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STATE OF SOUTH CAROLINA

Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina

BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

COVER SHEET

DOCKET NUMBER: 2015 - 103 - E

(Please type or print)

Submitted by: K. Chad Burgess
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NOTE: The cover sheet and information contained herein neither replaces nor supplements the filing and service of pleadings or other papers as required by law. This form is required for use by the Public Service Commission of South Carolina for the purpose of docketing and must be filled out completely.

DOCKETING INFORMATION (Check all that apply)

☐ Emergency Relief demanded in petition ☐ Request for item to be placed on Commission's Agenda expeditiously

☐ Other:

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)		
☒ Electric	☐ Affidavit	☐ Letter	☐ Request
☐ Electric/Gas	☐ Agreement	☐ Memorandum	☐ Request for Certification
☐ Electric/Telecommunications	☐ Answer	☐ Motion	☐ Request for Investigation
☐ Electric/Water	☐ Appellate Review	☐ Objection	☐ Resale Agreement
☐ Electric/Water/Telecom.	☐ Application	☒ Petition	☐ Resale Amendment
☐ Electric/Water/Sewer	☐ Brief	☐ Petition for Reconsideration	☐ Reservation Letter
☐ Gas	☐ Certificate	☐ Petition for Rulemaking	☐ Response
☐ Railroad	☐ Comments	☐ Petition for Rule to Show Cause	☐ Response to Discovery
☐ Sewer	☐ Complaint	☐ Petition to Intervene	☐ Return to Petition
☐ Telecommunications	☐ Consent Order	☐ Petition to Intervene Out of Time	☐ Stipulation
☐ Transportation	☐ Discovery	☐ Prefiled Testimony	☐ Subpoena
☐ Water	☐ Exhibit	☐ Promotion	☐ Tariff
☐ Water/Sewer	☐ Expedited Consideration	☐ Proposed Order	☐ Other:
☐ Administrative Matter	☐ Interconnection Agreement	☐ Protest	
☐ Other:	☐ Interconnection Amendment	☐ Publisher's Affidavit	

K. Chad Burgess
Associate General Counsel

chad.burgess@scana.com

March 12, 2015

VIA HAND DELIVERY ONLY

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

RE: Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina
Docket No. 2015-___-E

Dear Ms. Boyd:

Pursuant to S.C. Code Ann § 58-33-270(E) (Supp. 2014) South Carolina Electric & Gas Company ("SCE&G" or "Company") petitions the Public Service Commission of South Carolina (the "Commission") for an order approving an updated construction schedule and updated capital cost schedule for the construction of two 1,117 net megawatt nuclear units (the "Units") to be located at the V.C. Summer Nuclear Station near Jenkinsville, South Carolina. SCE&G is also petitioning the Commission to enter a confidentiality order protecting certain commercially sensitive information from disclosure, as set forth below.

For the convenience of the Commission and parties, SCE&G is also providing with this filing a draft Notice of Hearing and Prefile Testimony Deadlines ("Notice") for publication in newspapers of general circulation in its service territory and for communication to its electric customers. SCE&G would propose to provide the Notice directly to electric customers by way of inserts into their regular electric bills. Because of cycle billing and other considerations, doing so will require a return date for such Notice not earlier than May 11, 2015.

Also for the convenience of the Commission and within its proposed Notice, SCE&G is providing for consideration a proposed schedule for the pre-filing of testimony and hearing date in this proceeding. This schedule takes into account the statutory deadline for an order in this matter and the customary sequencing of due dates in such proceedings.

As part of its petition, SCE&G is filing as an exhibit a redacted and unredacted copy of its updated capital cost schedule. Therefore, SCE&G is filing both a Public Version and a Confidential Version of its Petition. In both versions, the Company's updated capital cost schedule is designated as Exhibit 2. The Confidential Version of Exhibit 2 of the filing contains confidential information related to the pricing and pricing terms of the Engineering, Procurement and Construction Agreement ("EPC Contract") between SCE&G and a consortium consisting of

(Continued . . .)

Westinghouse Electric Company, LLC and Chicago Bridge and Iron (collectively, "Contractor"). The EPC Contract contains confidentiality provisions that require SCE&G to protect proprietary information that the Contractor believes to constitute trade secrets and to be commercially sensitive. The Contractor has requested that SCE&G maintain the confidentiality of certain information contained in Exhibit 2. It is this confidential information that has been redacted from the Public Version of Exhibit 2.

In keeping with the Contractor's request and the terms of the EPC contract, SCE&G respectfully requests that the Commission find that the Confidential Version of the Petition contains protected information and issue a protective order barring the disclosure of Exhibit 2 of the Petition under the Freedom of Information Act, S.C. Code Ann. §§ 30-4-10 *et seq.*, 10 S.C. Code Ann. Regs. 103-804(S)(1), or any other provision of law, except in its public form. Pursuant to 10 S.C. Code Ann. Regs. 103-804(S)(2), the determination of whether a document may be exempt from disclosure is within the Commission's discretion. Such a ruling in this instance would be consistent with the Commission's prior rulings in Docket No. 2008-196-E, Docket No. 2009-293-E, Docket No. 2010-376-E, and Docket No. 2012-203-E finding, among other things, the pricing and pricing terms of the EPC Contract to be confidential and issuing a protective order barring the disclosure of related information.

To this end, and in accordance with Commission Order No. 2005-226, dated May 6, 2005, in Docket No. 2005-83-A, we enclose with this letter a redacted version of Exhibit 2 that protects from disclosure the sensitive, proprietary and commercially valuable information, while making available for public viewing non-protected information. We also enclose a copy of the unredacted version of Exhibit 2 in a separate, sealed envelope and respectfully request that, in the event that anyone should seek disclosure of this unredacted version of Exhibit 2, the Commission notify SCE&G of such request and provide it with an opportunity to obtain an order from this Commission or a court of competent jurisdiction protecting Exhibit 2 from disclosure.

Enclosed are the following:

(1) A true and correct copy of the Confidential Version of the Petition in a sealed envelope marked "CONFIDENTIAL." Each confidential page of the Confidential Version of the Petition is also marked "CONFIDENTIAL."

(2) Ten (10) copies of a redacted copy of the Petition for filing and public disclosure.

By copy of this letter, we are providing the South Carolina Office of Regulatory Staff ("ORS") with a redacted copy of the Petition for its records. Additionally, SCE&G will make the unredacted copy of the Petition available to ORS for its review.

(Continued . . .)

Thank you for your assistance and consideration of this matter. If you have any questions, please do not hesitate to contact us.

Very truly yours,

K. Chad Burgess

KCB/kms
Enclosures

cc: C. Dukes Scott
Nanette S. Edwards
John W. Flitter
M. Anthony James
Jeffrey M. Nelson, Esquire
(all via hand delivery and electronic mail)

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

CLERK'S OFFICE

NOTICE OF HEARING AND PREFILE TESTIMONY DEADLINES

DOCKET NO. 2015-__-E

SOUTH CAROLINA ELECTRIC & GAS COMPANY – PETITION OF SOUTH CAROLINA ELECTRIC & GAS COMPANY FOR UPDATES AND REVISIONS TO SCHEDULES RELATED TO THE CONSTRUCTION OF A NUCLEAR BASE LOAD GENERATION FACILITY AT JENKINSVILLE, SOUTH CAROLINA

In Order No. 2009-104(A), dated March 2, 2009, the Public Service Commission of South Carolina ("Commission") authorized South Carolina Electric & Gas Company ("SCE&G" or "Company") to construct and operate two 1,117 net megawatt nuclear facilities ("Units") to be located at the Virgil C. Summer Nuclear Station site near Jenkinsville, South Carolina. In accordance with the Base Load Review Act, S.C. Code Ann. § 58-33-210 *et seq.*, in Order No. 2009-104(A), the Commission approved an estimated capital cost for the Units of $4.5 billion in 2007 dollars. In Order No. 2010-12, in Docket No. 2009-293-E, the Commission approved SCE&G's request to, among other things, approve an updated schedule of capital costs for the project. The updated capital cost schedule did not alter the total estimated capital cost for the Units of $4.5 billion in 2007 dollars but changed the forecasted timing of cash flows.

