing commodities and services. SCANA's Strategic Sourcing personnel continue to hold internal meetings focusing on the development of new ideas and strategies to enhance opportunities available to small business concerns. In 2015, SCANA implemented an information technology platform that optimizes procurement personnel's efforts to identify potential diverse suppliers. To date, over 2,300 suppliers have been added to the database.

SCANA continues to support the Mentor Protégé Program, which is designed to provide training and additional procurement access to new companies and more established companies that have potential for growth, thereby creating a path to become essential providers within the supply chain. We partnered with the South Carolina Business Development Center to help prospective vendors develop a five-year business plan, organize internal bookkeeping processes, set up new bookkeeping software, and improve various office policies and procedures.

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Key points contributing to the success of the Supplier Diversity Program include:
- Developing and implementing small business development strategies with internal stakeholders
- Developing new branding and marketing materials
- Enhancing supplier diversity communications and training plans
- Continuing to grow and conduct specialized vendor symposiums
- Engaging with community-based supplier diversity organizations
- Providing supplier education and development to enable success with SCANA as well as in respective markets
- Scheduling supplier introduction meetings with Strategic Sourcing management
- Developing relationships with third party providers who can assist small businesses with developing business plans and strategic alignments for infrastructure growth
- Developing an in-house reverse trade show for suppliers to meet with procurement personnel and learn about future procurement opportunities
- Reactivating the company's Supplier Diversity Advisory Committee to include additional key leadership representation

SCANA's Supplier Diversity Advisory Committee consists of key leadership from each business unit. The membership has proactively set accountability, sustainability and reliability measures throughout the organization that will grow and enhance subcontracting goals and objectives.

In 2018, SCANA will continue hosting, coordinating meetings, and utilizing proactive business processes that seek to provide all suppliers equal access to its procurement opportunities.

8. The offeror assures that the clause entitled "Utilization of Small Business Concerns" will be included in all subcontracts that offer further subcontracting opportunities, and all subcontractors (except small business concerns) who receive subcontracts in excess of $700,000 ($1,500,000 for construction of any public facility) will be required to adopt a plan similar to this plan.

9. The offeror assures that it will (i) cooperate in any studies or surveys as may be required, (ii) submit periodic reports in order to allow the Government to determine the extent of compliance by the offeror with the subcontracting plan, (iii) submission of the Summary Subcontract Report (formerly Standard Form 295) via the Electronic Subcontracting Reporting System (eSRS). Ensure that large business subcontractors with subcontracting plans agree to submit the ISR and SSR.

10. The offeror agrees to maintain the following types of records to demonstrate procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists, and a description of its efforts to locate small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns and award subcontracts to them:
    (a) Source lists, guides, and other data that small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns.

    (b) Organizations contacted in an attempt to locate sources that are small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns.

    (c) Records on each subcontract solicitation resulting in an award of more than $150,000, indicating whether small business concerns were solicited and if not, why not; and, if applicable, the reason award was not made to a small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business concerns.

    (d) Records of outreach efforts to contact trade associations, business development organizations, conferences and trade fairs to locate small, small disadvantaged, HUBZone, veteran, service disabled veteran and women-owned small business sources.

    (e) Records of internal guidance and encouragement provided to buyers through workshops, seminars, training; and monitoring performance to evaluate compliance with the program's requirements.

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SCE&G®
A SCANA COMPANY

VOLUME IV:
PRICE PROPOSAL

Solicitation No. SPE600-16-R-0805

Final Revised Proposal for the Privatization of the Fort Jackson Natural Gas Utility System

Submitted: July 20, 2018

Restriction on Disclosure and Use of Data

This Price Proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal or quotation. If however, a contract is awarded to this offeror or quoter as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction is the entire Past Performance Proposal, including all sheets contained herein.

Prepared for:

DLA Energy - EF
8725 John J. Kingman Road, Suite 3830
Fort Belvoir, Virginia 22060-6222

Prepared by:

South Carolina Electric and Gas Company
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Attachment B: Contract Rate Charge Template
Attachment C: Sample Work Force Management Reports
Attachment D: Price Data Sheets

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Volume IV Price Proposal Glossary	
Term	**Definition**
A&G	Administrative and General
AFB	Air Force Base
BRAC	Base Realignment and Closure
CFR	Code of Federal Regulations
CIAC	Contribution in Aid of Construction
CLIN	Contract Line Item Number
COS	Cost of Service
COTR	Contracting Officer's Representative
CPI-U	Consumer Price Index for All Urban Consumers
CRC	Contract Rate Charge
CSD	Contract Start Date
DBA	Davis Bacon Act
DFAR	Defense Federal Acquisition Regulation Supplement
DLA	Defense Logistics Agency
DoD	Department of Defense
EBS	Environmental Baseline Study
EFV	Excess Flow Valve
EOM	Extraordinary Operations and Maintenance
FAR	Federal Acquisition Regulation
FEMA	Federal Energy Management Administration
FERC	Federal Energy Regulatory Commission
FMV	Fair Market Value
FRP	Final Revised Proposal
FTE	Full-Time-Equivalent
HDPE	High Density Polyethylene
IGCE	Independent Government Cost Estimate
IRS	Internal Revenue Service
ISDC	Initial System Deficiency Correction
LCCA	Life Cycle Cost Analysis
M&S	Materials and Supplies
MAOP	Maximum Allowable Operating Pressure
MCF	Million Cubic Feet
MDPE	Medium Density Polyethylene
MILCON	Military Construction
MOU	Memorandum of Understanding
N.A.	Not Applicable / Not Available
NPV	Net Present Value
NTE	Not to Exceed

O&M	Operations and Maintenance
OMB	Office of Management and Budget
PE	Polyethylene
R&R	Renewals and Replacements
RCN	Replacement Cost New
RCNLD	Replacement Cost New Less Depreciation
RFP	Request for Proposals
ROE	Return on Equity
ROR	Rate of Return
SCA	Service Contract Act
SCE&G	South Carolina Electric & Gas
SOP	Standard Operating Practice
U.S.C.	United States Code
USC	Utility Service Contract
USOA	Uniform System of Accounts
UGP	Unified Gas Projects
WFM	Work Force Management

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Section 1.0

Pricing Schedules

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1.0 Pricing Schedules

Schedule B-1 Regulated Tariff

Fort Jackson, South Carolina, Natural Gas Distribution System					
CLIN	**Supplies/Services**	**Qty**	**Unit**	**Unit Price**	**Total**
0001	Utility Services Charge	600	Months	$12,635	$7,580,850
	The unit price is the Applicable Tariff(s) less the monthly credit as payment for the purchase price plus the recoverable portion of the purchase price. Applicable Tariff / Contract Rate Charge: [a,b] $17,455 Monthly Credit for Purchase Price (PP): $4,820 Number of months: 600 Interest rate: 3.5% [c] Purchase Price: $1,364,700 Recoverable Portion of PP: [d] Not applicable Unit Price: $12,635				
0002	Initial System Deficiency Corrections / Upgrades/ Connection Charges [e]	n.a.	n.a.	n.a.	n.a.
0003	Transition Period Charges [f]	1	1	$357,900	$357,900
0004	Extraordinary Operations and Maintenance (EOM) Charge [g]	600	Months	$7,500	$4,500,000
0005	Deleted [h]	n.a.	n.a.	n.a.	n.a.
0006	Gross Receipts Tax (GRT) and SCPSC Support Tax [i]	600	$s	$0.005227	$144,676
0007	Third-Party Construction Hourly Inspection Charge Rate [j]	n.a.	Hour	$88.81	n.a.
0008	Deleted [k]	n.a.	n.a.	n.a.	n.a.
0009	Deleted [l]	n.a.	n.a.	n.a.	n.a.

[a] The Contract Rate Charge is based on widely accepted and approved regulatory principles that apply to regulated utility service rates. It incorporates a return on and of the South Carolina Electric and Gas Company (SCE&G) investment in the privatized natural gas distribution system plus associated expenses and income taxes. These items collectively represent the cost to serve Fort Jackson, and form the basis for the Contract Rate Charge (see Table 2-7 in the Volume IV Price Proposal for the derivation of the base year Contract Rate Charge). The Contract Rate Charge is based on the monthly charge for the first 12-month period after ownership of the system is transferred to SCE&G, which is projected to occur within nine months after the South Carolina Public Service Commission (SCPSC)

approves the service contract and the regulatory approval contingency is satisfied. The charge will be adjusted at least annually in accordance with the terms and conditions of the contract.

[b] The Contract Rate Charge is a bundled tariff rate that does not separately identify operations and maintenance (O&M) and renewals and replacements (R&R) costs. The Section B.3.1 Price Schedule Data Sheet requirements accordingly do not apply to this proposal.

[c] The bill credit amount is based on the current 3.5 percent nominal interest rate for long-term Treasury notes and bonds as reported in the November 2015 update of Appendix C to the Office of Management and Budget's (OMB) Circular A-94 and a 600-month crediting term.

[d] The Recoverable Portion of the Purchase Price for the natural gas distribution system will be added to the plant-in-service component of the Contract Rate Charge when ownership of the natural gas distribution system is transferred from the Government to South Carolina Electric and Gas Company. Cost recovery will be accommodated under the Contract Rate Charge as a depreciation expense.

[e] The Contract Rate Charge does not provide for separate identification of Initial System Deficiency Correction, Upgrades or Connection Charges. However, estimated project costs are provided for informational purposes only in Price Data Sheet 3, and the projects are described in Section 2.10.3 of the Volume IV Price Proposal.

[f] Transition Period charges will be billed as one-time charges. The transition projects and proposed costs are provided in Price Data Sheet 5 and are described in Section 2.10.4 of the Volume IV Price Proposal.

[g] The initial $7,500 monthly EOM Charge will be applied on a firm-fixed-price basis, without inflation or other adjustments, beginning the first billing month after the ownership transfer and continuing for a 36-month term. The EOM Charge then will be reduced to $5,500 in the fourth ownership year. The charge will be further reduced to $3,500 in the seventh contract year and thereafter will be adjusted annually for the remainder of the 600-month contract term based on 75 percent of the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U).

[h] Deleted.

[i] There will be an annual flow-through of Gross Receipts Tax (GRT) and SCPSC Support Tax, which are applied to gross contract revenues, exclusive of the CLIN 0001 Monthly Credit for Purchase Price, as set forth in Section 2.9 of the Volume IV Price Proposal.

[j] In accordance with Section 11.3.3 of the Solicitation, SCE&G shall have the right to reasonably inspect the third party contractor's construction of system components for which SCE&G will take ownership. The proposed Hourly Inspection Charge Rate shall be indexed to the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers.

[k] Deleted.

[l] Deleted.

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Price Data Sheet 1 - Utility Services Charge

Not applicable.

Price Data Sheet 2 - Renewals and Replacements – 50-Year Plan

Price Data Sheet 2 is provided in Attachment D as a separate Excel spreadsheet.

Price Data Sheet 3 - Initial System Deficiency Corrections / Upgrades/ Connection Charges [a]

Fort Jackson, South Carolina, Natural Gas Distribution System					
Price Data Sheet 3-A: CLIN 0002 Post-Ownership Capitalized Projects [a]					
Project Name [b]	**Interest Rate**	**Project Cost ($)**	**First Full Month Project will be in Service [b]**	**# of Months to Amortize Com-ponent**	**Monthly Charge**
C-1: Replace Steel Pipe	n.a.	3,339,700	60	n.a.	n.a.
C-2: Miscellaneous Station Repairs	n.a.	83,600	24	n.a.	n.a.
C-3: Replace Secondary Meters	n.a.	3,200	60	n.a.	n.a.
Total	n.a.	3,426,500	n.a.	n.a.	n.a.

[a] This Price Data Sheet is provided for information purposes only. Project costs will be recovered by including the installed cost of each project, or phase thereof, in the plant-in-service component of the Contract Rate Charge. The Data Sheet costs should not be added to the initial CLIN 0001 charges for the purposes of life cycle cost analyses (see Section 2.10 and Table 2-16 in the Volume IV Price Proposal).

[b] The month in which an Initial Capital Upgrade will be placed in service is measured from the Contract Start Date. Although the projects will be completed within five years, the associated costs will not be fully reflected in the Contract Rate Charge's rate base until the seventh contract year.

Fort Jackson, South Carolina, Natural Gas Distribution System		
Price Data Sheet 3-B: CLIN 0003 Pre-Ownership Transition Period Projects		
Description	**Unit**	**Amount ($)**
Project T-1: Transition Planning and Management	Project	107,100
Project T-2: Initial Leak Survey	Project	15,700
Project T-3: System Map, Inspection, Inventory & Repair	Project	75,800
Project T-4: Pothole Inspections	Project	135,600
Project T-5: Environmental Reconnaissance Study	Project	23,700
Total		$357,900

Price Data Sheet 4 – Recoverable Portion of the Purchase Price [a]

Fort Jackson, South Carolina, Natural Gas Distribution System				
Item	Interest Rate	Amount	Amortization Period	Monthly Charge
Recoverable Portion of the Purchase Price	0.0%	$1,364,700	600 months	$0.00

[a] There is no defined amortization charge. The Recoverable Portion of the Purchase Price instead is the initial distribution plant-in-service component of the CLIN 0001 Contract Rate Charge. Cost recovery is under the depreciation expense component of the CRC.

Price Data Sheet 5 – Proposed 50-Year Charges to the Government (for South Carolina Electric & Gas Privatization of the Fort Jackson Natural Gas Distribution System)

Price Data Sheet 5 is provided in Table 2-16 and as a separate Attachment D Excel spreadsheet.

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Section 2.0

Cost Proposal, Introduction, Pricing Assumptions, and Schedules

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2.0 Cost Proposal, Introduction, Pricing Assumptions and Schedules

South Carolina Electric & Gas (SCE&G or the Company is pleased to present this Price Proposal to provide privatized natural distribution service for Fort Jackson (hereinafter referred to as Fort Jackson, the Installation or the Post). SCE&G is the Installation's current natural gas utility service provider and its facilities provide the exclusive means to connect the Installation's distribution system to upstream natural gas transmission and supply resources. The Company's certificated service territory includes Fort Jackson.

SCE&G welcomes the opportunity to participate in the Army's privatization program by acquiring ownership of and assuming operation and maintenance responsibility for the Fort Jackson natural gas distribution system and providing a regulated public utility service. The acquired system will be integrated into the operation of SCE&G's existing local natural gas transmission and distribution system. This is possible because the Company's retail service area adjoins the Installation and the acquired system would account for only about a 0.3 percent incremental increase in SCE&G's existing 13,400-mile upstream distribution system. It therefore generally can be absorbed using existing local personnel, equipment and other resources.

SCE&G is a regulated public utility and proposes to provide a privatized service that will be regulated by the South Carolina Public Service Commission (SCPSC) with regard to cost of service, rates, and safety and service standards. Section 58-5-210 of the Code of Law of South Carolina Administrative Regulations gives the SCPSC "… the power and jurisdiction to supervise and regulate the rates and service of every natural gas public utility." Every SCPSC-regulated natural gas utility must file an Annual Report based on the Federal Energy Regulatory Commission's (FERC) Form 2.[1]

The Installation's long-term service and price stability will be uniquely enhanced as a result of the independent regulatory oversight provided by the SCPSC. Price stability is supported by SCE&G's established record of cost-based and stable service rates.

2.1 SUMMARY OF PROPOSED PRIVATIZED SERVICE

SCE&G proposes to treat the Installation as a jurisdictional customer and provide service under SCPSC-authorized tariffs, rules and regulations. The privatized service will be based on a Contract Rate Charge (CRC) and related service charges as shown in Schedule B-1. These charges are collectively referred to as the "Contract Rate". The Contract Rate in general, and the Contract Rate Charge in particular, incorporate all of the components of the cost of service required to provide a privatized service. These costs include operations and maintenance (O&M), depreciation, administrative and general (A&G) and materials and supplies, as well as Federal and State income tax expenses and excise taxes and fees. The Contract Rate Charge also covers financing costs, such as interest, dividends and return on equity.

In sum, the Contract Rate results in service charges that generate revenues similar to and

[1] As an intrastate utility, SCE&G is not required to file a Form 2 annual report with the FERC. Nonetheless, the annual report filed with the SCPSC incorporates the Form 2 format.

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based on SCE&G's system wide cost of service. The proposed tariff rate structure also is consistent with the cost of service methodologies that are used to establish service rates for SCE&G's current service to the Installation and the Company's 386,100 other retail service customers.

2.1.1 Summary of the Privatization Process

The transfer of system ownership and the implementation of an SCPSC-regulated service and Contract Rate will involve the following major activities:

- The contract is awarded and SCE&G will seek regulatory approval of the contract / tariff rate. Substantive Transition Period work commences when the SCPSC approves the contract.
- An initial leak survey will be performed and identified Grade 1 leaks will be repaired, by either by the Government or, if authorized, by SCE&G, to mitigate safety risks while SCE&G performs transition activities. Selected Grade 2 leaks also will be repaired meeting time requirements in Title 49 rules and after consultation with the Contracting Officer.
- Field verification of gas piping and facility location and condition would be conducted.
- The system will be comprehensively mapped. Selected potholing will be performed to confirm the location and assess the condition of underground piping.
- A system inventory will be prepared in consultation with Installation personnel, and will be the basis for the Bill of Sale for the privatized system.
- Ownership of the system will transfer to SCE&G after the facilities are mapped and the Transition Period is completed.

2.1.2 Summary of the Proposal Changes

This Final Revised Proposal (FRP) incorporates the issue clarifications and discussions reflected in the Negotiation Message (NM) #3 and #4 review of SCE&G's original Price Proposal that was submitted June 28, 2016.

1. The system replacement cost new and fair market value / purchase price were updated (see Sections 2.4.1 and 2.5.1) to reflect:
   a. Changing the expected CSD / ownership transfer from 2019 to 2020 (which marginally increased the depreciation component of the RCNLD-based valuation).
   b. Corrected the depreciation adjustment (60.5%) to exclude the steel components of the system. The original proposal inadvertently applied a total system adjustment (72.7%). The change increases the unadjusted RCNLD value by about $480,000.
   c. Revising the 2016 unit prices to estimated 2018 values using more current Handy-Whitman indices (see Table 2-10).
   d. The changes collectively increased the proposed purchase price by about $400,000.

2. The long term inflation rate was updated to reflect the current (2017) OMB Circular A-94 real and nominal discount rates of 2.6 and 0.6 percent respectively. The Section 2.4.2 bill credit,

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however, will continue to be based on the 3.5 percent discount rate that was applied in the 2016 proposal.

3. The rate of return (ROR) component (see Section 2.5.2) of the Contract Rate Charge was updated to reflect:
    a. The recently-enacted Tax Cuts and Job Act's lowering of the corporate income tax rate from 35 to 21%.
    b. The current (2017) FERC Form 1-based capital structure, which reduced of the common equity component from 52.6 to 49.5 percent and increased the debt component to 50.5 percent. The higher debt level was due in large measure to the issuance of about $400 million of additional bonds. All else being equal, a lower equity percentage lowers the ROR.
    c. The current embedded cost of debt, which increased slightly from 5.2 to 5.4 percent.
    d. The changes collectively reduced the pre-tax ROR component of the CRC from 11.2 to 9.50% percent.

4. The above changes collectively reduced the pre-tax ROR from 11.2 to 9.5 percent

5. The Section 2.3 meter reading charge was deleted (see NM3 response to Exception 5, *Meter Reading*).

6. The cost of service basis and allocations in the Contract Rate Charge were updated to reflect 2017 FERC Form 1 and Form 2-based Annual Report values (see Section 2.5.3).

7. The Section 2.7 discussion of O&M costs was expanded to show a full-time-equivalent (FTE) estimate and address relative and absolute increases in O&M revenues generated by the CRC as the ISDCs are fully rate based.

8. The Section 2.6 EOM Charge was reassessed to reflect NM discussions and updated Annual Report values and cost of service allocations. The $8,000 base year charge was reduced to $7,500 for seven years (and to $3,500 in the seventh year) based on:
    a. Higher base year O&M revenue generated by the CRC;
    b. Increasing the system-wide O&M per mile to $1,850 per mile based on the average for Annual Report years 2015 through 2017 (versus $1,700 per mile based on the 2015 Annual Report);
    c. Reducing the complexity adjustment from 75 to 65 percent; and
    d. Reflecting possible administrative costs (such as preparing certified payroll reports to the Department of Labor) in the event the Davis-Bacon Act is applicable to the privatized service.

9. The cost of service allocations of system general, intangible and common plant as well as O&M and G&A expenses similarly were updated to reflect 2017 annual report values (see Sections 2.5.1 and 2.5.3). Combined with the above-noted ROR updates, the changes lowered the annualized CRC rate from 16.8 to 15.3 percent of the privatized system plant value.

10. The Project C-1 (steel pipe replacements) construction term was reduced from 10 to 5 years after the Contract Start Date (see Section 2.5.3.1). The project cost accordingly will be

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phased into the plant-in-service component of the Contract Rate Charge (CRC) over a six-year term beginning in Year 2 (i.e., work completed in Year 1 will be reflected in the CRC rate base in Year 2). As with the original proposal, the work would be completed within the designated (now five year) term but an extra year is needed to finalize construction cost records and fully enter the values into SCE&G's real property system. An additional year is to reflect the costs in the annual recalculation of the CRC.

11. In a related matter, the 5.0 percent excess capacity adjustment was deleted from the Project C-1 cost. This increased the projected base year cost by $90,600.

12. Scope of the Project T-4 system potholing was expanded to increase the number of main and service line inspections from 112 to 173. The change increases the project cost by about $51,000.

13. The Renewals and Replacements (R&R) projections were revised to reflect the potential need to replace the 70,000 LF of 1983-vintage PE piping during the 50-year contract term (see Section 2.6). The R&R percentages were increased from 0.25% in all years to:

    a. 0.50% for the first 30 years (15,000 LF);

    b. 4.50% for the next 10 years (44,700 LF); and

    c. 1.25% for the remaining 10 years (12,400 LF).

14. Section 4.0, Cost Risk Assessment, was expanded to include a discussion of estimated versus actual (installed) costs based on SCE&G's experience with Charleston AFB's privatized gas system. As shown therein, actual costs were on average 21 percent less than estimated costs.

15. The Price Data Sheets were combined into a single Excel file. The file also contains the Contract Rate Charge template and 2017 CRC price, as well as the 50-year CRC projections that originally were provided in Attachment A.

2.2 BENEFITS OF SCE&G SERVICE

Table 2-1 summarizes the benefits Fort Jackson will receive from SCE&G's privatized service. Treating the Installation as a jurisdictional customer has particular meaning for a public utility. The exercise of its regulatory obligations means SCE&G must give priority to, and devote system resources for, the benefit of its jurisdictional retail customers.

Service under the Contract Rate and independent regulation by the SCPSC has an additional benefit to Fort Jackson in terms of reduced contract administration and oversight costs that might otherwise be incurred in managing a Government-owned system or a privatized service provided by an unregulated entity. The cost to provide this oversight is included as a bundled component of the cost of service basis for the proposed service rates.

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Table 2-1. Unique Benefits of SCE&G Regulated Service

Regulatory Benefits:
- ✓ Ability to implement service - no known regulatory barriers
- ✓ Independent service obligation - service obligation independent from the contract
- ✓ Independent service oversight - with sustained resources to exercise oversight functions
- ✓ Ability to compel performance - must comply with regulatory orders of the SCPSC
- ✓ Jurisdictional service within the Installation - availability of all Company resources
- ✓ Reasonable rates - utility service rates are cost based, reasonable and non-discriminatory

Service Benefits:
- ✓ Core business - owning, operating and maintaining a gas distribution system
- ✓ System upgrades - to meet regulatory, safety, SCE&G and industry standards
- ✓ Detailed service specifications - automatically applied to the Post like any other customer
- ✓ Tailored service standards - geared to local soil, weather and other conditions
- ✓ Service presence – established South Carolina yard, crew and other resources
- ✓ Specialized equipment and practices - including hot tap equipment [a]

Contract Administrative Benefits:
- ✓ Service charge methodology - approved by the SCPSC
- ✓ Service charge concept - consistent with overall ratemaking concept in setting prices
- ✓ Cost controls - use of standard stock equipment and record of stable prices

Community & General Benefits:
- ✓ Established, permanent area presence
- ✓ Installation seen as important to the local economy

[a] Only large utilities such as SCE&G maintain local equipment that can tap into a larger-diameter pressurized main. This enables the installation of new service and other connections without the need for sometimes prolonged outages as a main otherwise would have to be valved-off and purged. Gas construction crews working within Fort Jackson periodically ask SCE&G to provide its equipment and expertise when taping into larger-diameter pipes.

2.3 GENERAL PRICING ASSUMPTIONS

SCE&G is a regulated public utility that is subject to the economic, safety and service jurisdiction of the SCPSC. SCE&G proposes to include the Installation as a jurisdictional customer and provide a regulated service in much the same manner as for its 386,100 other retail natural gas service customers. This will include the application of existing detailed standard operational and administrative service methods and practices. General pricing assumptions incorporated into this Price Proposal are listed in Table 2-2.

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Table 2-2. Pricing Assumptions

1. Assumption: System Exclusions

- **Paragraph / Page / CLIN:** General
- **Assumption:**

  The privatization system will not include previously abandoned natural gas lines (i.e., mains or service lines not pressurized or connected to active natural gas service loads on the CSD). See the related Volume III exception.
- **Rationale & Effect:**

  See above. Proposed costs associated with previously abandoned lines are not reflected in the Contract Rate.
- **NM Disposition:**

  No further response required.

2. Assumption: System Scope

- **Paragraph / Page / CLIN:** General
- **Assumption:**

  The general scope, composition and condition of the utility system are generally as presented in the Attachment JA2 of the Request for Proposals (RFP) and specifically in the Table 3 system inventory. The scope of the privatized natural gas distribution system includes the exterior distribution system up to the designated points of demarcation. Per the Table 3 inventory, the system generally contains:
  - 116,700 linear feet (LF) of steel pipe (22.1 miles);
  - 99,300 LF of polyethylene pipe (18.8 miles);
  - 376 regulators;
  - 27 pressure reducing stations;
  - 423 valves; and
  - 38 secondary meters.
- **Rationale & Effect:**

  Complies with the RFP instruction to base proposals primarily on the Attachment JA2 inventory. The summarization assures SCE&G and Government agreement on the general scope of the system. It is understood that the final inventory will be determined during the Transition Period.
- **NM Disposition:**

  Deleted (the above-noted quantities are included in the Section 2.5.2 due diligence discussion).

3. Assumption: System Exclusions – Propane Systems

- **Paragraph / Page / CLIN:** General
- **Assumption:**

  Per the Attachment JA2 system description, the privatized natural gas system will not include:
  - The liquid propane / air backup system; and
  - Standby propane system serving the Government-owned / contractor-operated laundry.
- **Rationale & Effect:**

  No specific price impact
- **NM Disposition:**

  No further response required.

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Table 2-2. Pricing Assumptions
4. Assumption: System Exclusions – Central Propane Plant • **Paragraph / Page / CLIN:** General • **Assumption:** The Government will not inject propane into the privatized system. • **Rationale & Effect:** The injection of a propane-air mixture into a distribution system poses such unacceptable safety and reliability risks that SCE&G discontinued this practice on its upstream distribution system. The Attachment JA2 system description stated that the Installation uses "a backup (propane) gas with sufficient capacity to operate the entire Installation (except for the central energy plants). When the backup system is in operation all gas supplied by the local utility ceases." (emphasis added) Notwithstanding this statement, the propane air system has not operated for the past few years. The Post as a result incurred significant penalties over the past two years due to its inability to operate the propane plant and therefore curtail natural gas usage as required in its Interruptible Gas Contract with SCE&G. The plant is not expected to be available to provide backup service for interruptible natural gas commodity deliveries. To the contrary, Fort Jackson currently is in discussions with SCE&G to switch from interruptible to firm delivery service. There is no apparent price impact. • **NM Disposition:** No further response required.
5. Assumption: System Operator • **Paragraph / Page / CLIN:** General • **Assumption:** The system will be owned and operated by the Government until such time as the bill of sale is executed. The Government accordingly will be deemed the "system operator" of all gas distribution facilities until such time as SCE&G acquires ownership and related operational responsibilities on the Contract Start Date. As is standard within the regulated natural gas utility industry, SCE&G cannot be deemed the "system operator" of distribution facilities that are not owned and operated by the Company. This is because of the unique regulatory requirements and liabilities associated with a system operator designation. • **Rationale & Effect:** Obviates the need to determine the extent of liability and related cost exposure associated with a system operator designation for facilities not owned and operated by SCE&G prior to the CSD. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions

6. Assumption: Patent and Latent Conditions

- **Paragraph / Page / CLIN**: General
- **Assumption:** General

  Although the information furnished by the Government is believed reliable, SCE&G did not conduct a comprehensive evaluation of the system to assess the accuracy or completeness of the inventory data or the characterizations (in terms of scope, age, condition, etc.) of the system descriptions. Such a comprehensive inspection will be performed as part of an expensed transition project. Items that are known or reasonably should be known ("patent") are addressed in this proposal. Items that are not reasonably capable of being known at the time of proposal submission ("latent") and will be handled in accordance with Section H.12, *Differing Site Conditions*, of the RFP.

  With the exception of the deficiencies identified and discussed in Section 2.10 and lacking specific information to the contrary, SCE&G assumes that the distribution system was installed in accordance with generally recognized industry standards. These include comprehensive and consistent compliance with the Department of Transportation (DOT) pipeline safety regulations codified in Part 192 of Title 49 of the Code of Federal Regulations (CFR). This assumption applies particularly to the gas distribution piping that will not be replaced as an Initial System Deficiency Correction, which requires that the "Contractor shall be responsible for all required SDCs (System Deficiency Corrections), upgrades, and renewals and replacements necessary to maintain and operate the utility system(s) in a safe, reliable condition, such that the system is complete and usable, and to meet the requirements of this contract."

  For other than the possible lack of tracer wire and/or warning tape or possible instances where small sections of the system may contain other than high or medium density polyethylene pipe, SCE&G is not aware of specific instances if or where the underground pipe was not properly installed (e.g., with proper PE pipe fusions and bed preparations).

  Notwithstanding the above, SCE&G acknowledges that (a) the Government may not have been subject to the same standards as would a commercial entity (b) the Government does not guarantee compliance and (c) the system will be sold in an "as-is, where-is" condition.

- **Rationale & Effect:**

  Based on information in the Technical Library and the site inspections results, SCE&G is aware that the system is not in compliance with many record keeping and operational requirements.

  The proposed scope of the Section 2.10 Initial System Deficiency Corrections / Upgrades / Connections and Renewals and Replacements Plan addresses observed deficiencies for aboveground equipment and an assumed need to replace portions of the underground system (i.e., all steel pipe). Additional, post-award deficiencies are not expected to be material.

- **NM Disposition:**

  No further response required.

