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S. C. PUBLIC SERVICE COMMISSION
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May 21, 2009

Mr. Charles L.A. Terreni
Chief Clerk of the Commission
SC Public Service Commission
P. O. Drawer 11649
Columbia, SC 29211

RE: South Carolina Energy Users Committee v. The South Carolina Public Service Commission; South Carolina Electric & Gas; Office of Regulatory Staff
Docket No.: 2008-196-E

Dear Mr. Terreni:

Enclosed for filing is a Notice of Appeal in the above case.

If you have questions, please do not hesitate to contact me.

Sincerely,

Elliott & Elliott, P.A.

Scott Elliott

SE/jcl

Enclosures

cc: The Honorable Daniel E. Shearouse
All Parties

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May 21, 2009

S. C. PUBLIC SERVICE COMMISSION
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The Honorable Daniel E. Shearouse
Clerk, SC Supreme Court
P. O. Box 11330
Columbia, SC 29211

RE: South Carolina Energy Users Committee v. The South Carolina Public Service Commission; South Carolina Electric & Gas; Office of Regulatory Staff
Docket No.: 2008-196-E

Dear Mr. Shearouse:

Enclosed for filing is a Notice of Appeal in the above case. Also enclosed are the following:

(1) Proof of Service of the Notice of Appeal on the Respondents;
(2) A copy of the orders which are to be challenged on appeal;
(3) A filing fee of $100; and
(4) This appeal is being filed with the Supreme Court because the Appellant appeals a decision of the Public Service Commission setting public utility rates pursuant to Title 58 of the South Carolina Code of Laws.

If you have questions, please do not hesitate to contact me.

Sincerely,

Elliott & Elliott, P.A.

Scott Elliott

SE/jcl
Enclosures
cc: Parties of Record (w/enc.)

NOTICE OF APPEAL FROM
ADMINISTATIVE TRIBUNAL

THE STATE OF SOUTH CAROLINA
In The Supreme Court

APPEAL FROM
THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION

Docket No. 2008-196-E

South Carolina Energy Users Committee,	Appellant,
v.	
The South Carolina Public Service Commission; South Carolina Electric & Gas; and Office of Regulatory Staff,	Respondent.

The South Carolina Energy Users Committee appeals Order No. 2009-104(A) dated March 2, 2009 and Order No. 2009-218 dated April 21, 2009 of the South Carolina Public Service Commission. Appellant received written notice of entry of Order No. 2009-218 denying petitions for rehearing and reconsideration on April 23, 2009.

May 21, 2009

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721 Olive Street
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803-771-0555
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Other Counsel of Record
and Parties below:

See attached list.

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PROOF OF SERVICE OF
A NOTICE OF APPEAL

THE STATE OF SOUTH CAROLINA
In The Supreme Court

APPEAL FROM
THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION

Docket No. 2008-196-E

South Carolina Energy Users Committee.....Appellant,

v.

The South Carolina Public Service Commission; South Carolina Electric & Gas and Office of Regulatory Staff .....Respondent.

PROOF OF SERVICE

I certify that I have served the Notice of Appeal dated May 21, 2009, on all parties of record by depositing a copy of it in the United States Mail, postage prepaid, on May 21, 2009. Please see list attached.

Jackie C. Livingston, Paralegal
Elliott & Elliott, P.A.
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May 21, 2009

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Ruth Thomas 1339 Sinkler Road Columbia, SC, 29206 803-782-3000	

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2008-196-E – ORDER NO. 2009- 104(A)

March 2, 2009

S. C. PUBLIC SERVICE COMMISSION
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IN RE:)
)
Combined Application of South Carolina)
Electric & Gas Company 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.)
)

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BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2008-196-E - ORDER NO. 2009-104(A)

MARCH 2, 2009

IN RE: Combined Application of South Carolina Electric & Gas Company 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	)))))))	ORDER APPROVING COMBINED APPLICATION (FINAL VERSION)[1]

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the "Commission") on the Combined Application (the "Combined Application") of South Carolina Electric & Gas Company ("SCE&G" or "the Company") which was filed with the Commission on May 30, 2008. That Combined Application seeks a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order to construct and operate a two-unit, 2,234 net megawatt ("MW") nuclear facility to be located at the V.C. Summer Nuclear Station ("VCSNS") site near Jenkinsville, South Carolina (the "plant" or the "Units"). The Combined Application was filed pursuant to the provisions of the Utility Facility Siting and Environmental

[1] On Friday, February 27, 2009, this Commission issued its Order Approving Combined Application in the above docket. The version of the Order issued on that date accurately contained the findings of the Commission. However, some final edits were not captured due to a server malfunction. This present version contains final edits which were intended to be but not captured in the February 27 version of the Order.

Protection Act, S.C. Code Ann. §§ 58-33-10 *et seq.* (the "Siting Act") and the Base Load Review Act, S.C. Code Ann. §§ 58-33-210 *et seq.* (the "Base Load Review Act").

The Combined Application states that in order to meet the growing needs of its customers for electric power and to support the continued economic development of the state of South Carolina, SCE&G plans to construct two AP1000 Advanced Passive Safety Power Plants ("AP1000") and associated facilities ("Units 2 and 3") approximately one (1) mile from VCSNS Unit 1 ("Unit 1"). Units 2 and 3 will be constructed by a consortium consisting of Westinghouse Electric Company, LLC ("Westinghouse") and Stone & Webster, Inc. ("Stone & Webster"). The anticipated commercial service date for Unit 2 is April 1, 2016, and the anticipated commercial service date for Unit 3 is January 1, 2019. Units 2 and 3 will be owned by SCE&G and the South Carolina Public Service Authority ("Santee Cooper") jointly. SCE&G will own a 55% undivided share in both Units and their output and Santee Cooper will own the remainder. SCE&G will be the operator of the Units.

In its Combined Application, SCE&G also requested that the Commission approve revised rates to reflect its cost of capital applied to its projected investment in Units 2 and 3 as of June 30, 2008. The Company requested that the proposed revised rates be effective on issuance of a base load review order. As requested in the Combined Application, the proposed average increase to the residential class was 0.52%; small general service class was 0.48%; medium general service class was 0.51% and large general service class was 0.44%. The amount and percentage of these rate increases

would vary by rate schedules within these classes, and individual customer bill increases would also vary depending upon actual usage patterns and amount of consumption.

On June 18, 2008, the Commission's Docketing Department instructed the Company to publish by June 30, 2008, a Notice of Filing and Hearing in newspapers of general circulation in the areas affected by the Company's Application and to provide a copy of that notice to each affected customer by July 31, 2008. The Notice of Filing and Hearing indicated the nature of the Company's Combined Application and advised all interested parties wishing to participate in the docket of the manner and time for intervention or appearance as a public witness. On July 31, 2008, the Company filed affidavits with the Commission demonstrating that the notice was duly published in accordance with the Docketing Department's instructions and certified that a copy of the notice was provided to each electric customer in its monthly bill. As attested to in an affidavit from the Company's counsel, copies of the Combined Application were also served on the chief executive officer of each municipality, and the head of each state and local government agency charged with the duty of protecting the environment or of planning land use in the area in the county in which any portion of the proposed facility will be located.

Timely petitions to intervene in this docket were received from CMC Steel South Carolina ("CMC Steel"), Pamela Greenlaw ("Ms. Greenlaw"), Friends of the Earth ("FOE"), Mildred A. McKinley ("Ms. McKinley"), Lawrence P. Newton ("Mr. Newton"), the South Carolina Energy Users Committee ("SCEUC"), Ruth Thomas ("Ms. Thomas"), Maxine Warshauer ("Ms. Warshauer"), Samuel Baker ("Mr. Baker"), and

Joseph Wojcicki ("Mr. Wojcicki"). The Office of Regulatory Staff ("ORS") is a party to the proceedings in this docket pursuant to S.C. Code Ann. §§ 58-4-10(B) (Supp. 2008) and 58-33-140(1)(b) (Supp. 2008). The South Carolina Department of Health and Environmental Control ("DHEC"), South Carolina Department of Natural Resources ("DNR"), South Carolina Department of Parks, Recreation and Tourism ("DPRT"), and the Town of Jenkinsville were listed as parties based on the provisions of S.C. Code Ann. § 58-33-140 but did not appear or take part in the proceedings. See also § 58-33-240(B) (such entities are recognized as parties only "to the extent [that they] seek to appear to raise issues").

The Commission convened a hearing on this matter on December 1, 2008, with the Honorable Elizabeth B. Fleming, Chairman, presiding. SCE&G was represented by K. Chad Burgess, Esq.; Mitchell M. Willoughby, Esq.; and Belton T. Zeigler, Esq. ORS was represented by Nanette S. Edwards, Esq.; Shannon B. Hudson, Esq.; and C. Dukes Scott, Esq. FOE was represented by Robert Guild, Esq. and SCEUC was represented by Scott Elliott, Esq. CMC Steel did not appear at the hearing. Ms. Greenlaw, Ms. Warshauer, and Mr. Wojcicki each appeared *pro se*. At the commencement of the hearing, Mr. Newton waived his right to participate as an intervenor and instead made a statement as a public witness. Ms. Thomas did not appear at the hearing due to health issues but, without objection, Ms. Greenlaw was permitted to sponsor the testimony of one witness whose testimony Ms. Thomas had caused to be prefiled in the docket. *See* Commission Order No. 2008-797. Ms. McKinley appeared on the first and third day of the hearing but not thereafter. The remaining parties did not appear at the hearing.

In support of the Combined Application, the Company presented the direct testimony of Kevin B. Marsh, President and Chief Operating Officer of SCE&G; Stephen A. Byrne, Senior Vice President and Chief Nuclear Officer of SCE&G; Jimmy E. Addison, Senior Vice President and Chief Financial Officer of SCE&G; E. Elizabeth Best, Director of Financial Planning and Investor Relations for SCANA Services, Inc.; Steven J. Connor, Project Manager for Tetra Tech NUS, Inc.; Stephen E. Summer, Senior Environmental Specialist for SCANA Services, Inc.; Robert B. Whorton, Senior Engineer for SCE&G; Dr. Joseph M. Lynch, Manager of Resource Planning for SCE&G; David K. Pickles, Southern Region Vice President for the Energy Efficiency Practice for ICF International; Hubert C. Young, III, Manager of Transmission Planning for SCE&G; and Kenneth R. Jackson, Vice President, Regulatory Matters for SCANA Services, Inc. SCE&G Witnesses Byrne, Addison, Lynch and Jackson provided rebuttal testimony in addition to their direct testimony.