In Order No. 2011-345, the Commission approved an updated capital cost schedule for the Units which also removed all projected contingency costs as required by the decision of the South Carolina Supreme Court in South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm'n, 388 S.C. 486, 697 S.E.2d 587 (2010). In Order No. 2012-884, the Commission approved an estimated capital cost for the Units of $4.5 billion in 2007 dollars and a new milestone schedule reflecting substantial completion dates for Units 2 and 3 of March 15, 2017, and May 15, 2018, respectively. The South Carolina Supreme Court affirmed the Commission's ruling in all respects. South Carolina Energy Users Comm. v. South Carolina Elec. & Gas, 410 S.C. 348, 764 S.E.2d 913 (2014).

On March 12, 2015, SCE&G filed a petition with the Commission, pursuant to S.C. Code Ann. § 58-33-270(E), seeking an order approving an updated construction schedule and capital cost schedule for the Units. The updated construction schedule reflects new substantial completion dates for Unit 2s and 3 of June 19, 2019, and June 16, 2020, respectively. It also incorporates in the construction cost schedules approximately $698 million in additional capital costs that have been identified since the issuance of Order No. 2012-884. The petition indicates that these additional costs are due to a number of factors including the delay in the substantial completion dates of the Units, and the additional labor and other costs required to construct the Units and prepare for their operation. The elements of cost are set forth in more detail in the petition.

The capital cost estimate for which the Company seeks Commission approval in this proceeding is currently $5.2 billion in 2007 dollars. In its filing, the Company states that it may seek to update its capital cost estimates during the pendency of these proceedings if additional cost items are identified or if cash flow schedules are updated.

S.C. Code Ann. § 58-33-270(E) authorizes SCE&G to petition the Commission for modification of any of the schedules related to the construction of a base load generation facility. This statute provides that such requests shall be granted if, after a hearing, the Commission finds that the changes are not the result of

imprudence on the part of the SCE&G. In the petition, the Company states that the changes to the schedules are not the result of any imprudence by the Company in managing or overseeing the project.

A copy of the Company's filing may be obtained from the Commission at the address below. Additionally, the filing is available on the Commission's website at www.psc.sc.gov and is available from the corporate office of South Carolina Electric & Gas Company at 220 Operation Way, Mail Code C222, Cayce, South Carolina, 29033.

In order for testimony and evidence to be received from all interested parties, a public hearing will be held in the Commission's Hearing Room, Saluda Building, Synergy Business Park, 101 Executive Center Drive, Columbia, South Carolina 29211 on **Monday, June 29, 2015, at 10:30 am**.

Any person who wishes to participate in this matter as a party of record should file a Petition to Intervene in accordance with the Commission's Rules of Practice and Procedure on or before **May 18, 2015,** and indicate the amount of time required for his presentation. Please include an email address for receipt of future Commission correspondence in the Petition to Intervene. ***Please refer to Docket No. 2015-__-E and mail a copy to all other parties in this docket.***

Any person who wishes to testify and present evidence at the hearing should notify the Clerk's Office, in writing, at the address below; the South Carolina Office of Regulatory Staff, 1401 Main Street, Suite 900, Columbia, South Carolina 29201; and K. Chad Burgess, Associate General Counsel, South Carolina Electric & Gas Company, 220 Operation Way, Mail Code C222, Cayce, South Carolina 29033, on or before **May 18, 2015,** and indicate the amount of time required for their presentation. ***Please refer to Docket No. 2015-__-E.***

Any person who wishes to be notified of the hearing, but does not wish to present testimony or be a party of record, may do so by notifying the Clerk's Office, in writing, at the address below on or before **May 18, 2015**. ***Please refer to Docket No. 2015-__-E.***

PLEASE TAKE NOTICE: Any person who wishes to have his or her comments considered as part of the official record of the proceeding **MUST** present such comments, in person, to the Commission during the hearing.

INSTRUCTIONS TO ALL PARTIES OF RECORD (Applicants, Petitioners, and Intervenors only): All Parties of Record must prefile testimony with the Commission and with all Parties of Record. Prefiled Testimony Deadlines: Applicant's **Direct Testimony** Due: **5/13/2015**; Other Parties of Record **Direct Testimony** Due: **6/8/2015**; Applicant's **Rebuttal Testimony** Due: **6/19/2015**; and Other Parties of Record **Surrebuttal Testimony** Due: **6/25/2015**. All prefiled testimony deadlines are subject to the information as posted on www.psc.sc.gov under **Docket No. 2015-__-E**.

Persons seeking information about the Commission's Rules of Practice and Procedure should contact the Commission in Columbia at 803-896-5100 or visit its website at www.psc.sc.gov.

Public Service Commission of South Carolina
Attn: Clerk's Office
Post Office Drawer 11649
Columbia, SC 29211

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2015-____-E

IN RE:

Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction Of a Nuclear Base Load Generation Facility as Jenkinsville, South Carolina	)	**CERTIFICATE OF SERVICE**

This is to certify that I have caused to be served this day one (1) copy of South Carolina Electric & Gas Company's **Petition for Updates and Revisions to the Capital Cost Schedule and the Construction Schedule** to the persons named below via hand delivery and electronic mail at the addresses set forth:

C. Dukes Scott, Director
Office of Regulatory Staff
1401 Main Street, Suite 900
Columbia, SC 29201
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Nanette S. Edwards, Esquire
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jnelson@regstaff.sc.gov

Karen M. Scruggs

Cayce, South Carolina

This 12th day of March 2015

RECEIVED
PUBLIC SERVICE
COMMISSION

BEFORE

THE PUBLIC SERVICE COMMISSION

OF

SOUTH CAROLINA

DOCKET NO. 2015-__-E

In Re: Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina	))))))	**PETITION FOR UPDATES AND REVISIONS TO THE CAPITAL COST SCHEDULE AND THE CONSTRUCTION SCHEDULE**

South Carolina Electric & Gas Company ("SCE&G" or the "Company") hereby petitions the Public Service Commission of South Carolina (the "Commission") for an order approving an updated capital cost schedule and updated construction schedule for the construction of two 1,117 net megawatt nuclear units (the "Units") to be located at the V.C. Summer Nuclear Station site near Jenkinsville, South Carolina. This petition (the "Petition") is filed pursuant to the provisions of the Base Load Review Act ("BLRA"), S.C. Code Ann. § 58-33-270(E) (Supp. 2014). In accordance with the provisions of the BLRA, SCE&G would respectfully show to the Commission the following:

I. INTRODUCTION

1. SCE&G is a corporation duly organized and existing under the laws of the State of South Carolina, with its principal offices at 220 Operation Way, Cayce, South Carolina 29033.

2. SCE&G is engaged in the business of generating, transmitting, and delivering electricity and providing electric service to the public for compensation. SCE&G owns and operates an integrated electric utility system that serves approximately 688,000 customers in 24 counties in central and southern South Carolina.

3. Corporate legal counsel for SCE&G in this proceeding are as follows:

K. Chad Burgess
Matthew W. Gissendanner
South Carolina Electric & Gas Company
Mail Code C222
220 Operation Way
Cayce, SC 29033
(803) 217-8141
chad.burgess@scana.com
matthew.gissendanner@scana.com

Private legal counsel for SCE&G in this proceeding is as follows:

Belton T. Zeigler
Pope Zeigler, LLC
P.O. Box 11509
Columbia, SC 29211
(803) 354-4949
bzeigler@popezeigler.com

All correspondence and any other matters relative to this proceeding should be addressed to these representatives.

II. PRIOR BLRA ORDERS

4. In Docket No. 2008-196-E, SCE&G sought approval of a Combined Application for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order for the Construction and Operation of a Nuclear Facility in Jenkinsville, South Carolina for the Units. Pursuant to S.C. Code

Ann. § 58-33-250, SCE&G provided the anticipated construction schedule and anticipated capital cost schedule for the Units.

5. Those schedules indicated that the Units could be constructed for a total cost to SCE&G of approximately $4.5 billion in 2007 dollars.[1]

6. Following a full hearing on the Combined Application, the Commission issued Order No. 2009-104(A), in which the Commission approved the proposed construction schedule and capital cost schedule for the Units.

7. In Order No. 2010-12, dated January 22, 2010, the Commission approved SCE&G's request to update the construction schedule for the project and to update the capital cost schedule for the project to reflect changes in the forecasted timing of cash flow resulting from the updated construction schedule. The updated capital cost schedule did not alter the total estimated capital cost for the Units of approximately $4.5 billion in 2007 dollars.