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Table 2-2. Pricing Assumptions
7. Assumption: Tariff Service • **Paragraph / Page / CLIN:** Schedule B-1 • **Assumption:** SCE&G's status as a regulated utility providing a regulated service qualifies for service under the Schedule B-1 pricing structure rather than the Schedule B-2 structure that applies to service that is not subject to rate regulation by an independent regulatory authority. • **Rationale & Effect:** Contract Rate projections are tariff based. • **NM Disposition:** No further response required.
8. Assumption: SCPSC Regulation • **Paragraph / Page / CLIN:** General • **Assumption:** The Government will, as matter of comity, accept the jurisdiction of the SCPSC and comply with the SCPSC's regulations, practices and decisions, in accordance with DFAR 241.201, *Policy*. • **Rationale & Effect:** No specific price impact. • **NM Disposition:** No further response required.
9. Assumption: Regulatory Compliance • **Paragraph / Page / CLIN:** General • **Assumption:** SCE&G will provide the privatized service in accordance with its standard operating practices, as well as the requirements of the RFP, which include compliance with applicable SCPSC and Title 49 requirements. Among other things, Title 49 requires monitoring atmospheric corrosion, conducting annual valve inspections, establishing system maximum allowable operating pressures (MAOPs), monitoring cathodic protection levels, properly trained pipeline maintenance personnel, maintaining system records and accurately and comprehensively mapping a gas distribution system. • **Rationale & Effect:** The scope of proposed upgrade projects and the magnitude of the proposed EOM Charge incorporate compliance with relevant regulatory requirements. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
10. Assumption: Fair Market Value Purchase Price & Ownership Year • **Paragraph / Page / CLIN:** Section 2.4.1 • **Assumption:** The system will be purchased for its estimated fair market value (FMV). The system valuation assumed that ownership will transfer to SCE&G during calendar year 2019. That year was used to calculate the applicable depreciation and other valuation adjustments. • **Rationale & Effect:** The depreciation component of the FMV is based in part on the age of system facilities on the CSD. A later transfer date would increase both the average age and the related depreciation adjustment. The converse would apply for an earlier ownership transfer. • **NM Disposition:** No further response required.
11. Assumption: Fair Market Value Purchase Price / No CIAC • **Paragraph / Page / CLIN:** Section 2.4.1 • **Assumption:** The derivation of the fair market value / purchase price was based on the replacement-cost-new-less-depreciation (RCNLD) valuation method. • **Rationale & Effect:** Since the system will be purchased for its FMV, there is no related CIAC tax liability. • **NM Disposition:** No further response required.
12. Assumption: System Age • **Paragraph / Page / CLIN:** Section 2.4.1 • **Assumption:** The weighted average age of the system on the Contract Start Date is estimated at 41 years. The estimated age excluding the steel pipe is 24 years. • **Rationale & Effect:** Provides an indication of the relative age of the system. There is no specific price impact. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
13. <u>Assumption</u>: Steel Pipe Has No Value • **Paragraph / Page / CLIN:** Section 2.4.1 • **Assumption:** Since all 1965-vintage steel pipe will be replaced within five years of the CSD, these facilities have no market value and therefore are excluded from the replacement-cost-new-less-depreciation (RCNLD) based valuation. • **Rationale & Effect:** Such facilities will be fully depreciated by the CSD. They also are properly viewed as having no (or a *de minimus*) useful life. This and other adjustments which reduce the FMV-based system purchase price benefit the Government by reducing the estimated life cycle cost of the privatized service (see Section 2.4.3). • **NM Disposition:** No further response required.
14. <u>Assumption</u>: Excess Capacity and System Rationalization Adjustment • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.3.1 • **Assumption:** The Project C-1 ISDC cost was reduced by 5.0% to account for the system's apparent excess capacity. This is in addition to related assumptions that (a) replacement mains will have an average of seven valves per mile and (b) as-needed 10" pipe replacements will be with 8" diameter pipe. • **Rationale & Effect:** In view of the historical loads and current operating pressures, it appears that the loads could be adequately served from smaller diameter (i.e., 4 to 6-inch) pipe instead of the inventoried 6 and 8" mains, especially if the system was Title 49 complaint. By way of comparison, less than 1.0% of the SCE&G system has mains of 8" or greater, while 13.2% of the Fort Jackson system consists of 8" and 10" mains. The system also seems to have more pressure reducing stations than would a comparably-sized SCE&G system. This adjustment reduces the FMV-based system purchase price and benefits the Government by reducing the estimated LCC of the privatized service. To clarify, the adjustment will only be used to determine the system's fair market value. It is not be applied to ISDC or R&R projections. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
15. <u>Assumption</u>: Standard Stock Replacements • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.3 • **Assumption:** The unit prices used to estimate the system RCN, Initial System Deficiency Corrections (ISDCs) and renewals and replacements (R&R) are based on replacements with SCE&G standard-stock materials. For example, SCE&G typically uses 2, 4 and 6" pipe for mains, so 2" piping generally would be used as replacements for the existing 3.0" and 5.0" mains included in the Table 3 system inventory. • **Rationale & Effect:** Unit prices were based on standard-stock equipment and SCE&G installation practices, which comply with applicable Title 49 and other pipeline safety requirements. Related economies of scale will tend to reduce the privatized service cost. All replacements will be appropriate for the related loads and other service requirements. The assumption explains the basis for RCN, up-grade and R&R cost estimates. • **NM Disposition:** No further response required.
16. <u>Assumption</u>: RCN, ISDC and R&R Unit Price Estimates • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.3 • **Assumption:** The unit prices used to estimate the system RCN, ISDC and R&R pipe and other facility replacements are based on SCE&G's current labor hour, material, overhead and other costs as reflected in the Company's Work Force Management (WFM) system. They thus reflect costs for similar work performed on the upstream system and consistency with standard installation practices. Incorporated into the WFM are the following overhead loadings: - 5.0% materials and taxes (applied to material costs to cover material procurement costs); - 47.0% payroll overhead (applied to direct labor for payroll taxes and fringe benefits); - 30.0% transport overhead (applied to direct labor for transit to a work site); - 10.0% administrative and engineering (applied to total, loaded labor and material costs for A&G support and allowance for funds used during construction (AFUDC)). • **Rationale & Effect:** Unit prices were based on standard SCE&G installation practices and current costs. Among other things, this includes installation inspections and pressure testing. Overhead loadings may change from time-to-time, but the changes do not tend to be substantial, especially in the near term. A Section 4.0 sensitivity assessment addresses possible unit cost increases by assuming an across-the-board 10% increase in capitalized ISDC and R&R costs. The assumption explains the basis for RCN and upgrade cost estimates. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
17. Assumption: Miscellaneous Equipment Costs • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1 • **Assumption:** The Work Force Management system generated unit prices include equipment components that are common to most installation projects. For example, unit prices for mains include costs for tracer wire, compliance inspections and valves. Prices for service lines include tracer wire, valves, risers, and compliance inspections. All pipe installations include pressure testing. There nonetheless may be some unspecified equipment items that are not reflected in the WFM estimates. A 5.0% adder was thus applied to unit and/or project costs to account for miscellaneous equipment items. • **Rationale & Effect:** The 5.0% miscellaneous equipment adjustment is reflected in RCN, ISDC and R&R price estimates • **NM Disposition:** No further response required.
18. Assumption: Unit Prices, Mains • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1 and Table 2-10 • **Assumption:** The blended unit-price based RCN and upgrade project estimated costs assume 5% pavement and 95% established grade installation. The blended unit cost for mains assumes the following mix of installation methods: - 71.25% established grade with excavation installation; - 23.75% established grade with boring installation; and - 5.0% pavement with boring installation; • **Rationale & Effect:** Recognizes that installation costs vary for pavement and established grade work, as well as for boring and excavation installation methods. • **NM Disposition:** No further response required.
19. Assumption: Unit Prices, Valves • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1 • **Assumption:** The Table 3 system inventory identifies 423 valves, but does not indicate whether they are main or service valves and whether they were installed on steel or PE pipe. Assuming that the system contain about 33 miles of main, this equates to an average of 13 valves per mile of main. That number is consistent with averages at other Government-owned gas systems. It was further assumed that all valves installed in 1965 are part of the steel system and the rest are in PE pipe (that is, 193 steel and 230 PE valves). • **Rationale & Effect:** No specific price impact. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
20. Assumption: Unit Prices, Services • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1 • **Assumption:** The unit price per LF of service line reflects installed costs for the pipe as well as for all related ancillary equipment, such as valves, risers, anodes, regulators, connections and tracer wires. • **Rationale & Effect:** If a service line needs replacement, it is more economical and less mission disruptive to replace an entire service connection at one time, rather than to replace the components at different times. This approach requires that SCE&G develop a unit price for a typical, entire service connection. That also would include an average length per service line. • **NM Disposition:** No further response required.
21. Assumption: Main Valves • **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1 • **Assumption:** Unit main prices include an average of two valves per 1,500 LF of main (or an average of seven valves per mile). Valve unit costs and RCN values according are not provided, nor are replacement requirements and related costs accordingly are not separately identified. • **Rationale & Effect:** Installation work generally will be in accordance with standard SCE&G practices. Two to three valves per mile of main is fairly typical for SCE&G and other regulated gas utility systems operating in suburban or business district settings. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions

22. Assumption: Number and Length of Services

- **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1
- **Assumption:**

  The average service length is 107 feet.
- **Rationale & Effect:**

  The Attachment JA2 system inventory was in terms of total piping, and did not separately identify mains and service lines. An approximation of the number and average length of gas service connections was thus estimated based on:

  - 376 gas service connections (per the Table 3 number of regulators);
  - All inventories pipe less than 1" assumed as service;
  - 30% of pipe 1.00 to 2.00" assumed as service; and
  - All other pipe assumed as main lines.

  There accordingly is an estimated 40,200 LF of service line and a related assumed 107 foot average length. This is the same as the 107 foot average for the upstream SCE&G system. The average is incorporated into the above-discussed linear foot basis for the unit service price. The linear extent of service lines is established in large part by the system characteristics in Attachment JA2. So if the number of service connections is changed, all else being equal so too would the average service length and hence the service line unit cost. Any such unit cost change is not expected to be material because the installed cost of non-pipe components is not a substantial part of the total cost to install a service line.
- **NM Disposition:**

  No further response required.

23. Assumption: Service Valves and Regulators

- **Paragraph / Page / CLIN:** Sections 2.4.1 and 2.10.1
- **Assumption:**

  SCE&G anticipates that some of the service regulators will need replacement. Regulators replaced as part of service line replacements are addressed under Project C-1.
- **Rationale & Effect:**

  Regulators and other ancillary equipment is included in the unit cost for a service replacement.
- **NM Disposition:**

  No further response required.

24. Assumption: System Operating Pressure

- **Paragraph / Page / CLIN: CLIN 0008,** Section 2.10.2
- **Assumption:**

  The existing system has operates at two pressures: a so-called higher pressure of 75 psig and a lower pressure of 25 psig. Current and likely prospective loads can be adequately served with a properly designed system operated at the SCE&G (and gas industry) standard of 60 psig.
- **Rationale & Effect:**

  There is no specific price impact. Not that this is consistent with the de facto 60 psig maximum allowable operating pressure.
- **NM Disposition:**

  No further response required. However, pressure testing of existing PE piping has been deleted as a separately-identified CLIN.

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Table 2-2. Pricing Assumptions

25. Assumption: Proper Installation for 2016 Pipe

- **Paragraph / Page / CLIN:** Section 2.10.4
- **Assumption:**

  The revised system inventory indicated that about 2.5 miles of PE pipe and perhaps six PE services were installed in 2016. It is assumed that the installations were Title-49 compliant and that the relevant documentation can be obtained from the Government or the installation contractor.

  An actual maximum allowable operating pressure (MAOP) will be established for those portions of the privatized system with extant Title 49-compliant documentation that the piping was previously pressure tested and that the testing compiled with DOT code requirements.
- **Rationale & Effect:**

  There is no specific price impact.
- **NM Disposition:**

  No further response required.

26. Assumption: Pressure Testing Uprating

- **Paragraph / Page / CLIN: CLIN 0008,** Section 2.10.4
- **Assumption:**

  The cost of service basis for the Contract Rate does not include pressure testing, by uprating or other means, of acquired (existing) distribution facilities. Post-conveyance pressure testing may, however, be a least-cost alternative to line replacements otherwise required to accommodate new or modified loads. Any such post-conveyance pressure testing would be performed only if the project scope and testing price is authorized by the Government. Unit main and service pipe prices for ISDC projects and R&R include pressure testing to 100 psig.

  All existing steel pipe will be replaced in the short term so there will be no need for pressure testing to establish a higher MAOP to accommodate potential load growth, or for any other reason.
- **Rationale & Effect:**

  There is no specific price impact.
- **NM Disposition:**

  No further response required. However, pressure testing of existing PE piping has been deleted as a separately-identified CLIN.

27. Assumption: Transition Period Leak Repairs

- **Paragraph / Page / CLIN:** Section 2.10.5
- **Assumption:**

  There was insufficient information in the Technical Library and from pre-proposal site inspections to develop a realistic prediction of the number of possible Grade 1 and 2 leaks and the related repair cost for each leak. As the owner of the system prior to the CSD, the Government will be financially responsible for Transition Period leak repairs. It is uncertain if SCE&G or another contractor would be tasked to make needed repairs. If the Government determines that SCE&G will effectuate the repairs, the costs will be invoiced on a cost reimbursable or fixed price basis as authorized by the Contracting Officer prior to the initiation of leak repairs. Project costs accordingly are not included in the 50-year price projections.
- **Rationale & Effect:**

  There is no specific price impact.
- **NM Disposition:**

  No further response required.

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Table 2-2. Pricing Assumptions
28. Assumption: Initial CRC Plant-in-Service Value • **Paragraph / Page / CLIN:** Section 2.5.1 • **Assumption:** The plant-in-service component of the Contract Rate Charge (CRC) initially will be based on the system FMV purchase price. The plant-in-service component thereafter will be adjusted to reflect the installed cost of ISDCs and future capital upgrades and replacements, and will be reduced as replaced equipment is taken out of service. • **Rationale & Effect:** Contract Rate Charge and other elements of the Contract Rate are tariff based. • **NM Disposition:** No further response required.
29. Assumption: CRC Adjustments • **Paragraph / Page / CLIN:** Section 2.5.5 • **Assumption:** The Contract Rate Charge methodology provides for annual recalculations based, among other things, on changes in SCE&G's FERC Form 2-based cost of service filings with the SCPSC. The contract and rate methodology included therein will be filed with the SCPSC. As with any rate subject to the jurisdiction of the SCPSC, the rate formula itself or any portion of the formula could be re-examined in the future upon the request of the Government, SCE&G or the SCPSC. The Contract Rate will also be subject to regulatory oversight and review. See the related Volume III exception. • **Rationale & Effect:** Explains the mechanics of CRC price adjustments. There is no specific price impact. • **NM Disposition:** No further response required.
30. Assumption: Treatment of Capitalized versus Expensed Costs • **Paragraph / Page / CLIN:** Section 2.10 • **Assumption:** SCE&G plans to implement a number of upgrades to the privatized system in order to correct safety hazards, address code violations, enhance reliability and generally conform the privatized system to SCE&G and industry standards. The estimated installed cost for the capital upgrades identified in Section 2.10.3 will be incrementally added to the projected plant-in-service component of the CRC. The Section 2.10.3 expensed upgrade and repair costs as well as the Section 2.10.4 expensed transition costs are not included in the cost of service basis for the CRC. • **Rationale & Effect:** Only capitalized items are reflected in the R&R and CRC projections. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions

31. Assumption: Levelized Renewals and Replacements (R&R)

- **Paragraph / Page / CLIN:** Section 2.11
- **Assumption:**

  The Attachment JA2 inventory indicates approximately 70,000 linear feet of PE pipe installed in 1983. Although the in-service life for PE pipe can last 70 or more years, there possibly will be a need for PE pipe replacements. The R&R percentages accordingly are as follows:

  - 0.50% for the first 30 years (15,000 LF);
  - 4.50% for the next 10 years (44,700 LF); and
  - 1.25% for the remaining 10 years (12,400 LF).

  The nature of a levelized rate is that replacements in any given year may be higher or lower, but that they would average the assumed percentages over the long term.
- **Rationale & Effect:**

  The assumed R&R rate is equivalent to replacing 71,900 of PE pipe during the 50-year contract term. The replacement rate is in addition to replacing all steel pipe within five years.
- **NM Disposition:**

  No further response required.

32. Assumption: Discretion for Upgrades or Replacements

- **Paragraph / Page / CLIN:** Section 2.11
- **Assumption:**

  SCE&G's proposal is predicated on applying its sound, standard practices to keep all equipment in "working order." There nonetheless may be instances where the condition of facilities will require replacement even if proper O&M was applied.

  Using steel pipe as an example, there was no evidence of proper and continuous cathodic protection, the absence of which could cause steel pipe to corrode. Once a pipe is corroded the process cannot be reversed no matter how much maintenance is applied.

  ISDC Project C-1 is to replace all steel pipe within five years. The scheduling of the specific replacements, however, will be coordinated with the Installation. SCE&G would have discretion to partially prioritize the replacement of steel pipe (if any) found to be severely corroded and thus requiring more accelerated replacement.

  SCE&G will have some discretion regarding the implementation of capital upgrades and the installation of capital replacements required for health, safety, and reliability reasons in accordance with the Company's standard service practices, and in compliance with the Installation's construction standards. Construction also generally will be in accordance with applicable Federal, state, local and SCE&G standards and not Government specifications. SCE&G will recommend applicable conforming standards for inclusion in the Installation Design Guide.
- **Rationale & Effect:**

  Unit prices (e.g., for 2" PE mains) used to develop Capital Upgrade projects and other estimated costs were based on standard SCE&G installation practices, which comply with applicable Title 49 and other pipeline safety requirements. There is no specific price impact.
- **NM Disposition:**

  No further response required.

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Table 2-2. Pricing Assumptions
33. Assumption: Gross Receipts Tax and SCPSC Fee • **Paragraph / Page / CLIN:** CLIN 0006 and Section 2.9 • **Assumption:** South Carolina, as well as county and municipal governments, imposes a gross receipts tax (GRT) on persons engaged in business in the state. There also is a companion South Carolina PSC tax which is assessed on SCE&G's gross gas service revenues. The GRT and SCPSC tax are embedded in the cost of service basis for the Company's Rate 35 Transportation and Standby Service and other standard tariff rates. They will be applied on a pass-through basis under a separate CLIN charge. • **Rationale & Effect:** The current $0.00527 combined GRT and SCPSC tax will be applied to gross Contract Rate revenues, exclusive of the purchase price bill credit. • **NM Disposition:** No further response required.
34. Assumption: Rate of Return • **Paragraph / Page / CLIN:** Section 2.5.2 • **Assumption:** The rate of return on common equity (ROE) component of the Contract Rate Charge will be fixed at 10.25% as shown in Table 2-6 and the CRC Template until modified by order of the SCPSC. • **Rationale & Effect:** A 2012 SCPSC rate proceeding is the basis for the 10.25% ROE. There is no specific price impact. • **NM Disposition:** No further response required.
35. Assumption: Federal Income Taxes • **Paragraph / Page / CLIN:** Sections 2.5.2 and 2.12 • **Assumption:** The Federal income component of the CRC is calculated based on the tax factors presented in Table 2-6 calculation of the rate of return. It is the 3.055% difference between the pre-tax ROR with Federal taxes (9.499%) and the pre-tax ROR without Federal taxes (8.078%). • **Rationale & Effect:** A Federal tax offset to privatized service life cycle cost estimates is consistent with privatization policy. The Section 2.13 50-year price projections separately identify the tax component. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
36. Assumption: DBA Exemption • **Paragraph / Page / CLIN:** General • **Assumption:** Section C.5.2.9 provides that, if applicable, SCE&G shall comply with the Davis Bacon Act (DBA). SCE&G believes the DBA does not apply to the proposed service, just as it does not apply to service to other Federal sector customers. Although the privatized system may be physically configured to only serve Fort Jackson, it will become a part of the utility system that serves all of SCE&G's retail customers. SCE&G nonetheless is ultimately responsible for determining the applicability of DBA requirements to its activities and recognizes that a DBA-related equitable adjustment will not be allowed by the Government. • **Rationale & Effect:** Costs otherwise associated with the DBA compliance are not reflected in proposed prices. • **NM Disposition:** No further response required.
37. Assumption: Applicable FAR Provisions • **Paragraph / Page / CLIN:** General • **Assumption:** SCE&G is a regulated public utility that proposes to provide a regulated privatized service. The Utility Service Contract (USC) will be submitted to the SCPSC the service will be regulated by the SCPSC. Service prices, therefore, will be set by law or regulation. As such, the following Federal Acquisition Regulation (FAR) clauses will not apply: - FAR 52.222-41, Service Contract Act of 1965; - FAR 52.222-44, Fair Labor Standards Act and Service Contract – Price Adjustment; - FAR 52.230-2, Cost Accounting Practices; - FAR 52.230-3, Disclosure and Consistency of Cost Accounting Standards; - FAR 52.230-6, Administration of Cost Accounting Standards; - FAR 52.244-5, Competition in Subcontracting; and - DFAR 252.231-7000, Supplemental Cost Principles • **Rationale & Effect:** Costs otherwise associated with the above FAR clauses are not reflected in proposed prices. • **NM Disposition:** No further response required.
38. Assumption: Legal Description • **Paragraph / Page / CLIN**: General • **Assumption:** General SCE&G assumes no responsibility for the legal description provided or for matters pertaining to legal or title considerations. Title to the property is assumed to be good and marketable, unless otherwise stated. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
39. Assumption: Liens And Encumbrances • **Paragraph / Page / CLIN:** General • **Assumption:** The Installation's distribution system, described and considered in this proposal, will be free and clear of any or all liens or encumbrances, unless otherwise stated. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.
40. Assumption: No Encroachment • **Paragraph / Page / CLIN:** General • **Assumption:** The Installation's distribution system described and considered in this proposal is confined within the boundaries or property lines of the Installation, and there is no encroachment or trespass, unless noted in this proposal. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.
41. Assumption: Residual Value • **Paragraph / Page / CLIN:** Section 2.11 • **Assumption:** The residual value of the system at the end of the 50-year contract term can be estimated based on the undepreciated value of the distribution system. This can be derived, for the 50th and any other contract year, from the Attachment B CRC worksheets by subtracting the projected accumulated distribution depreciation from the corresponding distribution plant investment value. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.
42. Assumption: Nominal Dollar Prices • **Paragraph / Page / CLIN:** Section 2.14 • **Assumption:** Prices are presented in nominal (inflation adjusted) terms to facilitate a proper life cycle cost evaluation of SCE&G's proposed privatized service. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.

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Table 2-2. Pricing Assumptions
43. Assumption: Long Term Inflation Rate • **Paragraph / Page / CLIN:** General • **Assumption:** The 1.988 percent long-term inflation rate used to develop nominal, 50-year price projections is derived from the December 2017 update of Appendix C of Office of Management and Budget Circular A-94. It is derived from real and nominal interest rates for long-term (30 year) Treasury notes and bonds.[2] • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.
44. Assumption: Firming of ISDCs and R&R • **Paragraph / Page / CLIN:** General • **Assumption:** References to installed cost rate basing or installed cost adjustments to the plant-in-service component of the Contract Rate Charge are for consistency with the terminology used in SCPSC rate proceedings and other filings related to the cost of service basis for SCE&G service rates. Notwithstanding such installed cost references, it is acknowledged that ISDC project costs and projected recurring system renewals and replacement costs are estimates only that will, among other things, be used by the Government to assess the price realism of SCE&G's privatization proposal. SCE&G further acknowledges the Government's determination that installed-cost rate basing is a prohibited cost plus percentage of cost contracting method. Cost estimates provided for initial and future System Deficiency Corrections, Upgrades, Connections and Renewals and Replacements will be firmed to fixed prices for contracting officer review and approval prior to project initiation. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** The Government in NM4 did not explicitly accept the assumption, but seemed to do so implicitly by indicating that the FRP should "… provide the maximum, mean and minimum variation between the initial estimate and the installed cost at Charleston AFB privatization, to help understand the magnitude of price change between the cost estimate based on the Unified Gas Projects (replaced by the Work Force Management, or WFM, system) cost estimation system and the actual (installed) cost" (emphasis added)." The requested data is provided in Section 4.0 of the FRP. See also related discussion for Issue E7.

[2] The inflation rate is derived from the difference in interest rates expressed in real and nominal terms. As an example, the long-term interest rates currently are 2.6 and 0.6% when expressed in real and nominal terms, respectively. The long-term rate is: ((1 + 2.6% ÷ (1 + 0.6%)) -1 = 1.988%.

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Table 2-2. Pricing Assumptions
45. Assumption: Rounding • **Paragraph / Page / CLIN:** General • **Assumption:** The costs in the explanatory text and associated tables are presented in whole dollar or rounded dollar values. Summations in table rows and columns therefore may not add. • **Rationale & Effect:** There is no specific price impact. • **NM Disposition:** No further response required.

The basis for the Contract Rate Charge and other service prices are presented in the sections that follow. The costs in the explanatory text and related tables are presented in whole dollar or rounded dollar values. Summations in table rows and columns therefore may not add correctly.

2.4 PURCHASE PRICE AND MONTHLY CREDIT

SCE&G's purchase price is based on the replacement cost new less depreciation (RCNLD) valuation method. This method results in a reasonable and acceptable valuation of the privatized system. The reasons for this assumption are as follows:

- The pricing method is based on the current physical inventory of the mains, service lines, regulators, valves, risers and other equipment identified in Attachment JA2's Table 3 fixed inventory for the privatized gas distribution system.
- The element of time is explicitly accounted for in that SCE&G incorporated the Table 3 indicated year of installation for each inventoried item and depreciated the system components accordingly based on their respective booked life depreciation rates.[3]
- SCE&G's current installed (unit) cost of facilities (i.e., the replacement cost new, or RCN) is applied to the inventoried units.
- The methodology is consistent with FERC Uniform System of Accounts requirements.

The application of actual cost experience reflects the Company's purchasing power. SCE&G's large size, especially when viewed in the context of its more than 386,100 utility customers and 13,400 miles of main and service lines, enables economies of scale that the Government is not likely to enjoy. Based on the relative size of the privatized system, SCE&G typically would purchase and install more equipment in a day than the Government would over a number of years.

This purchasing power is likely to result in material prices for mains, service pipe and other system components that are substantially lower than prices that are likely to be included in the Government's independent cost estimate. They also are likely to be lower than prices for other offerors who do not own and operate large natural gas utility systems.

[3] Consistent with standard industry practices, SCE&G periodically prepares a depreciation study that is submitted to the SCPSC for review and approval.

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2.4.1 Distribution System Fair Market Value Estimate

The fair market value (FMV) estimate for the privatized Fort Jackson natural gas distribution system is summarized in Table 2-3. Applying SCE&G's estimated unit costs to the Attachment JA2 natural gas system inventory resulted in a gross system replacement cost new (RCN) of $7.4 million. Applying depreciation and other adjustments, the FMV and proposed purchase price is $1.4 million. The derivation of the system RCN and unadjusted RCNLD valuation estimate is detailed in an Attachment A spreadsheet and summarized as follows:

- The description of system facilities, quantities and estimated installation dates are from the Table 3 system inventory in Attachment JA2.
- SCE&G will generally use appropriately-sized, standard-stock equipment for replacements. For example, inventoried 3-inch mains would be replaced with 2-inch mains.
- The equipment was categorized by the applicable Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (USOA) code. For example, Account 376 is for distribution mains and Account 380 is for distribution services.
- Unit (replacement) costs were developed using SCE&G's Work Force Management (WFM) system (which replaced the Unified Gas Projects system, but has similar functionality and applications) to generate cost estimates based on historical prices within its service territory. As discussed in more detail in Section 2.10.1, this system is used throughout SCE&G to develop cost estimates for upstream, utility-owned systems, and is based on actual, contemporary recorded costs to install similar facilities. Use of the system is appropriate and proper since generally the same personnel, procedures, standards and equipment types will be used for replacements both on and off Post.
  - Unit costs for mains were based on a standard 1,500 LF run of pipe, with a main valve at each end.[4] There are tie-in holes at the end of each run. An 18-inch open cut is used for excavation construction. For bore construction, there would be bore pits spaced an average of 500 LF apart, as well as potholes about every 50 LF to properly identify and expose other utilities crossed by the pipe main.
  - Unit costs for service lines are based on a 107 foot average length. The unit price for a service also includes associated valves, risers and connections.
- A replacement cost new was calculated for each equipment item by multiplying the unit cost by the number of units.
- The "booked" (depreciation) life for each equipment type was developed based on current, SCPSC-reviewed depreciation rates for the SCE&G system (see Table 2-4).
- The estimated age of each equipment type when ownership of the system is expected to be transferred to SCE&G was estimated by subtracting the installation year from the assumed 2020 CSD. The remaining life (in years) was then calculated by subtracting the age on the CSD from the booked life. Depreciation percentages were then calculated.

As noted above, the WFM-derived unit costs for the system piping include ancillary components, such as valves, risers and connections. A "zero" unit cost accordingly was applied to

[4] The upstream SCE&G system averages two to three valves per mile of main. Since each 1,500 LF run of main includes two valves, the unit cost estimate conservatively assumes about seven valves per mile.

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these inventoried components because the cost of these facilities was subsumed within the main and service cost estimates. The cathodic protection system is expected to be removed or replaced within five years of the Contract Start Date, so it has no current market value.

Table 2-3. Derivation of Natural Gas System Purchase Price	
Gross Replacement Cost New (RCN) [1]	$7,445,100
Less Steel Mains and Services	- 3,201,500
Subtotal	$4,243,600
Less Accumulated Depreciation	- 2,568,000
Subtotal	$1,675,600
Plus Miscellaneous Equip (5%)	83,800
Less Excess Capacity (5%)	- 83,800
Less Condition Assessment (5%)	- 83,800
Less Transition Projects T-2 through T-4 [2]	- 227,100
RCNLD/Fair Market Value	$1,364,700

[1] Details on the derivation of the RCN and RCNLD estimates are provided in Attachment A, which provides quantities and unit costs for the individual components of the privatized system as inventoried in the Attachment JA2.

[2] Based on the estimated costs for transition Projects T-2 through T-4 that are summarized in Price Data Sheet 3-B and Table 2-9.

The system purchase price was developed by applying five categories of adjustments to the gross RCN estimate. The first adjustment excludes the RCN values of the steel components of the existing system. These components have no value because they all will be replaced in order and are fully depreciated.

The second adjustment is for accumulated depreciation for the non-steel components of the system. The estimated accumulated depreciation amount is based on SCE&G depreciation rates for capital assets. Booked lives applied to equipment categories for both SCE&G's upstream system and the privatized system are shown in Table 2-4. Based on the estimated Attachment JA2 installation dates, the system depreciation adjustment with steel pipe is 72.7 percent of the gross RCN value. With the steel piping excluded, the depreciation adjustment is 60.5 percent for the PE components of the system. The total, on average, will be about 54 years old at the time of the expected Contract Start Date.

Table 2-4. SCE&G Booked Life Depreciation Rates			
FERC Code	**Description**	**Percent**	**Years**
376	Gas Mains and Valves	1.66	60
378	Measurement and Regulators	2.29	44
380	Gas Services and Valves	3.91	26
381	Meters	2.43	41

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The third is a 5.0 percent adjustment for miscellaneous equipment that was not reflected in the WFM-generated unit prices for mains and service lines.

The fourth adjustment accounts for the system's potential excess capacity. The Attachment JA2 inventory shows that about 13 percent (23,100 LF) of the mains consist of 8- and 10-inch pipe. This is significantly higher than the 0.94 percent of mains with diameter of 8 inches or more on the upstream SCE&G distribution system. About 29 percent (50,700 LF) of the mains are 6-10". In view of the historical loads (as measured from the SCE&G meter station) and current operating pressures, it appears that the loads could be adequately served from smaller diameter (i.e., 4 to 6-inch) pipe if operated at higher pressures. A review of the system maps also indicates that some of the 27 regulator stations could be eliminated. The maps also seemed to indicate a less than optimal layout of the piping. In light of these and other considerations, engineering judgments were applied to assume a 5.0 percent excess capacity adjustment.

The estimate also includes two condition assessment adjustments. The first condition adjustment reflects the expectation that equipment items that may have a remaining depreciable life will nonetheless need to be replaced in the short- to mid-term. This would apply to system components (other than the 1965-vintage steel piping, all of which will be replaced and thus has no market value) that might not have been properly installed or were subsequently damaged and thus may need to be replaced during the initial contract years. Possible examples are improperly installed or non-functioning secondary meters and PE pipe that evidenced excessive cracking. The market value of such assets that would be replaced is thus overstated. Here as well, engineering judgments were applied to assume a 5.0 percent condition assessment adjustment. As a measure of the financial implication of this adjustment, it is equivalent to about 1.3 percent of the unadjusted RCN value of the non-steel components of the system.

The final condition adjustment accounts for the cost of certain of the expensed transition projects required to conform the system to SCE&G and industry standards so that it will be used and useful for the safe and reliable provision of service. For example, a natural gas utility system must be properly leak surveyed, mapped and have an established MAOP. Many of the associated costs are incorporated into the unit prices used to estimate the system RCN value and upgrade costs. These activities are addressed within the scope of transition Projects T-2 through T-4. It is therefore appropriate such costs be netted out of the fair market value calculation.

The above-discussed RCN adjustments are consistent with standard industry practices and Internal Revenue Service (IRS) rulings. They also are supported by a generally recognized definition of depreciation that includes functional obsolescence, which includes property characteristics such as "a poor floor plan, inadequate mechanical equipment, or *functional inadequacy* or *super-adequacy* due to size or other characteristics." (emphasis added)

The *expensed transition* adjustment similarly is consistent with the *functional adequacy* portion of the noted definition. This also can be understood by the use of examples. Pressure testing of a gas system is required under the DOT's Title 49 safety regulations. A system that is not properly pressure tested is not worth as much as one that is. Without an appropriate depreciation adjustment, a utility such as SCE&G would double pay for the pressure testing: once as part of the system purchase price and again as it expensed the resources necessary to remedy the functional deficiency.

The Government suggested during its review of other privatization proposals that there would be no double payment as long as SCE&G was reimbursed for its costs. This view, however, is

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predicated on a balance sheet perspective of the contract, which is not compatible with the cost of service nature of the proposed service. It is thus appropriate to reduce the FMV of a system that is not properly tested. The Government could have arranged, at its expense, document compliance with the Title 49 pipeline safety requirements before the Solicitation was issued, in which case the FMV of the system might have increased.

2.4.2 Purchase Price Credit (CLIN 0001)

SCE&G proposes to pay for the purchase of the system in the form of a credit on monthly Contract Rate service invoices. The payment basis shown in Table 2-5 is based on the $1.4 million estimated FMV-based purchase of the natural gas distribution system.

Table 2-5. Derivation of Provisional Purchase Price Credit

FMV Base Purchase Price	$1,364,700
Amortization Term [1]	600 months
Monthly Credit	$4,820
Annual Credit [2]	$57,841
Contract Credit	$2,892,074

[1] The annual and monthly credit amounts are based on amortizing the purchase price over a 600-month term and using a 3.5 percent interest rate.

Based on the Transition Plan presented in Section 4.0 of the Volume I Technical Proposal, SCE&G expects to acquire ownership of the gas system within nine months from when SCPSC regulatory approval of the privatization contract is obtained. The bill credit will then commence and continue for the 600-month ownership term of the contract.