The ORS presented the direct testimony of A. Randy Watts, Program Manager of the Electric Department; Malini R. Gandhi, Deputy Director of Auditing; Douglas H. Carlisle, Jr., Economist; Dr. Zhen Zhu, Senior Consulting Economist with C. H. Guernsey and Company; George W. Evans, Vice President of Slater Consulting; William R. Jacobs, Vice President of GDS Associates, Inc.; Jerry W. Smith, Senior Consultant at C. H. Guernsey and Company; and Mark W. Crisp, Managing Consultant of C. H. Guernsey and Company.

SCEUC offered the direct testimony of Kevin W. O'Donnell, CFA, President of Nova Energy Consultants, Inc. FOE presented the direct and surrebuttal testimony of

Nancy Brockway of Brockway & Associates. Ms. Thomas presented the direct and surrebuttal testimony of Dr. Ronald P. Wilder of the Moore School of Business, University of South Carolina.

The Commission also heard from 26 public witnesses during sessions held on December 1, 2008, and December 3, 2008.

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

At the outset, we find that SCE&G is a privately owned electric utility which has its principal offices in Columbia, South Carolina, and has a service territory which includes the metropolitan areas of Charleston, Columbia, Beaufort and Aiken and many other smaller cities, towns, and rural areas in the state. SCE&G is subject to the Commission's jurisdiction pursuant to S.C. Code Ann. § 58-27-10, *et seq.* This proceeding concerns a Combined Application filed under the Siting Act and the Base Load Review Act and includes a request for the establishment of revised rates as provided for in the Base Load Review Act. S.C. Code Ann. § 58-33-270(A)(2).

Pursuant to the Siting Act the Commission must determine:

1. The basis of the need for the facility. S.C. Code Ann; 58-33-160(1)(a);
2. The nature of the probable environmental impact. S.C. Code Ann. §58-33-160(1)(b);
3. That the impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. S.C. Code Ann.§ 58-33-160(1)(c);

4. That the facilities will serve the interests of system economy and reliability. S.C. Code Ann. §§ 58-33-270(A)(2); 58-33-160(1)(d);
5. That there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations issued thereunder, including any allowable variance provisions therein, except that the Commission may refuse to apply any local law or local regulation that is unreasonably restrictive. S.C. Code Ann. §58-33-160(1)(e);
6. That public convenience and necessity require the construction of the facility. S.C. Code Ann. §58-33-160(1)(f).

In addition, pursuant to the Base Load Review Act ("the Act") the Commission must issue findings that establish:

7. The reasonableness and prudence of the utility's decision to proceed with construction of the plant considering the information available to the utility at the time. S.C. Code Ann. § 58-33-270(A)(1);
8. The anticipated construction schedule for the plant construction including contingencies. S.C. Code Ann. § 58-33-270(B)(1);
9. The anticipated components of capital costs and the anticipated schedule for incurring them, including specified contingencies. S.C. Code Ann. § 58-33-270(B)(2);
10. The return on equity for setting revised rates established in conformity with Section 58-33-220(16). S.C. Code Ann. § 58-33-270(B)(3);

11. The choice of the specific type of unit or units and major components of the plant. S.C. Code Ann. § 58-33-270(B)(4);
12. The qualification and selection of principal contractors and suppliers for construction of the plant. S.C. Code Ann. § 58-33-270(B)(5);
13. The inflation indices used by the utility for costs of plant construction, covering major cost components or groups of related cost components. S.C. Code Ann. § 58-33-270(B)(6);
14. The specific initial revised rates reflecting the utility's current investment in the plant. S.C. Code Ann. § 58-33-270(C); and
15. The rate design and class allocation factors to be used in calculating revised rates related to the plant. S.C. Code Ann. § 58-33-270(D).

In making these determinations, the Commission is mindful that a Base Load Review Order constitutes a "final and binding determination that a plant is used and useful for utility purposes" and that the plant's "capital costs are properly included in rates" contingent only upon the construction of the plant within the parameters of "the approved construction schedule including contingencies; and . . . the approved capital costs estimates including specified contingencies." Id. at § 58-33-275(A). According to the Act, "[s]o . . . long as the plant is constructed or being constructed in accordance with the approved schedules, estimates, and projections set forth in Section 58-33-270(B)(1) and 58-33-270(B)(2), as adjusted by the inflation indices set forth in Section 58-33-270(B)(6), the utility must be allowed to recover its capital costs related to the plant through revised rate filings or general rate proceedings." Id. at § 58-33-275(C).

This Order is the first base load review Order issued by the Commission. Consistent with the intent of the Base Load Review Act, the ORS has conducted an extensive audit and examination of SCE&G's decision to construct the Units and the contracts, designs, and permits under which they will be constructed. In doing so, the ORS relied on the expertise of its staff supplemented by outside consultants with extensive experience in power plant construction, construction contracting, resource planning, transmission planning, load modeling, economics, and environmental and nuclear permitting. As the record shows, this ORS team conducted a detailed audit and evaluation of all aspects of the Company's decision to proceed with construction of Units 2 and 3 and the plan for doing so, including the design and licensing of the proposed Units, and the Engineering, Procurement and Construction contract for their construction. Other parties have conducted similar reviews, and the Company has submitted extensive testimony from multiple witnesses concerning all aspects of the decision to construct these Units. At the hearing in this matter, the Commission heard from 22 witnesses including SCE&G's senior leadership and the experts sponsored by the ORS and the intervenors. The rulings that follow are based on the record produced as a result of this testimony and analysis.

III. SITING ACT FINDINGS

A. The Basis for the Need for the Facility

Under the Siting Act, the Commission must find and determine the "basis of the need for the proposed facility." S.C. Code Ann. § 58-33-160(1)(a). As Company President Marsh testified, SCE&G presently serves more than 640,000 electric customers

in 24 counties in central and southern South Carolina. To meet the needs of those customers, SCE&G owns and/or operates ten coal-fired fossil fuel units (2,484 MW), one cogeneration facility (90 MW), eight combined cycle gas turbine/steam generator units (gas/oil fired, 1,319 MW), eighteen peaking turbines (347 MW), five hydroelectric generating plants (227 MW), one pumped storage facility (576 MW) and a two-thirds share (644 MW) of Unit 1 which it owns jointly with Santee Cooper. In 2007, the total net generating capability of all SCE&G facilities was 5,687 MW and its total supply capacity, when supplemented by two relatively small long-term purchases, was 5,745 MWs. This capacity was used to serve a 2007 peak demand of 5,248 MW, which resulted in an on-system reserve margin of approximately 9%. (Tr. II, p. 150, l. 3 – 6.) To serve its customers reliably, and to account for extreme weather, unanticipated plant outages, and forecast uncertainties, SCE&G must maintain a certain amount of capacity above its forecasted peak demand in reserve. SCE&G's established reserve margin target is 12% to 18% of forecasted peak demand, a target supported by the ORS's expert witness, George W. Evans.[2] (Tr. VI, p. 1338, l. 13 – 15; Tr. VIII, p. 2000, l. 22 and Hearing Exhibit 20, GWE-1.)

As set forth in Exhibit G to the Combined Application, and as testified to by Company witness Lynch, the Company forecasts that its firm territorial demand will grow 1.7% per year over the next 15 years. (Hearing Exhibit 12, JML-1, p. 1 – 3.) In his load forecast, Dr. Lynch assumed that future demand growth will be reduced or off-set by the new federal efficiency standards for heating and air conditioning units, new federal

[2] To provide the necessary reserve margin in 2009, SCE&G made short-term off-system capacity purchases to supplement the 9% in system reserve margin referenced above.

standards for residential and commercial lighting efficiency, and by the expiration of current wholesale contracts with the Cities of Orangeburg and Greenwood and the North Carolina Electric Membership Corporation. (Tr. VI, p. 1334, l. 3 – 15.) For those reasons, Dr. Lynch's 1.7% demand growth forecast is substantially less than SCE&G's historical retail load growth of approximately 2.5% per year during the past 15 years. (Tr. VI, p. 1334, l. 7 – p. 1335 l. 22.)

Nevertheless, in light of anticipated demand growth, SCE&G's reserve margin will decline to 2% by 2016 unless new generating capacity is added before then. Adding the capacity represented by SCE&G's ownership portion of Unit 2 to the system in 2016 would increase SCE&G's reserve margin from 2% to 13% in that year. By 2019, the reserve margin would fall to -3.9% if no new generation has been added in the interim. Adding Unit 2 in 2016 and Unit 3 in 2019 would increase SCE&G's 2019 reserve margin to 16.8%.[3] (Hearing Exhibit 12, JML-1, p. 1.)

Dr. Lynch and Mr. Marsh also testified that demand growth is only part of the need SCE&G seeks to meet by adding Units 2 and 3. According to these witnesses, for the past 12 years, the Company has met demand growth on its system by adding peaking and intermediate resources to its generation fleet. As a result, they testified that the Company now has a specific need to add additional base load capacity to its system. (Tr. II, p. 150, l. 14 – p. 160, l. 4; Hearing Exhibit 12, JML-2, p. 1 – 11.)

[3] The reserve margins that Dr. Lynch forecasts with the additions of Units 2 and 3 are within SCE&G established range of target reserve margin. Even so, it is not unusual for the Company to exceed that target margin in years when new base load or intermediate capacity is added to SCE&G's system.

Some intervenors challenged the reliability of SCE&G load forecasts as a basis for assessing the need to construct Units 2 and 3. Those challenges included contentions 1) that load forecasts like Dr. Lynch's are generally too uncertain to support a decision as to the need for new capacity in 2016 and 2019; 2) that Dr. Lynch's load forecasts do not suitably account for additional Demand Side Management ("DSM") related reductions in load growth that may occur in the future; and 3) that it is imprudent to rely on current load forecasts in light of the sharp economic downturn that the nation is currently experiencing. Certain of the intervenors also challenged the Company's testimony indicating that it has a specific need for base load generation in the 2016 and 2019 time period. Each of these challenges is discussed below.