8. In Order No. 2011-345, the Commission approved the Company's request to update capital cost projections for the project in response to the decision by the Supreme Court of South Carolina in South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm'n, 388 S.C. 486, 697 S.E.2d 587 (2010). In that Opinion, the Supreme Court disallowed the inclusion in capital cost forecasts of costs that had not been itemized to specific capital cost items. In response, SCE&G removed its owner's contingency pool from the capital cost forecasts and sought Commission approval of

[1] Unless otherwise noted, all amounts reflect SCE&G's portion of the cost of the Units in 2007 dollars.

specific costs that would otherwise have been accounted for using the contingency allowance. Order No. 2011-345 established a total estimated capital cost for the Units of approximately $4.3 billion in 2007 dollars.

9. On March 30, 2012, the Nuclear Regulatory Commission ("NRC") issued the Combined Operating License ("COL") for the Units which allowed nuclear safety-related construction to begin.

10. On July 11, 2012, SCE&G signed an agreement with the contactors for the Units, Westinghouse Electric Company ("WEC") and the Shaw Group, now Chicago Bridge and Iron ("CB&I," and together with WEC, "WEC/CB&I"). The agreement provided for new substantial completion dates for the Units tied to the issuance date of the COL which had been delayed by approximately nine months. That agreement also resolved claims made by WEC/CB&I under the Engineering, Procurement and Construction Contract ("EPC Contract") for additional charges related to the delay in the issuance of the COL, design changes made to the Units during licensing, unanticipated rock conditions at the site of the Unit 2 Nuclear Island and other matters.

11. In Order No. 2012-884, dated November 15, 2012, the Commission approved SCE&G's request to update the construction schedule and the capital cost schedule for the project to reflect the new substantial completion dates and the settlement of claims by WEC/CB&I. The Commission also approved updates to the capital cost schedule for change orders related to cyber security costs; the effect of Federal legislation on healthcare costs for CB&I; and waste water piping; as well as changes in Owner's

costs related to schedule delay, changes in plant safety regulations and other changes; and changes in Transmission Costs related to changing load forecasts and power flow modeling, updated equipment loading forecasts and unanticipated construction conditions at a substation site.

12. In Order No. 2012-884, the Commission approved an estimated capital cost for the Units of approximately $4.5 billion in 2007 dollars and a new milestone schedule tied to substantial completion dates for Units 2 and 3 of March 15, 2017, and May 15, 2018, respectively.

13. Order No. 2012-884 was appealed to the South Carolina Supreme Court. The Supreme Court affirmed the Commission's ruling in all respects in South Carolina Energy Users Comm. v. South Carolina Elec. & Gas, 410 S.C. 348, 764 S.E.2d 913 (2014).

III. CURRENT UPDATE REQUEST

14. Since the issuance of Order No. 2012-884, substantial progress has been made towards the completion of the Units. As of the time of this filing:

a. Eighty-five percent of the major equipment for Unit 2 has been received on site.

b. Eighty-six percent of the circulating water system for both Units has been installed. Two of the Units' four cooling water towers are complete and the third is two-thirds complete.

c. The containment vessel bottom heads of both Units have been fabricated and set on nuclear island basemats for the two Units.

d. All three of the steel rings that comprise the vertical walls of the Unit 2 containment vessel have been completed or are nearing completion. Unit 2, Ring 1 has been set in place. Fabrication of Unit 3 containment vessel Ring 1 and Ring 2 is underway.

e. Sixty-six individuals have been recruited and are in training to become licensed system operators for AP1000 units. Approximately 84 additional personnel are in training as non-licensed system operators or to become qualified in other technical, maintenance and craft areas.

f. More than 3,800 construction personnel are working on site. A total of 23 million man-hours have been worked with an excellent safety record.

15. When constructed, the Units will provide the State of South Carolina with 2,234 megawatts of reliable electrical generating capacity. As to greenhouse gases, generation from the Units will be emissions-free in all material respects. Because of the Units, SCE&G forecasts that its carbon emissions in 2020 will be lower than its carbon emissions in 2005 by almost 50%. When the Units come on-line, approximately 60% of SCE&G's system electricity will come from sources without greenhouse gas emissions. The Units are anticipated to provide SCE&G's customers with service for 60 years or more.

16. From a financial standpoint, important elements of the costs to customers from the project have been reduced from the projections that were presented when the Units were initially approved in Docket 2008-196-E.

a. Since 2008, SCE&G has been able to obtain low-cost borrowing for project costs based on SCE&G's favorable bond ratings and the low cost of financing available in debt markets. Compared to the projections made in the 2008 BLRA proceedings, customers are anticipated to save $1.2 billion in interest cost over the life of the debt that has been issued to date or for which rates for future issuances have been hedged. SCE&G's ability to access debt capital at favorable rates is in part the direct result of the BLRA and how it has been administered by the Commission and the South Carolina Office of Regulatory Staff.

b. During the period since 2008, the forecasted cost of escalation for the project has declined by $214 million even after considering the effect on escalation of proposed new substantial completion dates.

c. Based on current construction schedules and assuming current tax law, SCE&G anticipates that additional Federal Production Tax Credits will be available for the Units that will provide customers with $1.2 billion in additional benefits compared to projections made in 2008.

17. However, delays related to structural submodule production at the CB&I facility in Lake Charles, Louisiana; revised schedules for the production of shield building panels at the Newport News Industries ("NNI") facilities in Newport News,

Virginia; and other changes in construction, construction oversight and operational readiness requirements have resulted in revisions to the construction and cost schedules for the project. Those revisions are the subject of this filing.

18. Accordingly, SCE&G hereby requests adjustments to the milestone construction schedule and capital cost schedule for the project.

A. UPDATED CONSTRUCTION SCHEDULE

19. During the third quarter of 2013, WEC/CB&I provided SCE&G with information indicating that the substantial completion dates for Units 2 and 3 would be delayed. In the ensuing months, WEC/CB&I updated this information to include a detailed reevaluation of the engineering, procurement and construction activities necessary to complete the Units with specific emphasis on the production schedules for structural submodules and shield building panels.

20. The result of WEC/CB&I's effort is a revised, fully-integrated construction schedule (the "Revised, Fully-Integrated Construction Schedule") with an associated cash flow forecast for completion of the project (the "Revised Cash Flow Forecast").

21. The Revised, Fully-Integrated Construction Schedule indicates new substantial completion dates for Units 2 and 3 of June 19, 2019, and June 16, 2020, respectively (the "Substantial Completion Dates"). SCE&G has not, however, accepted WEC/CB&I's contention that the new Substantial Completion Dates are made necessary by delays that are excusable under the EPC Contract.

22. Attached to this filing as ***Exhibit 1*** is an updated construction milestone schedule for the project which aligns all milestones as approved in Order No. 2009-104(A) to the new Substantial Completion Dates and to the current construction and fabrication schedules.

23. SCE&G requests that the Commission approve ***Exhibit 1*** as the revised construction schedule for the project. As to all matters pertaining to the schedule revisions reflected on ***Exhibit 1***, SCE&G requests the Commission to affirm that SCE&G's actions associated with these schedule changes have been reasonable and prudent.

24. WEC/CB&I continues to refine and update the Revised, Fully-Integrated Construction Schedule as issued-for-construction designs are finalized and as additional information is received related to the fabrication of modules, shield building panels and equipment; construction activities on site; start-up testing requirements and other matters. For example, by letter dated March 10, 2015, WEC/CB&I provided SCE&G with preliminary information concerning an integrated project schedule update (the "March Revision"), indicating that WEC/CB&I's current construction planning now shows a substantial completion date for Unit 2 of August 10, 2019, and June 7, 2020 for Unit 3. As of the time of the filing of this Petition, SCE&G has not analyzed or accepted the preliminary information concerning the March Revision nor has it discussed potential schedule mitigation efforts with WEC/CB&I. Considering the preliminary nature of the information contained in the March Revision, it is not part of this filing or the schedules

presented here. SCE&G continues to review the schedule refinements and updates provided by WEC/CB&I and to explore schedule mitigation opportunities with WEC/CB&I related to them.

25. This review and updating of construction schedules will continue as a part of the project for the foreseeable future and may result in additional schedule changes. However, the Revised, Fully-Integrated Construction Schedule and Revised Cash Flow Forecast presented here are based upon SCE&G's most current review and analysis of the information provided.