2.4.3 Comparative FMVs

SCE&G is aware that another Defense agency previously noted that proposed privatized system fair market values were less than the Government's. There was an inference that this might violate the conveyance authority in 10 U.S.C. 2688. This might be because the Government's Independent Government Cost Estimate (IGCE) included a higher system RCN estimate, a lower depreciation estimate, or a combination of the two.

Because owning and operating a utility system is a core competency, the Company is able to implement substantial economies of scale and efficiencies for the purchase of equipment. Indeed, capturing the cost efficiencies offered by SCE&G and other large regulated utilities was one of the bases for the establishment of the privatization program by Defense Secretary Cohen. The net result invariably should be a lower RCN value than the Government or another offeror estimates.

The above described depreciation adjustments used by SCE&G (and other utilities) also reflect such considerations as excess system capacity and the cost to comply with applicable codes and standards. The net result will be a much larger depreciation adjustment. When combined with a lower RCN, SCE&G's estimation of the FMV for the privatized system might well be less than the Government's. Other potential reasons for divergent FMVs are:

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- SCE&G applied a booked life depreciation adjustment, whereas the Government may have used a useful life-based adjustment. With a booked life adjustment, an asset may be completely depreciated if it is old enough, regardless of its condition. A useful life adjustment may assume that an asset has some residual value, regardless of its age, as long as it is operational.
- The Government's FMV estimate might not include an adjustment to account for the cost to bring the system into compliance with the CFR Title 49 and industry standards.

It is also noted in this regard that other Defense organizations have determined, as a matter of policy, that a lower economic value as consideration for the FMV of a utility system is acceptable *if it is in the best interest of the Government*. On a more general level, the FMV of an asset that is competitively procured can simply be based on the price a bidder is willing to pay to acquire the assets for any legitimate business purpose. The RFP for the privatization of the system is part of a competitive procurement process. The proposed system purchase price thus, *ipso facto,* meets the market test for a FMV.

The DoD elsewhere also expressed concern that a utility company's acquisition of a Government-owned system for less than the Government's estimate of the system's FMV could result in a portion of the differential in fair market values being classified by the Internal Revenue Service or others as a contribution in aid of construction (CIAC) and, as such, creating liability for the income tax charge component of any CIAC.

> This is to clarify that SCE&G, and not the Government, will be responsible for any CIAC related income tax charges associated with its FMV acquisition of the privatized system.

The Government elsewhere also expressed reservations concerning some of the RCN adjustments used to determine the FMV purchase price. In doing so, the Government in this regard was arguing against its own self-interest. This is because, all else being equal, a higher FMV-based purchase price, resulting from a reduction or elimination of the questioned RCN adjustments, would increase the Government's privatized cost of service. This can be demonstrated by an example. It assumes that the adjustments are not made and that the purchase price is increased by $1 million. The consequences are:

- The annual bill credit would increase by $42,000 (from $58,000 to $100,000).
- This would be more than offset by a $154,000 increase in the base year Contract Rate Charge (from $209,000 to $363,000).
- The net present value cost of SCE&G's privatized service would increase by about $1.6 million over the 50-year contract term.

2.4.4 Recoverable Portion of the Purchase Price

The concept of the recoverable portion of the system purchase price referred to in the Solicitation does not apply to the Contract Rate. Rather, the total system purchase price will be included in the contract rate base. Recovery of the purchase price will therefore be part of the bundled Contract Rate Charge (i.e., recovered as a depreciation expense).

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2.5 FORT JACKSON CONTRACT RATE CHARGE (CLIN 0001)

In a Contract Rate Charge calculation, SCE&G seeks to earn a fair and reasonable *rate of return* on *rate base* (as determined by the SCPSC), as well as recover associated *expenses* required for the operation of the relevant system or assets comprising the same rate base. The CRC is structured to generate revenues similar to SCE&G's cost of service. It also is functionally similar to published special facilities tariffs, such as the Rule 2 rate applicable to investor-owned electric, gas and water utilities in the state of California, the Rider AFC charge applied by Entergy operating companies and the Rental Facilities charge included in AEP's Texas tariffs.

The elements of the proposed Contract Rate Charge are summarized in Figures 2-1 and 2-2 and described below.

Figure 2-1. Contract Rate Charge: Rate Base Definitions and Cost Allocations

Item		Summary / Calculation Detail		
PLANT-IN-SERVICE				
Natural gas Distribution Plant	(A)	Privatized System Purchase Price		
Capital Additions	(B)	Installed cost of new facilities being added between now and next bill recalculation		
General & Intangible Plant Allocation	(C)	Sum of Items A and B Listed Above / Sum of Production, Storage, Transmission, Distribution Plant	X	General & Intangible Plant
Common Plant Allocation	(C)	Sum of Items A and B Listed Above / Sum of Production, Storage, Transmission, Distribution Plant	X	Common Plant
ACCUM. DEPRECIATION				
Distribution	(D)	Actual Accumulated Provisions For Depreciation per Plant Accounting Records		
General & Intangible	(E)	Sum of Items A and B Listed Above / Sum of Production, Storage, Trans.& Distribution Plant	X	Accumulated Depreciation General & Intangible Plant
Common	(E)	Sum of Items A and B Listed Above / Sum of Production, Storage, Trans. &, Distribution Plant	X	Accumulated Depreciation Common Plant
WORKING CAPITAL				
	(F)	Sum of Operations and Maintenance Expenses	÷	Eight
MATERIALS & SUPPLIES				
	(G)	Sum of Items A and B Listed Above / Sum of Production, Transmission, Distribution, and General Plant (pp. 204-207, FERC Form 1)	X	Materials and Supplies

2.5.1 Rate Base

The rate base for a public utility company is generally synonymous with the company's investment that is "used or useful" for public utility purposes. In the case of the Fort Jackson system, it will be comprised of privatized system plant-in-service, which includes such things as:

- The initial FMV purchase price (referred to as the original system cost for SCE&G);
- The installed costs for the Initial System Deficiency Correction projects and future capitalized replacements and installations; and

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- An allocation for intangible and general plant (which includes service trucks, billing systems, computer equipment, buildings, etc.) required to provide service to Fort Jackson, as well as for common plant (which supports both the electric and natural gas systems).

General plant items are recorded under FERC Accounts 389-399, and include such items as office furniture and equipment, computers, large tools, vehicles and laboratory equipment. Intangible plant is recorded under FERC Accounts 301-303, and includes such items as organization costs, franchises, consents, software systems and licenses, patent rights, and privileges.

An offset to rate base will be recorded in the form of accumulated to reflect the gradual write down of this plant over time. Plant values will no longer be included in the rate base when fully offset by accumulated depreciation.

To explain further, the "rate base" may be defined as "the value established by a regulatory authority, upon which a utility is permitted to earn a specified rate of return. Generally, this represents the amount of property used and useful in public service … (and) may provide for the inclusion of cash working capital, materials and supplies, (and) deductions for Accumulated Provisions for Depreciation…" (See *Introduction to Public Utility Accounting, 5th Edition, jointly published by the Edison Electric Institute and the American Gas Association*).

2.5.2 Rate of Return

The rate of return (ROR, and sometimes referred to as the Weighted Average Cost of Capital) on rate base is arrived at by taking the Company's primary sources of capital funding and summing the weighted cost of each source of funding based on the embedded (historical) cost rate for debt and preferred stock, as well as an SCPSC-approved return on common equity (ROE). The derivation of the rate base is depicted in Figure 2-1, and Table 2-6 provides a breakdown of the capital components and their associated cost rates based on SCE&G's 2017 FERC Form 1 data.

The Form 1 documented capital structure supports both the electric and natural gas utility functions. This data is not provided in the Form 2-based SCPSC annual report. The Government may independently verify the proposed and updated capital structure, or other related cost of service elements, by accessing SCE&G's Form 1 filings from the FERC webpage, or SCE&G can provide an electronic copy if requested.

SCE&G and other regulated utility general rate proceeding typically authorize a return on common equity. SCE&G's last rate proceeding was concluded October 2005 per the SCPSC's Final Order in Case No. 2005-113-G, dated October 31, 2005, which established a rate of return on equity (ROE) of 10.25 percent. As discussed below, changes to the ROE will be indexed to values in future SCPSC decisions.

When a rate of return has been re-calculated per the above, it is applied to the contract rate base to arrive at an annual amount of return in dollars that is required to support the investment that SCE&G has in its operations. Table 2-6 also shows the rate of return percentage to be applied to rate base in both pretax and after tax terms (see Section 2.12 discussion of Federal taxes). The remainder of this proposal, including the Section 2.13 price projections, is based on SCE&G's most current and reported Table 2-6 cost of capital.

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Some within the DoD have suggested that utility rates of return (RORs) are excessive. The rate of return on rate base, including the ROE, is regulated by the SCPSC. Also, the return on equity is the only source of profit in standard utility service rates. This is in contrast to non-utilities that seek profits on O&M, A&G and other expenses. It is noted as well that the ROR is applied only to the undepreciated, original cost value of rate based plant-in-service. As plant equipment is incrementally depreciated over time, the net rate base for that plant declines and eventually is zeroed out.

Table 2-6. Development of Capital Structure and Tax Factors (Year 2017)

Input	Source Document	Amount
Proprietary Capital	FERC Form 1, p. 112, Line 16C	$4,838,967,576
Preferred Stock	FERC Form 1, p. 112, Line 3C	$100,000
Account 216.1	FERC Form 1, p. 112, Line 12C	0
Long-Term Debt	FERC Form 1, p. 112, Line 19C-22C	$4,929,015,843
Preferred Stock Div	FERC Form 1, p. 118, Line 29	n.a.
LTD Interest	FERC Form 1, p. 117, Line 62C-64C	$266,987,558

Actual Capital Structure	Capitalization	Ratio	Actual Cost	Weighted Cost	Tax Factors	Pre-Tax Cost [1]
Long-Term Debt	$4,929,015,843	50.461%	5.417%	2.733%	100.00%	2.733%
Preferred Stock	100,000	0.001%	0.000%	0.000%	75.05%	0.000%
Common Equity [1]	4,838,967,576	49.538%	10.25%[3]	5.078%	75.05%	6.766%
Total	$9,767,983,419	100.00%		7.811%		9.499%

Computation of SCE&G Tax Factors		
		Tax Factor
Example Using Pre-Tax Required Return of →	$1,000,000	100.00%
(1) State Income Tax @ 5.0% ($1,000,000 x .05 = $50,000)	$ 50,000	5.0%
(2) Federal Income Tax @ 21% ($1,000,000 - $50,000) x 21% = $199,500) [2,3]	$199,500	19.950
(3) Total Taxes	$249,500	24.95%
(4) Additional Return Recognized	$750,500	75.05%

[1] Equity capitalization equals total proprietary capital less Account 216.1 plus preferred stock.

[2] Accounts for the deductibility of state taxes for Federal tax calculation purposes.

[3] Excluding Federal income taxes reduces the privatized service pre-tax weighted average cost of capital from 9.499 to 8.078 percent. The exclusion also increases the "additional return recognized" and the related "tax factors" for preferred stock and common equity from 61.75 to 95.0 percent.

In summation, SCE&G proposes that the rate of return on rate base shall be based on reported FERC Form 1 capitalization weightings, debt costs and preferred stock costs. Further, the ROE shall be based on the noted 10.25 percent rate. The ROE shall be fixed in the Contract Rate Charge until such time as the SCPSC issues an order approving a revised ROE.

There may be anomalous cost of service events from time-to-time during the 50-year contract term. It is expected, however, that such anomalous events will tend to be self-correcting.

An example is if SCE&G retired some of its long-term debt late (e.g., in December) during an accounting year. The Form 1 report for that year would exclude the retired debt from the year-

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end value, but 11 to 12 months of associated interest would be included. The cost of debt would accordingly be overstated. But by the next year there normally would be no related reported interest expense associated with the retired debt. There also may be converse situations whereby SCE&G issues new debt in one year such that the cost of debt would be lower the next year, as would the CRC. This also would be normalized by the next year whereby the Form 1 would report a full year of related interest expense for the year end debt component of the capital structure.

2.5.3 Expenses

The final component of the Contract Rate Charge is for expenses. Two major types of expenses required to support the privatization of the system are O&M and depreciation (see Figure 2-2). The categories of O&M expenses are as follows:

- *Distribution O&M*, which is based on a proportionate allocation of SCE&G's average system costs. The estimated distribution O&M expense indexed from the FERC Form 2-based annual report filed with the SCPSC and incorporated into the Contract Rate Charge will be adjusted annually without regard to the actual costs incurred to operate and maintain the privatized system in accordance with SCE&G and industry standards.

- *Administrative and General*, which is based on a proportionate allocation of SCE&G's average system costs, similar to distribution O&M. The calculation is summarized in Figure 2-2 below.

Here as well there may be anomalous cost of service events from time-to-time during the 50-year contract term that affect the Contract Rate Charge expense allocations. For example, the CRC in any given rate year would be based on SCE&G's prior year's SCPSC annual report cost, such that unusually high system O&M costs in one year would normally increase the O&M allocation in the CRC in the next year. But the reverse is also the case as unusually low system O&M in one year would tend to lower allocated costs in the next year.

The related CRC price impacts should be relatively minor because SCPSC-reported O&M costs do not change substantially from year-to-year. A possible exception might be if the DOT modified its Title 49 regulations in a manner that imposed substantially more stringent, and costly, maintenance and reporting requirements as occurred in recent years).

Operation and Maintenance. As a further example of the derivation of the formula components of the rate, provided below is the calculation used to determine the distribution O&M component of the Contract Rate Charge:

- SCE&G Distribution System O&M (Form 2, Page 324): $25,650,050
- SCE&G Distribution System Plant-in-service (Form 2, Page 205): ÷ $999,648,528
- SCE&G O&M as Percent of Distribution Plant: 2.566%
- Fort Jackson FMV Purchase Price (Table 2-7, Item A): x $1,364,700
- Fort Jackson Distribution O&M (Table 2-7, Item H): $35,017

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Figure 2-2. Contract Rate - Expense Definitions and Cost Allocations

Item		Summary / Calculation Detail		
O & M EXPENSES				
Distribution	(H)	Sum of Items A and B Listed in Figure 2-1 / Total Distribution Plant-in-service	X	Distribution O&M Expense
Admin. & General Expense	(I)	Item Total A&G Expense) / Total O&M Expense - Gas Purchases - A&G (pp. 319&325)	X	CRC Distribution O&M
DEPRECIATION EXPENSE				
Distribution	(J)	Actual Annual Provision for Depreciation per Plant Accounting Records		
General & Intangible	(K)	Sum of Items A and B Listed Above / Sum of Production, Transmission, Distribution Plant	X	Depre. & Amortization of General & Intangible Plant
Common	(K)	Sum of Items A and B Listed Above / Sum of Production, Transmission, Distribution Plant	X	Depre. & Amortization of Common Plant

Depreciation. Depreciation is the mechanism used by SCE&G and other utilities to recover their capital investments. In the case of the Contract Rate Charge, it recovers the cost to purchase and upgrade the privatized system. Depreciation also is referred to as the return "of" capital, which is distinguished from the rate of return and return "on" capital.

The contract depreciation expense is determined by applying SCE&G's annual depreciation rates to the distribution plant balances for the Post, as well as including associated allocations of depreciation expense to support the general (and intangible, if any) plant facilities mentioned above. The depreciation term will begin the year a capitalized asset is installed. The weighted average booked life of the privatized system (excluding the steel piping) is 54 years. This equates to a 1.8519 percent annual, system wide depreciation rate. This is the depreciation rate that is used to develop the 50-year price projections presented below in Section 2.11.

As noted, SCE&G periodically prepares depreciation studies that are submitted to the SCPSC for review and approval. The actual depreciation rate assigned to a particular capital asset (such as a gas main or regulator station) will be based on the authorized rates that are in effect at the time the asset is included in the rate base. Once the rate is assigned to an asset, it will be used throughout the contract term until the affected asset is either fully depreciated or it is removed from service. It is possible that future approved depreciation studies may result in category rates that differ from the Table 2-4 values. Any impact on the Section 2-13 price projections, however, is expected to be minimal. The initial depreciation adjustment (see Item J in Table 2-7) is as follows:

- Initial cost basis: $1,364,700
- Annual depreciation rate (1 ÷ 54): x 1.8519%
- Annual depreciation expense: $25,273

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The Table 2-7 derivation of the Contract Rate Charge provides an example of how the depreciation adjustments are applied. Note that the annual depreciation expense is the same as the accumulated depreciation credit shown in Item D of Table 2-7, except that there is a one-year lag from when the depreciation expense is recorded and the accumulated depreciation is booked.

The annual depreciation expense associated with the initial system acquisition will be the same $25,273 value beginning in the first contract year and continuing until the initial system purchase price is fully depreciated. The accumulated depreciation credit to the rate base, however, will in the second year initially be the same $25,273 depreciation from the first year. It will then double to $50,546 to reflect two years' worth of accumulated depreciation, and so forth until the booked accumulated depreciation is equal to the initial purchase price.

The purchase price will be fully depreciated 54 years after SCE&G acquires ownership of the system, after which the accumulated depreciation will include the full $1.4 million initial cost basis and there will be no further depreciation expenses (or related rate of return) associated with the initial purchase price.

Income Tax. Another expense related to the Contract Rate Charge is income taxation. That expense is included through the use of the Pre-Tax Weighted Cost percentage as derived in Table 2-6. Based on SCE&G's 2017 FERC Form 1 data, the imputed weighted average pre-tax cost of capital is 9.499 percent. Excluding Federal income taxes, the pre-tax cost of capital is 8.078 percent.

2.5.4 Cost Allocations

The previous explanations include numerous references to allocations. These allocations are explained in Figures 2-1 and 2-2 using FERC Form 2-based data filed annually by SCE&G.

In summary, the Contract Rate Charge seeks to recover SCE&G's costs of owning, operating and maintaining the Installation's natural gas distribution system. The rate is primarily derived from source data that is easily verifiable and provided to State and Federal agencies. The rate derivation will also be filed with, and approved by, the SCPSC. Under these circumstances, this methodology meets the criteria for "prices set by law or regulation."

2.5.5 Rate Recalculations

SCE&G proposes to recalculate the Contract Rate Charge on an annual basis, with the new monthly rate being updated in May and applied for the upcoming year commencing with the June billing month. This will allow sufficient time after the annual SCPSC Annual Report has been published to verify and update the components of the Contract Rate Charge. A June adjustment is needed because annual reports are filed with the SCPSC in April each year. The annual recalculation will reflect changes (as of December 31st of each contract year) in the rate base for the privatized system and in SCE&G's system-wide cost of service.

In addition to the annual recalculation, the rate of return component of the CRC will be adjusted to reflect a flow-through of any SCPSC-authorized change, either up or down, to SCE&G's rate of return on equity. This recalculation would be implemented the first billing month after the effective date of the new ROR.

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A summary of annual capital upgrades and replacements would be provided in the required Privatized Service Annual Report. The summary would describe the replacements and provide adjusted plant-in-service values. The level of detail for the description would be commensurate with the scope of the replacements. It is anticipated that the level of detail provided might well change over the course of the contract as the Government becomes more comfortable with the process. Upon request, the Installation would have access to the service orders and other plant-in-service documents that support the provided annual descriptions.

A CRC Template that would be used for the annual updates to the CRC is provided in Attachment B. The charge reflects an original plant-in-service value based on the proposed FMV-based purchase price for the Fort Jackson gas system and cost of service data from SCE&G's 2017 FERC Form 2-based SCPSC Annual Report (for expense and plant allocations) and FERC Form 1 (for capital structure and rate of return) filings.

2.5.6 Catastrophic Losses

As an investor-owned regulated utility, SCE&G would not have access to funding assistance from the Federal Energy Management Administration (FEMA) or others. SCE&G instead would self-finance its recovery work on the privatized system and recover its costs through adjustments to the plant-in-service component of the CRC.

The recovery funds would be obtained from working capital and cash reserves. Obtaining the requisite funds will not be an issue because the privatized system is and will remain a very small percent of the total SCE&G system. For example:

- The $7.4 million gross RCN value of the privatized system equipment (i.e., excluding conduits and manholes) is less than 0.1 percent of SCE&G's $1.2 billion plant value.
- The system RCN value represents only about 13.2 percent of SCE&G's annual average of about $56 million in additions to gross natural gas plant for the past five years.
- The RCN value of the privatized system equipment represents only 2.0 percent of SCE&G's $366 million in average annual gas system operating revenue.

Catastrophic storm damage to a natural gas system fortunately is a rare occurrence. Should such damage occur, a common practice when this happens is for the utility to seek an emergency rate increase from its Public Service Commission. Any such increase for the SCE&G system would affect base natural gas distribution rates (i.e., the rate for natural gas deliveries to Fort Jackson and other customers). It would not directly affect the CRC.

2.5.7 Termination Costs

SCE&G is concerned that mission or other Government-initiated service changes could result in the full or partial abandonment of major gas distribution facilities after they are installed or acquired. This might occur if SCE&G installs (or is the process of installing) a new line extension and the mission served from that line is later cancelled and the buildings are razed. It is also possible that all or a substantial portion of the system may be abandoned as a result of the Base Realignment and Closure (BRAC) process. While the probability of a BRAC closure may be low, the risk still must be addressed.

Appropriate termination costs will be calculated in accordance with Section H.7, *Government Repurchase Option*. To clarify, the termination provision only will apply to actions initiated by

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the Government. It will not apply if SCE&G elects to remove facilities under its standard system replacement and upgrade practices.

2.5.8 Example Application of Contract Rate Charge

Table 2-7 provides an example application of the Contract Rate Charge that is based on the proposed FMV system purchase price and SCPSC Annual Report data as of December 31, 2017. For ease of analysis, the table does not consider future additions to the distribution plant-in-service (see item B) as the initial and recurring capital upgrades are completed and added to the contract rate base. The table highlights the rate treatment of the depreciation components of the cost of service basis for the Contract Rate Charge.

The annual revenue requirement from this table is the basis for the monthly Contract Rate Charge shown in Schedule B-1. This rate will be in effect until recalculated each June. It also will be recalculated to reflect changes, up or down, to the authorized ROE or income tax rates.

Consistent with the methodology presented in Figures 2-1 and 2-2, including Table 2-7, the initial Contract Rate Charge is derived from only three independent variables. They are highlighted in Table 2-7. The remainder of the Table 2-7 costs are derived from, based on, and/or indexed to the referenced data contained in the applicable SCPSC Annual Report filings. The independent variables are as follows:

- *Initial Purchase Price* -- reflects the FMV (RCNLD) of the system. The value shown is as derived in Table 2-3.

- *Capitalized Upgrade Projects* -- reflects the estimated installed cost for the initial capitalized upgrade projects that are identified in Price Data Sheet 3 and that will be installed during the first five years of the contract. For ease of presentation, it is assumed that the projects will be completed, and included in the rate base, after ownership of the system is transferred to SCE&G. The associated costs thus are not included in Table 2-7.

- *Capital Additions* -- reflects the installed cost of future capital upgrades and replacements. These costs similarly are omitted from the example in the table.

As noted previously, SCE&G's O&M costs will be recovered based on an allocation of system average costs. Contract rate billings will not be based on costs actually incurred to provide the privatized service. Please refer to Section 2.7 below for more information.

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Table 2-7. Example Derivation of Contract Rate Charge Based on the FMV Purchase Price

	Item	Cost of Service [1] First Year	Second Year
RATE BASE CALCULATION			
Plant-In-Service			
Initial Purchase Price		$1,364,700	$1,364,700
Capitalized Upgrade Projects [2]		-	-
Future Capital Additions [2]		-	-
Privatized System	(A)	$1,364,700	$1,364,700
General & Intangible Plant Allocation	(B)	125,611	125,611
Common Plant Allocation	(C)	45,655	45,655
Total Plant-in-service	(D)	$1,535,966	$1,535,966
Accumulated Depreciation			
Distribution	(E)	-	►►(25,273)
General & Intangible	(F)	($33,376)	($33,376)
Common	(G)	(20,272)	(20,272)
Total Accumulated Depreciation		($53,647)	($78,920)
Materials & Supplies	(H)	3,353	3,353
Working Cash	(I)	4,826	4,826
Total Rate base		$1,490,497	$1,465,224
PRE-TAX RATE OF RETURN			
See Capital Structure Computation [3]	Table 2-6	x 9.499%	x 9.499%
PRE-TAX ROR REQUIRED TO SUPPORT RATE BASE		$141,582	$139,182
OPERATION & MAINTENANCE EXPENSE			
Distribution O&M	(J)	$35,017	$35,017
Admin. & General Exp. Allocation	(K)	3,588	3,588
Total O&M Expense		$36,604	$36,604
DEPRECIATION EXPENSE [4]			
Distribution	(L)	►$25,273	►$25,273
General & Intangible	(M)	2,666	2,666
Common		1,333	1,333
Total Depreciation Expense		$29,272	$29,272
TOTAL ANNUAL REVENUE REQUIREMENT		$209,458	$207,058
MONTHLY CONTRACT RATE CHARGE		$17,455	$17,255

[1] The Contract Rate Charge for the first year an asset is included in the rate base (e.g., the initial acquisition of the system) reflects a beginning of year depreciation expense. The depreciation expense continues In the second year, and the accumulated depreciation from the prior year is recognized and reduces the rate base. Although not shown in the table, the depreciation expense would be the same in the third year, but the accumulated depreciation would be the sum of the depreciation expense recognized from the two prior years (i.e., $50,546).

[2] The installed costs for the upgrade projects and capital additions will be added to the rate base after they are completed. For ease of presentation, the associated costs are not included in the table.

[3] The pre-tax rate of return without Federal income taxes is 8.078 percent.

[4] To clarify, the required return is a return “on” capital; the depreciation expense is a return “of” capital.

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2.6 EXTRAORDINARY O&M (EOM) CHARGE (CLIN 0005)

Although SCE&G intends to operate and maintain the system based on its standard service methods, it necessarily will take some time before the standard methods can be applied on a seamless basis. For example, the existing system contains some non-standard equipment items. SCE&G therefore must assess potential failure rates, identify equipment vendors and establish an appropriate inventory policy. SCE&G crews also will have to become familiar with any associated special O&M practices.

The system distribution service O&M percentage incorporated into the Contract Rate Charge is based on natural gas distribution system equipment that was installed new by SCE&G and then operated and maintained continuously by SCE&G in accordance with its standard operating practices (SOPs) and Title 49 requirements. The privatized system, on the other hand, was installed, operated and maintained by the Government. It is believed that the Government's O&M practices were not applied on a continuous basis and some did not always comply with industry standards.

Another concern is that some of the existing PE piping may not have tracer wire. This will make periodic line markings more difficult and costly. The lack of continuous steel piping cathodic protection, and related potential degradation, may require more frequent leak surveys, especially for portions of the system with excessive survey calls or a relatively high incidence of recorded leaks until the facilities are replaced.

A related concern is the need for SCE&G crews to become thoroughly familiar with the unique characteristics of the privatized system and the Government's special service requirements. While SCE&G desires to treat the Government the same as other SCE&G customers, the reality is that the Government is a large composite customer with unique operational and mission requirements. These include such matters as special security protocols and excavation practices. It will take time for SCE&G crews to achieve a level of familiarity that will enable operations to proceed on a routine manner. In the interim, O&M services will be more costly than the regulated service provided to other customers that are served from distribution facilities that SCE&G installed and continuously maintained.

The direct operations and maintenance component of the cost of service basis for the Contract Rate Charge also does not include a cost allocation for customer service expenses. There accordingly is a need to recover the incremental costs required to manage and administer the special privatized service contract. This includes such things as adjusting the rate base, preparing an annual capital plan and working closely with the Installation to ensure that its unique reliability and budgetary concerns are addressed. These special requirements will continue over the entire 50-year contract term.

Engineering judgment, coupled with SCE&G's understandings of the experiences of other public utilities operating privatized systems, was applied to estimate that operation and maintenance of the Fort Jackson system would be 65 percent greater than the Company's system average O&M cost per distribution pipe mile.

There is no directly analogous historical documentation to support this complexity adjustment. The appropriate percentage adjustment instead was discussed internally, and was the level ap-

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proved by management. It also was felt that an adjustment of this magnitude would be sufficient to demonstrate to the SCPSC that the service contract was just, reasonable and non-discriminatory. Among the considerations for this adjustment are anecdotal information as follows:

- The system is not accurately mapped and tracer wire was not always installed with new and replacement PE pipe. This will create difficulties in locating gas lines for marking and other purposes.
- The lack of continuous cathodic protection for the steel facilities is likely to generate incrementally more service calls to address leaks and pipe repairs.
- Other utilities also might not be properly mapped and marked. This will require substantially more hand digging than for the upstream system.
- The steel portions of the system are fully depreciated. They accordingly will generate no CRC-based O&M revenue. Assuming that the $3.2 million unadjusted RCN value of the steel piping was depreciated at the same 60 percent as for the PE facilities, this would have increased in plant-in-service component of the rate base by about $1.3 million and thereby generated about $33,000 in Year 1 CRC-based O&M revenue.
- Although the steel pipe replacement ISDC project will substantially increase the assigned distribution pant value, increases in CRC-based O&M revenue will be mitigated because the SCE&G plant is expected to substantially increase as well.[5]

There also are a number of unique special contract requirements that don't apply to service for SCE&G's other jurisdictional customers, and that will continue for the 50-year term of the contract. Examples are:

- The obligation to obtain excavation permits prior to digging;
- The provision of record drawings compatible with the Government's system;
- Participation in crisis evacuation exercises;
- Compliance with the Installation's plant control and environmental procedures;
- Compliance with security protocols, including the added time to pass equipment and personnel through security checks, especially during times of heightened threat levels;
- The preparation and submission of monthly outage reports;
- The obligation to reschedule work to minimize operational impacts;
- The requirements of system performance tracking and reporting for a specific customer (versus for the total SCE&G system);
- Participation in monthly meetings;
- Preparation and review of annual updates to the five-year capital plan;
- Preparation of Annual Reports as specified in the Contract;

[5] Fort Jackson will initially be about 0.1% of SCE&G's 2017 distribution plant. The assigned plant component of the CRC rate base is expected to increase by about 280% (triple) when the five year steel replacement project is completed. This might infer that CRC-based O&M revenue would increase by a like amount. However, SCE&G's system distribution plant has increased over the past four years by an average of 7% per year. Extrapolating this trend, Fort Jackson by the 7th year would account for only about 0.3% (double) of total SCE&G plant and therefore limit the O&M increase.

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- Preparation of price estimates for new or modified service connections, replacement projects and other capitalized activities for review and Government approval;
- The process of negotiation and approval of contract modifications for substantive changes to the Service Interruption and the Quality Management Plans; and
- Administrative costs associated with potential Davis-Bacon Act compliance.

SCE&G does not perform the above-listed tasks for its other customers and the costs of these tasks are not reflected in SCE&G's overall cost structure or shown in Form 2-based annual reports. They accordingly are not included in the cost of service basis for the Contract Rate Charge.

The conventional language in the utility industry to describe these is "non-standard" service. Non-standard service occurs when a customer requests an action that is not a standard offering. When that occurs the customer is provided a cost for the non-standard request and they have the option to accept the cost or withdraw the request.

These types of services are provided at SCE&G's cost with no mark-up or profit. If SCE&G were to provide these services at no cost then effectively what occurs is a transfer of costs to other customers, and those customers would be subsidizing the cost of the privatized service. The EOM Charge is designed to cover these non-standard services that the Government is requesting or that are uniquely required to provide a responsive privatized service.

The purpose of this CLIN, therefore, is to recover extraordinary O&M costs associated with the privatized service. The proposed initial $7,500 per month fixed-price Extraordinary O&M (EOM) Charge will be assessed during a 36-month period beginning on the Contract Start Date, which is also when ownership of the system will be transferred to SCE&G and the system purchase price will be included in the contract rate base.

The monthly charge will then be reduced to $5,500 in the fourth ownership year, which also is the mid-point of when the ISDCs will be rate based. The charge will be further reduced to $3,500 in the seventh contract year when the steel replacement project will be completed and the associated costs are fully reflected in the plant-in-service component of the CRC. The charge thereafter will be adjusted annually for the remainder of the 600-month contract term based on 75 percent of the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U for the rest of the contract term. This means that the EOM Charge will decrease each year in real terms.[6]

The reasonableness of the proposed EOM Charge was assessed by comparing O&M revenue to be generated from the proposed CRC with planning factors based on system-wide distribution. The results of this assessment were:

- SCE&G's average distribution O&M expense, as derived from 2017 Annual Report data, was about $1,970 per line mile, and averaged $1,850 over the past three years. Applying the average to the privatized system's 40.9 miles of Table 3 piping equates to an unadjusted distribution service revenue requirement of about $75,000 per year. System O&M costs are higher in part due to the implementation of modified service practices in response to strengthened Title 49 pipeline safety requirements, such as enhance inspection monitoring of work performed by subcontractors.

[6] The real dollar value of the EOM Charge will decline each year based on the OMB A-94 long-term inflation rate. For example, the real value will decline to about a month by the 50th contract year.

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- The noted 65 percent complexity adjustment increases the revenue requirement by $50,000, or to $125,000.
- The proposed FMV-based system purchase price is $1.4 million. This will be the initial plant-in-service value used to calculate the cost of service based CRC. SCE&G's Distribution O&M as a percent of total system distribution plant-in-service is 2.6 percent. This means that the purchase price is expected to initially generate about $35,000 in annual CRC-based O&M revenue (i.e., $1,365,000 x 2.6% ≈ $35,000).