1. The General Reliability of SCE&G's Load Forecasts

The ORS's expert witness, Dr. Zhu, testified that SCE&G's load forecasts incorporate extensive economic data and analysis and are based on data and methodologies that are consistent with accepted industry standards and practices. (Tr. VIII, p. 1967, l. 7 – 13.) As part of the ORS audit of the Company's filing, Dr. Zhu conducted a detailed review and analysis of Dr. Lynch's forecasts. To measure the accuracy of these forecasts, Dr. Zhu compared Dr. Lynch's forecasts over the past seven (7) years with actual growth rates on SCE&G's system. (Tr. VIII, p. 1967, l.14-l.21; Hearing Exhibit 19, ZZ-3.) He also compared SCE&G's forecasted demand growth rates with the forecasted demand growth rates of other utilities in the region. (Tr. VIII, p. 1963, l. 11 – 13.) Dr. Zhu's conclusion was that Dr. Lynch's forecasts are reasonable. (Tr. VIII, p. 1970, l. 16-17.) Dr. Zhu stated that in determining need, SCE&G forecasted

total energy sales growth and peak demands. Over the next 15 years, from 2008 to 2022, according to the Company's May 2008 update to its Integrated Resource Plan, total energy sales growth is forecast to grow an average of 1.3% per year, and the firm territorial summer peak and winter peak demands are projected to increase at 1.7% a year. (Tr. VIII, p. 1963, l. 5-8.) Dr. Zhu also concluded that the resulting load growth rates for SCE&G are consistent with the forecasts of other regional utilities. (Tr. VIII, p. 1963, l. 11 – 13.) The FOE assertion that much has happened since the Company's IRP issuance may be factually true, but this Commission believes that the Company's forecasting makes allowances for these occurrences, as discussed below.

Dr. Zhu concluded that Dr. Lynch's current forecast tends to take a conservative approach to measuring demand growth. For instance, the current forecast does not assume that any wholesale load will replace the wholesale contracts with the City of Orangeburg, the City of Greenwood and the North Carolina Electric Membership Corporation that will expire during the planning period. Dr. Zhu's opinion is further supported by Company witness Marsh's testimony that current forecasts do not assume that any new electric technologies or applications like electric vehicles place substantial loads on the system. (Tr. VIII, p. 1965, l. 15 – l.19; Tr. VIII, p. 1968, l. 3 – 11; *see also* Tr. II, p. 159, l. 5 – 16.) The 1.7% demand growth rate that Dr. Lynch derived from these forecasts is 35% less than historical growth rates for the prior 15 year period. As Dr. Zhu testified, the conservative nature of these assumptions creates results that tend to understate the need for Units 2 and 3 rather than overstate that need. (Tr. VIII, p. 1968, l. 3 – 4.)

The reasonableness of Dr. Lynch's load forecast was also supported by Mr. Marsh who testified from an operational standpoint concerning the growth that the Company has experienced during the last 12 years. Mr. Marsh testified that SCE&G serves some of the most rapidly growing areas in South Carolina. According to his testimony, over the past twelve years, SCE&G has added some 149,000 new customers, which amounts to a 31% percent increase. (Tr. II, p. 153, l. 15 – 17.) Net of retirements, SCE&G installed 2,413 miles of new overhead line, 3,014 miles of new underground line, 86,065 new distribution transformers and 139,988 new service poles on its system since 1996. (Tr. II, p. 153, l. 17 – 20.) Mr. Marsh testified that while territorial growth rates may be slowed by the current economic downturn, the areas SCE&G serves will continue to be attractive places for residential and commercial growth in future years, and growth is anticipated to continue over the long term. (Tr. II, p. 188, l. 9 - 20.)

Certain of the intervenors, and FOE Witness Brockway, argued that inaccuracies in utility demand forecasts in the 1960s and 1970s led to an overbuild in base load capacity during that period. (Tr. III, p. 417, l. 5 – 8.) They contended that the Company's current demand forecasts should be discounted in light of past forecasts, and that the Company's application should be denied. However, the intervenors produced no specific evidence or expert analysis indicating that Company's current load forecasts are inaccurate in any specific way. The intervenors did not rebut Dr. Zhu's testimony concerning the detailed review and analysis he conducted of Dr. Lynch's forecasts, nor did they conduct any such review themselves.

The record shows that the forecasting errors of thirty years ago were based on specific conditions that are not present today. Specifically, thirty years ago, utilities were projecting compound growth rates of 6% -7%. (Tr. III, p. 310, l. 12 – 20.) Current demand projections are much lower, and are driven by new customers coming on the system more than by assumptions of increased power consumption by existing customers as were the forecasts in the 1960s and 1970s. (Tr. III, p. 310, l. 21 – p. 311, l. 4; Tr. VI, p. 1353, l.4 – l.10.) The record does not support the conclusion that SCE&G's current forecasts are subject to the same sorts of errors as were contained in demand forecasts of thirty years ago.

2. Accounting for Future DSM Effects

Several of the intervenors suggested that Dr. Lynch's forecasts were inaccurate because they failed to take into account the possible reductions in demand growth due to future DSM programs and increased conservation efforts by customers. The record, however, shows that SCE&G has included substantial reductions in demand due to current and forecasted DSM efforts in its forecasts, and that its resource plans provide room for increased DSM contributions even if Units 2 and 3 are built. (Tr. II, p. 165, l. 8 - - p.169, l. 5; Tr. VI, p. 1335, l. 4 – p. 1336, l. 7; Tr. VI, p. 1350, l. 16 – p. 1353, l. 16; Tr. VI, p. 1361, l. 13 – 18.)

There are two principal types of DSM programs. Demand reduction DSM programs involve efforts to shift use of power away from peak periods. By shifting the time of energy use, such programs reduce the growth in the utility's peak demand. Energy efficiency programs involve efforts to reduce customers' overall energy

consumption. Depending on the appliance or end use involved, energy efficiency programs may or may not materially affect peak demand.

a. Demand Reduction Programs

As Dr. Lynch testified, SCE&G has a very active demand reduction program which includes its interruptible load program, its standby generation program, its real time pricing program and its time-of-use rates. These programs are currently reducing SCE&G's peak demand by approximately 200 MW or by more than 4%. (Tr. VI, p. 1346, l. 15 – 18.) Dr. Lynch provided data showing that this 4% reduction is well above industry standards for utilities in this region, and above the national average, which is between 2% and 3%. (Hearing Exhibit 12, JML-2, p. 5, Tr. VI , p. 1347, l. 1-7.) In addition, SCE&G uses two major generation sources, its Fairfield Pumped Storage Plant (576 MW) and Saluda Hydro (206 MW) as peak shaving units. The use of these units further flattens SCE&G's peak demand and reduces the need for additional capacity on its system to serve customers' peak requirements. (Tr. VI, p. 1347, l. 1 – 7; Tr. VI, p. 1377, l. 19-22.)

However, as Dr. Lynch testified, demand-related DSM programs can reach a point of diminishing returns as existing programs flatten peak demand and customers have to be interrupted for longer and longer periods to move their loads outside what has become a longer peak period. (Tr. VI, p. 1346, l. 15 – p. 1349, l. 11.) Dr. Lynch testified that given SCE&G's load shape, and the current level of participation in demand response programs, customers would need to agree to be interrupted for a total of two weeks a year to remove another 100 MW of demand from the system. (Tr. VI, p. 1348, l.

1 – 7.) In addition, as the required time of interruption is extended, the ability of the utility to rely on customers remaining on the program for the long term and interrupting or deferring their energy use as agreed is reduced.

b. Energy Efficiency Programs

The other category of DSM programs is energy efficiency programs. Like other utilities regulated by this Commission, SCE&G embarked on extensive energy efficiency programs in the 1980's but these programs were significantly scaled back, with Commission approval, in the 1990's.

Currently, SCE&G has two categories of energy efficiency programs: customer information programs and energy conservation programs. (Tr. VI, p. 1349, l. 14-15.). SCE&G's customer information programs include its Annual Energy Campaign which seeks to educate the company's customers about energy efficiency, and World Wide Web ("Web") based services programs which allow customers to analyze their individual consumption patterns. (Tr. VI, pp. 1350, l. 3-8.). Dr. Lynch testified that 174,000 SCE&G customers are registered for Web based account access; and 20% of commercial consumption is provided under time-of-use or real-time-pricing rates. (Tr. VI, pp. 1350, l. 20-1351, l. 3-4.).

FOE argues in its brief that Company "information only" programs do not represent a serious attempt to reduce customer usage or peak, and that information alone is typically not enough to motivate a choice of the alternative. (FOE Brief at 16.) Further FOE opines that registering for internet access to obtain efficiency guidelines does not tell us what actions the customers have taken that have saved kilowatt hours, nor does the

fact that 20% of commercial sales are made on TOU or RTP rates demonstrate that customers taking service on these rates have done anything to achieve greater efficiency or move load off peak. (Id.)

We believe that SCE&G could have done more in general with its energy efficiency programs in the past, especially in regard to expansion of residential energy efficiency programs, and also believe that the Company is committed to improving its effectiveness going forward. However, action by customers must first start with obtaining the information on DSM methodologies. The availability of TOU or RTP rates gives consumers the wherewithal to be both more efficient in their use of energy, and to move load off-peak. Without the provision of information on the availability and use of these rates, customers simply cannot reduce usage or shift usage to off-peak hours. We note that the Company is hiring additional energy auditors to perform residential audits, and instituting further studies and programs which would aid residential and commercial consumers in energy saving methodologies. We expect that gains will be made in effectively communicating information on the DSM programs. (Tr. VI, p. 1351, l. 12-13.)

Also like other utilities, SCE&G is in the process of revitalizing its energy efficiency programs in light of current energy prices, general economic conditions and the increased environmental concerns of its customers. As discussed below, SCE&G's witnesses testified that the Company is conducting a comprehensive study of potential new DSM offerings and is preparing to present a new suite of DSM programs for Commission review and approval in 2009. (Tr. VII, p. 1562, l. 13 – 20.)

Certain of the intervenors contend that the Company's demand forecasts cannot be relied on to predict future load until the effects of these new DSM programs can be evaluated. However, as discussed above, SCE&G's outside energy efficiency consultant Mr. Pickles testified that significant demand reductions due to the effects of current energy efficiency and demand reductions programs are already embedded in Dr. Lynch's forecasts.[4] (Tr. VII, p. 1564, l. 4 – 19; Tr. VII, p. 1612, l. 15 – 22; *see also*, Tr. VI, p. 1357, l. 12 – 22.) In addition, Dr. Lynch's forecasts were adjusted to include a further 5% reduction in retail sales over the period 2011-2019 due to anticipated increases in the efficiency of heating and air conditioning units and residential and commercial lighting. (Tr. VI, p. 1358, l. 10 – 16; Tr. VII, p. 1612, l. 15 – 22.)