B. UPDATED COST FORECASTS

26. SCE&G further requests that the Commission update the cost schedule for completion of the Units to reflect (a) the effect of the new Substantial Completion Dates on Owner's costs, and (b) other changes in costs that have been identified since the forecasts approved in Order No. 2012-884 were prepared.

a. EPC Contract Costs

27. The Revised Cash Flow Forecast that WEC/CB&I has provided SCE&G indicates that the estimated at completion ("EAC") cost for the project has increased. The revisions to the EAC cost are in the EPC Contract categories of Actual Craft Wages, Non-Labor Costs, and Time and Material Costs. These cost categories are those that, under the terms of the EPC Contract, SCE&G pays WEC/CB&I's actual costs plus contractually determined margins.

i. Delay and Other EAC Costs

28. The majority of the revised EAC costs are the result of delays in the project, revised projections of the labor required to accomplish previously-identified scopes of work, and revised overhead and staff ratios associated with that labor. The revised EAC costs also reflect additional Time and Materials scopes of work necessary to staff the start-up of the Units and to provide for the processing of License Amendment Requests ("LARs") to support construction. LARs are requests for amendments to the design basis of the Units that must be approved by the NRC.

29. SCE&G has not accepted responsibility for these costs (the "Delay and Other EAC Costs"). SCE&G has also asserted the claim that WEC/CB&I is contractually responsible for the occurrence of the delay and other factors underlying the Delay and Other EAC Costs.

30. WEC/CB&I has not accepted responsibility for any part of SCE&G's claim.

31. At the time of this filing, WEC/CB&I and SCE&G are in negotiations concerning responsibility for the Delay and Other EAC Costs. However, under the EPC Contract, which was approved by this Commission in Order No. 2009-104(A), SCE&G must pay WEC/CB&I at least 90% of certain types of disputed amounts, provided that WEC/CB&I has properly invoiced those amounts to SCE&G under the EPC Contract.

32. Other provisions of the EPC Contract provide that SCE&G shall recoup from WEC/CB&I any payments made on disputed amounts if the dispute is resolved in SCE&G's favor.

33. Although SCE&G has advised WEC/CB&I that the provision concerning 90% payments does not apply to certain of WEC/CB&I's invoices, WEC/CB&I has disagreed. WEC/CB&I has reserved its rights under a provision of the EPC Contract that permits it to cease work and treat the project as if it had been suspended at SCE&G's request if 90% payments are contractually required but are not made within 30 days after proper invoicing.

34. SCE&G has included in the cash flow forecasts presented here payments associated with the Delay and Other EAC Costs. By including these payments in this filing, SCE&G in no way waives any claims or defenses related to them.

35. By including these payments in this filing, SCE&G seeks only to recover carrying costs on those payments as the BLRA envisions. As a general principle under the BLRA, until the Units go into commercial operation, the Company can recover only its carrying costs on its investment in the Units.

36. If through negotiation or litigation, SCE&G recovers any past payments to WEC/CB&I or reduces any current payments, those amounts will be reflected as reductions to the capital cost of the project. Doing so will reduce the financing costs to be charged to customers and the reduction will be reflected in lower revised rates in subsequent revised rates proceedings.

37. SCE&G also forecasts that it will recover from WEC/CB&I the full amount of liquidated damages payable under the EPC Contract for delays in the substantial completion dates for the Units. The full amount of liquidated damages is $86 million and has been netted against the Delay and Other EAC Costs for the purposes of this filing.

38. The amount of the Delay and Other EAC Costs is $411 million, or $325 million net of liquidated damages. This net amount represents approximately 47% of the total change in the capital cost schedule.

ii. Changes to the EAC Cost Due to Design Finalization

39. WEC/CB&I continues to finalize the issued-for-construction design documents for the project. As it does so, WEC/CB&I updates its projections of the amount of commodities that must be installed to complete the project, *i.e.,* the required units of materials and equipment such as concrete, cabling, rebar and piping that are necessary to compete the Units.

40. As a result of design finalization, WEC/CB&I has identified additional units of commodities that must be installed.

41. Under the fixed and firm pricing components of the EPC Contract, WEC/CB&I is responsible for the cost of the additional commodities themselves; however, SCE&G is responsible for the Actual Craft Wages and Non-Labor Costs associated with performing this work of installing these additional units of commodities.

42. SCE&G's assessment of WEC/CB&I's entitlement for payment associated with these recently identified costs is approximately $72 million, or approximately 10% of the total change in the capital cost schedule.

iii. Changes in EAC Costs Due to Change Orders

43. SCE&G has executed or anticipates executing ten additional change orders under the EPC Contract. The forecasted costs associated with these change orders are included in the capital cost schedule submitted here.

1. Plant Layout Security

44. SCE&G has recently conducted a review of plant layout to ensure that its physical security can be maintained. This was necessary as a final stage in the design review of the Units and their supporting structures and could not be done until design layouts and building orientations were finalized.

45. These physical security reviews have been conducted based on NRC and nuclear industry standards that have become increasingly stringent in the years after the events of September 11, 2001.

46. As a result of these reviews, SCE&G has determined that it is reasonable and prudent to alter the site layout in various ways to improve its physical security and has negotiated a change order to the EPC Contract for this work.

47. The cost of the current phase of the work to increase the security of the plant through physical security alterations is forecasted to be $20.4 million.

2. *Cyber Security Upgrades*

48. In late 2011, an agreement was reached between SCE&G and WEC/CB&I on a phased approach to strengthening the Units' defenses against cyber attacks ("Cyber Security"). The cost of the Phase I scope of the Cyber Security plan was reviewed by the Commission and approved in Order No. 2012-884. However, the Commission determined that approval of Phase II costs should be deferred until the scope of work and associated costs were more fully defined and quantified.

49. In mid-2013, SCE&G and WEC/CB&I agreed to divide the remaining Cyber Security plan into additional phases. The cost for Phase II of the plan is $18.8 million. The scope of work for the following phases of the plan will be determined as Phase II is completed.

3. *Schedule Mitigation for Shield Building Panels*

50. WEC/CB&I has subcontracted the construction of the steel panels which will form the walls of the shield buildings to NNI in Newport News, Virginia.

51. Schedule delays related to the finalization of design of these panels have placed the fabrication of these panels on the critical path for timely completion of the project.

52. NNI has agreed to expand its manufacturing facility to allow for additional panels to be worked simultaneously, thus mitigating potential schedule delays.

53. SCE&G estimates that the cost of this expansion will add $12.1 million to the EPC Contract cost.

4. Additional Costs Related to the Federal Health Care Act

54. Both WEC and CB&I have sought change orders to recover their increased costs of compliance with the Federal Patient Protection and Affordable Care Act and related statutes. As a change in cost caused by a change in law, these amounts are recoverable under the EPC Contract. Change Order 20 provides for the recovery of WEC's costs for 2011-2013 in the amount of $206,589. The amount of these additional costs for WEC/CB&I over the life of the project is forecasted to be $2.2 million.

5. Plant Reference Simulator and Software Upgrade

55. Change Order 19 provides for upgrades to the Plant Reference Simulator ("PRS") hardware and software and associated training to enhance PRS displays and to acquire versions of the software that will be issued subsequent to the version provided under the EPC Contract. The cost of this change order is forecasted at approximately $1.1 million.

6. Ovation and Common Q Instrumentation and Control Maintenance Training Systems

56. Ovation and Common Q are the instrumentation and control software that will be used to operate the Units. Maintenance training systems are required to support training on the Ovation and Common Q system in a training environment without interfering with the use of the systems for operations. Maintenance training systems also allow software maintenance to be conducted off-line.

57. The cost of the change order associated with acquiring hardware and software for these maintenance training systems is currently forecasted at approximately $880,000.

7. *Simulator Development System*

58. The PRS is a critical system necessary for training and requalifying licensed operator candidates and senior operators and for developing and validating NRC license exam simulator scenarios.

59. SCE&G has determined that the schedule for training and scenario development on the PRS will require it to be in nearly continuous use for the balance of the project. This level of use does not allow sufficient time for the PRS to be taken out of service for upgrades, modifications and routine maintenance of its software.

60. The new Simulator Development System will be a scaled down version of the PRS. It will include a complete copy of the PRS software which can be serviced and modified without interfering with use of the PRS. The modified software can then be uploaded to the PRS when servicing is complete. The cost of the change order to acquire the Simulator Development System is currently forecasted to be approximately $605,000.