The CRC-generated O&M would therefore result in a $125,000 annual shortfall in planning-factor based revenue requirements. The EOM Charge therefore is designed to cover the expected O&M revenue deficit as shown in Table 2-8.:

Table 2-8. Derivation of Base Year EOM Charge

Unadjusted O&M requirement	$75,000
Complexity adjustment (65%)	+ 50,000
Adjusted requirement	$125,000
CRC generated O&M	- 35,000
Annual O&M deficit	$90,000
Monthly charge (rounded)	$7,500

The noted complexity adjustment is equivalent to about 70 additional full loaded labor hours per month. Of that amount, an estimated 20 hours would be associated with various DBA administrative requirements, such as preparing and submitting certified payroll data to the Department of Labor and monitoring subcontractor wage rates.

2.7 OPERATIONS AND MAINTENANCE COST

As discussed in Section 2.5, SCE&G's cost to operate and maintain the privatized system will be recovered as part of the Contract Rate. The O&M component of the CRC will be based on an allocation that reflects system-wide average costs. As such, it will be separate and distinct from SCE&G's actual costs. This same theory applies to SCE&G's retail service under standard residential, commercial and other retail service rates. That is, a customer's gas utility service rates are based on SCE&G's total cost of service and on rates authorized by the SCPSC.

It is irrelevant whether the actual cost to serve a particular customer is higher or lower than the revenue generated by standard rates. This will apply as well to the privatized service.

SCE&G accordingly will assume all risks associated with the actual cost of operating and maintaining the Government's system being different than generated revenues under the CRC. A limited exception would apply if the Government requests additional extraordinary services beyond the scope of the Solicitation and SCE&G's current offerings (such as the RFP's Clause C.9.8 support for special exercises).

There is no O&M full-time-equivalent (FTE) directly associated with the CRC-based tariff rate. A proxy FTE may be estimated based on the loaded labor costs. The O&M revenue generated by the combination of the CRC cost allocation and EOM Charge is equivalent to between 0.8 and

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1.2 FTEs performing O&M on the privatized system and managing the service contract. It warrants emphasis that the Government's billings will not be affected if actual O&M in any given year equates to say 10 FTEs or 0.5 FTEs.

A substantial portion of system O&M (e.g., for service responses, facility inspections and leak surveys) will be performed by service technicians. As an indication of the reasonableness of the noted O&M levels, SCE&G's Columbia service facility has 40 technicians who support 1,535 miles of distribution mains. This equates to 38 miles per (technician) FTE. This is in contrast with the between 20 and 28 main-miles for the noted privatized service O&M equivalent FTEs. The number of FTE-supported miles will necessarily be less for the privatized system in part due to the unique coordination and other contractual special service requirements.

The dollar value of O&M revenue generated by the CRC is a largely a function of the ratio of the privatized system to total SCE&G distribution plant. That ratio (percentage) will initially be about 0.1 percent and increase to about 0.3 percent in the seventh contract year (i.e., when the ISDCs are fully rate based). While a doubling of the percentage may at first blush seem significant, it is much less so when view in absolute terms as follows:

- CRC-generated O&M revenue increases from Year 1 to Year 7 by about $75,000 (i.e., from about $35,000 to $110,000.
- During this same period, annual EOM Charge revenue decreases from $90,000 to $42,000.
- Total contract O&M accordingly only increases by about $27,000 (or 21.6 percent of the $125,000 total base year requirement).

As for equipment, Fort Jackson will be allocated an undifferentiated portion of SCE&G's total general, intangible and common plant costs, which includes such items as service trucks, excavators and other equipment items, as well as service yards, corporate offices, computer systems and more. Fort Jackson initially will be about 0.1 percent of the total gas storage and distribution system such that the CRC initially will allocate about 0.1 percent of the related total SCE&G system costs to Fort Jackson.

2.8 DELETED

2.9 GROSS RECEIPTS TAX AND PSC SUPPORT FEE (CLIN 0006)

SCE&G analyzed five types of state and local taxes that might pertain to a privatized utility service. It was determined, however, that the gross receipts tax and PSC support fee are the only applicable taxes. The types of taxes evaluated are described below.

- *System Sales Tax*. There is a 7.0 percent sales tax (6 percent State plus 1 percent Richland County) that is imposed on the seller of property. The seller of the distribution system is the United States Government. Since a state may not impose a tax on the Government, the sales tax does not apply to the sale of the Post's gas distribution system.
- *State Sales Tax*. The sales tax is collected by a vendor but nonetheless applied to the purchaser of goods and services. Since the purchaser of a privatized service under the proposed contract will be the Government, this tax similarly does not apply.

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- *Real Property Tax*. South Carolina applies a "unit value" based real property tax to an entity in the electric, natural gas, or communication business, whether or not it is regulated. The State's current policy is to exempt SCE&G facilities that are located on Federal land from the real property tax. There accordingly are no applicable real property taxes.[7]

- *License Fees*. There are two elements of the State license fees that are imposed on regulated entities. One is a true value tax that is based on the property tax assessment base. To the extent real property taxes are not applied to Federal facilities, this tax likewise does not apply. The second is a gross receipts tax (GRT), will apply to the privatized service.

- *SCPSC Support Fee*. This fee is assessed similar to the GRT, and will apply to the privatized service.

The tax basis for the GRT is the monthly service revenue, and the current rate is $0.0030 (i.e., three mills for every dollar of applicable service revenue). The CLIN 0001 monthly credit for the payment of the purchase price is excluded from the revenue basis since this would be characterized as a deferred purchase payment.

In addition, a SCPSC support fee is assessed from the same basis as that for GRT. The current rate is $0.002227. The combined GRT/PSC fee is the thus $0.005227. The GRT and SCPSC fee will vary from month-to-month depending on the amount of service revenues paid to SCE&G. That is, the monthly payment would be indexed to the amount of the tax and the applicable revenue base.[8]

> The GRT would apply whether the gas distribution system is owned and/or operated by SCE&G or another entity. It is suggested that Fort Jackson carefully review for price realism any proposal that did not include the GRT.

2.10 INITIAL SYSTEM DEFICIENCY CORRECTIONS / UPGRADES / CONNECTIONS AND RENEWALS AND REPLACEMENTS

Three categories of initial upgrade projects are proposed for the system. The first addresses safety and other upgrades needed to conform the acquired system to SCE&G and industry standards. SCE&G also proposes upgrades to enhance service reliability. The second addresses optional pressure testing in order to establish a compliant maximum allowable operat-

[7] Pursuant to Section C.2.1, SCE&G must comply with all applicable Federal, state, interstate, and local laws and regulations, as they may be amended, and shall modify our services practices accordingly. Such changes may constitute a reasonable basis for a change in the service charge pursuant to Section G.3, *Service Charge Adjustment*. Although acquired properties are currently exempted from real property taxes and there are no known initiatives to modify the current policy, SCE&G would request a pricing change to provide for a flow-through of any future tax liabilities.

[8] The GRT and PSC fee are not separately identified on invoices for SCE&G's current delivery service to the Installation. This is because the charges are embedded in the cost of service basis for the Company's Rate 24 Large General Service and other standard tariff rates. The Contract Rate, on the other hand, operates much like a directly assigned cost of service for the privatized system.

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ing pressure (MAOP). The third addresses transition requirements, as ownership and operational responsibility for the natural gas distribution system is transferred from the Government to SCE&G.

Capital projects will be capitalized ("C") and the installed costs will be included in the rate base for the Contract Rate Charge. Transition activities ("T") will be expensed and the costs will be recovered by a one-time connection charge. The projects are identified in Table 2-9 as well as in Price Data Sheet 3.

Expensed transition projects will be completed during the transition period. The capitalized projects addressed in the plan would be completed within the first five contract years. The installed costs would be reflected in the plant-in-service values for the Contract Rate Charge by Year 7. Although the projects would be completed within five years, the costs are not booked until the work is completed and the facilities are used and useful (pressurized). There also typically is a time lag before all costs are entered into SCE&G's accounting programs and then booked to plant-in-service.

Table 2-9. Initial Upgrade Projects and Other Improvement Costs

Project Number and Title	Project Cost
Post-Ownership Capitalized Upgrade Projects (CLIN 0001):	
C-1: Replace Steel Piping	$3,339,700
C-2: Miscellaneous Station Repairs	83,600
C-2: Secondary Meter Replacements	3,200
Subtotal	$3,426,500
Pre-Ownership Expensed Transition Period Projects (CLIN 0003):	
T-1: Transition Planning and Management	$107,100
T-2: Initial Leak Survey	15,700
T-3: System Inspection, Inventory, Mapping & Minor Repairs	75,800
T-4: System Potholing	135,600
T-5: Environmental Reconnaissance Study	23,700
Total	$357,900

There are two broad considerations affecting the scope of the proposed capital projects. The first is that the Attachment JA2 system inventory indicated that steel piping accounts for 54.0 percent of the privatized system. Much of this pipe will be 54 years old when SCE&G acquires ownership of the system on the Contract Start Date (CSD).

Second, and perhaps more significant than age, is the incomplete records, which are to be retained for the life of the asset, regarding the Title 49 requirements for the establishment of MAOPs, leak survey, repair records and cathodic protection inspections.

2.10.1 General Cost Estimation Process

SCE&G operates and maintains an extensive natural gas transmission and distribution system that includes 13,400 miles of pipe and serves 35 South Carolina counties. With the exception of the noted and observed deficiencies, the upstream SCE&G system is generally comparable to the privatized system. An exception is that the existing system contains non-standard pipe sizes (e.g., 3- and 5-inch mains) and there is apparent over-capacity in terms of pipe sizes, the

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number of pressure reducing stations and valves and the general layout of the system. SCE&G will maintain and repair all acquired piping, regardless of its diameter, although as-needed capitalized replacements generally will be with standard-stock materials.

Cost Estimation Methods. That SCE&G engineers have extensive hands-on and applicable cost experience that enables the use of two general types of cost estimates. One is an order of magnitude estimate that is based on a general understanding of the work requirements, the application of knowledge of historical costs for generally comparable work and engineering judgments. Order of magnitude estimates are routinely prepared for internal budgeting purposes, as well as to provide cost estimates for customers that might have financial responsibility for capital projects under SCPSC-authorized service and line extension polices. They are prepared at SCE&G's and not the customer's expense.

The second is a method of service study. This is a more vigorous effort that often includes the development of engineered preliminary designs. The study is substantially more costly than an order of magnitude estimate. SCE&G's standard policy is that a method of service study is prepared for the convenience of the customer such that the customer, and not the utility, is responsible for the cost of the study. This same general approach to costing is consistent with standard practices within the regulated utility industry. While employing a more vigorous process, there usually are not substantial differences between price estimates for similar work based on the order of magnitude and the method of service methods. SCE&G's price estimates for this proposal are based on order of magnitude estimates.

Neither a non-utility contractor nor a utility that does not operate in the general vicinity of Fort Jackson would have SCE&G's extensive comparable work experience. They thus would necessarily tend to rely on a bottoms-up estimation process. That process would be compatible with the Government's request for labor hours, labor rates and material costs. Nonetheless, SCE&G tested the reasonableness of the order of magnitude estimates by also estimating labor and material costs for selected upgrade projects. This is akin to bottom-up pricing but, given the more limited objective of assessing price reasonableness, it was not as comprehensive as might be used by a non-utility contractor.

A somewhat different pricing approach was used for transition versus ISDC/Capital Upgrade projects. As discussed, unit costs (e.g., for a 2-inch PE main or a 2-inch service line) were based on SCE&G's costs to install similar equipment on the upstream distribution system as recorded in the Work Force Management (WFM) system. The same level of similarity, however, was not apparent for transition projects. The scopes of these projects instead are generally based on the unique requirements to initiate a privatized service.

Work Force Management System. The installed costs of main and service line piping, and other system components are recorded in the Company's property records and plant-in-service accounts in accordance with the FERC Uniform System of Accounts. The installed costs are also recorded in SCE&G's proprietary WFM pricing program, which is used to generate project cost estimates. The system is used to develop cost estimates for customers desiring special facilities, to plan for system expansions or modifications (in response to changing SCE&G or customer service requirements) and for internal budgeting purposes. WFM costs are differentiated by the Company's ten operating regions.

The WFM system contains unit equipment costs that include material, labor, overheads and other cost components. They reflect current, actual costs to install the particular equipment item or subsystem on the SCE&G system. They also reflect the average inventory cost of SCE&G's

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stock of piping, risers, valves and other equipment. For example, the inventory (material) cost of a 2-inch PE main or other equipment item is based on the average cost of like equipment in the inventory. Absent unusual circumstances, the inventory cost does not appreciably change in the short- to mid-term even if the purchased cost of new equipment that is added to the inventory might be higher or lower than the average. Nor do unit direct labor costs or the amount of labor required to install equipment vary substantially, especially in the near term. An exception is when labor or subcontract master agreements are periodically renegotiated.

SCE&G subcontracts much of its system installation work under "blanket" contracts. Each contract contains set prices to install a given length of pipe or number of valves, which also are differentiated by pipe diameter "band" prices (e.g., mains of 2" or less and for 4" to 6"). The contracts also set a flat fee (currently $750) for any service connection up to 200 LF in length. This price includes labor and material costs. For larger construction work, usually involving a major main extension, SCE&G may prepare a work scope and seek competitive bids from a number of contractors. Contractor installations are supervised and inspected by SCE&G personnel. All WFM -generated price estimates include an SCE&G labor component for required Title 49 quality control inspections.

Cost breakouts for a number of capital (and expensed) upgrade and transition projects are provided below in Sections 2.10.3 and 2.10.4, respectively. Current labor and other overheads applied to direct labor and material costs are as follows:

- 5.0% materials and taxes (applied to material costs to cover material procurement costs);
- 47.0% payroll overhead (applied to direct labor for payroll taxes and fringe benefits);
- 30.0% transport overhead (applied to direct labor for transit to a work site);
- 10.0% administrative and engineering (applied to total, loaded labor and material costs for A&G support and allowance for funds used during construction (AFUDC)).

Where applicable, labor hours and the related labor costs are shown on the WFM estimates. The labor costs are based on SCE&G's current fully loaded labor rates for foreman and for engineering and administration personnel, respectively as follows:

Loaded labor rates:	Foreman	Engineering
• Direct labor cost:	$30.46	$45.00
• Payroll overhead (at 47.0%):	14.32	21.15
• Transport overhead (at 30.0%:	9.14	13.50
• Admin & engineering (at 10.0%)	3.05	4.50
• Subtotal:	$56.96	$84.15
• Inflation to 2019 transition (5.54%):	3.16	4.66
• Total direct labor:	$60.12	$88.81

The fully loaded labor costs were used to develop transition project prices. The senior category is for more experienced personnel, such as those used for inspections, and as such are the basis for the CLIN 0007 inspection costs.

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Hourly direct labor rates for line personnel range from $20.09 for an apprentice to $36.08 for a senior line locator. Rather than use these actual direct rates, the WFM system applies a "variance" or default labor rate of $50.00 per hour as a quasi-contingency factor. The difference between the actual and variance direct labor cost accounts for such things as yard time, safety protocols (e.g., tailboard conferences and meetings), site set-up and site break-down. Although the use of the variance rate increases related unit installation costs, the overall impact on unit prices is not particularly substantial.

Unit Prices. Provided in Table 2-10 is the buildup of unit prices used to estimate the RCN and fair market value of the system and to estimate ISDC installation costs. Due to the extensive amount of construction anticipated, it is assumed that most replacement work would be for main increments of more than 1,500 feet. It was also assumed that main pipe installation would reflect a blend of five percent pavement and 95 percent established grade (non-pavement).

Directional boring is a common installation method. There nonetheless will be instances where boring cannot be used, in which case trench excavation would be used. As shown in the blended cost table, there is a relatively small trenching premium for established grade work. The premium is quite substantial, however, in the rarer instances where SCE&G must excavate into paved areas. Boring would be used for all pavement pipe installations.

Table 2-10. Derivation of Blended Pipe Installation Unit Costs ($/LF)

Pipe Size	Pavement (5%)	Established Grade (95.0%) Boring (25%)	Established Grade (95.0%) Excavate (75%)	2016 Blended Cost [1]	Cost Escalation [1]	2018 Blended Cost
Mains:						
2.0" PE	17.71	34.08	39.18	22.67	1.026	23.26
4.0" PE	24.64	49.57	54.97	32.08	1.026	32.91
6.0" PE	30.98	65.13	71.19	41.10	1.026	42.17
8.0" PE	38.80	84.90	91.55	52.39	1.026	53.75
Services:						
0.75" PE	n.a.	n.a.	n.a.	10.29	1.051	10.82
1.25" PE	n.a.	n.a.	n.a.	21.28	1.051	22.36
2.0 " PE	n.a.	n.a.	n.a.	33.96	1.051	35.69

[1] The weighting calculation for the blended main cost is: (a) pavement boring at 5.0% (b) established grade boring at 95.0% x 25.0% = 23.75%; and (c) established grade excavation at 95.0% x 75.0% = 71.25%.

[2] Price escalation from 2016 to 2018 based on Handy-Whitman Index of Public Utility Construction Costs for the South Atlantic Region.

Unit pipe costs were WFM -generated. The unit prices for mains include valves based on a standard for the upstream system of two valves per 1,500 LF of main. Sample WFM outputs are provided in Attachment C for 2-inch main and 2-inch service pipe.

Included in the sample WFM -generated unit price for 2-inch PE mains are the following:

- Tracer wire;
- Storm water pollution plan compliance;
- Surface restoration;

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- Tie-in holes;
- Ball valves;
- Elbow joints and connections;
- Inspections; and
- Pressure testing.

In a similar vein, included in the sample WFM -generated unit price for 2-inch PE service lines are the following:

- Tracer wire;
- Riser stake and service;
- Anode;
- Tee connection;
- Valves;
- Regulator;
- Excess flow valve;
- Inspections; and
- Pressure testing.

Costs for regulator sets also are provided. They are reflected in the composite cost for a meter set with the cost of the meter itself netted out. The unit costs also are new installations and, as such, do not include abandonment and disposal costs for replacements. The later costs are, however, reflected in the ISDC and renewals and replacements price estimates.

2.10.2 Due Diligence Basis for Proposed Capital Upgrades

The general scope, composition and condition of the utility system are generally as presented in Attachment JA2 of the Request for Proposals and specifically in the Table 3 system inventory. The scope of the privatized natural gas distribution system includes the exterior distribution system up to the designated points of demarcation. Per the Table 3 inventory, the system generally contains:

- 116,700 linear feet (LF) of steel pipe (22.1 miles);
- 99,300 LF of polyethylene pipe (18.8 miles);
- 376 regulators;
- 27 pressure reducing stations;
- 423 valves; and
- 38 secondary meters.

SCE&G's pre-proposal due diligence assessment of the gas distribution was primarily based on the Attachment JA2 system description and the limited amount of current information in the Technical Library. Of particular note was the PBS&J *Gas Utilities Assessment Technical Report*, March 2010 (hereinafter referred to as the 2010 Assessment Report). The basis also reflects the results of the pre-proposal site visit.

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Since the piping system is underground, SCE&G's site visit precluded a physical inspection of mains and service lines to assess condition and determine whether they appeared to have been properly installed. This would have particularly applied to PE pipe fusions, the steel pipe coating material and the extent of possible steel pipe corrosion. Another area of concern involves whether plastic pipes was consistently installed with tracer wire and warning tapes. And if initially installed, the Attachment JA2 assessment noted that there were broken or cut locate wires within the PE system.[9]

The due diligence assessment also noted that proper and continuous compliance with Title 49 procedures and documentation, due perhaps to limited resources or other reasons, was not evident. This seems to have resulted from not using the 49 CFR 192 maintenance and record keeping requirements as guidance, but resources may not have always allowed strict adherence. For example, leakage surveys and cathodic protection monitoring have not adhered to the schedules prescribed in 49 CFR 192.

There are three issues of additional particular concern. The first is the Government-recognized lack of continuity or "locatability" within the gas system, that:

> "… prevented successful locating of underground pipe in most areas of the system. As such, validation of the system maps was not possible in most instances unless excavation to examine buried facilities was allowed."

The second is corrosion. Assessment reports recognized problems with the cathodic protection system and maintenance of facilities (especially rust removal and painting of metallic facilities). It was noted that measures were taken to address system deficiencies. These included the installation of rectifiers in 2008 and a post-2008 wire brushing and painting. Notwithstanding these efforts, it must be assumed that the lack of continuous catholic protection degraded the condition of the steel piping. And once degraded, the process cannot be reversed.

Additional observed and anecdotal issues with the system are:

- There was no evident documentation to support a maximum allowable operating pressure. It is understood that the newer pipe installations were generally pressure tested. It is not known, however, if the older pipe was tested or if the test records are obtainable.
- While a utility standard is to operate and maintain all valves annually, there seemed to be little such effort within the Installation such that many valves are in poor condition. Examples of deficiencies included valves repaired with duct tape and grease stops that can be easily removed.[10]

[9] Gas system descriptions for other Army installations indicated that not all of the PE pipe had tracer wire. Absent accurate and up-to-date maps, however, it would be difficult to determine which sections of pipe have or do not have tracer wires. And without comprehensive records, it similarly would be difficult to identify the portions of PE pipe with broker or cut tracer wire.

[10] Section 208 in SCE&G's O&M Manual states that each valve that may be necessary for the safe operation of a system must be maintained at least once each year. The process begins with locating the valve using GIS and digital compliance records. Sealant/lubricant is injected by a qualified individual if a valve does not properly operate. The Company's Failure Investigator is contacted if the valve still does not properly operated.

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- Leak detection surveys were not performed at the required intervals. For example, Attachment JA2 indicated that a survey was performed in August 2011 and another was scheduled for late 2015.
- There are locations with obvious gas odors. This means that there is system leakage and the leaks have not been identified and repaired in a timely manner.[11] It is believed that the lack of proper and periodic main valve maintenance is the cause of a number of suspected leaks.
- Of the inventoried 376 regulators, the 2010 Assessment Report classified 29 percent (109 units) and 22 percent (82 units) as in fair and poor condition, respectively.
- The 2010 Assessment Report also classified all but three of the pressure reducing stations as in fair to poor condition.
- There were a number of minor issues at many of pressure reducing stations. These included:
  - A missing regulator;
  - PE piping out of and into the ground;
  - Lack of structural support or barriers;
  - Absence of main valves to enable the gas shut offs; and
  - Absence of bleed values (to reduce pressure when doing maintenance).
- Excess flow valves (EFVs) were not evident. Title 49 requires EVFs for all new or replaced residential services and there is a pending rulemaking to extend the requirement to commercial services.[12]
- There were instances of improper repairs to service regulators. For example, tape with a hardening agent was used. This method does not provide a proper seal and often leads to gas leakage.
- There are some isolated instances where exterior piping seemed to be installed by a plumber rather than a certified gas installed. The proper installation methods and the quality of the facilities are therefore questionable. In at least one instance, interior pipe was laid.

Notwithstanding the above discussion, the Attachment JA2 condition assessment concluded that:

> The Installation's natural gas system provides an acceptable quality of service. DPW personnel did not indicate any significant problems with the gas system other than typical age-related problems and leakage.

[11] SCE&G's leak response procedures provide that: "when investigating a gas leak, it must be assumed that a hazardous conditions exists unless proven otherwise. Therefore, prompt action is required."

[12] Section 1020 in SCE&G's Design and Installation Manual requires an EFV for all new or replaced residential services. EFVs also should be installed on commercial services when practical. This generally applies to all commercial ¾" and 1 ¼ services. Curb valves should be used for services of 2" and above.

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SCE&G does not completely concur with this characterization. If a gas system is properly installed and maintained, the age alone of facilities would not be a primary factor in the quality or reliability of the service. And the combination of past corrosion and valve issues create the potential for reliability issues. The lack of material records, test reports, lack of design certification and the application of the numerous other requirements for a natural gas system indicate that the system is not Title 49 compliant.

***Inventory Quantities*.** Attachment JA2 requires that proposals be based on the Table 3 system inventory and use the site inspections as well as information included in the Technical Library as reference points for developing other aspects of a proposal. Accordingly, the scope (and related Volume IV prices) of this Capital Plan is based on the inventory quantities and other information.

As noted above, the Attachment JA2 inventory did not differentiate main from service pipes or the pipe material for the listed valves. SCE&G accordingly assumed the following system characteristics:

- System piping (LF):
  - Service lines: 40,200
  - Main lines: 175,800
  - Total pipe: 216,000
- (Main) valves (number):
  - Steel: 193
  - PE: 230
  - Total valves: 423

Of particular note is the privatized system's inordinately large portions of larger-diameter mains. As noted above, about 13 percent of the mains consists of 8- and 10-inch pipe. This is significantly higher than the 0.94 percent of mains with diameter of 8 inches or more on the upstream SCE&G distribution system. About 29 percent the mains are 6 to 10 inches in diameter.

***Pipe Material*.** Attachment JA2 did not indicated if the system contains medium density polyethylene pipe (which is the standard for the upstream and many Army installations) or high density pipe (which is less commonly used). It is even possible that the system contains a mix of medium and high density pipe.[13] Exposed PE pipe observed during the site visit was yellow, which is for MDPE pipe. It accordingly is believed that MD pipe was used for recent upgrades and replacements.

As is the norm within the gas utility industry, SCE&G generally uses MD polyethylene pipe for both distribution mains and service lines. One reason is that pipe fusions are easier when using the same kind of material.

While it is not uncommon to join HD and MD pipe, relatively more care must be taken to make sure that the fusions and other work is properly performed. This concern would normally be ad-

[13] The Army's 2010 Gas Utilities Assessment Technical Report noted that the Fort Jackson system is "a combination of steel and polyethylene (PE) pipe or high density polyethylene (HDPE) pipe."

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dressed by using properly certified personnel to perform the work, coupled with a vigorous quality control (QC) inspection regime as is standard for the upstream SCE&G system. The historical level of QC by Installation personnel is uncertain.

***Maximum Allowable Operating Pressure*.** The existing Government-owned system is served from a single, master-metered connection with the upstream SCE&G upstream system. The Fort Jackson pipeline system is operated at two distinct pressures: 75 and 25 psig. These pressure levels are generally consistent with readings from observed regulator station.

The privatized gas system must have an established and documented MAOP for compliance with 49 CFR, Part 192. Such documentation was not systematically evident from a review of Technical Library information. This is not to say, however, that pressure testing records do not exist. To the contrary, it is reasonable to assume that PE pipe installed within the past ten years, and more likely within the past year or so, was properly tested. It is instead uncertain where the test records were retained (e.g., with the installation contractor, a MILCON or other general contractor, the Corps of Engineers or Fort Jackson's DPW) and if they can be retrieved during the Transition Period. The following criteria will be applied to the privatized system.

- *Piping With Adequate Material and Proper Pressure Test Documentation*. The MAOP will be as documented for those portions of the privatized system for which there is Title 49 compliant pressure testing records and sufficient as-built information as to verify the integrity of the installed components. Gas distribution pipe is pressure tested up to 150 percent of an established MAOP. No additional testing would be required.

- *Iron and Steel Piping*. A fully documented MAOP for the steel piping is important even though it will be replaced within five years from the Contract Start Date. To the extent records are available, they will be reviewed to verify operating pressures. Absent such records, the de facto MAOP for such piping will be the operating pressures on the CSD, provided that it does not exceed 60 psig. Any unverifiable piping would result in the MAOP being no higher than 60 psig or the current operating pressure, whichever is lower.

- *PE Piping Without Test Documentation*. The operating pressures on the CSD would serve as an interim, not to exceed, de facto MAOP for PE piping lacking proper Title 49 documentation. Pressure testing, if determined to be necessary and/or beneficial to further substantiate the establishment of a higher MAOP, would be completed for affected facilities as authorized by the Government.

- *PE Replacement Piping*. The need for replacements would be largely condition driven, such as if piping is found to have improper fusions, excessive cracking, shallow installation depth, high leakage rates or otherwise not to have been properly installed. It is doubtful that such piping could be successfully pressure tested, given safety hazards and other considerations. Here, as well, the interim, not to exceed, de facto MAOP would be the operating pressures on the CSD, provided that they do not exceed 60 psig or the design capability of the subsequently identified material and wall thickness.

- *60 psig Maximum MAOP for PE*. Safety considerations resulting from the uncertainty regarding which mains are high or medium density, coupled with the apparent lack of sustained record keeping, would necessitate a 60 psig MAOP for all PE segments unless it can be verified that the piping is HDPE, the installation records and as-builts support a higher MAOP and the lines are successfully pressure tested to establish a higher

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MAOP, provided that the system install records are sufficiently detailed to provide assurance the material can withstand a higher operating pressure. SCE&G would follow the current O&M standards for uprating and establishing MAOPs.

There are no known current requirements to increase system operating pressures. There may, however, be an as yet undefined need to conduct pressure testing of existing facilities to establish a higher MAOP on portions of the privatized system, especially those operated at lower pressures. Should such testing be required in the future (e.g., to accommodate load growth), SCE&G generally would "uprate" the existing pressurized facilities in small increments to establish a higher MAOP. SCE&G would follow the Section 107, *Uprating Pipelines*, procedures in the Company's Operations and Maintenance Manual.

The cost for post-conveyance pressure testing, or other MAOP related intervention, would be capitalized if conducted as part of an approved capitalized system upgrade project. Cost recovery would be under the Contract Rate Charge. It is possible; however, that pressure testing or other interventions may be required at the request of the Government with no related capitalized upgrade. In this case, the cost would be expensed and recovered under an equitable price adjustment.

***Steel System*.** The Attachment JA2 Table 3 system inventory indicates that that steel piping accounts for 54.0 percent of the privatized system. As indicated above, proper and continuous cathodic protection documentation, which was required by DOT 192 starting in 1970, was not evident and it was uncertain whether there is adequate documentation on other important aspects such as establishing an MAOP or proper maintenance and corresponding records as required by Title 49. Additional related considerations regarding whether and when to retain or replace the steel piping were:

- *Lowest Total Cost*. SCE&G estimates the cost of replacing steel piping versus the cost required to bring an existing system segment up to industry standards. By replacing a segment, many required activities, such as correcting functional deficiencies to provide reliable service, are accomplished in a much more efficient manner.
- *Piping Materials*. SCE&G is concerned with the condition of the steel pipe, especially since all facilities did not seem to have complete and sustained cathodic protection.
- *Installation Specifications*. Due to the unavailability of comprehensive and continuous records, SCE&G was unable to determine if the facilities were properly installed and maintained in accordance with standard industry practices.
- *Cathodic Protection*. Retention of the steel facilities would necessitate the maintenance and/or replacement of cathodic protection systems. Replacing the steel with PE piping would generally avoid this considerable expense.
- *Maximum Allowable Operating Pressure*. Given the age and condition of the steel facilities, it is doubtful that the segments could be pressure tested in an economical manner, if at all. There are likely to be numerous leaks as the system pressure is elevated. The testing would then have to stop until the leaks are repaired. An inordinate number of pressure test iterations would be required. Replacement of the steel facilities would avoid what is likely to be a largely unproductive and futile process.

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- *System Rationalization*. Replacing a sizable quantity of steel piping, especially if coupled with a higher operating pressure, should result in a degree of rationalization of the system to minimize potential excess capacity and circuitous pipe routings.
- *System Mapping*. Replacement piping will have accurate maps.
- *Distribution Integrity Management*. Required replacements of steel piping would be consistent with the SCPSC's DIMP requirements and the Attachment JA2 Government-recognized system deficiencies.

In light of the above, SCE&G proposes to replace all of the steel piping within five years of the Contract Start Date (see Project C-1). Relatively small segments of existing steel piping may be replaced with steel pipe for code compliance, which requires the use of steel pipe when crossing steam lines and certain roadways. Cathodic protection for these pipe segments, as well as for steel risers and regulators, would be provided by localized anodes rather than from a "system" that provides protection for an extended run of steel pipe.

There is anecdotal information that, notwithstanding issues cited in the noted corrosion report, parts of the system are in good, or even great, condition. For example, SCE&G crews were recently called to the Post to install a hot tap on a six-inch steel main. An excavation pit was dug to expose the pipe and crew personnel took off the coating off about 8 foot of pipe. That pipe was characterized as in great condition. However, it was noted that an adjacent valve was covered in duct tape.

Since a substantially part of the system will have to be replaced, SCE&G will use this opportunity to assess the system as an integrated unit (see proposed Project E-3) and develop a comprehensive plan that addresses current and future requirements. The physical layout of the rebuilt facilities also will be addressed with the aim of minimizing run lengths. A particular focus will be opportunities to rationalize the system by increasing the low pressure portion of the system to operate at SCE&G's standard 60 psig. This will enable a reduction in pipe size while still providing needed throughout with an adequate margin to accommodate future load growth. For example, the capacity of a 4" main operated at 60 psig would be comparable to the capacity of a 6" main operated at 20 psig.

SCE&G also can uniquely explore opportunities to provide a second point of delivery by tapping into Company-owned distribution lines near the north side of the Post. Besides the added reliability of an alternate supply source, if feasible this option could reduce the length of long pipe runs within the Installation.