In response to the intervenors' claims, Dr. Lynch modeled SCE&G's future load assuming an additional 0.50 percentage point reduction in annual energy demand growth per year due to additional DSM programs. He found that this reduction had no material effect on the need for Units 2 and 3. (Tr. VI, p. 1358, l. 5 – 7.) By comparison, utilities in the Southeast averaged only a0.16 percentage point reduction in energy demand growth due to DSM programs in 2006. (Tr. VI, p. 1382, l. 10 - 12.) As both Dr. Lynch and Mr. Pickles testified, the available data and analysis all indicate that the achievable reduction in demand growth from increased energy efficiency programs will not

[4] In this regard, it should be noted that the 209 MW savings listed as the DSM contribution to meeting peak requirements in the SCE&G Integrated Resource Plan ("IRP") represents only the supply-side contribution to meeting demand represented by the amount of load that SCE&G interrupts on short notice to meet its capacity reserve requirements during system peaks. In other words, the 209 MW is that portion of interruptible load that can be counted as a ***generation resource*** available to meet peak load. Energy efficiency programs reduce system demand and are embedded in the load forecast that is part of the IRP analysis.

materially change the forecasted need for Units 2 and 3. (Tr. VI, p. 1358, l. 5 – 7; Tr. VII, p. 1564, l. 17 - 19.)

Based on the evidence cited above, the Commission finds that additional savings due to DSM programs are not a viable substitute for the base load capacity that SCE&G seeks to build. Contrary to the testimony of FOE witness Brockway, who opined that the Company had failed to adequately consider DSM in its planning, (Tr. III, p. 364, l. 17-19.), the Commission finds Dr. Lynch's forecasts and analyses have properly accounted for or analyzed the potential for additional DSM-related savings. Moreover, SCE&G's resource plans contain room for additional DSM related energy savings even with the addition of Unit 2 and 3 to the system. DSM is a useful supplement to the generation capacity needed on SCE&G's system. It is not a substitution for it.

c. SCE&G's Commitment to Expanded DSM Programs

The Company's Witness Mr. Pickles testified in detail concerning the scope and methodology of the "bottom up" DSM program analysis that he is presently performing for SCE&G along with SCE&G's DSM organization. As Mr. Pickles testified, the analysis includes the following:

- An assessment of currently-available DSM data specific to SCE&G's service territory and a gap analysis to identify critical information needs,
- The identification of a broad range of potential DSM measures and programs based on a national review of DSM programs and best practices,

- The determination of the peak demand and energy impacts of the most promising DSM measures based on a detailed evaluation of service territory-specific building practices, efficiency levels, weather, and operational characteristics using detailed hourly computer simulation models,
- The estimation of the current and future penetration of energy efficiency measures and their cost, including evaluation of free-ridership,
- The forecasting of the potential impact of the DSM programs using a variety of scenarios concerning incentive levels and program effectiveness,
- A benchmarking of results against the actual experience of other utilities and against other studies of the potential for DSM performed in other jurisdictions, and
- The development of DSM's supply curves and the analysis of the appropriate type, scale, and timing of future DSM programs in an integrated analysis alongside potential supply-side alternatives.

(Tr. VII, p. 1563, l. 1 – 23.)

SCE&G's President, Mr. Marsh, affirmed the Company's commitment to complete this thorough and comprehensive review of potential DSM programs and to bring the results to the Commission in 2009. (Tr. III, p. 297, l. 18 – p. 298, l. 10.) The Commission believes that these initiatives by the Company are critical to the energy

future of the state, as well as the economic well being of its consumers, and directs the Company to complete a comprehensive and thorough DSM analysis along the lines that Mr. Pickles outlined and to present the findings and proposals for expanded DSM offering to the Commission for review no later than June 30, 2009.

FOE argues that the Company should ask whether additional DSM could contribute to a plan that could replace the 1,229 MW of nuclear power the Company has decided is the best option. (Tr. III, p. 377, l. 10-20.) For instance, FOE uses California as an example, stating California has held its per capita consumption of electricity to roughly 7,000 kWh from 1975 through 2004, compared to the growth from 8,000 kWh to 12,000 kWh in the national average electricity consumption over the same period. (Tr. III, p. 378, l. 13-16.) SCE&G responded that FOE failed to mention that the price for power in California has increased at a faster rate than the national average and that today the residential price for power is more than 30% higher than the national average. (Tr. VI p. 1380, l. 11-14.) SCE&G compared a yearly bill for a single family residence under its rates assuming yearly usage of 18,500 kWh with a yearly billing California assuming the same usage. (Id.) A customer in SCE&G's territory would pay approximately $2,064 yearly under SCE&G's current approved rates while a California customer would pay approximately $4,258 under Pacific Gas & Electric rates, $3,171 under Southern California Edison rates and $3,628 under San Diego Gas & Electric rates (Tr. VI, pp. 1380, l. 18-1381, l. 1.) SCE&G asserted that with such higher rates, more DSM programs can be cost justified. (Tr. VI, p. 1381, l. 2-3.) During the hearing on this matter, FOE witness Brockway agreed that California historically has had higher rates and

continues to have higher rates. (Tr., Vol. III, p. 504, l. 1-3.) SCE&G also asserted that California's levelized electricity consumption is likely to be as much the result of high costs for electricity as the effectiveness of DSM programs. (Tr. VI, p. 1381, l. 3-7.) FOE witness Brockway acknowledged that many of the utilities with reductions in energy sales attributable to DSM savings have residential prices for energy that are significantly higher than the average retail price in South Carolina. (Tr. III, p. 478, l. 20-22. See also Composite Hearing Exhibit 1, Exhibit NB-3.) Mrs. Brockway's Exhibit NB-3 shows annual DSM Energy Savings but it fails to reflect the incremental effects for both energy and peak demand impact. (See Hearing Exhibit 25 showing peak demand reduction from DSM.) Incremental effects are impacts on energy and peak demand from new programs and new customers.

FOE cites ORS witness Evans as having acknowledged "the Company's flawed and inadequate DSM program," by quoting the witness as saying that the ORS panel was "very critical of the company's DSM efforts." (Tr. IX, p. 2255, l. 10-12.) However, Evans also testified that the Company "has responded to that very well" to the criticism with its plans for future programs. (Id.)

3. Effects of the Current Economic Downturn on Load

Certain of the intervenors contend that are not reliable due to the current economic downturn. However, Dr. Lynch testified that he has continued to update his load growth forecasts to include the current economic data and forecasts up to the time of the hearing. (Tr. VII, p. 1539, l. 14 – p. 1541, l. 2.) He did so using the economic data and forecasts that the Company regularly receives from national economic consulting

firms. Id. Dr. Lynch testified that this updated analysis showed that the impacts of the current economic downturn on load growth forecasts, while potentially significant in the near term, have only a minor impact on the load forecasts for 2016 and 2019, and that these impacts do not change the forecasted need for Units 2 and 3. (Tr. VII, p. 1540, l. 4 - 7.) He also testified that he analyzed the load growth patterns on SCE&G's system during and after major recessions over the past 30 years. The data shows that load growth on SCE&G's system slowed but did not stop even during the most severe of the historic recessions. When these past recessions ended there was an accelerated growth in load that offset much of the effect of the earlier growth reduction. (Tr. VII, p. 1539, l. 2 – p. 1542, l. 25.)

While the current economic downturn is a matter of concern to all South Carolinians, it is important that long-term infrastructure projects needed to meet the state's future energy demands not be shelved too quickly. To prosper and compete in global markets in the future, South Carolina will need efficient, reliable energy sources. The generation capacity SCE&G now seeks to build will take 12 years to complete and will serve the state for as many as 60 years thereafter. The Commission agrees with Company witness Addison who testified that long-term decisions related to energy capacity should be based on the long-range needs of the system and the state economy, not shorter-term considerations.

4. Flexibility to Respond to Changes in Demand or Supply

An important consideration in assessing the need for Units 2 and 3 is their benefit to the system even if the demand or supply patterns are different than forecasted. It is

possible that demand on SCE&G's system may grow faster than anticipated. If so, the benefits from choosing to build Units 2 and 3 at this time are likely to be greater than anticipated. But the record also shows that if DSM measures, alternative energy sources or adverse economic conditions reduce SCE&G's load capacity requirements significantly below forecast, Units 2 and 3 will still be quite valuable. Witness Marsh testified that at present 64% of SCE&G's base load capacity is in plants that were built between 1953 and 1973. (Tr. II, p. 158, l. 15 - 17.) These plants will be on average more than 50 years old by 2019 and may require substantial capital investments to meet reliability requirements and increasingly stringent environmental regulations. (Tr. II, p. 158, l. 17 - 18; p. 160, l. 20 - 22.) If load growth is slower than expected, adding Units 2 and 3 may allow SCE&G to reduce its reliance on its aging fleet of coal-fired plants, and perhaps even retire some of the less efficient plants. (Tr. VI, p. 1392, l. 9 – 13.) Allowing these older plants to be retired or used less intensively in the future could benefit the system in terms of reliability, environmental compliance and fuel efficiency. The evidence indicates that the capacity represented by Units 2 and 3 will provide useful flexibility for SCE&G's generation in the future. Units 2 and 3 can provide significant benefits to SCE&G's system even if load growth during the coming decades is substantially below forecast.

5. The Company's Need for Base Load Capacity

Certain of the intervenors challenged the testimony of Dr. Lynch and Mr. Marsh that the Company has a specific need for base load capacity in the 2016-2019 time period. As the testimony of record indicates, base load capacity is fuel efficient

generating capacity intended to run for thousands of hours a year and at high capacity factors. (Tr. II, p. 187, l. 22 – p. 188, l. 8.) Such plants are the foundation upon which an electric system operates and on which it relies for the majority of the energy used to serve customers. (Tr. II, p. 151, l. 8 – 13; Tr. II, p. 188, l. 3 – 8.) Peaking and intermediate units are intended to run for substantially fewer hours per year. (Tr. II, p. 152, l. 3 – 8.)