8. *ITAAC Maintenance*

61. Change Order 21 provides for the recovery of the costs of new NRC regulations requiring the review of completed Inspections, Tests, Analyses, and Acceptance Criteria ("ITAAC") packages when work is done on the associated

components or systems or non-conforming conditions are discovered after the ITAAC is closed.

62. Change Order 21 reflects WEC/CB&I's cost for 2015 of $59,400. WEC/CB&I intends to submit a new change order each year. SCE&G has forecasted the costs for 2016-2020 to be $313,000, for a total of $372,400 in additional costs over the life of the project.

9. Warehouse Fire Security

63. To mitigate fire insurance premiums, SCE&G is upgrading the remote monitoring capabilities of the fire and security systems in the three on-site warehouses that serve the project. The cost of these upgrades will be $121,000.

10. Perch Guards

64. Change Order 18 provides for the installation of perch guards on transmission structures on site to prevent avian interference with system reliability. The forecasted cost of this change order is $14,056.

Total for Change Orders

65. The costs associated with these ten change orders is $56.5 million or approximately 8% of the total request.

iv. Switchyard Cost Re-Allocation

66. The Unit 2-3 Switchyard is an asset belonging to the project and its costs were originally allocated between SCE&G and Santee Cooper based on their percentages of ownership in the project.

67. However, both Santee Cooper and SCE&G are also constructing certain transmission lines and other facilities at their individual expense to transmit power from the project to their customers. As a result, they will use shared transmission assets like the Switchyard in proportions that are different from their ownership of the Units.

68. To account for this fact, Santee Cooper and SCE&G agreed that the transmission assets constructed as part of the project would be allocated among themselves based on engineering studies of how intensively each party would use specific project assets.

69. These studies have resulted in a $107,000 decrease in the allocation of Switchyard costs to SCE&G.

b. <u>Owner's Cost Revisions Associated With Delay</u>

i. Owner's Labor Cost Revisions Associated with Delay

70. SCE&G's New Nuclear Deployment ("NND") team is primarily responsible for meeting SCE&G's obligations as owner of the project and as the holder of active NRC licenses to construct and operate the Units.

71. As owner and licensee of the project, SCE&G's obligations include responsibility for (a) quality assurance/quality control ("QA/QC") oversight both on site and at suppliers' locations worldwide; (b) the training and licensing of all personnel required for Unit operations; (c) the auditing of invoices from WEC/CB&I and other suppliers and the resolution of contractual and payment disputes with WEC/CB&I; (d) oversight and accounting for all commercial aspects of the project; (e) acceptance testing

and maintenance of plant systems as they are completed and turned over to SCE&G; (f) accepting the handover and maintenance of engineering, QA/QC and other data necessary for operating the Units; (g) drafting the procedures for plant operations and safety; (h) conducting plant start-up and start-up testing; and (i) providing the administrative support, IT systems and software necessary to sustain these functions. The operational readiness group comprises all personnel necessary to operate and maintain the Units when in service. In addition to their training, they also take a lead role in developing programs and procedures for operation and maintenance of the Units and in overseeing start-up and testing.

72. SCE&G's NND team is comprised of 507 individuals. Many are highly-skilled professionals in engineering, nuclear construction management, QA/QC, training, operational readiness, and other disciplines.

73. Extending the duration of the construction project will require SCE&G to maintain its NND team in place to support the completion of Units 2 and 3 for an additional 27 months and 25 months, respectively.

74. In response to the new Substantial Completion Dates, SCE&G has taken reasonable steps to delay NND hiring and to revise work assignments. However, SCE&G forecasts that the extension of the project will increase Owner's labor costs by approximately $125.3 million to allow SCE&G to support the NND team's role in the project for a longer period.

ii. Owner's Risk Insurance and Workers Compensation Insurance

75. As project owner, SCE&G is responsible for owner's risk insurance and workers compensation insurance on the project. In spite of diligent efforts to minimize these costs, SCE&G forecasts that extending the project will result in an increase in Owner's costs of approximately $30.1 million.

iii. Additional Information Technology ("IT") Costs Associated with Delay

76. As project owner, SCE&G is obligated to supply the software and other IT resources required to support operational readiness and the work of the NND team during construction. SCE&G must also ensure that the engineering data, QA/QC documentation and other data that are necessary for testing, start-up, and operation of the Units are properly maintained in SCE&G's IT system and are available at all times to the Units' operating staff.

77. Extending the project schedule will increase the cost of IT support for the project because software licenses and maintenance fees, equipment maintenance costs and other IT support costs must be paid for longer periods of time.

78. SCE&G forecasts that extending the schedule of the project will increase the IT component of Owner's costs by $6.5 million.

iv. Facilities Cost Increases Associated with Delay

79. SCE&G is responsible for the warehouse and storage space for materials and equipment necessary to operate the Units.

80. SCE&G is also required to pay for the office space and related support facilities for its NND team personnel while they are on site.

81. Because of delays in the project schedule, construction teams and operational readiness teams will overlap more, requiring more space. In addition, the maintenance, upkeep and other costs of office space and related support facilities will have to be borne by the project for a longer period of time.

82. SCE&G has taken reasonable steps to reduce the scope and cost of the additional warehouse, storage, office and other support facilities. Nevertheless, SCE&G forecasts that additional facilities and facilities costs associated with the new Substantial Completion Dates will increase Owner's cost by $6.1 million.

v. Other Owner's Costs Associated with Delay

83. Extending the duration of the project will also increase Owner's costs across a broad range of cost centers related to technical, administrative and other support for the project as well as increasing non-labor costs associated with NND centers. These cost centers include V.C. Summer Unit 1 cost centers and SCANA and SCE&G cost centers such as Licensing, Construction, Engineering, and Maintenance. The cumulative effect of these increases is forecasted to total $46.4 million.

c. <u>Owner's Cost Increases Not Associated with Delay</u>

i. Additional NND Staff

84. SCE&G has identified the need to add approximately 64 employees to its NND staff.

a. Approximately 43 of these additional personnel will be devoted to developing operating and safety procedures for AP1000 units. These additional personnel are required because experience has shown that the volume of work to be done in preparing procedures is greater than anticipated due in large part to increasingly demanding operating standards imposed by the NRC and the nuclear industry.

b. Ten of these additional personnel are necessary to staff the project's expanded cyber security program;

c. Six of these additional personnel are needed to meet the need to hire and train new members of the training department in anticipation of retirements that are now expected to occur before the completion of the project; and

d. Three of these additional personnel are for assignments principally involving the coordination of project activities with industry standards groups and two are in other areas.

85. The cost of these additional 64 individuals is approximately $7.5 million.

ii. NRC Fees

86. The NRC has updated its estimate of the fees that SCE&G must pay for NRC inspection and oversight of the project. The new estimate includes additional expenses for pre-inspection preparation and off-site work following up on inspections.

87. The new NRC fee estimate will increase Owner's cost for the project by $7.1 million.

iii. Other IT Costs

88. SCE&G has identified additional software and other IT resources, not related to the delay, that are necessary costs of the project. Included in these IT resources are additional cyber security resources for NND project personnel, fatigue and stress modeling software to diagnose and monitor the condition of equipment in the Units, and additional software to capture and monitor plant operating data.

89. SCE&G has exercised care and diligence to mitigate or avoid additional IT costs. However, in spite of these efforts, SCE&G has determined that additional IT costs are prudent and necessary and forecasts that they will add $3.3 million to Owner's costs.

iv. Other Owner's Costs Not Associated with Delay

90. SCE&G's forecast of Owner's costs has also increased in other areas including increased facilities cost, the cost of additional contractors for oversight of construction and component fabrication, increased fees for participation in the AP1000 Users Group, increased costs for updating Probability Risk Assessments related to the Units, and the cost of maintenance equipment needed to support the project during systems testing and when in operation.

91. The amount of other Owner's costs not associated with the delay is $12.9 million.

C. REVISED CAPITAL COST SCHEDULES

92. ***Exhibit 2*** attached to this filing provides the Commission with an updated capital cost schedule for the Units.

93. As set forth in ***Exhibit 2***, the revised capital cost schedule reflects a cost in 2007 dollars of the Units of $5.2 billion, which reflects an increase of approximately $698 million in the costs approved in Order No. 2012-884.