***Service Regulators, Risers and Valves*.** The same inspection of the system during the site visits did not identify significant numbers or types of deficiencies. A sample of related observed deficiencies include.

- The lack of paint and resultant rusting was somewhat common on the older sections of the system. It is possible that some of the facilities lacked paint for an extended period of time, in which case there may be deep pitting and require replacement.
- A few regulators and vent pipes were sited near windows, doors and building air intakes and electrical sources (such as an air conditioning unit or electric panel, which could create sparks/arcs and an ignition risk).

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Regulators (and risers) associated with steel service lines will be replaced as part of Project C-1. This would account for about 263 units, which is considerably in excess of the 191 regulators classified in the 2010 Assessment Report as in fair to poor condition. Minor rusting would be addressed in the interim before replacement as an as-needed, expensed maintenance item and therefore would not be included in the scopes of the ISDCs. Although it is possible that some regulators connected to PE service lines also may need replacement independent of pipe replacements, this would be addressed as needed as part of SCE&G's approach to renewals and replacements.

The Attachment JA2 system inventory identified 423 valves, all of which are believed to be main valves. This equates to about 17 valves per mile of main. The number of main valves thus seems excessive. For example, a typical gas utility distribution system might contain two to three valves per mile.

The apparent excess number of installed valves also seems consistent with the Army's standard operating practices for gas systems which generally state that successful operations of a gas system depend largely on the number of strategically located valves. Valves also usually are installed so that sections of the system or individual lines can be isolated without disturbing adjacent sections."

Applying SCE&G's standards to the general configuration of the Fort Jackson system would generally call for an average of no more than two or three valves per main mile. Any main replacements would include the installation of main valves at a conservatively estimated average of 3.0 valves per main mile.

Pressure Reducing Stations. The Table 3 inventory lists 27 regulator stations, all of which were installed in 1965. SCE&G was unable to visit all of the stations included in the Attachment JA2 system inventory. An initial observation was that many of the stations have been or were in the process of being rebuilt. None of the rebuilds, however, were consistent with SCE&G and industry standards such that some upgrades or repairs most likely will be needed for most if not all of them. Related additional observations are:

- Perhaps the most serious deficiency was that some of the upgraded stations used PE instead of steel pipe for the vertical runs out of higher pressure and into the lower pressure underground pipe. At a minimum, this results in an unsteady structure that is more prone to damage from being struck by vehicles. This risk can be mitigated by installing steel pipe and/or constructing bollards (i.e., steel posts). PE pipe also degrades when exposed to sunlight and exposed pipe is not allowed by code.
- A pressure relief valve was closed.
- One station is located near a housing area. It should be fenced in to minimize vandalism or accidental damage.
- Threaded flanges were utilized and welded.
- One station is missing a gas regulator.
- The stations did not include needle valves that would allow maintenance on the regulator without significant risk to the worker.
- Station equipment generally was painted. There was some observed rust. Such minor rusting would be addressed as an as-needed expensed maintenance item.

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Given the absence of material issues with observed stations, and the apparent on-going replacement effort, there was no observed need to completely replace one or more stations. There is, however, a capitalized project to implement a number of individually minor repairs and upgrades.

***Cathodic Protection*.** Notwithstanding the above-noted issues, impressed current cathodic protection will not be needed after the system's steel piping has been replaced. While corrosion damage to steel pipe is irreversible, the corrosion process is relatively slow.

However, an initial cathodic protection survey will be performed in the transition period to determine the state of the cathodic protection on identified steel sections. This will assist in prioritizing the replacement of the system, and in verifying that no immediate action is necessary to install large numbers of anodes as a protective measure as well as providing additional assurance that the proposed ten year term is appropriate. Passive, sacrificial anodes will be replaced as necessary.

The Title 49 code requires that all steel installed underground after 1970 be coated, cathodically protected and routinely monitored. Annual monitoring of pipe-to-soil potential measurements is required and generally anything reading less than -0.850 mV is considered to be inadequately protected and out of compliance. Prompt remedial action is required on any steel not having adequate protection as indicated by testing.

***Propane Air System*.** The Attachment JA2 system description states that the Post will retain ownership and operation of the propane air system. For safety, liability and other reasons, SCE&G will not allow the injection of propane air into the privatized natural gas distribution system. The reasons for this restriction include the following:

- Propane (unlike natural gas) is heavier than air and, as such, tends to accumulate in low areas (such as basements or other below-grade areas of buildings). Accumulated propane may ignite, thereby presenting a serious public safety (and mission) risk.
- Gas burning equipment does not always work properly when fired using propane air mixes. In some instances, a pilot flame may be extinguished without the knowledge of a building occupant. This could inordinately increase SCE&G's O&M cost due to increased pilot relight service calls. There also is a serious risk that leaking propane may accumulate in the low areas of a building, thereby creating an explosion risk.
- The propane leakage risk is exacerbated because the Post does not adhere to the same building codes that apply to SCE&G's other service customers. For example, there may be instances where gas regulators and other distribution system equipment are located within enclosed areas.
- Improper propane-air mixtures can accelerate the degradation of PE piping, thereby increasing SCE&G O&M and replacement costs to levels in excess of the revenues generated under the formula rate.

There should not be an identifiable commodity cost impact because the plant could not be operated for the past few years and there is no expectation that it would operate as envisioned in the future. The Installation was unable to curtail its gas commodity deliveries, and this resulted in very significant (millions of dollars) in transportation service penalties. It is noted as well that discussions are ongoing with the Government and SCE&G to convert the Installation from an interruptible to a firm service customer.

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Notwithstanding the above, SCE&G would work with the Post and discuss possible means to safely utilize the propane still in the storage tanks. The Government may decide to run a dedicated line from the air blender to the central plant.

It should be noted that SCE&G may be willing to allow the operation of the propane plant if the Government would provide sufficient indemnification and adhere to strict operating guidelines stipulated by SCE&G. The Government previously indicated, however, that such indemnification could not be obtained. SCE&G accordingly believes it is in the Governments best interest to not attempt to inject propane into the distribution system due to the unreliable history of the plant, the cost of plant maintenance, the ongoing training that is required for plant operators and the significant financial penalties for not adhering to gas curtailments when served on an Interruptible rate.

***Government Recognized /Deficiencies*.** The Government Recognized System Deficiencies are identified in Table 6 of the Attachment JA2 natural gas system description. SCE&G's proposed responses are summarized in Table 2-11.

Table 2-11. Comparison of Atch JA2 Deficiencies and SCE&G's Capital Plan

System Component	Attachment JA2 Description	Capital Plan Reference
1. System survey & record drawings	Conduct a comprehensive survey of the system to identify components not shown on record drawings and identify errors on existing record drawings (1 year from CSD)	The system survey and comprehensive mapping (as well as an actual inventory) will be completed during the Transition Period (see Project T-3).
2. Computerized model	Develop and maintain an accurate computerized model of the system to implement contingency studies, reliability, and load analysis (2 years from CSD).	The modeling effort will be completed within two years of the Contract Start Date.
3. Main valve at SCE&G meter station	Install an aboveground main valve on both branches of the Government feed just outside the SCE&G Meter Station at Gate 1 (Jackson Boulevard). The Fort Jackson main valve should be located 5 feet outside the SCE&G meter regulating station. The valve should be secured by a concrete wall enclosure with chain link fence. (2 years from CSD).	The purpose of the valves is to shut off gas flowing into the Installation. The Company-owned meter station already contains such a valve, so SCE&G ownership of the privatized system obviates the need to install additional valves (see, also, clarifying discussion below). The valves will be installed when the steel pipe is replaced.
4. Steel pipe and valves	Replace all coated and wrapped steel pipe and all 1965-vintage valves with PE. (5 years from CSD)	All steel pipe will be replaced within five years under ISDC Project C-1, with replacements prioritized based on Transition Period inspection and survey results. All valves connected to steel piping likewise will be replaced. As-required PE valve replacements will be covered under the Section 2.11 levelized R&R. [14]

[14] The material and installation cost for a ball valve and related box and couplings ranges from about $300 to $525 for a 4" and 6" valves, respectively. The installed cost of a residential or small commercial service regulator ranges from about $200 to $250. SCE&G's base year annual R&R spending is estimated at about $22,000. This amount therefore would accommodate a considerable number of as-needed valve and regulator replacements during the first five ownership years.

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Table 2-11. Comparison of Atch JA2 Deficiencies and SCE&G's Capital Plan		
System Component	**Attachment JA2 Description**	**Capital Plan Reference**
5. Gas regulators	Replace all facility gas regulators. (5 years from CSD)	All regulators connected to steel services will be replaced as part of the Project C-1. As-required replacements of regulators connected to the PE system will be covered under the Section 2.11 levelized R&R.

Referencing the suggested main valve at the meter station per #3 above, there is a 10-inch pipe sourced from the upstream system with a valve that can cut off service to the entire installation in the very unlikely event this would be required. There are two Government-owned pipe branches into the privatized system. The installation of shut-off valves would require trenching to gain access to the pipe. Gas service would have to be cut off and each line purged before the valves could be inserted. Gas service within Fort Jackson would have to be interrupted during this process.

A more economical, and less disruptive, approach is to use a combination of repairs, replacements and relocations to properly valve off gas mains in accordance with standard industry practices. Properly placed valves can limit service disruptions. SCE&G also will annually inspect all valves to make sure they can be properly worked. In the event new valves are nonetheless desired, this should be coordinated with the steel pipe replacements. This would include installing the noted two main valves.

Regarding the steel replacement schedule, it is possible that some of the pipe is in good condition and some replacements can be programmed for beyond five, or possibly even ten, years. SCE&G has periodically performed work on the system and has found pipe in acceptable condition but that work was in small areas. It may be that the pipe in these areas was acceptable but the same pipe in other areas may not be acceptable. This will be determined during the system inspection and records review.

***Other Deficiencies*.** There were other indications from the pre-proposal site visits and Technical Library documentation that the system may not have been properly maintained on a comprehensive and sustainable basis. The potential system deficiencies include inadequate operational documentation as required by the Title 49 pipeline safety regulations. These deficiencies will be addressed as either part of the initial Capital Plan or as elements of SCE&G's standard operating practices. The potential deficiencies and related remedial actions are summarized in Table 2-12.

Table 2-12. Response to Potential Gas System Maintenance Deficiencies	
Deficiencies	**Action Required**
DOT 49 CFR Part 191:	
Notification of certain gas incidents in accordance with DOT Title 49 CFR Part 191.9	SCE&G has a reportable incident system in place; will be expanded to include Fort Jackson incidents.
Submission of an annual report on its gas distribution system in accordance with DOT Title 49 CFR Part 191.11	SCE&G already files an annual report; will be expanded to include Fort Jackson statistics.
DOT 49 CFR Part 192, Subpart D:	

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Table 2-12. Response to Potential Gas System Maintenance Deficiencies	
Deficiencies	**Action Required**
Inadequate placement of valves at each regulator station in accordance with DOT Title 49 CFR Part 192.181	SCE&G will design and install properly spaced isolation valves at each of the Installation's regulator stations.
DOT 49 CFR Part 192, Subpart F:	
Written procedures for joining pipe in accordance with DOT Title 49 CFR Part 192.273	SCE&G has in place a comprehensive set of standards and written procedures including pipe joining procedures that meet DOT 49 CFR Part 192 requirements. Additional procedures for new materials and components will be added as necessary.
DOT 49 CFR Part 192, Subpart G:	
Plastic pipeline buried with tracer wire in accordance with DOT Title 49 CFR Part 192.321	SCE&G will install tracer wire with all new replacement piping. If there is existing piping without tracer wire, it will be mapped, located or replaced.
DOT 49 CFR Part 192, Subpart H:	
Accessible service valves. Must be accessible in accordance with DOT Title 49 CFR Part 192.365	SCE&G will review all service valves required for proper system operation to insure they are located and accessible in accordance with DOT Title 49 CFR Part 192.365.
DOT 49 CFR Part 192, Subpart I:	
Operable cathodic protection (CP) to protect buried steel pipeline systems and components	SCE&G will protect all buried steel components and pipelines that remain with adequate CP systems in accordance with DOT Title 49 CFR Part 192 Subpart I.
Monitoring of CP systems in accordance with DOT Title 49 CFR Part 192.465	All buried steel pipelines and components will be monitored by SCE&G in accordance with DOT Title 49 CFR Part 192.465.
DOT 49 CFR Part 192, Subpart J:	
Proper records on tests performed on steel pipelines	SCE&G currently keeps comprehensive pipeline records on all pipelines (including steel) for the life of the pipeline. SCE&G will expand its record system to include all information on all pipelines (of all materials) it tests, upgrades, replaces, or installs on the Installation in accordance with DOT 49 CFR Part 192.517.
DOT 49 CFR Part 192, Subpart L:	
Procedural manuals	SCE&G has a comprehensive set of written procedures and standards for operating and maintaining its pipelines. These will cover most procedures performed within the Post. New, written procedures will be developed as necessary covering installation and O&M on any new materials or components in accordance with DOT 49 CFR Part 192.605.
Program of continuing surveillance / patrolling the pipeline in accordance with DOT 49 CFR Part 192.613 and 721 (b)	SCE&G has a program for pipeline surveillance and patrolling that complies with all regulations; will expand the program to the Installation and keep reports on file.
Damage Prevention Program (DPP) in accordance with DOT 49 CFR 192.614	SCE&G has a DPP. The only added cost will be the initial locating and marking of Fort Jackson facilities. SCE&G will expand the coverage of its existing program and provide ongoing line locating and marking of the natural gas distribution pipelines as appropriate.
Written emergency plan in accordance with DOT 49 CFR 192.615	SCE&G has written emergency plans in place; the coverage of the plans will be expanded to include the Installation.

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Table 2-12. Response to Potential Gas System Maintenance Deficiencies	
Deficiencies	**Action Required**
Pressure testing pipelines without adequate documentation to verify the MAOP will satisfy the DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) requirement in 49 CFR 192.619.	SCE&G has procedures and a program in place for pressure testing to comply with the notification from PHMSA to have reliable, traceable, verifiable and complete documentation of transmission pipeline MAOP. The pressure test will prove up the existing MAOP value on the line and validate how SCE&G operates its system. Pressure tests also act as a go-no go assessment that addresses threats in the integrity management program, such as the stability of manufacturing and construction threats. The pressure testing of pipeline will determine the fitness for use of the entire length of the pipeline tested, inside and outside of HCA.
Public education program.	SCE&G has a public education program in place; the program coverage will be expanded to include the Installation.
Procedure for investigation of failures	SCE&G has procedures and a program in place for investigation of failures; will be expanded to include the Installation.
DOT 49 CFR Part 192, Subpart M:	
Marking of buried pipelines	SCE&G will install pipeline markers where appropriate on Post pipelines in accordance with DOT Title 49 CFR Part 192.707.
Leakage surveys	SCE&G performs pipeline leakage surveys at intervals required under DOT Title 49 CFR, Part 192.723. Following the initial special leak surveys, regular surveys will be performed in accordance with this regulation.
Periodic inspection of regulator stations	SCE&G has an established O&M inspection program for its regulator stations; will expand program coverage to regulator stations on the Installation. Maintenance will be performed in accordance with DOT Title 49 CFR Part 192.739.
Telemetering of recording gauges at regulating stations	SCE&G maintains electronic pressure recording gauges (EPRs) at some 120 locations throughout its service territory. EPRs continually monitor actual operating pressures in SCE&G's distribution system. EPRs will be added as necessary and in accordance with DOT Title 49 CFR Part 192.741.
Testing of relief devices at regulation stations	SCE&G tests all overpressure protection devices in its regulator stations at regular intervals as part of its regulator station O&M. Overpressure protection devices will be tested in accordance with DOT Title 49 CFR Part 192.743.
Maintenance of valves	SCE&G regularly maintains all valves necessary for the safe operation of the system at regular intervals; will locate and identify similar valves on the Installation. They will be maintained and records kept in accordance with DOT Title 49 CFR Part 192.747.

***Installation Methods*.** In accordance with the Section 2 Operations and Maintenance and Quality Management Plan, new and replacement construction will be in accordance with SCE&G's standard service practices. This means that the same techniques and methods that are applied upstream on the 13,400 mile utility distribution system within South Carolina will be applied as well within the Installation. These methods have proven to be cost effective and result in safe and reliable service.

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- *Directional Boring*. It is expected that directional boring will be used as a common installation method. Because of the potential difficulty in verifying locations of existing underground facilities and/or subsurface conditions, special precautions must be taken when installing underground natural gas facilities by any method of boring (e.g., directional, pneumatic, etc.). These precautions are intended to ensure as well as verify that proper clearance from other underground structures is maintained.
- *Open Trench Excavation*. This is also a common installation method and would tend to be used in congested areas where boring was less practical or when connecting main and service lines. Trenching is the preferred method for service line installation.

All PE pipe is installed with tracer wires and buried warning tape placed with at least a 6 to 12-inch separation from pipe. Tracer wire facilitates pipe location and markings. Buried warning tape helps prevent inadvertent damage to pipe during excavations. Excess flow valves will be installed for all (new) or replacement residential and smaller commercial service lines.

SCE&G's access to specialized equipment and crew resources, coupled with close coordination with Installation personnel, will help reduce the extent and duration of surface disruption, as compared to historical construction practices within Fort Jackson.

***Third-Party Construction*.** Section C.11.5.3 of the Solicitation addresses third-party constructed natural gas infrastructure that may be connected to the privatized system. Such construction would be in accordance with SCE&G's standards, and require an SCE&G inspector to monitor and observe the construction to ensure quality and compliance with SCE&G's construction standards. Thorough and complete construction as-builts and pressure testing records would also be required (see, also, related Section 2.10.4 discussion). At the Government's option, SCE&G may take ownership of system components constructed by a third party.

2.10.3 Natural Gas System Capital Improvements

Consistent with SCE&G's standard method of service, there would be no up-front payment requirements for capital upgrades. The installed cost instead will be added to the contract rate base, and the cost recovery would be accomplished as part of the Contract Rate Charge. The project costs incorporate blended unit costs based on a mix of 95 percent established grade and five percent downtown/urban grade construction.[15] Replaced risers, regulators and other above-ground facilities would be removed. Mains and service lines would be capped, purged and generally abandoned in place.

2.10.3.1 Project C-1: Replace Steel Facilities

The scope of this project is to replace the 116,700 LF (22.1 miles) of 1965-vintage steel mains and services, along with related valves and regulators (except instances where steel pipe is required to be installed at steam line crossings). It is envisioned that the installation of the replacement facilities will be phased in over five years.

The five-year term is consistent with Attachment JA2, which called for replacing the coated and wrapped steel within five years. The 5-year requirement seemed to be predicated primarily on

[15] The Government elsewhere for a large DoD installation suggested that two to three percent of its natural gas system was under pavement. The unit costs applied herein more conservatively assumed 5 percent of the system would be in an urban type environment.

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the age of the piping (i.e., installed in 1965 and thus currently 53 years old). Neither SCE&G nor other utilities replace gas facilitates based solely on their age. Properly installed and maintained coated and wrapped steel pipe can and does have an in-service life lasting for 60, 70 or more years.

SCE&G does not base valuations or the need for replacements on (theoretical or assumed) component design lives. It is noted that the depreciation life for steel (and PE) mains is 60 years versus an Attachment JA2 design life of 40 years. As noted elsewhere, in-service life of system components invariably would be longer than the depreciation life because the latter reflects facilities removed from service due to pipe relocations, a customer's termination of gas service or other reasons not related to the age or condition of the facilities. It would thus seem reasonable to assume that the useful life of steel mains should be longer than the 60 year deprecation life.

Nonetheless, and consistent with the December 2017 discussions at Fort Jackson, the proposal calls for completing the steel pipe replacements within five years.

As noted above, SCE&G will prioritize the replacements based on the results of the Transition Period inspections and studies. There also will be discussions with Installation personnel regarding mission changes and other activities that may affect the need, capacity, location and timing of the replacements. SCE&G may accelerate portions of the replacement project if warranted by safety, reliability or non-compliance concerns, or to accommodate Government requests for upgrades, expansions or other changes. The converse also might be the case if conditions justify delaying some of the replacements, especially after the most critical needs were met.

Construction techniques will be applied to minimize costs and disruption. The installed costs will be added to the plant-in-service component of the CRC when the charge is updated. Existing underground segments of replaced steel piping will then be capped, purged and abandoned in place. The number of main valves to be replaced is based on an average of two valves per 1,500 LF of main (about seven per mile).

The estimated scope and cost of this project is as summarized in Table 2-13.

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Table 2-13. Project C-1: Replace Steel Piping			
Mains[1]	LF	Unit Cost ($/LF)	Costs ($)
1.00 inch	11,400	23.26	264,300
1.25 inch	10,500	23.26	244,200
1.50 inch	6,100	23.26	141,500
2.00 inch	24,700	23.26	573,500
2.50 inch	700	23.26	15,800
3.00 inch	7,300	23.26	170,400
4.00 inch	11,900	32.91	391,200
5.00 inch	500	32.91	16,500
6.00 inch	8,100	42.17	341,600
8.00 inch	4,000	53.75	213,800
10.00 inch	3,500	53.75	185,700
Subtotal	88,500		2,558,500
Services [2]			
0.75 inch	16,200	10.82	175,100
1.25 inch	9,400	22.36	209,500
1.5 inch	2,600	35.69	93,000
Subtotal	28,200		477,600
Subtotal Main & Service	116,700		3,036,100
Miscellaneous Equipment		5.0%	151,800
Abandonment & Disposal		5.0%	151,800
Total Project C-1			3.339,700

[1] Unit prices for service line replacements are based on an average service line length of 107 feet. SCE&G accordingly estimates that about 232 service lines will be replaced during the five year project term.

2.10.3.2 Project C-2: Miscellaneous Station Repairs

As discussed above, SCE&G understands that the Installation is in the process of replacing all or many of the 27 pressure stations. Notwithstanding this effort, there were a number of issues with the new installations that will need to be remedied. There was no apparent need to replace for implement substantial repairs at any given station. SCE&G instead envisions that a number of individually minor but collectively major repairs will be needed. These are estimated to be equivalent to the cost to replace to stations.

SCE&G applied engineering judgement to assume a $41,800 average replacement cost for a standard, single-run station. The estimated total project costs is as follows:

- Unit cost per station: $41,800
- Equivalent number of stations: x 2
- Total project cost: $83,600

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2.10.3.3 Project C-3: Meter Replacements

The Attachment JA2 inventory identified 38 secondary meters, 17 of which are advanced-type units that were installed in 2009. The 21 others are analog meters installed in 1987. It is possible that some of the older meters will need to be replaced. This especially would be desirable if an existing meter showed signs of excessive rust or had other issues, and the service line was to be replaced. It is also reasonable to assume that perhaps 25 percent of the meters would warrant replacement as part of an ISDC. The scope and estimated project cost is as follows:

Size	Number	No Replace	Unit Cost ($)	Total Cost
• 0.75”	9	2	106	$200
• 1-1.25”	7	2	697	1,400
• 2.0” +	5	1	884	900
• Total project cost	21	5		$2,500

2.10.4 Deleted

2.10.5 Expensed Natural Gas System Transition Projects

A number of administrative, reliability based, and code compliance activities will have to be implemented to conform the system to SCE&G and industry standards and to comply with applicable laws and regulations. All of the expensed transition projects would be completed during the Transition Period.

2.10.5.1 Project T-1: Transition Management and Planning

The efficient transition from Government to SCE&G ownership of the natural gas utility system will initially necessitate very close coordination with base personnel and other non-recurring management and technical efforts. Project activities are described below.

Develop and Manage the Project Plan. All transition activities must be coordinated in detail with the Installation. This part of the transition plan allows for overall planning and management of upgrade and transition projects. SCE&G will also create a compliance plan that documents all facilities, their condition and plans to correct compliance problems.

Review Government Records. The DOT requires that many records regarding gas distribution facilities be kept for the life of the asset. SCE&G needs to obtain these records, if they exist. In addition, the records and maps contain large amounts of data that are very useful to new owners in assessing future activities and establishing maintenance records. For example, the customer is responsible for pressure testing “houseline” facilities (i.e., piping within a building). It is noted that a houseline system that could not be successfully pressure tested would be an indication of gas leaks within a building.

Update Initial Capital Upgrades. It will be necessary to identify and ascertain the status of Government-funded capital upgrade and / or replacement projects that may be on-going or completed during the interval from when the Attachment JA2 system inventory was prepared, this proposal was submitted and the date of the contract award. SCE&G proposes to meet with appropriate Government personnel and, if authorized by the Installation, Government and housing privatization contractor personnel, to arrange for an orderly transition of the responsibility for

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system operations, maintenance, repairs and replacements to SCE&G. The scope of and timing for identified initial capital upgrades would be modified appropriately. This would especially include establishing a preliminary schedule for the phased replacement of the iron and steel facilities.

Assess Potential New or Modified Service Requirements. SCE&G personnel will similarly meet to discuss potential long-term service requirement changes and related impacts on gas system configurations and capacities. Here as well, the scope and timing of identified initial capital upgrades would be modified appropriately.

Setup Records System. The DOT also requires that all maintenance on critical gas distribution system facilities is documented and available for audits. Compliance audits occur with regularity and certainty. SCE&G has computer systems to schedule and record compliance information, but all of the individual components identified during the transition must be organized and entered into the computer systems.

The privatized natural gas system will contain many hundreds of individual risers, regulators, valves and pipeline segments. Since each component will be inspected on a regular basis, SCE&G must carefully plan the new inspections so that the work is as level as possible throughout the year. This requires looking at the totality of the workload to achieve a well-balanced plan. The plan must be complete before the records can be input into the computer systems. Once entered, all data must be audited for accuracy.

Develop Emergency Response Plan. SCE&G will work with the Installation to identify and introduce all key personnel, and to document all emergency contact information. Procedures for handling emergencies must be documented and agreed upon. Some training of SCE&G personnel will be needed, and Installation access procedures must be well understood. With the Installation's concurrence, SCE&G would also like to test the procedures by including at least one emergency exercise during the transition period. Additional elements of the plan include:

- Documenting emergency contact information and special emergency response procedures and service priorities within the Installation; and
- Executing a Memorandum of Understanding (MOU) with the Fire Department to identify the need for fire suppressant equipment and clarify emergency response responsibilities.
- Executing an MOU with the housing privatization contractor (and DPW as appropriate) regarding house system relighting responsibilities and procedures.

*System Studie*s. Capacity studies will be performed by incorporating the privatized facilities into SCE&G's distribution system models. Input data will include materials, lengths and diameters of pipelines, as well as any restrictions, such as regulators, valves, reducers and crossovers that may exist. In a similar vein, modeling selected systems will facilitate the design of new connections or other enhancements that may be needed to meet the Installation's evolving gas service requirements over the extended term of the contract. Although the modeling will be initiated during the Transition Period, the studies would be completed on a preliminary basis within two years of the CSD, but would require fine-tuning over many years, in order to more comprehensively reflect near and mi-term load growth, mission changes and other considerations.

HDPE Refresher and Other Training. It is uncertain if the Fort Jackson system contains HDPE pipe. Because SCE&G uses HDPE pipe in its system on a very limited basis, service personnel

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who may regularly be assigned to work within the Post may need some refresher training regarding HDPE installation and repairs (e.g., for pipe crimping and fusion techniques). They also will need some training regarding Fort Jackson's unique security, site access, excavation permitting and other requirements.

Bill of Sale. SCE&G will work with designated Government agencies and personnel to negotiate the Deed of Sale. It is recognized that the Government will require at least 60 days from the completion of the Project T-3 final inventory to complete the Deed of Sale.

The projected project price is as follows:

• Engineering labor (hours):	1,000
• Foreman labor (hours):	180
• Engineering labor (at $88.81 / hr):	$88,800
• Foreman labor (at $60.12 / hr):	10,800
• Materials and Supplies:	7,500
• Total project cost:	$107,100

2.10.5.2 Project T-2: Initial Leak Survey

The experience of SCE&G and other regulated utilities working with Government-owned gas systems is that the survey may identify a meaningful number of leaks. This is consistent with the records review section in the 2010 Assessment Report which noted one below-ground Grade 2 leak and 77 above-ground leaks, most of which were characterized as Grade 2. While the report presented dated survey information, the expectation of leakage also is consistent with the above-noted gas odors at various places within the Installation. It is thus reasonable to assume that an initial SCE&G survey would identify an unknown number of Grade 1 and/or Grade 2 leaks.

The initial leak survey generally will comply with the standard and documented procedures which present a comprehensive and integrated approach for responding to identified natural gas system leaks. This will particularly apply to procedures for SCE&G's classification of identified leaks as Grade 1, 2 or 3 leaks. Some of the procedures, however, will have to be modified to reflect unique Transition Period responsibilities regarding such ancillary matters as leak monitoring, building evacuation and repair responsibilities for a system that is owned by, and under the operational control of, the Government.

This especially will be the case if the initial survey identifies Grade 1 leaks that require immediate and continuous action to eliminate an identified hazardous condition. The table below summarizes leak repair, re-check and repair verify schedules. SCE&G accordingly proposes that special coordination be discussed and documented in a Leak Survey and Repair Memorandum of Understanding (MOU) to be executed by SCE&G and the Government prior to the initiation of the leak survey. Among other things, the MOU should address:

- Procedures for SCE&G to recommend and the Government to implement required continuous action to eliminate a hazardous condition by, for example, closing valves, squeezing off the pipe or venting the area.
- Expedited procedures for the Installation to determine if needed leak repairs are to be performed by the Government or SCE&G.

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- Procedures to immediately notify the Installation if building evacuations are needed and instances, if any, in which SCE&G would be authorized to directly call for evacuations).
- Procedures for the Government to re-check, verify and/or clear leaks and provide as required continuous monitoring of Grade 1 leaks.
- Procedures to comply with related necessary and proper recordkeeping requirements.

The initial comprehensive leak survey will be conducted based on the maps provided. All leaks found, both below ground and above ground will be classified as either Grade 1, 2 or 3 leaks, based on SCE&G's Section 303, *Gas Leaks, Damage, Failure Notification*, criteria (see Technical Proposal Attachment B).

SCE&G personnel typically leak survey about 1,000 to 1,250 linear feet of natural gas piping per hour. However, the average for the Installation may be less due to the lack of familiarity with the Fort Jackson system, comprehensive nature of the survey and unknown accuracy of the system maps and other considerations. Assuming an average of 1,000 feet per hour, the estimated leak survey price is as follows:

• Gas system linear feet:	216,000
• Feet inspected per day:	÷ 1,000
• Inspection hours:	220
• Foreman labor ($ / hr):	x 60.12
• Labor cost:	$13,200
• Materials and Supplies:	2,500
• Total project cost:	$15,700

2.10.5.3 Project T-3: System Inspection, Inventory, Mapping and Minor Repairs

This project includes an inventory of components of the system to be privatized. Existing facilities must be identified so that routine O&M and project planning can occur. This information will be incorporated into SCE&G's distribution database. SCE&G will use the information from the system walk-down to create maintenance inspection schedules. Once the data is collected, the privatized system will be added to SCE&G's primary maps and maintenance and inspection system. The system inventory provided in Attachment JA2 will be verified and updated as needed to reflect the scope of the system prior to the ownership transfer. A final (joint) inventory will be prepared for incorporation into the Deed of Sale.

Critical components of the natural gas distribution system will be evaluated as part of the system inspection. The project also includes identifying and, as necessary, cleaning out valve boxes, exercising and lubricating critical main valves to confirm that they can be properly operated. It is possible that the project will identify the need to replace and/or relocate some of the valves on PE mains that are not replaced. Such needed valve replacements will be a capital expenditure and the installed cost will be incorporated into the Contract Rate Charge.

In conjunction with the Project T-1 review of Government records and Project T-4 system potholing, a particular focus of this effort will be to assess the relative condition of the steel piping. This assessment will be used to develop a preliminary prioritization of the Project C-1 pipe replacements. To the extent practicable, SCE&G will consider such parameters as pipe grade,

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construction practices, proximity to buildings, depth of pipe, location and condition of service line regulators, pipe casings and coatings and the extent of pipe corrosion.

Another area of emphasis will be to assess the location of PE piping that was installed without tracer wires or have cut wires. Lightly congested and/or dirt areas should have relatively few marking requirements and SCE&G may be able to apply special methods, such as the use of vacuum excavator, to uncover the buried pipe. Conversely, pipe located in high traffic areas with congested utilities and operations might require the installation of markers or, in some instances, necessitate replacements. The projected project price is as follows:

- Engineering labor (hours): 600
- Foreman labor (hours): 300
- Engineering labor (at $88.81 / hr): $53,300
- Foreman labor (at $60.12 / hr): 18,000
- Materials and Supplies: 4,500
- Total project cost: $75,800

2.10.5.4 Project T-4: System Potholing

SCE&G will conduct a number of pothole system inspections to confirm the condition of the PE portions of the system or to identify the type of pipe material (e.g., steel, HDPE or MDPE). Such matters as burial depths, material, size, coating condition, and fusion welds will be a primary focus of the inspection. This also will help ascertain the overall condition of key elements of the system. Since a variety of pipe materials may have been installed on the existing system, potholing will also help determine the points of demarcation between and among pipe material groups (e.g., steel versus PE).

Potholing should not be required for the PE mains (2.5 miles) and services (six) that were installed in 2016. Installation records for this piping should be obtainable from the Government or the installation contractors.