As Mr. Marsh testified, SCE&G last added a base load resource to its electric system when Cope Station went into commercial operation in 1996. (Tr. II, p. 155, l. 9 – 11.) Since that time, energy use on SCE&G's system has grown by 31%. (Tr. II, p. 155, l. 14 – 15.) By 2016, energy use on SCE&G's system is forecasted to have grown by a total of 44%. (Tr. II, p. 155, l. 15 – 17.)

Current operating statistics demonstrate the importance of base load generation to serving customers' energy needs. During 2007, base load plants constituted 56% of SCE&G's generation capacity. (Tr. II, p. 158, l. 6 – 7.) However, they produced over 80% of the energy used by SCE&G's customers during that year. Base load capacity—which represented 75% of SCE&G's generating capacity in 1996—is forecasted to drop to 45% as a share of total generation capacity by 2020 unless new base load resources are added in the interim. (Tr. II, p. 158, l. 9 – 12.)

Company witness Lynch notes that, in its application, the Company stated that it would take approximately 10,276 MWs of solar panels covering 61,656 acres or 6,852 MWs of wind turbines covering 120,192 acres to produce an amount of electric energy equivalent to that of 2,234 MWs of nuclear capacity represented by the two plants under question. FOE argues that the Company is merely setting up a "straw man" by estimating

the amount of alternative energy generating facilities that would be required to displace 2,234 MW of generation in such a way that would exclude all generation but base load. We understand that FOE and some of the intervenors are not arguing that alternative energy can fulfill all of the state's future generation needs. However, Dr. Lynch's exhibit does illustrate how difficult it would be to produce this amount of clean energy from another resource. (Tr. VI, pp. 1373, l. 13-1374, l. 4) Based on the foregoing, the Commission finds that the record supports the Company's testimony that the specific capacity need for 2016 and 2019 is most reliably and efficiently met through the addition of new base load capacity to its system. Units 2 and 3 represent such capacity.

6. **The Single Unit Proposal**

Certain of the intervenors suggested that the Commission should authorize SCE&G to build one new nuclear unit but not two. The record, however, does not support this proposal as being reasonable, economical or prudent. (Tr. III, p. 570, l. 13-21.) All U.S. utilities that have selected AP1000 units have opted to license and construct two units per site. As the record shows, the price SCE&G received from Westinghouse/Stone & Webster was premised on construction of two units in sequence, and substantial cost savings are included as a result. (Tr. II, p. 278, l. 23 – p. 279, l. 6.) The construction of two units allows SCE&G to partner in this project with Santee Cooper on a 55%-45% basis, spreading risk in the project, and providing a benefit to the the state's electric cooperatives and their customers. As a result, SCE&G will only own the equivalent of 1.1 complete units when the construction of both Units is finished. If the Commission were to deny SCE&G the authority to proceed with construction of the

second unit, the first unit will have to be re-priced and the price per KW of that unit will rise by a significant amount. (Tr. II, p. 162, l. 9 – 16.) There is no assurance that a new EPC contract could be successfully negotiated for one plant at terms that would benefit SCE&G's customers.

Approving only one unit would place SCE&G in the position of paying a higher cost per KW for the capacity it builds and building only half of the capacity that it will need in the next 12 years. For these reasons, the Commission finds that approving only one unit would not be reasonable, economical or prudent as compared to approving two units as proposed by SCE&G.

7. Conclusion as to Need

Having carefully reviewed the evidence of record in this proceeding, the Commission finds that the load forecasts presented by Dr. Lynch and reviewed and audited by ORS Witness Dr. Zhu provide a reliable and appropriate basis for assessing the need for Units 2 and 3. The Commission finds that the Company has in fact demonstrated the need for the Units and the need to proceed with their construction.

B. Nature of the Probable Environmental Impacts

The second finding and determination required by the Siting Act is a finding as to the "nature of the probable environmental impact" of Units 2 and 3. S.C. Code Ann. § 58-33-160(1) (b). As the record shows, Units 2 and 3 will be constructed on the site of an existing nuclear generating station whose environmental conditions have been closely monitored for over 30 years. (Tr. X, p. 2479, l. 4 – 10; Hearing Exhibit 30, SJC-3.) In addition, the environmental conditions at the site have been evaluated in detail at least

three times: in the initial NRC licensing of Unit 1, in the recent NRC license renewal for Unit 1, and in preparation of the environmental report that was provided to the NRC as part of the Company's Combined Operating License Application ("COLA") for Units 2 and 3. (Tr. X, p. 2479, l. 4 – 10; Tr. X, p. 2523, l. 12 – 20.)

Company witnesses Steven Connor and Stephen Summer testified concerning the most recent environmental report and its conclusions. That report is over 1,100 pages long and represents the work of over 25 major contributors and over 25,000 hours of work by environmental experts and others. (Tr. X, p. 2417, l. 3 – 10.) The report examined a comprehensive list of possible environmental impacts of the plant and provided a detailed analysis of Site and Vicinity Land Use; Air Quality; Water Quality; Water Quantity and Use; Terrestrial Ecosystems; Aquatic Ecosystems; Threatened and Endangered Species; Historic and Cultural Resources; and Transportation. (Tr. X, p. 2431, l. 1.) The report specifically examined the likely radiological impacts of the plant and the provisions for the storage and disposal of low-level wastes and spent fuel assemblies. (See generally, Tr. X, pp. 2436 – 2446.)

The report concluded that the impact of the plant on each of the areas enumerated above would be "small," which is defined as environmental effects which are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. (Tr. X, p. 2447, l. 14 – 15.) The only exception was in the area of transportation. The report concluded that the effect of the Units on traffic patterns in the vicinity of the Units would be small to large, with the greatest impact due to the increased road use in the area caused by construction traffic but would be moderate

during the operation of the facility. (Tr. X, p. 2448, l. l.) Moderate impacts are defined as environmental effects which are sufficient to alter noticeably, but not to destabilize any important attribute of the resource. (Tr. X, p. 2418, l. 16 – 18.) Large impacts are defined as environmental effects which are clearly noticeable and are sufficient to destabilize sufficient to alter noticeably, but not to destabilize any important attribute of the resource. SCE&G had indicated that it will work with the Department of Transportation ("DOT") to mitigate the impact that traffic and transportation activities will have on the area.

ORS Witness Crisp testified concerning ORS's review and audit of this environmental information. (Tr. VII, p. 1916, l. 4 – p. 1919, l. 15.) ORS witness Crisp testified that SCE&G had fulfilled its obligation for filing its environmental report with the NRC and had established a protocol to address the necessary permitting from state and federal agencies to protect the South Carolina environment, and he supported the conclusion that the environmental effects of the plant would be as set forth in that report. (Tr. VIII, p. 1919, l. 8 – 15.)

At the hearing, FOE contended that the analysis did not properly account for the environmental concerns related to the long-term disposal of spent fuel from the facility. The record, however, shows that the facility has capacity in its spent fuel storage pool to store the spent fuel assemblies generated by 18 years of operations. (Tr. III, p. 613, l. 7 - 10.) In addition, the Company plans to construct a dry cask storage facility in the near future to store spent fuel from Unit 1. (Tr. III, p. 613, l. 10 – 13.) The facility would be

designed to accommodate or to be expanded to accommodate spent fuel from Units 2 and 3 when their spent fuel pools are filled. (Tr. III, p. 613, l. 13 – 16.)

As the record indicates, dry cask storage is a means to store spent fuel assemblies which have been held in the spent fuel pool for five years or more to allow the radioactivity levels in them to decay to acceptable levels. These fuel assemblies are placed into heavy stainless steel containers that are welded shut and placed into a concrete overpack which is also sealed. (Tr. III, p. 614, l. 2 – 10.) The resulting cask can then be stored for an virtually indefinitely period either on a pad above ground or below ground in a shallow concrete silo. (Tr. III, p. 614, l. 8 – 10.) Other than fencing and site security, the casks require no maintenance or upkeep and do not emit levels of radiation that require special precautions. (Hearing Exhibit 30, SJC-3.) Within the casks, radiation levels continue to degrade as the assemblies are stored. (Tr. III, p. 614, l. 2 – 10.)

Dry casks provide long-term storage for spent fuel assemblies but do not constitute permanent repositories for them. However, as the Company points out, the long-term disposal of spent fuel assemblies is a statutory responsibility of the federal government. *See* the Nuclear Waste Policy Act of 1982, 42 U.S.C. § 10101 *et seq.*, 42 U.S.C. 10131(b)(1), 10 C.F.R. §961.11. As the record indicates, the U.S. Department of Energy must enter into an agreement to take ultimate responsibility for the fuel as a condition of the NRC issuing a license for the Units. (Tr. X, p. 2460, l. 16 - 19.) As the record also indicates, the federal Department of Energy is proceeding with licensing of the Yucca Mountain repository as a long-term site for such fuel assemblies. (Tr. IV,

p. 740, l. 5.) The license application for the facility has recently been submitted to the NRC.

With regard to radioactive solid waste, SCE&G witness Connor testified that the facility operations should not result in any high-level or transuranic radioactive wastes. (Tr. X, p. 2440, l. 20-21.) If so, Connor testified that the U.S. Department of Energy will dispose of the fuel. (Id.) The facility, however, will generate low-level radioactive waste and spent nuclear fuel ("SNF"). (Tr. X, p.2440, l. 11-12.) Connor stated the procedures and disposal methods currently utilized for the radioactive waste disposal of the existing nuclear unit will also be utilized for the new units. (Tr. X, p. 2440, l. 12-14.) Low-level radioactive waste is stored on-site on an interim basis before being shipped to a permanent disposal facility. (Tr. X, p. 2440, l. 16-17.) FOE challenged the storage facilities by arguing there is no long-term storage solution (Tr. X, p. 2591, l. 16-25.) SCE&G witness Connor testified that until the federal government takes possession of the spent fuel, SCE&G will store the spent fuel as it currently does with its existing unit by utilizing spent fuel pools and dry cask storage. (Tr. X, p- 2592, l. 5.) FOE questioned the safety of utilizing dry cask storage for a number of years. (Tr. X., p. 2598 l. 18-21.) SCE&G witness Connor responded by stating the dry cask storage facilities will be maintained. (Tr. X, p. 2598, l. 22-24.)