94. For ease of reference, ***Exhibit 3*** provides information showing the variation between the capital cost schedule approved by the Commission in Order No. 2012-884 and the capital cost schedule contained in ***Exhibit 2***.

95. The updated capital cost schedule set forth in ***Exhibit 2*** also reflects the most current inflation indices applied as mandated by the Commission in Order No. 2009-104(A). The updated capital cost schedule in future dollars, including Allowance for Funds Used During Construction, is approximately $6.8 billion which is approximately $1.1 billion more than the similar forecast of costs and escalation reflected in Order No. 2012-884.

96. ***Exhibit 4*** provides a summary reconciliation of the changes in forecasted costs shown on ***Exhibit 2*** to those approved in Order No. 2012-884. Also shown is a comparison of the escalation indices in effect under Order No. 2012-884 to those currently in effect.

D. CONCLUSION AS TO UPDATED CONSTRUCTION AND CAPITAL COST SCHEDULES

97. Pursuant to S.C. Code Ann. § 58-33-270(E), when a utility petitions for adjustments in the construction schedule or capital cost schedule for a project being constructed under the BLRA, the Commission "shall grant the relief requested if, after a hearing, the commission finds: (1) as to the changes in the schedules, estimates, findings,

or conditions, that the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility . . . ."

98. SCE&G's actions associated with the changes in the construction schedule and capital costs reflected in ***Exhibit 1*** **and** ***Exhibit 2*** have been reasonable and prudent.

99. The capital cost schedule contained in ***Exhibit 2*** contains no contingencies or other provisions for the additional capital costs that may be identified to specific items of cost in the future as construction of the Units proceeds. For that reason, SCE&G reserves the right to update this schedule during the pendency of this proceeding as cost forecasts are updated and supplemented.

100. SCE&G will continue to monitor and evaluate the construction schedule and schedule of capital costs. To the extent future revisions or updating of ***Exhibit 1*** or ***Exhibit 2*** or other revisions under S.C. Code Ann. § 58-33-270(E) are required, SCE&G will propose such changes for review by the Commission, either through updating ***Exhibit 1*** and ***Exhibit 2*** during this proceeding or through future filings and proceedings.

IV. REQUEST FOR RELIEF

WHEREFORE, South Carolina Electric & Gas Company respectfully requests that the Commission set the current matter for hearing and thereafter, pursuant to S.C. Code Ann. § 58-33-270(E),

A. Approve the updated construction schedule attached as ***Exhibit 1***, and the updated capital cost schedule attached as ***Exhibit 2***, as they may be amended

during the pendency of this proceeding, to be the operative schedules for construction of the Units under S.C. Code Ann. § 58-33-275(A).

B. Grant other relief as may be appropriate.

Respectfully submitted,

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Cayce, South Carolina
March 12, 2015

LIST OF EXHIBITS

EXHIBIT 1 – An updated milestone schedule for the Units.

EXHIBIT 2 – An updated capital cost schedule for the Units, which if approved, will replace Exhibit F of the original Combined Application for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order for the Construction and Operation of a Nuclear Facility in Jenkinsville, South Carolina, as approved in Order No. 2009-104(A) and as updated in Order Nos. 2010-12, 2011-345, and 2012-884.

EXHIBIT 3 – A schedule showing the variation between the capital cost schedule approved by the Commission in Order No. 2012-884 and the capital cost schedule contained in **Exhibit 2**.

EXHIBIT 4 – A schedule showing the reconciliation of the gross construction dollars shown in **Exhibit 2** to those approved by the Commission in Order No. 2012-884. Also shown is a comparison of the escalation indices in effect under Order No. 2012-884 to those currently in effect.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	Approve Engineering Procurement and Construction Agreement	Complete	Complete	
2	Issue POs to nuclear component fabricators for Units 2 & 3 Containment Vessels	Complete	Complete	
3	Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - First Payment - Unit 2	Complete	Complete	
4	Contractor Issue PO to Accumulator Tank Fabricator - Unit 2	Complete	Complete	
5	Contractor Issue PO to Core Makeup Tank Fabricator - Units 2 & 3	Complete	Complete	
6	Contractor Issue PO to Squib Valve Fabricator - Units 2 & 3	Complete	Complete	
7	Contractor Issue PO to Steam Generator Fabricator - Units 2 & 3	Complete	Complete	
8	Contractor Issue Long Lead Material PO to Reactor Coolant Pump Fabricator - Units 2 & 3	Complete	Complete	
9	Contractor Issue PO to Pressurizer Fabricator - Units 2 & 3	Complete	Complete	
10	Contractor Issue PO to Reactor Coolant Loop Pipe Fabricator - First Payment - Units 2 & 3	Complete	Complete	
11	Reactor Vessel Internals - Issue Long Lead Material PO to Fabricator - Units 2 & 3	Complete	Complete	
12	Contractor Issue Long Lead Material PO to Reactor Vessel Fabricator - Units 2 & 3	Complete	Complete	
13	Contractor Issue PO to Integrated Head Package Fabricator - Units 2 & 3	Complete	Complete	
14	Control Rod Drive Mechanism Issue PO for Long Lead Material to Fabricator - Units 2 & 3 - first payment	Complete	Complete	
15	Issue POs to nuclear component fabricators for Nuclear Island structural CA20 Modules	Complete	Complete	
16	Start Site Specific and balance of plant detailed design	Complete	Complete	
17	Instrumentation & Control Simulator - Contractor Place Notice to Proceed - Units 2 & 3	Complete	Complete	
18	Steam Generator - Issue Final PO to Fabricator for Units 2 & 3	Complete	Complete	
19	Reactor Vessel Internals - Contractor Issue PO for Long Lead Material (Heavy Plate and Heavy Forgings) to Fabricator - Units 2 & 3	Complete	Complete	
20	Contractor Issue Final PO to Reactor Vessel Fabricator - Units 2 & 3	Complete	Complete	
21	Variable Frequency Drive Fabricator Issue Transformer PO - Units 2 & 3	Complete	Complete	
22	Start clearing, grubbing and grading	Complete	Complete	
23	Core Makeup Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	Complete	
24	Accumulator Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	Complete	
25	Pressurizer Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	Complete	
26	Reactor Coolant Loop Pipe - Contractor Issue PO to Fabricator - Second Payment - Units 2 & 3	Complete	Complete	
27	Integrated Head Package - Issue PO to Fabricator - Units 2 and 3 - second payment	Complete	Complete	
28	Control Rod Drive Mechanisms - Contractor Issue PO for Long Lead Material to Fabricator - Units 2 & 3	Complete	Complete	
29	Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - Second Payment - Units 2 & 3	Complete	Complete	
30	Start Parr Road Intersection work	Complete	Complete	
31	Reactor Coolant Pump - Issue Final PO to Fabricator - Units 2 & 3	Complete	Complete	
32	Integrated Heat Packages Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	Complete	
33	Design Finalization Payment 3	Complete	Complete	
34	Start site development	Complete	Complete	
35	Contractor Issue PO to Turbine Generator Fabricator - Units 2 & 3	Complete	Complete	
36	Contractor Issue PO to Main Transformers Fabricator - Units 2 & 3	Complete	Complete	
37	Core Makeup Tank Fabricator Notice to Contractor Receipt of Long Lead Material - Units 2 & 3	Complete	Complete	
38	Design Finalization Payment 4	Complete	Complete	
39	Turbine Generator Fabricator Issue PO for Condenser Material - Unit 2	Complete	Complete	
40	Reactor Coolant Pump Fabricator Issue Long Lead Material Lot 2 - Units 2 & 3	Complete	Complete	
41	Passive Residual Heat Removal Heat Exchanger Fabricator Receipt of Long Lead Material - Units 2 & 3	Complete	Complete	
42	Design Finalization Payment 5	Complete	Complete	
43	Start erection of construction buildings, to include craft facilities for personnel, tools, equipment; first aid facilities; field offices for site management and support personnel; temporary warehouses; and construction hiring office	Complete	Complete	
44	Reactor Vessel Fabricator Notice to Contractor of Receipt of Flange Nozzle Shell Forging - Unit 2	Complete	Complete	
45	Design Finalization Payment 6	Complete	Complete	
46	Instrumentation and Control Simulator - Contractor Issue PO to Subcontractor for Radiation Monitor System - Units 2 & 3	Complete	Complete	
47	Reactor Vessel Internals - Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	Complete	Complete	
48	Turbine Generator Fabricator Issue PO for Moisture Separator Reheater/Feedwater Heater Material - Unit 2	Complete	Complete	
49	Reactor Coolant Loop Pipe Fabricator Acceptance of Raw Material - Unit 2	Complete	Complete	