Pothole inspections are also required in order to create accurate maps. In the process of discovering or repairing leaks, pothole excavations may be required to gain necessary access to the pipe. SCE&G reviewed available system maps to estimate the number of pothole inspections that would be needed. It is estimated that 3.0 pothole inspections per mile of main pipe, as well as a sample of 5.0 percent of the estimated service lines, will be needed to assess the location and condition of the gas system. This equates to about 111 total potholes as follows:

	Mains	Services
Main miles / no. of services:	33.3	376
Less 2016 installations:	- 2.5	- 6
Subtotal:	30.8	370
Potholes per mile / percent:	x 5.0	x 5.0%
Subtotal	154	19
Total potholes:	173	

SCE&G proposes to assign a two-person crew to perform the inspections over a three-month period. Depending on site conditions (e.g., pavement versus dirt) and other considerations, a

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three-person contract crew can normally perform 2.5 inspections in a work day. Another key consideration is the ability to secure excavation permits and other approvals in an efficient and timely manner. Depending on pipe conditions uncovered during the initial inspections, SCE&G may also change the mix of main versus service inspections.

Based on the above, the estimated price is summarized below.

• Number of potholes:	173
• Potholes per day:	÷ 2.50
• Subtotal (days):	69
• Daily crew cost:	x 1,900
• Subtotal	$131,000
• Materials and Supplies:	4,500
• Total project cost:	$135,600

2.10.5.5 Project T-5: Environment Reconnaissance Study

SCE&G proposes to prepare an Environmental Reconnaissance Study, the scope of which would include the following:

- Document results of a review of the Government's environmental literature;
- Conduct and record general observations from a reconnaissance of the natural gas system rights-of-access (which would focus on areas that are generally 13 feet from the center line of gas mains and in vicinity of the regulator stations);
- Document identified locations that do or might contain unexploded ordinance, and determine if they are areas traversed by the privatized system;
- Document identified areas with asbestos or lead paint along the pipeline system, so SCE&G would not inadvertently disturb or damage these areas;
- Identity areas of special interest, such as wetlands, historical preservation or archeological sites, and coastal areas, that might require special authorizations from the Installation or the use of special maintenance and repair practices;
- Identify other environmental issues, if any, and bring them to the attention of the Government;
- Provide input for a Physical Condition Report or similar document if required by the proposed easement.
- Conduct limited sampling, if warranted by unexpected site conditions; and
- Videotape all or selected portions of the system right-of-access (to the extent permitted by the Installation).

A possible benefit of the study would be to address future right-of-access related issues, such as a possible need to restore a portion of the right of access that is no longer required (used and useful) to its original condition at the time of contract award. If the study identifies major issues or concerns, its scope would need to be expanded to include additional investigation

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and/or sampling requiring a separate task or an adjustment to the fixed price for this task. Consistent with the scope and intent of the study, it warrants emphasis that it should not be construed as equivalent, or in lieu of, an environmental baseline study, environmental impact statement or assessment, Phase I or II assessment, or other type of standard environmental study.

The projected project price is as follows:

- Engineering labor (hours): 150
- Foreman labor (hours): 120
- Engineering labor (at $88.81 / hr): $13,200
- Foreman labor (at $60.12 / hr): 7,200
- Materials and Supplies: 3,200
- Total project cost: $23,700

2.11 PROJECTED CAPITAL UPGRADES, RENEWALS, AND REPLACEMENTS

The Contract Rate Charge rate base will be adjusted each year to reflect the future capital upgrades, renewals and replacements to the privatized system. The cost basis will be affected only for work that is classified as a "major capital item" in accordance with SCE&G's accounting standards and the FERC's Uniform System of Accounts (USOA). This would apply to such items as a regulator, valve or section of main or service line. Minor repairs and replacements, such as to a short segment of pipe (less than 10 feet), are normally expensed.

The rate base will be increased each year by the installed cost of capital renewals and replacements. The plant-in-service and accumulated depreciation values will also be reduced and increased, respectively, by the net book value of any capital items that are replaced, and increased by the removal costs of these assets. All changes to the rate base will be documented by service request documents, property records, inventory prices and other standard accounting means. The Government will be able to inspect the supporting records upon reasonable request. As discussed and for ease of administration, it is proposed that the rate base be adjusted to reflect recapitalization activity on an annual basis rather than concurrent with the installation of any major capital item.

Included in Section 2.13 is a 50-year projection of the Contract Rate Charge, which as discussed is dependent in part on the estimated plant-in-service values of future capital upgrades, renewals and replacements. Since the planning horizon for recapitalization-based changes to the rate base is 50 years, SCE&G employed a levelized costing methodology for future upgrades, replacements, and renewals. There are two reasons for this approach.

First, it is not possible to develop, with an acceptable level of certainty, a meaningful long-term schedule for specific capital upgrades, renewals and replacements beyond the ISDC projects described in Section 2.10.3. Public utilities such as SCE&G replace or upgrade facilities based on maintenance observations, failure analysis, and on-going risk assessments. These assessments address a number of criteria, such as leakage and outage histories, new or modified connected loads, regulatory requirements, and the age, condition and composition of facilities as evidenced from comprehensive documentation and actual inspections. While the age and condition of facilities certainly is an assessment consideration, SCE&G does not replace facilities solely on these criteria.

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Second, the levelized approach is consistent with how historical costs are tracked and future spending levels are budgeted, both for internal use and as support for a SCPSC filing to adjust standard tariff rates.

With the above in mind, the R&R requirement will only apply to the PE components of the system. This is because all steel pipe will be replaced within five years with PE mains and services. As noted previously, the in-service life for PE pipe can last 70 or more years so there should not be a need for further replacements during the 50-year contract term.

A considerable amount of the system's PE pipe was installed in the past few years. The inventory shows that 15,000 LF of PE pipe was installed in 2011 and an additional 28,200 LF was installed in 2016. These together account for 43.4 percent of the total PE piping, and given the extended useful life replacements also should not be needed during the contract term. The R&R projection accordingly will only apply to the approximately 70,000 linear feet of PE pipe installed in 1983. The estimated annual R&R replacements are summarized in the table below and detailed in the Attachment D Price Data Sheet 2. Note that all of the 19+83-vintage PE pipe would be replaced during the contract term.:

Levelized Renewals and Replacements Projections					
R&R by Year	**Inventory Quantity (LF)**	**Years 1–30 0.50%**	**Years 31-40 4.5%**	**Years 41+ 1.25%**	**Contract R&R**
Annual PE Mains	87,300	440	3,930	1,090	63,400
Annual PE Services	12,000	60.	540	150	8,700
Total	99,300	15,000	44,700	12,400	72,100

A consideration in developing the noted R&R percentages is the possibility the inspections conducted during the transition period (to include potholing) may identify the need for limited replacements. Some piping may be discovered to have inadequate depth of cover and be too shallow. Other possible issues also may be found, such as the lack of tracer wire, which will require the replacement of some PE pipe. This is due to the difficulty in protecting, locating, mapping and marking the facilities in a timely, accurate and comprehensive manner. This would especially be the case in areas with a large amount of expected new construction or rebuilds (and hence related line marking requirements). Pipe replacements also would be required for facilities that could not be successfully pressure tested, evidence excessive leakage or have an inordinate number of service calls.

The reasonableness of the proposed R&R percentages can be viewed from a number of perspectives. The average booked life for the system's distribution mains and services is 60 years. Booked depreciation rates, however, take into account equipment that is removed from service for reasons other than failure or damage. These include relocations to accommodate road widening projects and removals after customers relocate, scale back operations, shut down or otherwise no longer require the same level of utility service, if required at all.

One could develop a more tailored projection based in part on the depreciation rates for each accounting code. Yet this would have no meaningful impact either on the reasonableness of SCE&G's overall proposal or a reasonable perception of the Government's service risk. SCE&G accordingly did not provide such a breakout.

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2.11.1 SCE&G Responsibilities

The Contract Rate Charge will account for future capital upgrades, renewals and replacements to the system. As addressed above, the installed cost of these capital additions will be added to the plant-in-service component of the contract rate base. In addition, the contract rate base will be reduced by the net book value of assets that are removed, abandoned, replaced or otherwise no longer used and useful for the purpose of providing natural gas utility service, and at the same time increased by the removal costs of the removed assets.

SCE&G will be responsible for installing and financing all capital costs associated with future upgrades, renewals, and replacements to the privatized system. The Government's financial responsibility will be limited to paying the Contract Rate Charge. All capital work during the performance of the utility service contract will be at SCE&G's discretion, and required to:

- Comply with applicable laws, regulations, and standards. For example, a modification to a gas regulator may be needed due to a change in the DOT's Title 49.
- Protect the health and safety of Government and SCE&G personnel and the general public. An example is to replace an extended section of gas mains incidental to the repair of a Grade 1 or a Grade 2 leak.
- Provide reliable service consistent with the Company's standard method of service. An example would be to replace a gas regulator that required excessive maintenance or otherwise was not operating within acceptable design parameters.

SCE&G's established system-wide definitions of what constitutes a "capital" item will assure that "expensed" costs are not included in the rate base. The plant-in-service component of the rate base will include only work that is classified as a "capital item" in accordance with SCE&G's accounting standards and the FERC Uniform System of Accounts.

There are a number of existing controls to assure that capital improvements and replacements are proper and performed on a best value basis. The privatized service will be provided in accordance with SCE&G's standard operating practices that are applicable to a broad base of more than 386,100 natural gas service customers. These relate to maintenance standards, methods of service, accounting procedures, equipment inventory pricing and more.

2.11.2 Installation Responsibilities

It is standard utility service procedure that capital improvements for the customer's convenience will be installed only at the discretion of the Government. This would generally apply to mission changes within the Installation that require new or relocated service connections. It also would apply to improvements that the Installation may desire in order to achieve a level of service that is more reliable, or otherwise different, than it would be under SCE&G's standard method of service.

After an authorization to proceed with a discretionary project is obtained, the installed cost will similarly be added to the contract rate base, with reductions to account for net book value of removed or abandoned equipment and additions for its removal costs.

The above responsibilities for capital projects are the same as those that are applied by virtually every regulated public utility in the United States. SCE&G is not aware of any utility that dele-

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gates its responsibilities concerning health, safety, and reliability matters to its jurisdictional retail service customers. This is due in part to the industry's regulated status and its unique obligation to provide service to all customers within authorized service territories.

2.11.3 Coordination and Consultation

Notwithstanding the above division of responsibility, SCE&G will regularly consult with the Installation regarding the need, scope and timing of capital upgrades and replacements. The consultative process will be a combination of mandated activities (the submittal of the required Annual Plan) and as-required formal meetings and informal day-to-day contacts.

Very close coordination will be required for major system work. Examples of such work include major line replacements, relocations or extensions. It may also include the future up-rating of a segment of the system so that it can operate at a higher pressure and thereby serve additional connected load without the need for a physical expansion of the system.

Coordination is needed for SCE&G to properly prioritize the work and to assure that replacement facilities are properly sized and sited to meet the Installation's current and future service requirements. On the other hand, advance notice to and coordination with Fort Jackson will necessarily be much more limited for emergency replacements. The emphasis here instead will be ensuring the safety of Fort Jackson and SCE&G personnel and restoring service as expeditiously as possible.

The need for close coordination is especially important to ensure integration with the Installation's on-going construction activities. Obtaining information on the scope and current status of these activities is a specific agenda topic for the first formal transition period kickoff meeting (see Table 4-3 checklist). SCE&G will promptly review all provided information and inform the Installation of any special planning requirements or unique concerns.

A special area of coordination will apply to secondary meter replacements and new installations. As indicated previously, the Installation desires that meters be installed at all service locations. SCE&G accordingly will seek guidance from the Government regarding whether new meters should be installed when replacing service lines (it is generally more economical to replace/install meters, regulators and other ancillary facilities when installing new or replacing existing service connections).

2.11.4 Third-Party Construction

SCE&G will participate as reasonably necessary in pre-design, design, strategic planning and other meetings related to the planning and implementation of MILCON and similar projects that impact the privatized system. It is envisioned that the meeting will be either face-to-face or telephonic, depending on the scope of a particular meeting and the extent to which privatized facilities would be impacted.

Various third-party contractors may be responsible for the construction of natural gas distribution facilities that may connect to or become part of the privatized system. There is no analogous process as might apply to water or wastewater utility systems whereby a developer is responsible for the installation of an area's utility infrastructure that will then connect to a utility's backbone system. SCE&G instead is always responsible for the design and installation of all natural gas mains, service lines, regulators and other distribution facilities. The responsibility of

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the customer (or developer) is usually limited to arranging for a plumber to connect the service line to an internal house system at the outlet of the meter.

In accordance with the requirements of Section C.11.5.3., *Third Party Construction*, SCE&G will provide interested parties, upon reasonable request, specifications for gas distribution facilities that might connect to the privatized system. SCE&G shall have the right to inspect the third party contractor's construction of system components for which SCE&G will take ownership. All applicable documentation required for Title 49 and other regulatory compliance must be provided before SCE&G can accept ownership, including but not limited to pressure testing results and detailed, thorough as-builts. Any physical connections to the privatized system upstream of designated points of demarcation also will be SCE&G's exclusive responsibility.

At the Government's option, SCE&G would acquire ownership of properly constructed and documented distribution facilities. SCE&G would purchase such facilities for their fair market value, which normally would be based on the construction cost. The purchase price would be paid in the form of a bill credit, to be applied over up to the remaining term of the privatized service contract, in much the same manner as for the initial system acquisition. The acquisition price would then be added to the plant-in-service component of the Contract Rate Charge.

Ownership acquisition at other than fair market value would be deemed a contribution-in-aide-of-construction (CIAC) in accordance with Tax Reform Act of 1986. CIACs are treated as taxable income to SCE&G and other investor-owned utilities, and customers are responsible for the related income tax liabilities. A lump sum payment by the Government for facilities installed by SCE&G would similarly be deemed a CIAC with attendant tax liabilities.

2.11.5 Pressure Testing

As discussed above, the privatized gas system must have an established and documented maximum allowable operating pressure for compliance with 49 CFR, Part 192. The de facto MAOP for piping without proper documentation will be the less of the operating pressure on the Contract Start Date or 60 psig. Pressure testing will be required as necessary to establish a permanent, and higher, MAOP. Required pressure testing will be in accordance with SCE&G's O&M Manual Section 106 (Testing Pipelines) and Section 107 (Uprating Pipelines). The uprating process will generally proceed as follows:

- A leak survey will be conducted and any potentially hazardous leaks will be repaired (the initial leak survey will be conducted as part of the Project T-2 survey for the entire privatized system);
- The main or service line will be physically disconnected (isolated) from any adjacent facilities that will continue to operate at a lower pressure;
- Regulators appropriate for the higher pressure will be installed;
- The line pressure will be increased in stages, each of which will elevate the line pressure by 10 psig or 25 percent of the total pressure increase (whichever would require the fewest test increments); and
- The line will be leak surveyed after each pressure increment and leaks (if any) will be repaired).

The total number of test increments will depend on the current operating pressure and whether or not an increase in the interim, de facto MAOP is required or desirable to accommodate higher connected loads. For example, increasing an MAOP for a 40 psig line would normally require two test iterations of 10 psig each in order to test up to 60 psig. Since the privatized system currently operates between 10 to 60 psig, it is unclear based on the information provided if pressure testing to retain the de facto MAOP would be required or if existing records are sufficient to document that the current operating pressure is the de facto MAOP. There are no current requirements to increase the operating pressure of any of the lines at this time.

Because isolating the main from connected loads will require a scheduled service outage, usually occurring during normal duty hours, the timing for any as-required uprating will be developed in close consultation with Installation personnel.

2.12 FEDERAL INCOME TAXES

DoD's October 9, 2002, revised privatization program guidance requires that "all Federal taxes … contained in an offer are credited back to the offeror." Federal taxes included in the buildup of SCE&G's Contract Rate Charge should therefore be excluded from the Government's comparative life cycle cost analyses (LCCA). The tax exclusion also is consistent with established Department of the Defense policy. The purpose of this discussion is thus to identify the Federal taxes included in the proposed privatized service costs.

Federal taxes are included in the Contract Rate Charge in terms of the pre-tax rate of return that is used to calculate the return required to support the contract rate base. Table 2-14 details the derivation of SCE&G's cost of capital on a pre- and after-tax basis (see also Table 2-6). As shown in the table, the 9.499 percent pre-tax cost of capital includes Federal income taxes. The 8.078 percent cost of capital does not.

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Table 2-14. SCE&G Capital Structure and Cost of Capital

Table 2-14-A. SCE&G Capital Structure and Cost of Capital (with Federal Taxes)

Capital Component [2]	Amount ($)	Ratio (%)	Embedded Costs (%)	Weighted Avg. Cost of Capital (%)	Tax Factor [1] (%)	Total (%)
Long-Term Debt	$4,929,015,843	50.461%	5.417%	2.733%	100.00%	2.733%
Preferred Stock	100,000	0.001%	0.000%	0.000%	75.05%	0.000%
Common Equity	4,838,967,576	49.538%	10.25%	5.078%	75.05%	6.766%
Total	$9,767,983,419	100.00%		7.811%		9.499%

Table 2-14-B. SCE&G Capital Structure and Cost of Capital (without Federal Taxes)

Capital Component [2]	Amount ($)	Ratio (%)	Embedded Costs (%)	Weighted Avg. Cost of Capital (%)	Tax Factor [1] (%)	Total (%)
Long-Term Debt	$4,929,015,843	50.461%	5.417%	2.733%	100.00%	2.733%
Preferred Stock	100,000	0.001%	0.000%	0.000%	95.00%	0.000%
Common Equity	4,838,967,576	49.538%	10.25%	5.078%	95.00%	5.345%
Total	$9,767,983,419	100.00%		7.811%		8.078%

Notes:

[1] The tax factors in Table 2-14-A include Federal and state income taxes. The tax factors in Table 2-14-B exclude Federal income taxes.

[2] The capital structures and costs are as of December 31, 2017, as reported in SCE&G's 2017 FERC Form 1 filing with the FERC.

Table 2-16 identifies the annual Federal income tax component of the Contract Rate Charge for each contract year. An example calculation of the Federal tax component, based on the Table 2-6 data, is as follows:

- Contract Rate Charge with Federal taxes: $209,458
- Contract Rate Charge without Federal taxes: - 188,279
- Federal tax component: $21,179

It is important to distinguish SCE&G and other regulated public utilities from non-regulated entities. For SCE&G, the Federal tax component of all service rates (e.g., standard residential or special contract) is readily ascertainable based on public information (e.g., FERC Form 1s and SCPSC orders and rulings in general rate and other public rate proceedings). Utility rates are established based on cost of service principles, and the COS basis for rates specifically includes Federal and state income tax components. There is a presumption by the SCPSC, and other similar regulatory agencies that establish utility service rates set by law or regulation, that the utility will on average generate taxable income and related income tax liabilities that are equivalent to applying the 35 percent rate to the capital asset rate base.

The cost of service basis also applies to the entire retail service system. Tax liability is based on total system costs and not the costs associated with a particular contract or service, such as the current special delivery service or the proposed privatized service for Fort Jackson. There is no analogous situation within a regulated utility for separate profit centers as is the norm for other entities. The above discussion thus fully responds to the letter and spirit of the Revised

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Guidance by providing clear and publicly available evidence of the Federal tax component of the privatized service.

2.13 50-YEAR COST/PRICE PROJECTIONS

Provided in this section are 50-year price projections for the privatized natural gas utility system. The price projections are in nominal dollars and include inflation. The nature of the proposed tariff-based service, which incorporates the rate-basing and depreciation of capital assets as well a rate of return on rate base, is such that a nominal dollar price projection is a much more meaningful measure of future price levels.

2.13.1 Base Year Contract Rate Charge

Based on SCE&G's 2017 Annual Report, the base year Contract Rate Charge is $17,455 a month, or $209,458 on an annualized basis. The system ownership is projected to transfer within 12 months from contract award. This is referred to as (Contract) Year 1, which begins on the Contract Start Date. The values for the Table 2-7 independent pricing variables are as follows:

- *System Value/Initial Purchase Price*. The fair market value based purchase price for the system is $1.4 million, as shown in Table 2-3. This is the value that will be incorporated into the initial derivation of the Contract Rate Charge as detailed in Table 2-7.

- *Capitalized Upgrade Projects*. The capital upgrade projects, as summarized in Table 2-9, will be incrementally installed beginning in Year 1 and added to the contract rate base beginning in the second contract year.

- *Capital Replacements*. The net value of recurring capitalized renewals and replacements will be added to the rate base beginning in the second contract year. The estimated annual cost of system replacements (without inflation beyond the assumed 2020 Contract Start Date) is summarized in Table 2-16 and reflects the discussion in Section 2.9.

It is not possible, however, to properly and accurately project 50-year prices for the Contract Rate Charge without taking into account inflationary impacts. This in part is because:

- The rate base is incrementally increased by the levelized cost of renewals and replacements that are added based on their future installed cost. Future costs incorporate inflationary adjustments.

- The rate base also is incrementally decreased by depreciation adjustments that are based on historical installed costs. Once an asset is booked, its value is not adjusted. And once an equipment item is fully depreciated, the accumulated depreciation offsets the installed plant-in-service value such that the item is not included on a net basis in the rate base for the Contract Rate Charge.

As discussed in the Section 2.3 General Pricing Assumptions, this proposal accordingly applies the Government's long-term inflation rate of 1.988 percent as derived from OMB Circular A-94.

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Table 2-15. Annual Renewals and Replacements (R&R) Costs			
	Yr 1 – 30	**Yr 31 – 40**	**Yr 41+**
Unadjusted RCN Cost Basis (w/o steel) [1]	$4,243,600	$4,243,600	$4,243,600
Times Levelized R&R Rate	X 0.50%	X 4.50%	X 1.25%
Annual Replacement Cost (2018)	$21,200	$191,000	$53,000
Inflation Adjustment (3.662%)	800	7,000	1,900
Annual Replacement Cost (2020)	$22,000	$198,000	$54,900

[1] The system RCN value does not include 1965-vintage steel pipe and other components that were excluded from the Table 2-3 derivation of the system purchase price. All such facilities will be replaced within five years of the Contract Start Date.

2.13.2 50-Year Cost/Price Projections

Nominal dollar (with price inflation) price projections for the Fort Jackson system are provided in Table 2-16. The pricing data that comprise the Total Annual Cost of Service should be incorporated into the cost model as is for any price analysis to be performed in nominal dollars. The table data **SHOULD NOT** be adjusted for inflation as this is already incorporated into the price projections. Table A-1 in Attachment A provides a 50-year projection of each of the cost of service components of the Contract Rate Charge (see Table 2-7).

Purchase Price Credit (CLIN 0001). The Purchase Price Credit reflects the annual credit as shown in Table 2-5 (see Section 2.4.2). The monthly credit will be applied for beginning in the first contract year. The annual credit amount is $57,841.

Contract Rate Charge (CLIN 0001). The Contract Rate Charge is as discussed above and in Section 2.5 of this proposal. The base year monthly charge shown in Table 2-7 is the CRC for the first contract year (i.e., beginning on the Contract Start Date, or when SCE&G acquires ownership of the privatized system). The following additional assumptions were incorporated into the price projections:

1. The contract rate base will increase as the capitalized Initial System Deficiency Corrections (see Section 2.10.3) and future upgrades, renewals and replacements to the system (see Section 2.9) are placed into service based on their installed costs.

2. The Section 2.10.3 initial capital upgrades will be phased in on a levelized basis during the first five years of the contract. Although the upgrades are expected to be completed within five years of the Contract Start Date, it is also expected that the costs will not be fully booked to the Company's property records (and thus fully reflected in the plant-in-service value for the CRC, until the sixth year (and be reflected in annual CRC recalculation in the seventh year). Therefore, one-sixth of the (inflation adjusted) base year ISDC cost will be added to plant-in-service component of the Contract Rate Charge in the first contract year, and this will be reflected in the annual update of the CRC in the second contract year. There will be similar additions for the next five years. The reasons for this approach are:

   - The completion months for the ISDCs shown in Data Sheet 2 are for when the entire project will be completed.

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- ISDC installed costs will be added to the plant-in-service component of the CRC when the facilities are completed (pressurized). There typically is a time lag from when new (or replacement) facilities are installed to when all costs are entered into SCE&G's accounting records and the facilities are formally added to plant-in-service records. This means that work completed three years, for example, would not be fully reflected in the CRC update until the fourth year.
- Elements of each ISDC will be rate based during the contract term as they are completed and in service.

3. The short-term rate inflation rate derived from OMB Circular A-94 (1.815 percent) was used for the rate base phasing of the Capital Upgrades. For example, the ISDC rate base additions in Year 1 are as summarized below. An annual inflation adjustment was applied for each year in which the ISDCs are phased into rate base.
   - Initial Capital Upgrades: $3,426,500
   - Inflation adjustment (2018 to 2020): x 1.03662
   - Subtotal: $3,551,978
   - Percent rate based annually: [16] x 16.667%
   - Adjusted 2019 rate base addition: $591,996

4. A similar approach was applied for the recurring R&R (see Table A-2 Price Data Sheet 2 and Table A-1 Contract Rate Charge worksheets in Attachment A).

5. The total Distribution Plant-in-Service is based on:
   a. The initial system purchase price, plus
   b. Initial capital upgrades / new connections, plus
   c. Renewals and replacement, less
   d. Equipment removals.

   The value for the purchase price is fixed and the values for ISDCs, connections and R&R are based on costs at the time of installation. The values for removals, however, are based on the original plant-in-service amounts.

   There also is a general correlation in the price projections between R&R and removals. For example, if the R&R percentage in a given year is 0.50 percent, then 0.50 percent of the original plant-in-service value will be removed from the net distribution plant value.

6. The contract rate base will decrease as the rate based assets are depreciated annually. The initial system acquisition and other installed capital assets will be depreciated over a 54-year term and at an annualized rate of 1.8519 percent per year (i.e., 1 ÷ 54). This means that after 54 years the accumulated depreciation will completely offset the original plant value (i.e., purchase price) of the system such that it would no longer be reflected in the CRC rate base.

[16] The price projections assume that the identified capital upgrades generally will be rate based on an equal, inflation-adjusted basis over a 6-year term. A generally equalized phasing of the upgrades would tend minimize disruptions to the Installation's missions.

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7. The Year 1 general, intangible and common plant rate base allocations are the values shown in Table 2-7, which in turn is based on the ratio of the plant-in-service for the privatized system to the total SCE&G gas production, transmission and distribution plant-in-service. The cost allocated to the Contract Rate Charge is thus a function of the relationship between the noted plant values and the value of the general and intangible plant.

   One approach would be to escalate the values by the annual rate of inflation. This does not consider, however, that SCE&G's distribution plant is expected to experience substantial growth due to the continued expansion of the upstream system and other considerations. For example, the plant value increased by an average of 7.0 percent annually in the past four years (i.e., from $782 million to $1.0 billion). General, intangible and common plant also increased, but only by an average of 4.5 percent during the same period. The net effect is that, *all else being equal*, the CRC's general and intangible plant allocations would decrease every year).

   However, the plant value for the privatized system also is projected increase markedly (by about 280 percent) over the first six years (or seven years to be fully reflected in the CRC) as the capital upgrades are implemented, the costs are added to the plant-in-service component of the CRC and an inflation adjustment is applied to base year ISDC and R&R costs. A continuation of the historical growth in the upstream system would increase SCE&G's distribution plant by about 82 percent over the same term. The juxtaposition between growth in both the SCE&G and privatized systems is reflected by increasing the allocated cost by 85 percent of the annual increase in the magnitude of the privatized system plant valve. For example, the Year 2 cost is calculated as follows: [17]

   - Year 1 Fort Jackson distribution plant: $1,364,700
   - Year 2 ISDCs: + 591,996
   - Year 2 R&R: + 22,000
   - Year 2 removals: - 6,824
   - Year 2 Fort Jackson distribution plant: $1,971,873
   - Percent change Year 1 to 2: 44.9000%
   - 85% of percent change: 37.8165%
   - Year 1 general, intangible & common plant: $171,266
   - Year 1 vs. Year 2 distribution plant: x 1.378165
   - Year 2 general, intangible & common plant: $236,032

   After the ISDCs are fully rate based, there should be much more moderate net additions to the privatized system (i.e., between 0.35 and 0.55 percent for the next 25 years). A continuation of even a much lower growth rate than the noted 7.0 percent for distribution, even combined with a continuation of the noted 4.5 percent growth for general, intangible and common plant, means that the privatization system each year would account a reduced percent of the upstream SCE&G system such that the allocated costs should decrease every year.

   Basing the post-Year 7 projections on the growth of the privatized system would result in declining values (i.e., Nonetheless, and in interest of applying a conservatively estimate, the

[17] By comparison, the Year 2 allocation would be $88,200 if the Year 1 allocation instead was increased by the rate of inflation.

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CRC values continue to be based on the above-described 85 percent factor for the remainder of the contract term. A similar approach was applied to project the common plant rate base allocation as well as for common, general and intangible plant depreciation expense and accumulated depreciation.

8. Regarding the projected distribution O&M expense, SCE&G's gas distribution plant increased by about 28 percent the past four years and distribution O&M expenses only increased by about 19 percent. Also noted is that while a 280 percent increase in the plant value of the privatized system is projected when the ISDCs are fully rate based, Fort Jackson is projected to only grow from about 0.11 percent of SCE&G's distribution plant on the CSD to about 0.30 percent, or only 170 percent increase. There necessarily would be some diminution in the growth of the CRC's allocated O&M expense. The projections accordingly assume that the base year O&M allocation also will increase by 85 percent of the annual privatized system increase for the first six years and remain constant thereafter.

   A test of the general reasonableness of this methodology is an alternative O&M calculation based on applying projected SCE&G O&M as a percentage of projected SCE&G total distribution plant. The results are summarized in the table below. As shown therein, the O&M allocations are generally consistent for the first seven contract years, but the allocation using the O&M percentage method trends lower in the eighth year. Extending the method for the remainder of the contract term (even will a 100 percent adjustment) substantially increases the differential so that allocated CRC O&M is more than halved by the 50th contract year.

Contract Year	SCE&G Distribution Plant	SCE&G Distribution O&M	O&M % Distribution Plant	O&M Percent Alloca.	85% of System Growth
1	1,209,500,000	29,300,000	2.42%	35,017	35,017
2	1,294,200,000	30,700,000	2.37%	46,800	46,733
3	1,384,800,000	32,200,000	2.33%	60,300	61,143
4	1,481,700,000	33,700,000	2.27%	73,800	73,814
5	1,585,400,000	35,300,000	2.23%	87,200	86,362
6	1,696,400,000	37,000,000	2.18%	100,600	98,841
7	1,815,100,000	38,800,000	2.14%	114,000	111,292
8	1,942,200,000	40,700,000	2.10%	112,100	111,623
9	2,078,200,000	42,700,000	2.05%	110,200	111,955
10	2,223,700,000	44,700,000	2.01%	108,300	112,298

Consistent with the above discussion, Table A-1 in Attachment A summarize the plant-in-service and rate base components of the Contract Rate Charge, respectively. The cost of service elements of the charge are summarized in Table B-3.

Transition Period Charges (CLIN 0003). The transition connection charges identified in Price Data Sheet 3-B will be assessed in the first contract year.

EOM Charge (CLIN 0004). The EOM Charge will be invoiced at $7,500 per month on a fixed-price basis, without inflation or other adjustments, beginning the first billing month after the ownership transfer and continuing for a 36-month period beginning on the Contract Start Date. The monthly charge will then be reduced to $5,500 in the fourth ownership year. The charge will be

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further reduced to $3,500 in the seventh contract, and thereafter will be adjusted annually for the remainder of the 600-month contract term based on 75 percent of the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) for the rest of the contract term. This means that the EOM Charge will decrease each year in real terms.

Secondary Meter Reading Charges (CLIN 0005). Deleted.

GRT & SCPSC Fee (CLIN 0006). The combined Gross Receipts Tax and South Carolina Public Se vice commission fee of $0.5227 is applied to total privatized service invoice, excluding the purchase price credit. The base year cost is:

- Contract rate charge: $209,458
- Transition charges: 357,900
- EOM charge: 90,000
- GRT/fee basis: $657,328
- Rate: x 0.5227
- GRT/PSC fee: $3,436

PE Main Pressure Testing (CLIN 0008). Deleted.

Federal Income Taxes. The required wash cost for Federal income taxes reflects the difference between 50-year projections of the Contract Rate Charge first including the 9.499 percent pre-tax rate of return that includes Federal income taxes and, second, with an 8.078 percent rate of return that excludes Federal taxes (see Table 2-6 and discussion in Section 2.12).

Residual value. The residual value of the privatized system at the end of the 50-year contract is estimated on its undepreciated value. Referencing the Contract Rate Charge worksheets in Attachment A, the residual value is:

- Purchase price: $1,364,700
- Initial system deficiency corrections: 3,733,300
- Renewals and replacements: 5,978,500
- Distribution plant investment: $11,076,500
- Distribution accumulated depreciation: - 5,958,000
- Privatized system residual value: $5,117,700

The above value includes the unrecovered investments related to the initial system purchase and Initial System Deficiency Corrections as well as renewals and replacements. The residual value estimate in Price Data Sheet 2 is only for R&R investments.