For the Commission to find that long term disposal of spent fuel assemblies constitutes a negative environmental impact of Units 2 and 3, it would have to conclude that the federal government cannot or will not meet its statutory responsibilities. We decline to do so. The Commission presumes that the federal government will honor its

commitment to store spent fuel, and no convincing evidence has been presented that it will not do so.

Similarly, FOE challenged the environmental record of the Barnwell low-level nuclear waste disposal facility as posing a potential environmental problem with the siting of Units 2 and 3. The Barnwell facility accepts low-level waste only from generators in South Carolina, New Jersey and Connecticut, and would accept low-level nuclear waste from the proposed Units 2 and 3. (Tr. IV, p. 750, l. 12 – p. 751, l. 9.) Additional facilities exist in other states, and new facilities are being permitted at this time. (Tr. IV, p. 751, l. 20 – 21; Tr. X, p. 2440, . 16 – 19.) The Barnwell facility is extensively regulated by the DHEC. (See S.C. Code Ann. § 13-7-40 *et seq.*; S.C. Regs 61-63.) The purpose of that regulation is to ensure that this facility complies with applicable environmental regulations such that its activities do not result in injury to the environment of the state of South Carolina. There is no basis on this record for the Commission to find that DHEC will not fulfill its legal duties, or that the potential use of the Barnwell facility constitutes a negative environmental impact of building Units 2 and 3 that might prevent those units being approved by this Commission under the Siting Act.

C. Justification of the Impact on the Environment

The third finding and determination required by the Siting Act is whether "the impact of the proposed facility is justified considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations." S.C. Code Ann. § 58-33-160(1)(c). The environmental report concluded that wind, solar, biomass and hydro generation were not feasible alternatives to nuclear or fossil fired

generation. As to solar and wind generation, the environmental report concluded that these energy sources would have greater environmental impacts than nuclear given the amount of area that would need to be dedicated to them and the new transmission facilities they would require. (Tr. X, p. 2450, l. 5 – 8.) For purposes of the environmental assessment, coal and gas generation were identified as the principal alternatives to nuclear generation. Both coal and gas alternatives were found to have significantly greater environmental impacts than Units 2 and 3, due principally to significantly higher air emissions, specifically the amount of additional CO_2, nitrous oxides, SO_2 and particulates that would be emitted by either gas or coal generation. (Hearing Exhibit 30, SJC-3.) The environmental report concluded that from an environmental standpoint, nuclear generation was the best alternative for meeting the energy needs of SCE&G's customers with the least impacts on the environment. (Tr. X, p. 2450, l. 13 – 15.) The Commission finds that this conclusion is amply supported on the record.

D. Contribution to System Economy and Reliability

The fourth finding required by the Siting Act is whether the Units "will serve the interests of system economy and reliability." S.C. Code Ann. § 58-33-160(1) (d).

1. System Economy

In evaluating the contribution of Units 2 and 3 to system economy, the Commission is required to assess a) the projected cost of power to SCE&G's customers if Units 2 and 3 are built, as compared to b) the comparable cost to customers if alternative means of meeting demand are chosen. This analysis properly includes an assessment of all the costs of power from Units 2 and 3 and all the costs of power from the most

competitive alternative supply resource or resources. The relevant costs include capital costs, operating and maintenance costs, fuel costs and environmental compliance costs. This competitive economic evaluation also properly includes an evaluation of the needs, condition and operating requirements of SCE&G's electric system as a whole, as well as the abilities of various supply scenarios to respond to uncertainties in such things as aggregate future fuel costs and environmental compliance costs.

SCE&G selected Units 2 and 3 as the appropriate resources to meet its 2016 and 2019 energy needs based on analyses performed by its Resource Planning Group over the period 2005-2008. (Tr. II, p. 160, l. 11 – p. 161, l. 6.) Those analyses compared the cost to customers from resource plans based on adding Units 2 and 3 to three principal alternative plans; 1) plans that relied on two coal generation plants of similar capacity to SCE&G's ownership portion of Units 2 and 3 supplemented by simple-cycle gas peaking units, 2) plans that relied on adding one, two or three units of combined-cycle gas generation supplemented by simple-cycle gas peaking units, and 3) plans that relied on simple-cycle gas peaking units exclusively. (Tr. VI, p. 1353, l. 22 – p. 1354, l. 9.) Based on these analyses, the Company determined that constructing Units 2 and 3 provided the best contribution to system economy of any alternative. (Tr. VI, p. 1358, l. 5 - 7.)

In conducting these analyses, the Company first performed a base case analysis which evaluated these four alternative supply scenarios using a consistent set of assumptions related to future fuel costs, environmental compliance costs and other costs. (Tr. VI, p. 1355, l. 7 – p. 1356, l. 8.) The Company then conducted sensitivity analyses in which these four competing generation plans were analyzed under varying

assumptions related to these costs. As Company witness Marsh testified, the Company's evaluation of these four alternatives also included a qualitative assessment of the alternatives against the strengths and weaknesses of the Company's current generation fleet, the operating needs of the electric system and the environmental compliance cost risks, fuel cost risks and operational risks inherent in SCE&G's current generation mix. (Tr. II, p. 170, l. 17 - p. 175, l. 2.)

As Mr. Marsh and Dr. Lynch testified, Units 2 and 3 emerged as the Company's preferred capacity option in each of these analyses, *i.e.,* the base case analysis, the sensitivity analysis and the qualitative analysis. (Tr. II, p. 170, l. 4 – 14; Tr. VI, p. 1355, l. 7 – p. 1357, l. 7.) The ORS reviewed and audited these analyses, and ORS Witness Evans testified that they considered reasonable alternatives, and arrived at what will likely be the most economical plan for meeting SCE&G's base load generation needs. (Tr. VIII, p. 2002, p. 21 – p. 2003, l. 2.)

As Dr. Lynch and Mr. Marsh testified, the quantitative analysis of capacity options principally focused on the relative cost of those units compared to coal or combined cycle gas generation. (Tr. II, p. 164, l. 19 –p. 165, l. 3; Tr. VI, p. 1353, l. 18 – p. 1354, l. 9.) As Dr. Lynch's and Mr. Pickles' testimony shows, and as will be discussed more fully below, wind, solar, biomass and DSM programs were evaluated by the Company but did not emerge as competitive alternatives to nuclear, coal or natural gas fired generation. (Tr. VII, p. 1607, l. 14 – p. 1608, l. 14; Tr. VI, p. 1339, l. 8 - 12.) (The contribution that DSM programs can make to system supply needs is by limiting demand growth and is discussed in the preceding section of this order.)

The Company maintains that it did not intend to minimize the role that wind, solar, biomass and DSM programs could play as a supplement to additional base load capacity in meeting future energy needs. SCE&G's current resource plans include room for increasing the contribution to system requirements from these alternatives. (Tr. II, p. 165, l. 14 - 22.) However, for various reasons discussed more fully below, these generation sources are not a reasonable alternative to adding base load or intermediate generation resources to meet capacity needs in the 2016 and 2019 time period.

As for coal generation, the Company's analysis showed that coal generation capacity would not be competitive with combined cycle gas generation primarily due to the cost of constructing fully environmentally-compliant coal plants, as well as the recent increases in the cost of coal, and the potential costs associated with CO_2 emissions from coal generation. (Tr. II, p. 165, l. 5 – 13.) As Dr. Lynch testified, coal was competitive with nuclear only on the assumption that there would be no costs associated with CO_2 emissions. (Tr. VI, p. 1356, l. 11 - 13.) SCE&G did not believe that to be a reasonable assumption in light of the current political and environmental climate and considering the life-span of base load units. However, as Dr. Lynch testified, even if CO_2 costs are assumed to be zero, coal is still not the most competitive alternative to nuclear since under that assumption combined cycle gas generation is less expensive than coal. (Hearing Exhibit 12, JML-2, p. 9.) None of the parties contested SCE&G's conclusions related to coal generation.

The Company's analysis also showed that a generation plan based exclusively on simple-cycle gas generation was not competitive with combined-cycle generation under

any set of cost assumptions. (Hearing Exhibit 12, JML-2.) Simple-cycle units are peaking units. Their much lower fuel efficiency results in higher overall costs to the system when they are relied on to serve what is predominantly a base load requirement. (Tr. II, p. 152, l. 3 - 8.)

As Dr. Lynch's testimony shows, the costs associated with future CO_2 regulation are a major driver in the comparative evaluation of nuclear generation, combined-cycle natural gas generation and coal generation. As compared to the nuclear generation scenario, a combined-cycle gas scenario would increase SCE&G's CO_2 emissions by 8,500,000 tons per year or 510,000,000 tons over the 60-year life of a plant. (Hearing Exhibit 12, JML-2, p. 3.) A coal scenario would increase SCE&G's emissions by 19,000,000 tons per year, or over 1.1 billion tons of additional CO_2 emissions over a 60 year plant life. (Id., p. 4.) Given the magnitude of the increase in carbon emissions from the coal and natural gas scenarios, the cost analyses comparing combined-cycle gas generation and coal generation to nuclear are quite sensitive to assumptions concerning future CO_2 compliance costs.

The base case scenario prepared by Dr. Lynch's group showed that Units 2 and 3 would be more economical than combined-cycle gas generation if it is assumed that the cost of CO_2 emissions will $15 per ton or more beginning in 2012 and will escalate at 7% per year in ensuing years. (Tr. VI, p. 1355, l. 18 - 20.) (The 7% escalation number reflects the inflation assumptions contained in earlier federal CO_2 legislation that would inflate the CO_2 charges by the rate of underlying inflation plus 5 percentage points.) (Id. at 1358, l. 21 – 22.) Under the $15 per ton assumption, combined-cycle generation

would cost customers on average $15.1 million per year more than nuclear generation and coal generation would cost $94.9 million more. (Id. at 1356, l. 1 - 2.) However, as Dr. Lynch testified, the $15 per ton assumption is unrealistically low given the level of CO_2 charges that would be required to bring about a significant reduction in CO_2 emissions nationally. (Id., 1359, l. 1 - 4.) A more realistic but still low $30 per ton assumption, the cost to customers of combined-cycle gas generation would exceed the cost of nuclear generation by $125.7 million per year and coal generation would cost customers $267.5 million per year more. (Hearing Exhibit 12, JML-2, p. 9.)