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Item No.	Order No. 2012-384 Description	Order No. 2012-384 Date	Revised Completion Date	
50	Reactor Vessel Internals - Fabricator Start Weld Neutron Shield Spacer Pads to Assembly - Unit 2	Complete	Complete	
51	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 2	Complete	Complete	
52	Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 2	Complete	Complete	
53	Start excavation and foundation work for the standard plant for Unit 2	Complete	Complete	
54	Steam Generator Fabricator Notice to Contractor of Receipt of 2nd Steam Generator Tubesheet Forging - Unit 2	Complete	Complete	
55	Reactor Vessel Fabricator Notice to Contractor of Outlet Nozzle Welding to Flange Nozzle Shell Completion - Unit 2	Complete	Complete	
56	Turbine Generator Fabricator Notice to Contractor Condenser Fabrication Started - Unit 2	Complete	Complete	
57	Complete preparations for receiving the first module on site for Unit 2	Complete	Complete	
58	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Transition Cone Forging - Unit 2	Complete	Complete	
59	Reactor Coolant Pump Fabricator Notice to Contractor of Manufacturing of Casing Completion - Unit 2	Complete	Complete	
60	Reactor Coolant Loop Pipe Fabricator Notice to Contractor of Machining, Heat Treating & Non-Destructive Testing Completion - Unit 2	Complete	Complete	
61	Core Makeup Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 2	Complete	Complete	
62	Polar Crane Fabricator Issue PO for Main Hoist Drum and Wire Rope - Units 2 & 3	Complete	Complete	
63	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 3	Complete	Complete	
64	Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 2	Complete	Complete	
65	Start placement of mud mat for Unit 2	Complete	Complete	
66	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Tubing - Unit 2	Complete	Complete	
67	Pressurizer Fabricator Notice to Contractor of Welding of Upper and Intermediate Shells Completion - Unit 2	Complete	Complete	
68	Reactor Vessel Fabricator Notice to Contractor of Closure Head Cladding Completion - Unit 3	Complete	Complete	
69	Begin Unit 2 first nuclear concrete placement	Complete	Complete	
70	Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 2	Complete	Complete	
71	Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	Complete	Complete	
72	Steam Generator Fabricator Notice to Contractor of Completion of 1st Steam Generator Tubing Installation - Unit 2	Complete	Complete	
73	Reactor Coolant Loop Pipe - Shipment of Equipment to Site - Unit 2	Complete	Complete	
74	Control Rod Drive Mechanism - Ship Remainder of Equipment (Latch Assembly & Rod Travel Housing) to Head Supplier - Unit 2	Complete	Complete	
75	Pressurizer Fabricator Notice to Contractor of Welding of Lower Shell to Bottom Head Completion - Unit 2	Complete	Complete	
76	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 2	Complete	Complete	
77	Design Finalization Payment 14	Complete	Complete	
78	Set module CA04 for Unit 2	Complete	Complete	
79	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Final Post Weld Heat Treatment - Unit 2	Complete	Complete	
80	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Completion of Tubing - Unit 2	Complete	Complete	
81	Polar Crane Fabricator Notice to Contractor of Girder Fabrication Completion - Unit 2	Complete	Complete	
82	Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 3	Complete	Complete	
83	Set Containment Vessel ring #1 for Unit 2	Complete	Complete	
84	Reactor Coolant Pump Fabricator Delivery of Casings to Port of Export - Unit 2	Complete	Complete	
85	Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 3	Complete	Complete	
86	Reactor Vessel Fabricator Notice to Contractor of Receipt of Core Shell Forging - Unit 3	Complete	Complete	
87	Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 3	Complete	Complete	
88	Set Nuclear Island structural module CA03 for Unit 2	6/26/2013	12/28/2015	Unit 2
89	Squib Valve Fabricator Notice to Contractor of Completion of Assembly and Test for Squib Valve Hardware - Unit 2	Complete	Complete	
90	Accumulator Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	Complete	Complete	
91	Polar Crane Fabricator Notice to Contractor of Electric Panel Assembly Completion - Unit 2	Complete	Complete	
92	Start containment large bore pipe supports for Unit 2	Complete	Complete	
93	Integrated Head Package - Shipment of Equipment to Site - Unit 2	Complete	Complete	
94	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 2	Complete	Complete	
95	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 3	Complete	Complete	
96	Steam Generator Fabricator Notice to Contractor of Satisfactory Completion of 1st Steam Generator Hydrotest - Unit 2	Complete	Complete	
97	Start concrete fill of Nuclear Island structural modules CA01 and CA02 for Unit 2	4/3/2014	7/18/2016	Unit 2
98	Passive Residual Heat Removal Heat Exchanger - Delivery of Equipment to Port of Entry - Unit 2	Complete	Complete	
99	Refueling Machine Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 2	Complete	Complete	

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
100	Deliver Reactor Vessel Internals to Port of Export - Unit 2	1/31/2014	7/30/2015	Unit 2
101	Set Unit 2 Containment Vessel #3	4/24/2014	8/23/2016	Unit 2
102	Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 2	Complete	Complete	
103	Turbine Generator Fabricator Notice to Contractor Turbine Generator Ready to Ship - Unit 2	Complete	Complete	
104	Pressurizer Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	3/31/2014	3/28/2015	Unit 3
105	Polar Crane - Shipment of Equipment to Site - Unit 2	1/31/2014	12/31/2015	Unit 2
106	Receive Unit 2 Reactor Vessel on site from fabricator	Complete	Complete	
107	Set Unit 2 Reactor Vessel	6/23/2014	8/9/2016	Unit 2
108	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Channel Head to Tubesheet Assembly Welding - Unit 3	12/31/2013	3/30/2015	Unit 3
109	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 3	8/31/2014	10/30/2015	Unit 3
110	Reactor Coolant Pump - Shipment of Equipment to Site (2 Reactor Coolant Pumps) - Unit 2	10/31/2013	5/30/2016	Unit 2
111	Place first nuclear concrete for Unit 3	Complete	Complete	
112	Set Unit 2 Steam Generator	10/23/2014	10/10/2016	Unit 2
113	Main Transformers Ready to Ship - Unit 2	Complete	Complete	
114	Complete Unit 3 Steam Generator Hydrotest at fabricator	2/28/2014	7/30/2015	Unit 3
115	Set Unit 2 Containment Vessel Bottom Head on basemat legs	Complete	Complete	
116	Set Unit 2 Pressurizer Vessel	5/16/2014	8/23/2016	Unit 2
117	Reactor Coolant Pump Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 3	2/28/2015	1/31/2017	Unit 3
118	Deliver Reactor Vessel Internals to Port of Export - Unit 3	6/30/2015	12/31/2016	Unit 3
119	Main Transformers Fabricator Issue PO for Material - Unit 3	Complete	Complete	
120	Complete welding of Unit 2 Passive Residual Heat Removal System piping	2/5/2015	1/16/2017	Unit 2
121	Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 3	4/30/2015	1/30/2016	Unit 3
122	Refueling Machine - Shipment of Equipment to Site - Unit 3	2/28/2015	3/27/2016	Unit 3
123	Set Unit 2 Polar Crane	1/9/2015	12/19/2016	Unit 2
124	Reactor Coolant Pumps - Shipment of Equipment to Site - Unit 3	6/30/2015	4/30/2017	Unit 3
125	Main Transformers Ready to Ship - Unit 3	7/31/2015	12/30/2015	Unit 3
126	Spent Fuel Storage Rack - Shipment of Last Rack Module - Unit 3	7/31/2014	5/31/2015	Unit 3
127	Start electrical cable pulling in Unit 2 Auxiliary Building	8/14/2013	11/29/2016	Unit 2
128	Complete Unit 2 Reactor Coolant System cold hydro	1/22/2016	2/19/2018	Unit 2
129	Activate class 1E DC power in Unit 2 Auxiliary Building	3/15/2015	6/22/2017	Unit 2
130	Complete Unit 2 hot functional test	5/3/2016	5/23/2018	Unit 2
131	Install Unit 3 ring 3 for containment vessel	8/25/2015	2/27/2017	Unit 3
132	Load Unit 2 nuclear fuel	9/15/2016	12/21/2018	Unit 2
133	Unit 2 Substantial Completion	3/15/2017	6/19/2019	Unit 2
134	Set Unit 3 Reactor Vessel	10/22/2015	5/26/2017	Unit 3
135	Set Unit 3 Steam Generator #2	2/25/2016	9/22/2017	Unit 3
136	Set Unit 3 Pressurizer Vessel	7/16/2015	11/27/2017	Unit 3
137	Complete welding of Unit 3 Passive Residual Heat Removal System piping	6/16/2016	1/29/2018	Unit 3
138	Set Unit 3 polar crane	5/9/2016	12/18/2017	Unit 3
139	Start Unit 3 Shield Building roof slab rebar placement	5/26/2016	5/11/2018	Unit 3
140	Start Unit 3 Auxiliary Building electrical cable pulling	11/7/2014	6/23/2017	Unit 3
141	Activate Unit 3 Auxiliary Building class 1E DC power	5/15/2016	3/13/2018	Unit 3
142	Complete Unit 3 Reactor Coolant System cold hydro	3/22/2017	2/26/2019	Unit 3
143	Complete Unit 3 hot functional test	7/3/2017	5/26/2019	Unit 3
144	Complete Unit 3 nuclear fuel load	11/15/2017	12/19/2019	Unit 3
145	Begin Unit 3 full power operation	4/8/2018	5/20/2020	Unit 3
146	Unit 3 Substantial Completion	5/15/2018	6/16/2020	Unit 3