2.14 IMPACT ON OTHER CONTRACT RELATIONSHIPS

The proposed privatized service is not expected to have any impact on other contract relationships.

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Table 2-16. Price Data Sheet 5 - Fort Jackson Privatized Natural Gas Service Pricing (nominal $s									
Year	Purchase Credit	CRC	CLIN 0001	CLIN 0003 Transition	CLIN 0004 EOM	CLIN 0006 GRT/PSC	Subtotal	Federal Tax Wash	Total Cost of Service
1	-57,841	209,459	151,617	357,900	90,000	3,436	602,953	-21,180	581,773
2	-57,841	296,732	238,891	0	90,000	2,021	330,912	-30,125	300,788
3	-57,841	383,756	325,915	0	90,000	2,476	418,391	-39,063	379,328
4	-57,841	470,761	412,919	0	66,000	2,806	481,725	-48,003	433,722
5	-57,841	557,887	500,046	0	66,000	3,261	569,307	-56,949	512,358
6	-57,841	645,232	587,390	0	66,000	3,718	657,108	-65,903	591,204
7	-57,841	732,866	675,024	0	66,000	4,176	745,200	-74,870	670,330
8	-57,841	725,816	667,974	0	42,000	4,013	713,988	-73,747	640,241
9	-57,841	718,779	660,937	0	42,621	3,980	707,538	-72,624	634,914
10	-57,841	711,754	653,912	0	43,251	3,946	701,109	-71,502	629,608
11	-57,841	704,744	646,903	0	43,890	3,913	694,706	-70,380	624,326
12	-57,841	697,743	639,901	0	44,538	3,880	688,319	-69,259	619,061
13	-57,841	690,757	632,916	0	45,196	3,847	681,959	-68,138	613,821
14	-57,841	683,785	625,944	0	45,864	3,814	675,622	-67,018	608,604
15	-57,841	676,827	618,986	0	46,542	3,781	669,309	-65,898	603,411
16	-57,841	669,883	612,042	0	47,230	3,748	663,020	-64,779	598,241
17	-57,841	662,954	605,112	0	47,928	3,716	656,756	-63,661	593,095
18	-57,841	656,039	598,197	0	48,636	3,683	650,517	-62,543	587,974
19	-57,841	649,139	591,298	0	49,355	3,651	644,303	-61,425	582,878
20	-57,841	642,254	584,413	0	50,084	3,619	638,116	-60,309	577,807
21	-57,841	635,386	577,544	0	50,824	3,587	631,955	-59,193	572,763
22	-57,841	628,532	570,691	0	51,576	3,555	625,822	-58,077	567,744
23	-57,841	621,696	563,854	0	52,338	3,523	619,715	-56,962	562,753
24	-57,841	614,875	557,034	0	53,111	3,492	613,637	-55,848	557,789
25	-57,841	608,072	550,231	0	53,896	3,460	607,587	-54,734	552,852
26	-57,841	601,286	543,445	0	54,693	3,429	601,566	-53,621	547,944
27	-57,841	594,517	536,676	0	55,501	3,398	595,574	-52,509	543,065
28	-57,841	587,767	529,925	0	56,321	3,367	589,613	-51,398	538,215
29	-57,841	581,034	523,193	0	57,153	3,336	583,682	-50,287	533,395
30	-57,841	574,321	516,479	0	57,998	3,305	577,782	-49,177	528,605
31	-57,841	567,626	509,784	0	58,855	3,275	571,914	-48,067	523,847
32	-57,841	591,825	533,983	0	59,725	3,406	597,114	-50,697	546,417
33	-57,841	616,202	558,361	0	60,607	3,538	622,506	-53,334	569,171
34	-57,841	640,760	582,919	0	61,503	3,671	648,093	-55,978	592,115
35	-57,841	665,504	607,662	0	62,412	3,805	673,879	-58,629	615,250
36	-57,841	690,436	632,594	0	63,334	3,940	699,869	-61,288	638,581
37	-57,841	715,560	657,719	0	64,270	4,076	726,065	-63,954	662,111
38	-57,841	740,881	683,040	0	65,220	4,213	752,473	-66,627	685,846
39	-57,841	766,402	708,560	0	66,184	4,352	779,096	-69,309	709,787
40	-57,841	792,127	734,285	0	67,162	4,492	805,939	-71,998	733,940
41	-57,841	818,060	760,218	0	68,154	4,632	833,005	-74,696	758,309
42	-57,841	812,720	754,879	0	69,162	4,610	828,650	-73,563	755,087
43	-57,841	807,440	749,599	0	70,184	4,587	824,370	-72,432	751,938
44	-57,841	802,222	744,380	0	71,221	4,565	820,167	-71,304	748,863
45	-57,841	797,066	739,224	0	72,273	4,544	816,042	-70,178	745,864
46	-57,841	791,973	734,132	0	73,341	4,523	811,996	-69,054	742,942
47	-57,841	786,946	729,104	0	74,425	4,502	808,032	-67,933	740,099
48	-57,841	781,985	724,143	0	75,525	4,482	804,151	-66,815	737,336
49	-57,841	777,091	719,250	0	76,641	4,462	800,353	-65,699	734,654
50	-57,841	772,266	714,425	0	77,774	4,443	796,642	-64,586	732,056

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Section 3.0

General Estimating Methods

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3.0 General Estimating Methods

3.1 Estimating Methodology

As discussed in the prior sections, SCE&G's general estimating methodology is based on applying historical system costs to the estimates for the privatized service. Engineering judgments were used in selected instances to adjust historical costs to reflect privatized service requirements that might be different from those generally applicable to our other customers.

3.2 Accounting Systems

As a publicly held utility, SCE&G is required to follow specific accounting rules set forth by the Federal Energy Regulatory Commission. These FERC accounting rules specify a Uniform System of Accounts (USOA) for all income, expense, and balance sheet transactions.

SCE&G will provide the privatized service as a regulated utility that is subject to the rate, economic, and service jurisdiction of the SCPSC. The clauses in the Solicitation that do not apply when prices are set by law or regulation accordingly would not apply to SCE&G.

SCE&G uses various automated systems to process, record, and track all costs. SCE&G has implemented an integrated PeopleSoft financial system to support its accounting needs, and PowerPlan Cost Repository for reporting. This implementation is known as Enterprise Business Solution (EBS). At the center of the EBS financial systems is the PeopleSoft General Ledger that houses all actual data from the feeder systems. The General Ledger is complemented with PowerPlan's Cost Repository. The Cost Repository is a reporting database that includes both actual information and cost-center-accountable budget-related data.

Within SCE&G's source systems, costs are recorded using various elements within the account key structure. Through the use of these codes, SCE&G is able to accurately report information to support FERC reporting requirements and capture and track detail information to support special projects and events.

The primary source systems that feed the General Ledger are summarized in the figure and discussion below.

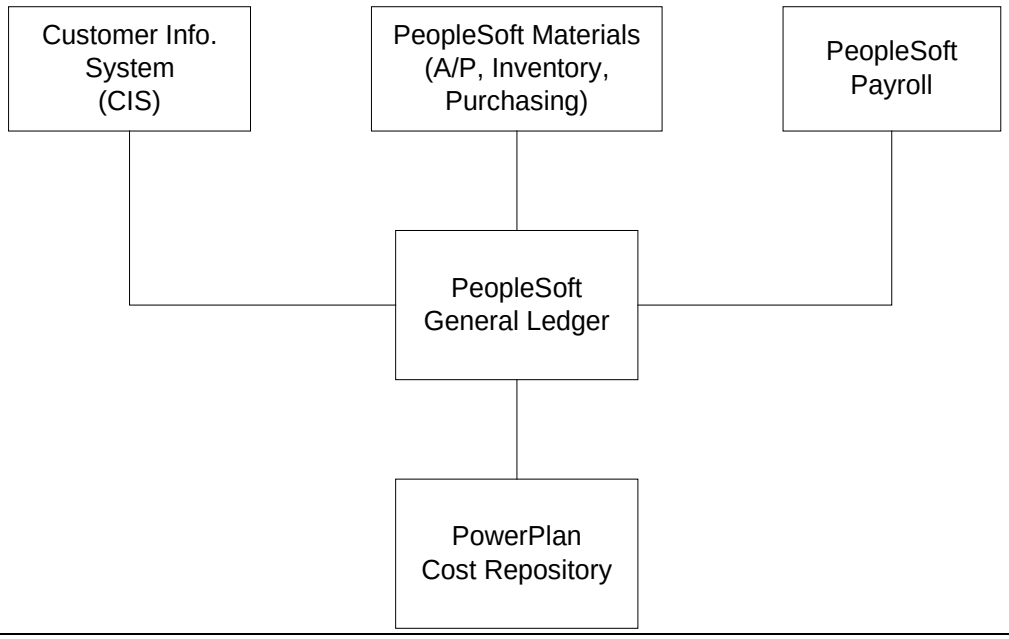
- PeopleSoft Payroll - Epsilon Time Entry System, which allows employees to enter their variable time and the applicable accounting distribution. The system interfaces with PeopleSoft Payroll/Time and Labor to supply the payroll dollars associated with the information entered in the Time Entry System. PeopleSoft payroll data is interfaced to the General Ledger on a bi-weekly basis. The employees' time can be coded utilizing various elements of the account key to accurately reflect their time on projects or assignments.

- PeopleSoft Materials - PeopleSoft Materials System, which consists of Accounts Payable, Purchasing, and Inventory applications. All Materials transactions are passed to the General Ledger on a weekly basis.

- Customer Service and Information System, which provides the billing for all residential, commercial, and industrial customers and the generation of revenue reports. The revenue information is passed to the General Ledger on a monthly basis.

All special projects are assigned specific codes to be used for any applicable charges. This allows for proper billing and tracking of dollars.

Figure 3-1
SCE&G
Accounting System



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Section 4.0

Cost Risk Assessment

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4.0 Cost Risk Assessment

SCE&G has not identified any meaningful cost risks associated with Contract Rate service. The acquired system will be comparable in terms of age and composition to the rest of the 13,400-mile utility system. Costs are based on actual costs that have been historically incurred to operate and maintain a similar natural gas distribution system located within the same geographic area in a safe and reliable manner. Selected cost risk areas are nonetheless identified in Table 4-1.

Table 4-1. SCE&G Contract Rate Cost Risk Assessment

Cost Risk Area	Mitigation
Operating inefficiencies	Regulatory oversight by the SCPSC; SCE&G's historical record of productively based cost minimization
Increasing overhead allocations	Regulatory oversight by the SCPSC; acquired system a small percent (<0.1%) of the total SCE&G system
Modified accounting treatments	Use of the standard FERC USOA prevents an expansion of direct cost assignments or overhead allocations
Higher equipment unit costs	Use of the same standard inventory costs for privatized and other retail service; regulatory oversight by the SCPSC
Change orders based on changing laws, regulations, or standards	Does not apply for the Contract Rate tariff structure; rate changes are implemented only as authorized by the SCPSC
General cost escalation	SCE&G must remain competitive compared to other energy sources, so there is an economic incentive to control costs and related overhead burdens; regulatory oversight by the SCPSC; productivity enhancements to offset inflationary price pressures
Escalating O&M Costs	Not applicable; O&M costs are based on system-wide cost and are recoverable as part of bundled service rates; the EOM Charge is a fixed-price charge (with a CPI adjustment after Year 11)
System gold plating	Use of the same standards, practices, and equipment for on-Post and off-Post services; the application of different standards will be readily apparent to the Government (and the SCPSC)
Degrading preventive maintenance	Use of the same standards, practices, and equipment for on-Post and off-Post services
Vulnerability to Acts of God related system damage and related change order cost exposure	Compliance with existing, comprehensive standards prevents the installation of a less robust (and hence less reliable) system; SCE&G standards incorporate the appropriate tradeoffs between short-term capital costs and longer-term life cycle operating costs

SCE&G system distribution plant costs historically have not been volatile and there are no known factors that lead SCE&G to believe that that will change. Utility service rates in general (for other than fuel cost adjustments) and distribution costs in particular historically have been relatively stable and predictable. This is supported in the Table 4-2 statistics, which show fairly nominal changes in O&M cost per customer. The average costs were very stable from year-to-year, and the overall cost increase was much less than the compounded rate of inflation.

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Table 4-2. SCE&G Distribution O&M Cost Trends	
Year	**O&M $ / 1,000 Customers**
2012	17.09
2013	17.03
2014	17.95
2015	18.18
2016	16.29
2017	15.75
Change ’11 to ‘15	- 7.8%

Additions to the rate base will be based on the actual installed cost of new or replacement capital equipment. Installed cost pricing is a very common practice within the public utility industry. It is routinely applied to connection charges associated with new, relocated, or expanded mains and services, regulators, meters, or other distribution facilities for both private sector and Government sector customers.

There are sound reasons why this practice is standard within the industry and SCE&G, and is appropriate for the privatized service as follows:

- Design and construction practices are standardized;
- Standards have proven to be effective in providing sustainable safe and reliable service;
- Consistency of application is readily visible by simply viewing facilities installed on- and off-Post;
- Capital upgrades and renewals, as with all other elements of the utility service, are subject to independent regulation and oversight by the SCPSC;
- Cost accounting for capitalized activities is regulated under the FERC Uniform System of Accounts;
- Cost records are routinely made public, in terms of SCPSC Annual Report filings and in considerable detail during periodic rate adjustment hearings before the SCPSC;
- Project costs are captured under work orders, which can be inspected by a customer upon request; and
- Standard inventory stock prices are applied to all capitalized efforts.

Contract Rate Charge Stability

A perception of potential price risk associated with annual updates to the Contract Rate Charge can be assessed from an historical context. The base year Contract Rate Charge in this proposal was based on the SCE&G system cost of service from the 2017 FERC Form 2-based SCPSC Annual Report. The base year, annualized Contract Rate Charges for different Annual Report years can be compared by applying the same CRC methodology used and a common $1.0 million assumed privatize plant value and 1.8519 percent system depreciation rate to the Annual Report cost of service values for prior years.

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As shown in Table 4-3, the annual CRC declined in each year and the 2017 value was 11.9 percent less than the 2012 value. Much of the cost reduction was attributable to a steady decline in debt cost, which in turn was a factor in lowering the rate of return component of the CRC. Although historic cost trends might not apply to future CRC projections for the privatized service, they do indicate a likelihood of a fairly stable system cost of service.

Another factor is a change in the capital structure from a 46.5 / 53.5 percent debt-to-equity ratio in 2012 to the current 50.5 / 49.5 percent ratio. The after-tax embedded cost of debt (at 5.4 percent)is substantially lower than the cost of common equity, so lowering the equity ratio lowers the rate of return percent and hence lowers the rate of return component of the CRC.

Table 4-3. SCE&G CRC Cost Trends per $1 Million Plant

Year	CRC ($)
2012	174,300
2013	174,300
2014	168,500
2015	168,100
2016	163,600
2017	153,500
Change ’12 to ’17	-11.9%

It also is useful to briefly assess cost risk by referencing comparable industry experience. The proposed Contract Rate in general and Contract Rate Charge in particular are special contract / tariff price structures that have been proposed by a number of other regulated utilities. Two such utilities were awarded privatization contracts to serve Air Force installations and a CRC-based contract was negotiated for an Army installation. Their Contract Rate Charges were then updated to reflect then-current cost of service allocations. Selected results of the updates are:

- A cost of service update for Offutt AFB reduced the base year CRC by 7.1 percent. There were additional cost savings associated with reductions from the proposed initial plant-in-service valuations.
- A cost of service update for Charleston AFB reduced the base year CRC by 19.8 percent.
- The actual cost of initial capital upgrades for Charleston AFB were 46.6 percent less than the proposed cost that was the basis for the decision to award the privatized service contract.
- The 2011 to 2012 cost of service update for a large privatized natural gas system in Texas reduced the CRC 0.03 percent.

While there can be no guarantee that the experiences at other installations would be replicated at Fort Jackson, the examples nonetheless support the general proposition that utility service rates tend to be relatively stable over time and that upgrade cost estimates provided by utilities such as SCE&G tend to be reasonable.

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Estimated Versus Actual (Installed) Capital Costs

ISDC and Capital Upgrade Projects. SCE&G's envisions that the price-firming process currently used for the Charleston AFB gas system privatization would be applied to Fort Jackson and would proceed as follow:[1]

- The need for the capitalized work would be identified by the Installation (e.g., for a new connection) or SCE&G (an ISDC or system upgrade);
- SCE&G prepares and submits to the COTR a scope of work and cost estimate based on the Unified Gas Projects cost estimation system described in Section 2.5.1 of the Price Proposal;
- The submittal is reviewed and approved by the COTR, establishing a firm-fixed- price-not-to-exceed (NTE) for the work effort;
- SCE&G executes the authorized work; and
- The actual (installed) cost is recorded in the Company's plant-in-service records and thereafter is included in the cost-of-service basis for the Contract Rate Charge.

Renewals and Replacements. A firming process was not established at Charleston AFB due to the relatively small size of the system, but may be needed for the Fort Jackson system. Unlike ISDCs and new connections, there typically will not be a pre-identified needed for R&R. This is consistent with the standard utility practice noted herein and in the proposal that facilities typically are replaced based on need and not on the age of a main, regulator or other system component.

As an example, consider third-party excavation damage to a main. An SCE&G repair crew excavates and determined that, based on the condition of the exposed pipe, extent of the breach and other standard operating practices that 120 LF of pipe had to be replaced. Given the length of the replacement, the work would be capitalized instead of an expensed repair (see discussion in proposal Section 2.6.1).

Another consideration is that the amount and dollar value of R&R is likely to vary considerably from year-to-year. Consistent with the Section 2.6 concept of "levelized" replacements there may be virtually no R&R activity in one year but a considerable amount in the next.

Due to the uncertain scope and cost of potential R&R activity, one firming approach would be to annually establish an R&R not-to-exceed (NTE) amount that could be modified based on actual requirements during the year. As with the ISDCs, SCE&G would enter actual, installed costs into its property records. Consistent with the need for a firming mechanism, SCE&G suggests that appropriate procedures would be worked out after contract award.

[1] The concept of price firming within the regulated utility industry had its genesis in an earlier Department of Navy determination that Rule 2 and similar percentage-based additional facility tariffs were statutorily prescribed cost-plus-percentage-of-cost pricing structures. A common feature of such tariffs was to apply a fixed percentage to installed project costs. This is similar to the CRC tariff structure, which includes a PSC-based rate of return percentage and allocates system cost of service elements based on a calculated ratio (percentage).

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Price Projections. Possible price changes between the initial estimate and the installed costs for Fort Jackson can be evaluated based on the magnitude of price changes between cost estimates based on the Work Force Management cost estimation system and the actual (installed) cost at Charleston AFB.

The Charleston AFB privatization proposal reflected a $325,800 purchase price and $140,900 ISDC cost, for a total initial plant-in-service value of $466,700. The actual plant value component of the CRC was the $469,100, for a $2,400 (0.5%) variance. The purchase price was fixed, so the $2,400 variance was attributable to the ISDCs.

The FRP also provided levelized R&R additions for the initial 25 years based on 0.75% of the system RCN value. The base year projected value was value $6,223, which was escalated based on a then-current 2.0 percent inflation rate.

The actual R&R cost for the first ten contract years was zero. Replacements were not needed because the system performed properly and reliably. This in part was because the acquired system was in a relatively good condition, and this condition was maintained after award due to proper maintenance (e.g., inspections, result removal, exercise of valves, etc.).

The plant value did increase to $580,700 through the eleventh (2016) contract year. However, all of the $116,600 increase from the initial value was due to gas system expansions installed at the request of the base. These primarily involved the installation of new secondary meters or new service line extensions. Excluding the noted expansions the Year 11 CRC would have been $69,900 versus a projected $83,600. A summary of bid versus actual prices is as follows:

	Actual	Proposed
• Initial plant value	$469,100	$466,700
• Year eleven value	580,700	$520,200
• Less expansions & removals:	- 111,600	n.a.
• Adjusted plant value:	$469,100	$520,200
• Initial CRC	$80,400	$94,100
• Year 11 CRC	$83,800	$83,600
• Less expansions & removals:	- 13,900	n.a.
• Adjusted CRC value:	$69,900	$83,600

A comparison of estimated versus actual costs for 13 identified projects at Charleston AFB is provided below:

				Variance	
Date	Location	Estimate	Actual	Dollars	Percent
08/04/2009	Building 1005	$1,598	$1,599	$1	0%
08/05/2009	Building 312	519	260	(259)	-50%
08/06/2009	Building 231	523	260	(263)	-50%
09/01/2009	Building 113	15,719	14,972	(747)	-5%
08/04/2010	Building 224	279	257	(22)	-8%
11/29/2010	Buildings 174 & 184	19,769	18,118	(1,651)	-8%

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03/15/2011	Building 241	4,572	3,084	(1,488)	-33%
01/30/2012	N Davis RFP 9	6,400	4,753	(1,647)	-26%
05/04/2012	CE Readiness Facility	1,128	694	(434)	-38%
07/08/2013	Building 551	17,904	11,421	(6,483)	-36%
07/08/2013	CE Readiness Facility	399	268	(131)	-33%
05/16/2016	Building 664	1,942	2,687	745	38%
10/26/2016	Red Horse RFP 13	20,110	13,688	(6,422)	-32%
	Total	$90,862	$72,061	$(18,801)	-21%
	Maximum Variance			$(6,483)	
	Minimum Variance			$1	
	Median			$(434)	

Sensitivity Assessments

To be provided

A technical consultant for the Government elsewhere suggested that what were perceived to be artificially low levelized R&R percentages would place the Government at considerable cost risk. This perceived risk can be quantified by an alternative price projection that changes the R&R percentages but holds all other pricing components constant. The assumptions for and results of this sensitivity assessment are summarized as follows:

- The base year levelized R&R cost was increased by 10 percent, due to either a 10 percent increase in unit costs, R&R replacement units or a combination thereof. The change increases the 50-year net present value for the Contract Rate Charge component SCE&G's proposed service (based on the 2.6 percent Circular A-94 discount rate) as follows:
  - Sensitivity assessment NPV: $16,688,000
  - Base case NPV (Table 2-16): - 16,390,000
  - Net change from base: $298,000
  - Percent change from base: 1.8 percent
- A second sensitivity assessment retains the base case, but increases the projected capital upgrade project costs by 10 percent. The change increases the 50-year net present value as follows:
  - Sensitivity assessment NPV: $17,315 ,000
  - Base case NPV (Table 2-16): - 16,390,000
  - Net change from base: $925,000
  - Percent change from base: 5.6 percent

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Attachment A:

Derivation of RCN Value

[A table containing unit prices and the derivation of the system replacement cost new is provided in a separate Excel file]

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Attachment B:

Contract Rate Charge Template

[A copy of the CRC Template is provided as a separate Excel file.]

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Attachment C:

Sample Work Force Management (WFM) Reports

[Samples of a Work Force Management system derived unit costs are provided in a separate Excel file]

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Attachment D:

Price Data Sheets

[The Price Data Sheets and CRC component projections are provided as a separate Excel file]

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Schedule B-1 Regulated Tariff

Price Data Sheet 1: Fort Jackson, South Carolina, Natural Gas Distribution System					
CLIN	Supplies/Services	Qty	Unit	Unit Price	Total
0001	Utility Services Charge	600	Months	$12,635	$7,580,852
	The unit price is the Applicable Tariff(s) less the monthly credit as payment for the purchase price plus the recoverable portion of the purchase price. Applicable Tariff / Contract Rate Charge: [a,b] $17,455 Monthly Credit for Purchase Price (PP): $4,820 Number of months: 600 Interest rate: 3.5% (provisional) [c] Recoverable Portion of PP: [d] Not applicable $12,635 Unit Price:				
0002	Initial System Deficiency Corrections / Upgrades/ Connection Charges [e]	n.a.	n.a.	n.a.	n.a.
0003	Transition Period Charges [f]	1	1	$357,900	$357,900
0004	Extraordinary Operations and Maintenance (EOM) Charge [g]	600	Months	$7,500	$4,500,000
0005	Deleted	n.a.	n.a.	n.a.	n.a.
0006	Gross Receipts Tax (GRT) and SCPSC Support Tax [i]	600	$s	$0.005227	$171,801
0007	Third-Party Construction Hourly Inspection Charge Rate j	n.a.	Hour	$88.81	n.a.
0008	Deleted	n.a.	n.a.	n.a.	n.a.
0009	Deleted	n.a.	n.a.	n.a.	n.a.

[a] The Contract Rate Charge is based on widely accepted and approved regulatory principles that apply to regulated utility service rates. It incorporates a return on and of the South Carolina Electric and Gas Company (SCE&G) investment in the privatized natural gas distribution system plus associated expenses and income taxes. These items collectively represent the cost to serve Fort Jackson, and form the basis for the Contract Rate Charge (see Table 2-7 in the Volume IV Price Proposal for the derivation of the base year Contract Rate Charge). The Contract Rate Charge is based on the monthly charge for the first 12-month period after ownership of the system is transferred to SCE&G, which is projected to occur within nine months after the South Carolina Public Service Commission (SCPSC) approves the service contract and the regulatory approval contingency is satisfied. The charge will be adjusted at least annually in accordance with the terms and conditions of the contract.

[b] The Contract Rate Charge is a bundled tariff rate that does not separately identify operations and maintenance (O&M) and renewals and replacements (R&R) costs. The Section B.3.1 Price Schedule Data Sheet requirements accordingly do not apply to this proposal.

[c] The bill credit amount is based on the current 3.5 percent nominal interest rate for long-term Treasury notes and bonds as reported in the November 2015 update of Appendix C to the Office of Management and Budget's (OMB) Circular A-94 and a 600-month crediting term.

[d] The Recoverable Portion of the Purchase Price for the natural gas distribution system will be added to the plant-in-service component of the Contract Rate Charge when ownership of the natural gas distribution system is transferred from the Government to South Carolina Electric and Gas Company. Cost recovery will be accommodated under the Contract Rate Charge as a depreciation expense.

[e] The Contract Rate Charge does not provide for separate identification of Initial System Deficiency Correction, Upgrades or Connection Charges. However, estimated project costs are provided for informational purposes only in Price Data Sheet 3, and the projects are described in Section 2.10.3 of the Volume IV Price Proposal.

[f] Transition Period charges will be billed as one-time charges. The transition projects and proposed costs are provided in Price Data Sheet 5 and are described in Section 2.10.4 of the Volume IV Price Proposal.

[g] The initial $7,500 monthly EOM Charge will be applied on a firm-fixed-price basis, without inflation or other adjustments, beginning the first billing month after the ownership transfer and continuing for a 36-month term. The EOM Charge then will be reduced to $5,500 in the fourth ownership year. The charge will be further reduced to $3,500 in the seventh contract year and thereafter will be adjusted annually for the remainder of the 600-month contract term based on 75 percent of the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U).

[h] Deleted,

[i] There will be an annual flow-through of Gross Receipts Tax (GRT) and SCPSC Support Tax, which are applied to gross contract revenues, exclusive of the CLIN 0001 Monthly Credit for Purchase Price, as set forth in Section 2.9 of the Volume IV Price Proposal.

[j] In accordance with Section 11.3.3 of the Solicitation, SCE&G shall have the right to reasonably inspect the third party contractor's construction of system components for which SCE&G will take ownership. The proposed Hourly Inspection Charge Rate shall be indexed to the annual rate of change to the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers.

[k] Deleted.

[l] Deleted.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

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Attachment D: Price Data Sheet 2 – Renewals and Replacements – 50-YEAR Plan (for SCE&G Privatization of the Fort Jackson Natural Gas Distribution System)

Item	Size	Quantity	Unit	Approx Year Installed	Existing Unit RCN	Existing Item Service Life	First Expected Replacement Year	New Item	New Item Service Life	New Unit Cost RCN	New Item RCN	Planned Renewals & Replacements		Residual Value in Year 50 (Const $)
												Contract Year	R&R Cost ($)	
Piping	Various	500	LF	Various	22,000	54	1	500	54	44.00	22,000	1	0	n.a.
Piping	Various	500	LF	Various	22,000	54	2	500	54	44.87	22,437	2	22,000	440
Piping	Various	500	LF	Various	22,000	54	3	500	54	45.77	22,883	3	22,437	897
Piping	Various	500	LF	Various	22,000	54	4	500	54	46.68	23,338	4	22,883	1,373
Piping	Various	500	LF	Various	22,000	54	5	500	54	47.60	23,802	5	23,338	1,867
Piping	Various	500	LF	Various	22,000	54	6	500	54	48.55	24,276	6	23,802	2,380
Piping	Various	500	LF	Various	22,000	54	7	500	54	49.52	24,758	7	24,276	2,913
Piping	Various	500	LF	Various	22,000	54	8	500	54	50.50	25,250	8	24,758	3,466
Piping	Various	500	LF	Various	22,000	54	9	500	54	51.50	25,752	9	25,250	4,040
Piping	Various	500	LF	Various	22,000	54	10	500	54	52.53	26,264	10	25,752	4,635
Piping	Various	500	LF	Various	22,000	54	11	500	54	53.57	26,787	11	26,264	5,253
Piping	Various	500	LF	Various	22,000	54	12	500	54	54.64	27,319	12	26,787	5,893
Piping	Various	500	LF	Various	22,000	54	13	500	54	55.72	27,862	13	27,319	6,557
Piping	Various	500	LF	Various	22,000	54	14	500	54	56.83	28,416	14	27,862	7,244
Piping	Various	500	LF	Various	22,000	54	15	500	54	57.96	28,981	15	28,416	7,957
Piping	Various	500	LF	Various	22,000	54	16	500	54	59.11	29,557	16	28,981	8,694
Piping	Various	500	LF	Various	22,000	54	17	500	54	60.29	30,145	17	29,557	9,458
Piping	Various	500	LF	Various	22,000	54	18	500	54	61.49	30,744	18	30,145	10,249
Piping	Various	500	LF	Various	22,000	54	19	500	54	62.71	31,355	19	30,744	11,068
Piping	Various	500	LF	Various	22,000	54	20	500	54	63.96	31,979	20	31,355	11,915
Piping	Various	500	LF	Various	22,000	54	21	500	54	65.23	32,615	21	31,979	12,792
Piping	Various	500	LF	Various	22,000	54	22	500	54	66.53	33,263	22	32,615	13,698
Piping	Various	500	LF	Various	22,000	54	23	500	54	67.85	33,924	23	33,263	14,636
Piping	Various	500	LF	Various	22,000	54	24	500	54	69.20	34,599	24	33,924	15,605
Piping	Various	500	LF	Various	22,000	54	25	500	54	70.57	35,287	25	34,599	16,607
Piping	Various	500	LF	Various	22,000	54	26	500	54	71.98	35,988	26	35,287	17,643
Piping	Various	500	LF	Various	22,000	54	27	500	54	73.41	36,704	27	35,988	18,714
Piping	Various	500	LF	Various	22,000	54	28	500	54	74.87	37,433	28	36,704	19,820
Piping	Various	500	LF	Various	22,000	54	29	500	54	76.36	38,178	29	37,433	20,963
Piping	Various	500	LF	Various	22,000	54	30	500	54	77.87	38,937	30	38,178	22,143
Piping	Various	4,470	LF	Various	22,000	54	31	4,470	54	79.95	357,396	31	38,937	23,362
Piping	Various	4,470	LF	Various	198,000	54	32	4,470	54	81.54	364,501	32	357,396	221,586
Piping	Various	4,470	LF	Various	198,000	54	33	4,470	54	83.17	371,748	33	364,501	233,281
Piping	Various	4,470	LF	Various	198,000	54	34	4,470	54	84.82	379,139	34	371,748	245,354
Piping	Various	4,470	LF	Various	198,000	54	35	4,470	54	86.50	386,676	35	379,139	257,814
Piping	Various	4,470	LF	Various	198,000	54	36	4,470	54	88.22	394,364	36	386,676	270,673
Piping	Various	4,470	LF	Various	198,000	54	37	4,470	54	89.98	402,204	37	394,364	283,942
Piping	Various	4,470	LF	Various	198,000	54	38	4,470	54	91.77	410,201	38	402,204	297,631
Piping	Various	4,470	LF	Various	198,000	54	39	4,470	54	93.59	418,356	39	410,201	311,752
Piping	Various	4,470	LF	Various	198,000	54	40	4,470	54	95.45	426,673	40	418,356	326,317
Piping	Various	1,240	LF	Various	198,000	54	41	1,240	54	97.30	120,657	41	426,673	341,338
Piping	Various	1,240	LF	Various	54,900	54	42	1,240	54	99.24	123,056	42	120,657	98,939
Piping	Various	1,240	LF	Various	54,900	54	43	1,240	54	101.21	125,502	43	123,056	103,367
Piping	Various	1,240	LF	Various	54,900	54	44	1,240	54	103.22	127,997	44	125,502	107,932
Piping	Various	1,240	LF	Various	54,900	54	45	1,240	54	105.28	130,542	45	127,997	112,638
Piping	Various	1,240	LF	Various	54,900	54	46	1,240	54	107.37	133,137	46	130,542	117,488
Piping	Various	1,240	LF	Various	54,900	54	47	1,240	54	109.50	135,784	47	133,137	122,486
Piping	Various	1,240	LF	Various	54,900	54	48	1,240	54	111.68	138,484	48	135,784	127,637
Piping	Various	1,240	LF	Various	54,900	54	49	1,240	54	113.90	141,237	49	138,484	132,944
Piping	Various	1,240	LF	Various	54,900	54	50	1,240	54	0.00	0	50	141,237	138,412
										Total			5,978,491	4,153,817

Price Data Sheet 2 Explanatory Notes:

1. R&R spending in any given year will not be reflected in the Contract Rate Charge until the following year.

2. New item service lives reflect the average booked life of the system based on SCE&G depreciation rates. Actual in-service lives will invariably be much longer (e.g., 705+ years for gas mains)

3. The residual value is based on booked cost less accumulated depreciation.

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

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Fort Jackson, South Carolina, Natural Gas Distribution System					
Price Data Sheet 3-A: NCLIN 0002 Post-Ownership Capitalized Projects [a]					
Project Name [b]	**Interest Rate**	**Project Cost ($)**	**First Full Month Project will be in Service**	**# of Months to Amortize Component**	**Monthly Charge**
C-1: Replace Steel Pipe	n.a.	3,339,700	120	n.a.	n.a.
C-2: Miscellaneous Station Repairs	n.a.	83,600	24	n.a.	n.a.
C-3: Replace Secondary Meters	n.a.	3,200	60	n.a.	n.a.
Total	n.a.	3,426,500	n.a.	n.a.	n.a.