The Company's Resource Planning Department conducted sensitivity analyses on the results of its quantitative analysis of capacity options, in order to see how they might be affected by factors such as higher uranium prices, lower gas prices, reduced reliability of aging coal plants, the forced retirement of such plants, and zero cost for CO_2 emissions. In these sensitivity analyses, combined cycle gas generation emerged as more economical than nuclear only in cases of lower than anticipated natural gas prices (and at $15 per ton CO_2) or zero CO_2 costs. (Tr. VI, p. 1356, l. 2 – 14.) Based on these studies, the Company's Resource Planning Department concluded that nuclear generation was the most economical resource to meet SCE&G's future supply needs. (Tr. VI, p. 1361, l. 19 – 22.) This conclusion was supported by the testimony of Mr. Marsh and Mr. Byrne, who reviewed it from the perspective of SCE&G's generation fleet as a whole, including its operational status, fuel mix, and fuel and environmental compliance costs and risks. (Tr. II, p. 157, l. 4 - 14; Tr. III, p. 554, l. 16 - 19.) Dr. Lynch testified that the fossil fuel plants (coal and gas) currently represent 73% of SCE&G's generation capacity, and if a

combined-cycle natural gas plan were chosen over nuclear, they would represent 79% of that capacity in 2020. (Hearing Exhibit 12, JML-2, p. 2.) Dr. Lynch also testified that adding the additional nuclear capacity would decrease reliance on fossil fuels and therefore lead to a more balanced fuel mix for the system. Id

Mr. Marsh and Mr. Byrne testified that in recent years the fossil fuels on which the Company relies have become increasing uncertain both as to price and supply and are increasingly subject to the risks and volatility of global commodity markets. (Tr. II, p. 171, l. 8 – 16; Tr. III, p. 561, l. 19 – p. 562, l. 2.) In addition, they testified that combined-cycle natural gas generation is intermediate capacity and not, strictly speaking, base load generation. (Tr. II, p. 152, l. 3 – 8; Tr. III, p. 561, l. 11 - 13.) Adding intermediate capacity to the system, instead of true base load capacity, would increase the Company's reliance on its aging fleet of base load plants and increase the price risk to customers if operational problems or future environmental restrictions limited the use of those plants. (Tr. III, p. 632, l. 16 – p. 633, l. 8.) As Dr. Lynch testified, if the base case analysis is adjusted to reflect an increased forced outage rate for SCE&G's existing coal plants in future years, the nuclear strategy saves customers an additional $28.8 million dollars per year over the combined-cycle gas generation scenario ($44.9 million per year savings as opposed to $15.1 million in the unadjusted study). (Hearing Exhibit 12, JML-2, p. 10.) Similarly, if the base case is adjusted to reflect the early retirement of the Company's smaller and older coal plants, the savings are an additional $60.6 million per year ($75.7 million per year compared to the same $15.1 million). (Id) For these reasons, the Company's leadership determined that, in addition to its other advantages,

building Units 2 and 3 will serve to strengthen the Company's aging base load capacity portfolio, diversify the Company's fuel mix and reduce customers' exposure to the risks and volatility of fossil fuel markets and supply.

a. Alternative Supply Resources

Certain of the intervenors argue that the Company failed to adequately consider alternative energy resources including wind, solar, landfill gas, and biomass and DSM/energy efficiency programs, or some combination of all of them. (Tr. III, p. 364, l. 13 – 19.) The Company's witnesses however, clearly indicated that these energy sources were considered but were determined not to be reasonable alternatives to new base load or intermediate generation at this time. (Tr. VI, p. 1369, l. 1 – 8.)

Landfill gas generation is one of the alternative energy sources that was considered in the Company's analysis of supply alternatives. (Tr. VI, p. 1339, l. 10 - 12.) Landfill gas is methane produced from the decay of organic matter in large municipal waste landfills. (Tr. II, p. 166, l. 2 - 3.)

Landfill gas is a limited resource because there are a limited number of landfill sites in South Carolina with suitable size and conditions for commercial methane production. (Tr. II, p. 166, l. 2 - 3.) In addition, the amount of energy these facilities can produce is quite small—approximately 5 MW per site—compared to the 1,228 MW of base load capacity SCE&G requires. (Tr. VI, p. 1343, l. 12 - 14.) Santee Cooper is already developing or is preparing to develop many of the suitable landfill gas sites in South Carolina. (Tr. VI, p. 1343, l. 18 - 21.) Given the limited number of sites and small output of these facilities, the Company concluded that they are not a reasonable substitute

for the 1,228 MW of capacity that SCE&G will receive from Units 2 and 3. In light of the evidence of record, the Commission finds that the Company properly concluded that landfill gas generation was not a reasonable alternative source of capacity to meet SCE&G's needs at present. (Tr. VI, p. 1344, l. 3 – 4.)

Similarly, biomass generation is limited by the quantities of forestry waste and agricultural material that are available and suitable for use as biomass fuel. (Tr. II, p. 166, l. 6 – 8.) Two comprehensive studies have been done by third parties on the availability of this resource in South Carolina. (Tr. VI, p. 1345, l. 1 – p, 1346, l. 2.) Both indicate a theoretical potential for about 491 MW of such generation statewide, which would mean that there would be approximately 132 MW of potential biomass capacity in SCE&G's territory. (*Id.*) In addition, as Dr. Lynch testified, biomass plants tend to be more expensive to build than traditional generation sources. (Tr. VI, p. 1344, l. 14 – 17.) They have limited fuel efficiency, and therefore are not cost competitive with traditional generation sources even where sufficient fuel is available. (Tr. VI, p. 1344, l. 14 – 17.) Considering these facts, the Company properly concluded that biomass generation is not a reasonable alternative source of supply to meet its need for base load capacity in the 2016 and 2019 periods.

The Company also considered solar and wind power as potential alternative sources of energy. (Tr. VI, p. 1339, l. 11.) As Dr. Lynch, Mr. Marsh, and ORS Witness Evans testified, South Carolina is not well-suited climatologically for either wind or solar power. (Tr. II, p. 166, l. 9 - 10; Tr. VI, p. 1368, l. 12 – 13; Tr. VIII, p. 2140, 4 – 12.)

The potential for wind generation in South Carolina is limited due to low average wind speeds. (Tr. VI, p. 1341, l. 4 - 5.) The only place where there is sufficient wind to support wind generation is off the South Carolina coast. (Tr. VI, p. 1342, l. 19 – 20.) The feasibility and cost of building wind-farms offshore in hurricane-susceptible areas like those off the South Carolina coast have not been demonstrated. (Tr. VI, p. 1343, l. 3 – 5.) South Carolina is not well suited to solar generation due to atmospheric conditions (*i.e.*, cloud cover, rain and haze). (Tr. II, p. 166, l. 9 – 10.)

Both types of facilities would have very low capacity factors in South Carolina, 20% or less for solar and 30%-35% for off shore wind. (Tr. VI, p. 1339, l. 19 – 20; p. 1343, l. 5 – 8.) These low capacity factors mean that, in practice, wind and solar facilities could produce only a small fraction of their theoretical output compared to nuclear plants which typically generate more than 90% of their rated capacity year in and year out. (Tr. VI, p. 1372, l. 16 – 18.) In addition, both wind and solar are expensive forms of generation in terms of their capital costs. The cost per MW of solar power substantially exceeds nuclear and other traditional generation sources, and as the FOE Witness Mrs. Brockway admitted, solar power is the most expensive form of power generation in commercial use today. (Tr. III, p. 486, l. 19 – 24; p. 487, l. 1 – 3.) Wind generation is also quite expensive and is primarily being built in locations where green-power mandates—rather than inherent economics—support its use. (Tr. VI, p. 1343, l. 5 – 6; p. 1387, l. 21 - 23.)

Furthermore, both wind and solar power are not "dispatchable" resources, meaning that the amount of energy that they produce cannot be varied with the needs of

the customers. (Tr. VI, p. 1340, l. 1 – 2; p. 1341, l. 20.) Wind resources may or may not be available at the time of system peak, depending on atmospheric conditions at the time. (Tr. VI, p. 1340, l. 21 - 22.) In this regard, the testimony shows that the average wind speeds are slowest in South Carolina during daylight hours in the summer when customers' power needs are greatest. (Tr. VI, p. 1372, l. 19 - 22; p. 1373, l. 1 - 11; Hearing Exhibit 12, JML-8.) As to solar, SCE&G's system peak most often occurs on summer afternoons after 4:00 PM, even in optimal conditions solar panels can generate only about 20% of their theoretical capacity. (Tr. VI, p. 1340, l. 1 - 9.)

For those reasons, the capacity that wind and solar resources represent must be discounted heavily in assessing a utility's net reliable generation capacity. For example, Texas has some of the best conditions for wind generation of any state in the nation, but its transmission system operators allow utilities to count only 8.7% of installed wind generation capacity as net reliable capacity for meeting peak requirements. (Tr. VI, p. 1371, l. 13 - 16.) This means that additional, duplicative generation capacity must be maintained on the system equal to 91.3% of a utility's wind capacity.

For purposes of considering economically competitive alternatives for meeting customers' need for base load power in the 2016 and 2019 period, the Company has properly concluded that wind, solar, landfill gas, and biomass do not constitute resources on which it can prudently and economically rely at this time.

b. The Cost of Nuclear Construction

FOE and other intervenors contend that the Company's projected cost of Units 2 and 3 is unreasonably low, and that this low cost skews the economic analysis in favor of

nuclear generation. (Tr. III, p. 364, l. 9 - 22.) FOE and others took the position that the unreasonably low projected cost of the Units created the lack of a reasonable basis on which to assess the cost of Units 2 and 3 compared to other alternatives.

i. The Unit 2 and 3 Cost Compared to Reported Data

In her testimony, FOE witness Brockway cited certain publications and reports indicating the all-in or future dollar costs of nuclear generation are estimated to be in the range of $4,000/KW to $8,000/KW. (Tr. III, p. 388, l. 5 - 20.) Ms. Brockway indicated that she was not able to determine the comparable costs per KW for Units 2 and 3. (Tr. III, p. 387, l. 17 - 18.) However, the public version of the Combined Application states that the cost in future dollars of SCE&G's 1,228 MW share in Units 2 and 3, including owner's costs, transmission, inflation, Allowance for Funds Used During Construction ("AFUDC" or capitalized interest) and contingencies, is $6.3 billion or $5,141/KW. (Hearing Exhibit 16, EEB-1-P, p. 3.) This figure is well within the range of costs Ms. Brockway indicated to be the current industry estimates in her testimony.