PUBLIC VERSION

Exhibit 2

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of $)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Actual through December 2014* plus Projected

Plant Cost Categories	Total	Actual								Projected					
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fixed with No Adjustment															
Firm with Fixed Adjustment A															
Firm with Fixed Adjustment B															
Firm with Indexed Adjustment															
Actual Craft Wages															
Non-Labor Costs															
Time & Materials															
Owners Costs															
Transmission Costs	329,512	-	26	724	927	11,964	51,677	56,593	47,207	64,576	64,794	30,314	710	-	-
Total Base Project Costs(2007 $)	5,246,638	21,723	97,386	319,073	374,810	314,977	488,461	448,947	422,076	742,980	759,311	658,948	389,817	169,840	38,289
Total Project Escalation	1,300,486	-	3,519	20,930	23,741	34,084	74,485	88,622	89,890	196,694	247,926	240,312	151,548	92,670	36,065
Total Revised Project Cash Flow	6,547,124	21,723	100,905	340,003	398,551	349,061	562,946	537,569	511,966	939,674	1,007,237	899,260	541,365	262,510	74,354
Cumulative Project Cash Flow(Revised)		21,723	122,629	462,632	861,183	1,210,244	1,773,190	2,310,759	2,822,725	3,762,398	4,769,635	5,668,895	6,210,260	6,472,770	6,547,124
AFUDC(Capitalized Interest)	279,790	645	3,497	10,564	17,150	14,218	18,941	27,722	26,131	30,502	44,426	39,884	30,984	11,529	3,599
Gross Construction	6,826,914	22,368	104,403	350,567	415,701	363,278	581,886	565,291	538,097	970,176	1,051,663	939,143	572,349	274,039	77,953
Construction Work in Progress		22,368	126,771	477,338	893,039	1,256,317	1,838,203	2,403,495	2,941,591	3,911,767	4,963,430	5,902,573	6,474,923	6,748,962	6,826,914

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*Applicable index escalation rates for 2014 are estimated. Escalation is subject to restatement when actual indices for 2014 are final.

Notes:

Current Period AFUDC rate applied: 5.68%

Escalation rates vary from reporting period to reporting period according to the terms of Commission Order 2009-104(A).
These projections reflect current escalation rates. Future changes in escalation rates could substatially change these projections.
The AFUDC rate applied is the current SCE&G rate. AFUDC rates can vary with changes in market interest rates,
SCE&G's embedded cost of capital, capitalization ratios, construction work in process, and SCE&G's short-term debt outstanding.

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Exhibit 3

Change from SCPSC Order 2012-884

(Thousands of $)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Actual through December 2014* plus Projected

Plant Cost Categories	Total	Actual								Projected					
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fixed with No Adjustment	(85,360)	-	-	-	-	-	(14,226)	(23,624)	(12,485)	20,064	20,823	9,558	56	(42,763)	(42,763)
Firm with Fixed Adjustment A	-	-	-	-	-	-	12,925	(12,925)	-	-	-	-	-	-	-
Firm with Fixed Adjustment B	52,971	-	-	-	-	-	(1,580)	(15,028)	(31,967)	20,877	25,935	7,721	22,137	19,537	5,339
Firm with Indexed Adjustment	17,998	-	-	-	-	-	(90,039)	(172,221)	(109,468)	84,056	124,876	82,924	19,196	51,832	26,842
Actual Craft Wages	198,626	-	-	-	-	-	(19,028)	(38,621)	(71,553)	(18,150)	71,542	156,910	94,873	22,652	-
Non-Labor Costs	288,327	-	-	-	-	-	16,149	(24,678)	(61,982)	(8,616)	91,813	157,787	94,851	22,781	223
Time & Materials	(19,425)	-	-	-	-	-	(846)	(16,941)	(30,076)	(10,297)	11,288	16,393	8,535	2,384	136
Owners Costs	245,096	-	-	-	-	-	(23,042)	(27,458)	(42,485)	21,164	26,430	55,879	92,679	93,417	48,512
Transmission Costs	-	-	-	-	-	-	(5,529)	(310)	(10,301)	(13,414)	67	28,777	710	-	-
Total Base Project Costs(2007 $)	698,233	-	-	-	-	-	(125,217)	(331,806)	(370,318)	95,685	372,774	515,949	333,037	169,840	38,289
Total Project Escalation	332,042	-	-	-	-	-	(25,145)	(80,804)	(125,285)	12,708	113,112	181,903	126,818	92,670	36,065
Total Revised Project Cash Flow	1,030,275	-	-	-	-	-	(150,362)	(412,609)	(495,603)	108,393	485,885	697,852	459,855	262,510	74,354
Cumulative Project Cash Flow(Revised)		-	-	-	-	-	(150,362)	(562,971)	(1,058,574)	(950,181)	(464,296)	233,556	693,410	955,921	1,030,275
AFUDC(Capitalized Interest)	42,075	-	-	-	-	-	(1,509)	(10,663)	(16,737)	(10,386)	16,907	24,493	24,841	11,529	3,599
Gross Construction	1,072,349	-	-	-	-	-	(151,870)	(423,272)	(512,340)	98,007	502,793	722,345	484,696	274,039	77,953
Construction Work in Progress		-	-	-	-	-	(151,870)	(575,142)	(1,087,482)	(989,476)	(486,683)	235,662	720,358	994,397	1,072,349

*Applicable index escalation rates for 2014 are estimated. Escalation is subject to restatement when actual indices for 2014 are final. These projections reflect current escalation rates. Future changes in escalation rates could substatially change these projections.

PUBLIC VERSION

Exhibit 4

RECONCILIATION TO ORDER No. 2012-884 AND BLRA INDICES COMPARISON

RECONCILIATION TO ORDER No. 2012-884(Thousands of $)

Revised Forecast Current Filing	$	6,826,914
Forecast Order No. 2012-884	$	5,754,565
Change	**$**	**1,072,349**

Reconciliation:		
Change in Base Project Costs(2007 $)	$	698,233
Change in Project Escalation	$	332,042
Change in AFUDC	$	42,075
Net	**$**	**1,072,349**

BLRA ESCALATION INDICES COMPARISON

BLRA Indices	Order No. 2012-884 Escalation Rates	Jul 2014 Update Escalation Rates
HW All Steam Index:		
One Year Rate	4.51%	2.52%
Five Year Average	3.91%	3.21%
Ten Year Average	4.71%	4.35%
HW All Steam/Nuclear Index:		
One Year Rate	4.52%	2.52%
Five Year Average	3.87%	3.21%
Ten Year Average	4.72%	4.38%
HW All Transmission Plant Index:		
One Year Rate	2.48%	1.68%
Five Year Average	3.00%	2.63%
Ten Year Average	4.55%	4.05%
GDP Chained Price Index:		
One Year Rate	2.11%	1.55%
Five Year Average	1.69%	1.55%

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