[a] This Price Data Sheet is provided for information purposes only. Project costs will be recovered by including the installed cost of each project, or phase thereof, in the plant-in-service component of the Contract Rate Charge. The Data Sheet costs should not be added to the initial CLIN 0001 charges for the purposes of life cycle cost analy-ses (see Section 2.10 and Table 2-18 in the Volume IV Price Proposal).

[b] The month in which an Initial Capital Upgrade will be placed in service is measured from the Contract Start Date. Although the projects will be completed within five years, the associated costs will not be fully reflected in the Contract Rate Charge's rate base until the seventh contract year.

Fort Jackson, South Carolina, Natural Gas Distribution System		
Price Data Sheet 3-B: CLIN 0003 Pre-Ownership Transition Period Projects [a]		
Description	**Unit**	**Amount ($)**
Project T-1: Transition Planning and Management	Project	107,100
Project T-2: Initial Leak Survey	Project	15,700
Project T-3: System Map, Inspection, Inventory & Repair	Project	75,800
Project T-4: Pothole Inspections	Project	135,600
Project T-5: Environmental Reconnaissance Study	Project	23,700
Total		357,900

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

Fort Jackson, South Carolina, Natural Gas Distribution System				
Price Data Sheet 4 – Recoverable Portion of the Purchase Price [a]				
Item	Interest Rate	Amount	Amortization Period	Monthly Charge
Recoverable Portion of the Purchase Price	0.00%	$1,364,700	600 months	$0.00

[a] There is no defined amortization charge. The Recoverable Portion of the Purchase Price instead is the initial distribution plant-in-service component of the CLIN 0001 Contract Rate Charge. Cost recovery is under the depreciation expense component of the CRC.

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Fort Jackson, South Carolina, Natural Gas Distribution System

Price Data Sheet 5 –Proposed 50-Year Charges to the Government

Year from CSD	Purchase Credit	Contract Rate Chg	CLIN 0001 Total Cost	CLIN 0003 Trans. Charges	CLIN 0004 Extraord. O&M	CLIN 0006 GRT / PSC Fee	Subtotal	Federal Tax Wash	Total Cost of Service
1	-57,841	209,459	151,617	357,900	90,000	3,436	602,953	-21,180	581,773
2	-57,841	296,732	238,891	0	90,000	2,021	330,912	-30,125	300,788
3	-57,841	383,756	325,915	0	90,000	2,476	418,391	-39,063	379,328
4	-57,841	470,761	412,919	0	66,000	2,806	481,725	-48,003	433,722
5	-57,841	557,887	500,046	0	66,000	3,261	569,307	-56,949	512,358
6	-57,841	645,232	587,390	0	66,000	3,718	657,108	-65,903	591,204
7	-57,841	732,866	675,024	0	66,000	4,176	745,200	-74,870	670,330
8	-57,841	725,816	667,974	0	42,000	4,013	713,988	-73,747	640,241
9	-57,841	718,779	660,937	0	42,621	3,980	707,538	-72,624	634,914
10	-57,841	711,754	653,912	0	43,251	3,946	701,109	-71,502	629,608
11	-57,841	704,744	646,903	0	43,890	3,913	694,706	-70,380	624,326
12	-57,841	697,743	639,901	0	44,538	3,880	688,319	-69,259	619,061
13	-57,841	690,757	632,916	0	45,196	3,847	681,959	-68,138	613,821
14	-57,841	683,785	625,944	0	45,864	3,814	675,622	-67,018	608,604
15	-57,841	676,827	618,986	0	46,542	3,781	669,309	-65,898	603,411
16	-57,841	669,883	612,042	0	47,230	3,748	663,020	-64,779	598,241
17	-57,841	662,954	605,112	0	47,928	3,716	656,756	-63,661	593,095
18	-57,841	656,039	598,197	0	48,636	3,683	650,517	-62,543	587,974
19	-57,841	649,139	591,298	0	49,355	3,651	644,303	-61,425	582,878
20	-57,841	642,254	584,413	0	50,084	3,619	638,116	-60,309	577,807
21	-57,841	635,386	577,544	0	50,824	3,587	631,955	-59,193	572,763
22	-57,841	628,532	570,691	0	51,576	3,555	625,822	-58,077	567,744
23	-57,841	621,696	563,854	0	52,338	3,523	619,715	-56,962	562,753
24	-57,841	614,875	557,034	0	53,111	3,492	613,637	-55,848	557,789
25	-57,841	608,072	550,231	0	53,896	3,460	607,587	-54,734	552,852
26	-57,841	601,286	543,445	0	54,693	3,429	601,566	-53,621	547,944
27	-57,841	594,517	536,676	0	55,501	3,398	595,574	-52,509	543,065
28	-57,841	587,767	529,925	0	56,321	3,367	589,613	-51,398	538,215
29	-57,841	581,034	523,193	0	57,153	3,336	583,682	-50,287	533,395
30	-57,841	574,321	516,479	0	57,998	3,305	577,782	-49,177	528,605
31	-57,841	567,626	509,784	0	58,855	3,275	571,914	-48,067	523,847
32	-57,841	591,825	533,983	0	59,725	3,406	597,114	-50,697	546,417
33	-57,841	616,202	558,361	0	60,607	3,538	622,506	-53,334	569,171
34	-57,841	640,760	582,919	0	61,503	3,671	648,093	-55,978	592,115
35	-57,841	665,504	607,662	0	62,412	3,805	673,879	-58,629	615,250
36	-57,841	690,436	632,594	0	63,334	3,940	699,869	-61,288	638,581
37	-57,841	715,560	657,719	0	64,270	4,076	726,065	-63,954	662,111
38	-57,841	740,881	683,040	0	65,220	4,213	752,473	-66,627	685,846
39	-57,841	766,402	708,560	0	66,184	4,352	779,096	-69,309	709,787
40	-57,841	792,127	734,285	0	67,162	4,492	805,939	-71,998	733,940
41	-57,841	818,060	760,218	0	68,154	4,632	833,005	-74,696	758,309
42	-57,841	812,720	754,879	0	69,162	4,610	828,650	-73,563	755,087
43	-57,841	807,440	749,599	0	70,184	4,587	824,370	-72,432	751,938
44	-57,841	802,222	744,380	0	71,221	4,565	820,167	-71,304	748,863
45	-57,841	797,066	739,224	0	72,273	4,544	816,042	-70,178	745,864
46	-57,841	791,973	734,132	0	73,341	4,523	811,996	-69,054	742,942
47	-57,841	786,946	729,104	0	74,425	4,502	808,032	-67,933	740,099
48	-57,841	781,985	724,143	0	75,525	4,482	804,151	-66,815	737,336
49	-57,841	777,091	719,250	0	76,641	4,462	800,353	-65,699	734,654
50	-57,841	772,266	714,425	0	77,774	4,443	796,642	-64,586	732,056

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Fort Jackson, South Carolina, Natural Gas Distribution System

Price Data Sheet 5 –Proposed 50-Year Charges to the Government

Year from CSD	Purchase Credit	Contract Rate Chg	CLIN 0001 Total Cost	CLIN 0151 Trans. Charges	CLIN 0051 Extraord. O&M	CLIN 0101 GRT / PSC Fee	Subtotal	Federal Tax Wash	Total Cost of Service
1	($57,841)	$209,459	$151,620	$357,900	$96,000	$3,468	$608,988	($21,180)	$587,808
2	($57,841)	$296,732	$238,896	$0	$96,000	$2,052	$336,948	($30,125)	$306,823
3	($57,841)	$383,756	$325,920	$0	$96,000	$2,508	$424,428	($39,063)	$385,365
4	($57,841)	$470,761	$412,920	$0	$96,000	$2,964	$511,884	($48,003)	$463,881
5	($57,841)	$557,887	$500,052	$0	$96,000	$3,420	$599,472	($56,949)	$542,523
6	($57,841)	$645,232	$587,388	$0	$84,000	$3,816	$675,204	($65,903)	$609,301
7	($57,841)	$732,866	$675,024	$0	$84,000	$4,272	$763,296	($74,870)	$688,426
8	($57,841)	$725,816	$667,980	$0	$84,000	$4,236	$756,216	($73,747)	$682,469
9	($57,841)	$718,779	$660,936	$0	$84,000	$4,200	$749,136	($72,624)	$676,512
10	($57,841)	$711,754	$653,916	$0	$84,000	$4,164	$742,080	($71,502)	$670,578
11	($57,841)	$704,744	$646,908	$0	$72,000	$4,056	$722,964	($70,380)	$652,584
12	($57,841)	$697,743	$639,900	$0	$73,068	$4,032	$717,000	($69,259)	$647,741
13	($57,841)	$690,757	$632,916	$0	$74,148	$3,996	$711,060	($68,138)	$642,922
14	($57,841)	$683,785	$625,944	$0	$75,240	$3,972	$705,156	($67,018)	$638,138
15	($57,841)	$676,827	$618,984	$0	$76,356	$3,936	$699,276	($65,898)	$633,378
16	($57,841)	$669,883	$612,048	$0	$77,484	$3,912	$693,444	($64,779)	$628,665
17	($57,841)	$662,954	$605,112	$0	$78,624	$3,876	$687,612	($63,661)	$623,951
18	($57,841)	$656,039	$598,200	$0	$79,788	$3,852	$681,840	($62,543)	$619,297
19	($57,841)	$649,139	$591,300	$0	$80,964	$3,816	$676,080	($61,425)	$614,655
20	($57,841)	$642,254	$584,412	$0	$82,164	$3,792	$670,368	($60,309)	$610,059
21	($57,841)	$635,386	$577,548	$0	$83,376	$3,756	$664,680	($59,193)	$605,487
22	($57,841)	$628,532	$570,696	$0	$84,612	$3,732	$659,040	($58,077)	$600,963
23	($57,841)	$621,696	$563,856	$0	$85,860	$3,696	$653,412	($56,962)	$596,450
24	($57,841)	$614,875	$557,040	$0	$87,132	$3,672	$647,844	($55,848)	$591,996
25	($57,841)	$608,072	$550,236	$0	$88,416	$3,636	$642,288	($54,734)	$587,554
26	($57,841)	$601,286	$543,444	$0	$89,724	$3,612	$636,780	($53,621)	$583,159
27	($57,841)	$594,517	$536,676	$0	$91,044	$3,588	$631,308	($52,509)	$578,799
28	($57,841)	$587,767	$529,932	$0	$92,388	$3,552	$625,872	($51,398)	$574,474
29	($57,841)	$581,034	$523,188	$0	$93,756	$3,528	$620,472	($50,287)	$570,185
30	($57,841)	$574,321	$516,480	$0	$95,148	$3,504	$615,132	($49,177)	$565,955
31	($57,841)	$567,626	$509,784	$0	$96,552	$3,468	$609,804	($48,067)	$561,737
32	($57,841)	$591,825	$533,988	$0	$97,980	$3,600	$635,568	($50,697)	$584,871
33	($57,841)	$616,202	$558,360	$0	$99,420	$3,744	$661,524	($53,334)	$608,190
34	($57,841)	$640,760	$582,924	$0	$100,896	$3,876	$687,696	($55,978)	$631,718
35	($57,841)	$665,504	$607,668	$0	$102,384	$4,008	$714,060	($58,629)	$655,431
36	($57,841)	$690,436	$632,592	$0	$103,896	$4,152	$740,640	($61,288)	$679,352
37	($57,841)	$715,560	$657,720	$0	$105,432	$4,296	$767,448	($63,954)	$703,494
38	($57,841)	$740,881	$683,040	$0	$106,992	$4,428	$794,460	($66,627)	$727,833
39	($57,841)	$766,402	$708,564	$0	$108,576	$4,572	$821,712	($69,309)	$752,403
40	($57,841)	$792,127	$734,292	$0	$110,172	$4,716	$849,180	($71,998)	$777,182
41	($57,841)	$818,060	$760,224	$0	$111,804	$4,860	$876,888	($74,696)	$802,192
42	($57,841)	$812,720	$754,884	$0	$113,460	$4,836	$873,180	($73,563)	$799,617
43	($57,841)	$807,440	$749,604	$0	$115,140	$4,824	$869,568	($72,432)	$797,136
44	($57,841)	$802,222	$744,384	$0	$116,832	$4,800	$866,016	($71,304)	$794,712
45	($57,841)	$797,066	$739,224	$0	$118,560	$4,788	$862,572	($70,178)	$792,394
46	($57,841)	$791,973	$734,136	$0	$120,312	$4,764	$859,212	($69,054)	$790,158
47	($57,841)	$786,946	$729,108	$0	$122,088	$4,752	$855,948	($67,933)	$788,015
48	($57,841)	$781,985	$724,140	$0	$123,900	$4,740	$852,780	($66,815)	$785,965
49	($57,841)	$777,091	$719,256	$0	$125,724	$4,716	$849,696	($65,699)	$783,997
50	($57,841)	$772,266	$714,420	$0	$127,584	$4,704	$846,708	($64,586)	$782,122

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Contract Rate Input Sheet for Fort Jackson Privatization - Year Ending 2017
Gas Systems

Input	Value	FERC Form 1/2 or Other Location	General Description
Capital Structure Data			
Proprietary Capital	$ **4,838,967,576**	Form 1, p. 112, Line 16, Column C	Total combined ownership in the company
Preferred Stock Issued	$ **100,000**	Form 1, p. 112, Line 3, Column C	Amount of Preferred Stock outstanding at the end of the period (FERC Account 204)
Unappr. Undist. Retained Earnings	$ **-**	Form 1, p. 112, Line 12, Column C	Undistributed retained earnings of subsidiary companies (FERC Account 216.1)
Long Term Debt	$ **4,929,015,843**	Form 1, p. 112, Lines 18-21, Column C	Combined Long Term Debt Capital of the Company (FERC Accounts 221-224)
PSC Authorized Return on Equity	**10.25%**	---	Approved by the SCPSC for SCE&G Gas Operations, per Order # 2005-619 (dated 10/31/2005)
Long Term Debt Interest	$ **266,987,558**	Form 1, p. 117. Lines 62-66, Column C	Combined Long Term Debt Interest Expense (FERC Accounts 427-429)
Dividends Declared - Pref. Stock	$ **-**	Form 1, p. 118, Line 29, Column C	Dividends declared payable to preferred shareholders in current year (FERC Account 437)
Ratebase Data			
Intangible Plant	$ **15,390,106**	Form 2, p. 204-205, Line 5, Column G	Gross Intangible Plant in Service - Includes licenses, utility permits, franchises, etc. (FERC Accounts 301-303)
Production Plant	$ **-**	Form 2, p. 206-207, Line 41, Column G	Primarily Manufactured Gas Production Plant for SCE&G (FERC Gas Accounts 325-348)
Natural Gas Storage & Processing	$ **72,542,850**	Form 2, p. 206-207, Line 69, Column G	Primarily Other Gas Storage Plant (FERC Gas Accounts 350-372)
Transmission Plant	$ **-**	Form 2, p. 208-209, Line 92, Column G	Gross Transmission Plant in Service (FERC Gas Accounts 365-371)
Distribution Plant	$ **999,648,528**	Form 2, p. 208-209, Line 109, Column G	Gross Distribution Plant in Service (FERC Gas Accounts 374-388)
General Plant	$ **83,297,174**	Form 2, p. 208-209, Line 124, Column G	Gross General Plant in Service - Includes Office, Transportation, Communication Equipment, etc. (FERC Gas Accounts 389-399)
Common Plant	$ **35,869,424**	Form 1, p. 356.2, "Plant" Line, Column C	Gross Common Plant in Service - Includes Computer Systems, Offices, etc.
Accumulated Depreciation - General	$ **26,221,882**	Form 2, p. 219, Line 29, Column B	Accumulated Depreciation on General Plant (Included in FERC Account 108)
Accumulated Depreciation - Common	$ **15,926,827**	Form 1, p. 356.2, "Depr." Line, Column C	Accumulated Depreciation on Common Plant
Materials & Supplies	$ **2,456,183**	From December 31 Quarterly PSC Filing "RB Sum" tab (pink)	Other Materials and Supplies
Expense Data			
Distribution O&M	$ **25,650,050**	Form 2, p. 324, Line 229, Column B	Current Annual Gas Distribution O&M Expenses (FERC Gas Accounts 870-894)
Administrative & General O&M	$ **25,693,341**	Form 2, p. 325, Line 270, Column B	Current Annual Gas A&G O&M Expenses (FERC Gas Accounts 920-935)
Total O&M	$ **276,479,134**	Form 2, p. 325, Line 271, Column B	Current Annual Total Gas O&M Expenses
Depreciation Expense - General	$ **2,094,805**	Form 2, p. 336-337, Line 10, Column H	Current Annual Depreciation Expense on General Plant (Included in FERC Gas Accounts 403-405)
Depreciation Expense - Common	$ **1,046,923**	Form 2, p. 336-337, Line 11, Column H	Current Annual Depreciation Expense on Common Plant (Included in FERC Gas Accounts 403-405)
Previous Yr. System Value	$ **-**	Plant Accting	
Current Yr. System Value	$ **-**	Plant Accting	

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Table D-8: SCE&G - Fort Jackson Contract Rate Charge Worksheets ($)

Yr	YE 2012 Plant Value	ISDCs/ Upgrades	Levelized R&R Add.	Subtotal	Plant Removals	Dist. Plant in Svc.	G, I & C Plant	Acc'l Depreciation Distribution	Acc'l Depreciation G & C	Acc'l Depreciation M & S	Wkg Cap.	Rate Base	ROR 9.499%	Dist. O&M	Allocate A&G	Depreciation Expense Distribution	Depreciation Expense G & C Plant	Total CRC
1	1,364,700	0	0	1,364,700	0	1,364,700	171,266	0	-53,647	3,353	4,826	1,490,497	141,582	35,017	3,588	25,273	3,999	209,459
2	0	591,996	22,000	613,996	-6,824	1,971,873	236,034	-25,273	-73,935	4,621	6,650	2,119,970	201,376	48,259	4,944	36,643	5,511	296,732
3	0	603,766	22,437	626,203	-6,824	2,591,253	299,053	-61,915	-93,675	5,855	8,426	2,748,996	261,127	61,144	6,264	48,239	6,982	383,756
4	0	615,769	22,883	638,653	-6,824	3,223,082	361,034	-110,154	-113,090	7,068	10,172	3,378,112	320,887	73,817	7,562	60,066	8,429	470,761
5	0	628,011	23,338	651,350	-6,824	3,867,608	422,401	-170,220	-132,313	8,269	11,901	4,007,646	380,686	86,364	8,847	72,128	9,862	557,887
6	0	640,497	23,802	664,299	-6,824	4,525,084	483,436	-242,348	-151,432	9,464	13,621	4,637,825	440,547	98,843	10,125	84,430	11,287	645,232
7	0	653,231	24,276	677,506	-6,824	5,195,767	544,340	-326,778	-170,510	10,656	15,337	5,268,812	500,484	111,295	11,401	96,976	12,709	732,866
8	0	0	24,758	24,758	-6,824	5,213,702	544,340	-423,754	-170,510	10,656	15,337	5,189,771	492,976	111,295	11,401	97,435	12,709	725,816
9	0	0	25,250	25,250	-6,824	5,232,129	544,340	-521,188	-170,510	10,656	15,337	5,110,764	485,471	111,295	11,401	97,902	12,709	718,779
10	0	0	25,752	25,752	-6,824	5,251,058	544,340	-619,090	-170,510	10,656	15,337	5,031,790	477,970	111,295	11,401	98,379	12,709	711,754
11	0	0	26,264	26,264	-6,824	5,270,499	544,340	-717,469	-170,510	10,656	15,337	4,952,852	470,471	111,295	11,401	98,868	12,709	704,744
12	0	0	26,787	26,787	-6,824	5,290,462	544,340	-816,337	-170,510	10,656	15,337	4,873,947	462,976	111,295	11,401	99,361	12,709	697,743
13	0	0	27,319	27,319	-6,824	5,310,957	544,340	-915,699	-170,510	10,656	15,337	4,795,082	455,485	111,295	11,401	99,867	12,709	690,757
14	0	0	27,862	27,862	-6,824	5,331,996	544,340	-1,015,566	-170,510	10,656	15,337	4,716,253	447,997	111,295	11,401	100,383	12,709	683,785
15	0	0	28,416	28,416	-6,824	5,353,589	544,340	-1,115,950	-170,510	10,656	15,337	4,637,462	440,513	111,295	11,401	100,910	12,709	676,827
16	0	0	28,981	28,981	-6,824	5,375,747	544,340	-1,216,859	-170,510	10,656	15,337	4,558,710	433,032	111,295	11,401	101,446	12,709	669,883
17	0	0	29,557	29,557	-6,824	5,398,480	544,340	-1,318,305	-170,510	10,656	15,337	4,479,998	425,555	111,295	11,401	101,994	12,709	662,954
18	0	0	30,145	30,145	-6,824	5,421,802	544,340	-1,420,299	-170,510	10,656	15,337	4,401,326	418,082	111,295	11,401	102,552	12,709	656,039
19	0	0	30,744	30,744	-6,824	5,445,723	544,340	-1,522,851	-170,510	10,656	15,337	4,322,695	410,613	111,295	11,401	103,121	12,709	649,139
20	0	0	31,355	31,355	-6,824	5,470,255	544,340	-1,625,972	-170,510	10,656	15,337	4,244,106	403,148	111,295	11,401	103,702	12,709	642,254
21	0	0	31,979	31,979	-6,824	5,495,410	544,340	-1,729,674	-170,510	10,656	15,337	4,165,559	395,686	111,295	11,401	104,294	12,709	635,386
22	0	0	32,615	32,615	-6,824	5,521,201	544,340	-1,833,968	-170,510	10,656	15,337	4,087,056	388,229	111,295	11,401	104,898	12,709	628,532
23	0	0	33,263	33,263	-6,824	5,547,641	544,340	-1,938,866	-170,510	10,656	15,337	4,008,598	380,777	111,295	11,401	105,514	12,709	621,696
24	0	0	33,924	33,924	-6,824	5,574,742	544,340	-2,044,380	-170,510	10,656	15,337	3,930,184	373,328	111,295	11,401	106,142	12,709	614,875
25	0	0	34,599	34,599	-6,824	5,602,517	544,340	-2,150,522	-170,510	10,656	15,337	3,851,818	365,884	111,295	11,401	106,783	12,709	608,072
26	0	0	35,287	35,287	-6,824	5,630,980	544,340	-2,257,305	-170,510	10,656	15,337	3,773,498	358,445	111,295	11,401	107,436	12,709	601,286
27	0	0	35,988	35,988	-6,824	5,660,145	544,340	-2,364,742	-170,510	10,656	15,337	3,695,226	351,010	111,295	11,401	108,103	12,709	594,517
28	0	0	36,704	36,704	-6,824	5,690,025	544,340	-2,472,845	-170,510	10,656	15,337	3,617,003	343,579	111,295	11,401	108,783	12,709	587,767
29	0	0	37,433	37,433	-6,824	5,720,635	544,340	-2,581,627	-170,510	10,656	15,337	3,538,831	336,154	111,295	11,401	109,476	12,709	581,034
30	0	0	38,178	38,178	-6,824	5,751,989	544,340	-2,691,103	-170,510	10,656	15,337	3,460,709	328,733	111,295	11,401	110,183	12,709	574,321
31	0	0	38,937	38,937	-6,824	5,784,102	544,340	-2,801,286	-170,510	10,656	15,337	3,382,639	321,317	111,295	11,401	110,904	12,709	567,626
32	0	0	357,396	357,396	-61,412	6,080,086	544,340	-2,912,190	-170,510	10,656	15,337	3,567,719	338,898	111,295	11,401	117,522	12,709	591,825
33	0	0	364,501	364,501	-61,412	6,383,175	544,340	-3,029,712	-170,510	10,656	15,337	3,753,287	356,525	111,295	11,401	124,272	12,709	616,202
34	0	0	371,748	371,748	-61,412	6,693,511	544,340	-3,153,984	-170,510	10,656	15,337	3,939,350	374,199	111,295	11,401	131,157	12,709	640,760
35	0	0	379,139	379,139	-61,412	7,011,238	544,340	-3,285,141	-170,510	10,656	15,337	4,125,921	391,921	111,295	11,401	138,178	12,709	665,504
36	0	0	386,676	386,676	-61,412	7,336,503	544,340	-3,423,318	-170,510	10,656	15,337	4,313,007	409,693	111,295	11,401	145,338	12,709	690,436
37	0	0	394,364	394,364	-61,412	7,669,455	544,340	-3,568,657	-170,510	10,656	15,337	4,500,621	427,514	111,295	11,401	152,641	12,709	715,560
38	0	0	402,204	402,204	-61,412	8,010,247	544,340	-3,721,298	-170,510	10,656	15,337	4,688,772	445,386	111,295	11,401	160,090	12,709	740,881
39	0	0	410,201	410,201	-61,412	8,359,035	544,340	-3,881,388	-170,510	10,656	15,337	4,877,471	463,311	111,295	11,401	167,686	12,709	766,402
40	0	0	418,356	418,356	-61,412	8,715,979	544,340	-4,049,074	-170,510	10,656	15,337	5,066,729	481,289	111,295	11,401	175,433	12,709	792,127
41	0	0	426,673	426,673	-61,412	9,081,240	544,340	-4,224,507	-170,510	10,656	15,337	5,256,556	499,320	111,295	11,401	183,335	12,709	818,060
42	0	0	120,657	120,657	-17,059	9,184,838	544,340	-4,407,841	-170,510	10,656	15,337	5,176,820	491,746	111,295	11,401	185,569	12,709	812,720
43	0	0	123,056	123,056	-17,059	9,290,835	544,340	-4,593,410	-170,510	10,656	15,337	5,097,247	484,188	111,295	11,401	187,848	12,709	807,440
44	0	0	125,502	125,502	-17,059	9,399,278	544,340	-4,781,258	-170,510	10,656	15,337	5,017,843	476,645	111,295	11,401	190,172	12,709	802,222
45	0	0	127,997	127,997	-17,059	9,510,217	544,340	-4,971,430	-170,510	10,656	15,337	4,938,609	469,119	111,295	11,401	192,542	12,709	797,066
46	0	0	130,542	130,542	-17,059	9,623,700	544,340	-5,163,972	-170,510	10,656	15,337	4,859,550	461,609	111,295	11,401	194,960	12,709	791,973
47	0	0	133,137	133,137	-17,059	9,739,778	544,340	-5,358,932	-170,510	10,656	15,337	4,780,669	454,116	111,295	11,401	197,425	12,709	786,946
48	0	0	135,784	135,784	-17,059	9,858,503	544,340	-5,556,357	-170,510	10,656	15,337	4,701,969	446,640	111,295	11,401	199,940	12,709	781,985
49	0	0	138,484	138,484	-17,059	9,979,928	544,340	-5,756,297	-170,510	10,656	15,337	4,623,454	439,182	111,295	11,401	202,504	12,709	777,091
50	0	0	141,237	141,237	-17,059	10,104,106	544,340	-5,958,801	-170,510	10,656	15,337	4,545,128	431,742	111,295	11,401	205,120	12,709	772,266

Inflation rate 1.98810%

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SCE&G
Contract Rate Charge for Fort Jackson Gas Service
Based on 2017 Data

RATEBASE	Item		
Estimated Plant in Service *			
System Value/Initial Purchase Price		**$ 1,364,700**	**$ 1,364,700**
Capitalized Initial Upgrade Projects		$ -	$ -
Recurring Capital Replacements		$ -	$ -
Total Distribution Plant in Service	(A)	$ 1,364,700	$ 1,364,700
General & Intangible Plant Allocation	(B)	$ 125,611	$ 125,611
Common Plant Allocation	(C)	$ 45,655	$ 45,655
Total Plant in Service	(D)	$ 1,535,966	$ 1,535,966
Accumulated Depreciation			
Distribution	(E)	$ -	$ (25,273)
General & Intangible	(F)	$ (33,376)	$ (33,376)
Common	(G)	$ (20,272)	$ (20,272)
Total Accumulated Depreciation		$ (53,647)	$ (78,920)
Materials & Supplies	(H)	$ 3,353	$ 3,353
Working Cash			
@ 1/8 of Annual O&M	(I)	$ 4,826	$ 4,826
TOTAL RATEBASE		$ 1,490,497	$ 1,465,224
PRE-TAX RATE OF RETURN			
See Capital Structure Computation	Table 2-4	9.499%	9.499%
PRE-TAX RETURN REQUIRED TO SUPPORT RATEBASE		$ 141,582	$ 139,182
OPERATION & MAINTENANCE EXP.			
Distribution O&M	(J)	$ 35,017	$ 35,017
Admin. & General Exp. Allocation	(K)	$ 3,588	$ 3,588
TOTAL O&M EXPENSE		$ 38,604	$ 38,604
DEPRECIATION EXP.			
Distribution	(L)	$ 25,273	$ 25,273
General	(M)	$ 2,666	$ 2,666
Common	(N)	$ 1,333	$ 1,333
TOTAL DEPRECIATION EXPENSE		$ 29,272	$ 29,272
TOTAL REVENUE ANNUAL REQUIREMENT		$ 209,458	$ 207,058
MONTHLY CONTRACT RATE CHARGE		$ 17,455	$ 17,255

SCE&G
Contract Rate Charge for Fort Jackson Gas Service
Inputs From 2017 FERC Form 1 (FF1) and FERC Form 2 (FF2)

CAPITAL STRUCTURE

	Capitalization	Ratio	Emb. Cost	Weighted Cost	Ret. Fac.	Rev. Req.
Long Term Debt	$ 4,929,015,843	50.460%	5.417%	2.733%	1.00000	2.733%
Preferred Stock	$ 100,000	0.001%	0.000%	0.000%	0.75050	0.000%
Common Equity	$ 4,838,967,576	49.539%	10.250%	5.078%	0.75050	6.766%
	$ 9,768,083,419	100.00%		7.811%		9.499%

Pyramid Tax Example:

Revenue			$ 1,000,000	100.000%
State Income Tax				
(1,000,000	X	**5%**	$ 50,000	5.000%
Federal Income Tax				
(1,000,000 - 5,000)	X	**21%**	$ 199,500	19.950%
Total Taxes			$ 249,500	24.950%
Additional Return			$ 750,500	75.050%

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BILL OF SALE

INSERT CONTRACT NUMBER

In accordance with Defense Logistics Agency Energy Contract # SPE600-XX-C-XXXX dated Month Day, 20XX, and the good and valuable consideration described therein, the United States of America, hereinafter designated "Government," hereby sells, transfers and conveys to **CONTRACTOR NAME,** Contractor Address, hereinafter designated "Grantee," the property described below:

ALL THOSE CERTAIN facilities and equipment comprising the INSTALLATION NAME NAME OF UTILITY SYSTEM, as described on the attached DA Form 337 "Request for Approval of disposal of Building and Improvements" dated Month Day, 20XX, attached hereto and made a part of this Bill of Sale.

This sale is subject to the following provisions:

1. The terms and conditions found in the Utility Privatization Contract No. SPE600-XX-C-XXXX, being an agreement between the Government and the Grantee, along with all applicable federal, state, county, municipal, and Installation laws, ordinances, regulations, rules, orders, and other requirements; and

2. The Government covenants that is has good and valid title to the facilities and equipment being conveyed by this Bill of Sale; that it is the sole owner of said facilities and equipment and no other party has any lawful interest therein, other than the possible attachment rights; and

3. The Government makes no warranty, express or implied, with regard to the condition of the facilities and equipment, which are being transferred in "AS IS" "WHERE IS" condition; and

4. These facilities will remain available through Contract No. SPE600-XX-C-XXXX for any future mobilization missions; and

5. All equipment in place and installed property will remain in these facilities.

This bill of sale is executed on behalf of the Department of the Army this _____ day of _____, 20XX.

_____

<<SIGNATURE BLOCK USACE>>>

ACCEPTANCE

I am Contractor Name who holds the position of President with Company Name, and I am duly authorized to accept and sign this Bill of Sale for Company Name this _____ day of _____, 20XX.

Company Name

By: _____

Contractor Name, President

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