In addition, Ms. Brockway cited an October 2, 2008 document which indicates that the U.S. Department of Energy's ("DOE") loan guarantee program under Title XVII of the Energy Policy Act of 2005 received initial applications for 21 nuclear units with an aggregated cost as stated in the applications of $188 billion. (Tr. III, p. 388, l. 24 – 27.) Mathematically, this would indicate approximately $9 billion for each unit. (Tr. III, p. 388, l. 24 - 27.) However, the release does not provide information concerning the type or size of the Units in question (the leading Areva and GE units at 1,600 MW and 1,550 MW respectively are approximately half-again the size of a 1,100 MW AP1000

unit and are priced accordingly). (Tr. III, p. 565, l. 10 – p. 566, l. 5.) Nor does the release provide information concerning the inflation assumptions and the expected completion dates of the plants, whether or not the requested amounts include AFUDC, the amount of contingencies contained in the cost estimates, and whether the sites are green-field sites or sites that already have been studied and developed for nuclear generation, the foundation conditions at the site and the amount included for other site-specific costs such as transmission, rail or other transportation upgrades. The DOE press release is not a reliable basis on which to evaluate the price projections for Units 2 and 3.

ii. The Reliability of the EPC Contract Price

On the other hand, the Company's cost projection for its share of Units 2 and 3 is based on a fully negotiated and executed EPC Contract with a leading supplier of nuclear generation facilities. (Tr. III, p. 578, l. 1 - 9.) More than half of the EPC Contract cost is subject to fixed pricing (*i.e.*, pricing with no escalation) or firm prices with adjustment provisions (*i.e.*, prices that are fixed in current dollars but have clearly defined inflation adjustments). (Tr. III, p. 592, l. 5 – 7.) As the EPC Contract indicates, most of the equipment and components of the plant that are uniquely nuclear in nature are subject to firm and fixed pricing.

In addition, the largest components of the contract price that are not subject to firm or fixed pricing are subject to clearly-established price targets. (Tr. III, p. 593, l. 1.) These target price components include the "craft" or construction labor for the project, and certain standard buildings such as warehouses and administrative spaces. (Tr. III, p. 592, l. 18 - 22.) As to these target price components, the EPC Contract contains

important incentives for the EPC contractors to bring the project in below those targets as adjusted for actual inflation. (Tr. III, p. 593, l. 11 - 22.) In addition, the contractors are at risk to lose substantial amounts of their profit on the work if those price targets are not met. (Tr. III, p. 593, l. 11 - 22.) These provisions of the EPC Contract constitute meaningful incentives for the EPC contractors to ensure that target prices are reasonable and to manage the project to meet them. (Tr. III, p. 593, l. 7 - 14.) As a result, the EPC Contract provides a reliable basis on which to evaluate SCE&G's cost of nuclear construction for the purpose of Dr. Lynch's competitive economic studies.

iii. Contingencies as a Component of Cost

An important part of evaluating the reasonableness of the Company's price projection for the Units is evaluating the degree to which they include reasonable provisions for contingencies and inflation over the construction period, as the Base Load Review Act envisions.

As to these contingencies, Company witness Addison testified that the capital cost estimates included in the Company's price forecasts include a pool of contingency funds above those already included in the EPC Contract cost and the owner's cost and transmission cost estimates. (Tr. IV, p. 921, l. 14 - 16.) The amount of that contingency pool is $438,293,000 in 2007 dollars, subject to escalation. (Hearing Exhibit 16, EEB-1.) This contingency pool represents approximately 10% of the base cost of the Units. This amount of contingency is reasonable in light of what is known about the project and its risks today. It provides further assurance that the Company's price projections do not

underestimate the cost of nuclear capacity and so provide a reasonable basis for comparing nuclear capacity to other alternatives.

iv. Inflation as a Component of Cost

The Company's price projection also includes $1.5 billion in assumed inflation over the construction period. (Hearing Exhibit 16.) In contesting the accuracy of the Company's cost projection, FOE witness Brockway suggests that the inflation component of the Company's price projection may be too low. (Tr. III, p. 394, l. 2 - 8.) (The general reasonableness and suitability of the Handy-Whitman and other inflation indices included in the EPC Contract and the Combined Application is discussed in more detail below.) However, as shown in Exhibit I, Chart B (Hearing Exhibit 16, EEB-2, p. 5.) to the testimony of Company witness Best, the inflation rates used in creating the Company's price projection are actual 2007 rates, including the current-year rate for 2007 and the five-year average 2003-2007. Given the high level of inflation in utility construction in the 2003-2007 time period, these rates are significantly higher than historically lower inflation rates for these indices. (See generally, Tr. VII, p. 1675 - 1677.)

For example, the Handy-Whitman All Steam and Nuclear escalation rate, which is the principal rate used in escalating the target price component of the plant, showed current year inflation of 7.7% for 2007 and a five year average of 5.75%. In 2002, the current year rate was 2.8% and the five year average was 2.5%. (Hearing Exhibit 16, EEB-2.) The other indices show a similar relationship between the inflation rates used in calculating the $6.3 billion projection and the inflation rates from prior periods. (Id.)

While inflation indices will vary from year to year, if history is any guide, the rates SCE&G has used to project the cost of Units 2 and 3 are not likely to understate actual inflation rates over the 12 year construction period of the plant. Accordingly, the Commission finds that the inflation rates used in deriving the Company's projection of construction prices for the Units do not understate that the likely cost of the plants for comparative economic evaluations are significantly higher than historical averages.

v. Delay as a Cost Risk

FOE witness Brockway also testified that delays in the construction schedule for Units 2 and 3 might be assumed to cause the ultimate costs of the Units to exceed the current projections. (Tr. III, p. 394, l. 12 - 15.) The completion dates for the Units, however, are subject to contractual guarantees. The EPC contractors have committed to complete the first Unit by 2016 and the second by 2019. They will pay substantial liquidated damages if they fail to meet this schedule. (Tr. III, p. 598, l. 13 – 14; p. 364, l. 14.) The Company is at risk for regulatory delays, but as to such delays, Company witness Byrne testified the NRC licensing schedule for the plant and the construction schedule contained in the EPC Contract are reasonable. (Tr. III, p. 635, l. 7 - 14.) Furthermore, as Company witness Addison testified, inflation represents roughly 24% of the Company's construction price projection. (Tr. XIII, p. 2951, l. 21-23.) For these reasons, the Commission does not find support for the contention that the risk of delay is a reason to discount the nuclear construction costs.

vi. Conclusion as to the Cost of Nuclear Construction

For all these reasons, the Commission finds that SCE&G's analysis of the costs of nuclear generation as compared to other alternatives is based on a reasonable assessment of the cost of Units 2 and 3. Those costs have been reasonably estimated by the Company and do not constitute a flaw in the Company's analysis of the comparative economics of alternative generation resources as suggested by the intervenors.

c. The Ability of the Plant to Meet Projected Capacity Factors

Dr. Wilder, testifying on behalf of Ms. Thomas, contested SCE&G's ability to operate Units 2 and 3 at the capacity factors projected in the comparative supply analyses. (Tr. VI, p. 1283.) This argument goes to the relative cost of nuclear production compared to other alternatives. (Tr. VI, p. 1284.) Company witness Byrne testified in rebuttal that improvements in nuclear plant capacity factors over the past decades have been due to improvements in things like preventive and predictive maintenance programs, inspection and testing of equipment, staffing, training, human performance management, management of nuclear operating culture, fitness for duty standards, root cause analysis of problems and events, management of engineering processes, outage scheduling and management, and vendor and supplier quality control. (Tr. III, p. 636, l. 2 - 16.) These improvements apply across the board to nuclear operations, independent of the specific design of the Units in question. (Tr. III, p. 636, l. 8 - 9.) Mr. Byrne also testified that SCE&G intends to use the personnel and nuclear operating culture it has established at Unit 1 as the basis for establishing the staffing and operating culture for

Units 2 and 3. (Tr. III, p. 636, l. 17 - 19.) In addition, as Mr. Byrne testified, Westinghouse AP1000 technology represents an updated design of the Westinghouse pressurized water reactor technology currently in use at Unit 1. Moreover, the AP 1000s' passive safety systems should make the new Units simpler and less expensive to operate and maintain than earlier Westinghouse units. (Tr. III, p. 572, l. 11 - 19.) Based on all these factors, the Commission concludes that the anticipated capacity factors for Units 2 and 3 as included in Dr. Lynch's resource planning analyses are reasonable and appropriate for use in evaluating long-term nuclear operating costs.

d. Conclusion as to System Economy

The Company's witnesses testified extensively in support of the reasonableness of the price, schedule and cost projections on which the decision to select Units 2 and 3 was made. The EPC Contract, the inflation and contingency adjustments, the project schedule and the cost projections presented by the Company have been extensively reviewed and audited by the ORS staff experts, as well as by the independent outside experts in generation plant construction that ORS has employed to assist in the audit of the Combined Application. (Tr. VIII, p. 1903, l. 21 – p. 1904, l. 2; Tr. VIII, p. 1954, l. 5 – 18.) Those ORS witnesses have testified that their audit and review confirmed the reasonableness of the projections and assumptions contained in those documents. (Tr. VIII, p. 1954, l. 5 – 18.)

For all these reasons, the Commission finds that the cost projections and comparative economic analyses on which the selection of Units 2 and 3 was made are reasonable and appropriate. Based on these specific economic analyses and the broader

evaluation of system needs by SCE&G's leadership team, the Company properly concluded that the construction of Units 2 and 3 would provide the greatest and most dependable contribution to system economy of all reasonably competitive alternatives.

2. Contribution to System Reliability

In evaluating the contribution of Units 2 and 3 to system reliability, the Commission is required to assess the ability of the facility when constructed to operate reliably and to support reliable electric service to SCE&G's customers. One intervenor, Mr. Wojcicki, challenged the proposed site of Units 2 and 3 as being unsuitable from a reliability standpoint because of concerns about the sufficiency of water supply for the Units during drought conditions and because of their location in relation to system load centers.

a. Water Supply

The record shows that Units 2 and 3 will benefit from a unique combination of water resources available at the site. Units 2 and 3 will be built adjacent to the Broad River which is one of the major river systems in South Carolina. The adequacy of the Broad River's water supply is shown by its "7Q10". The 7Q10 is a standard measurement representing low flow with a ten-year return frequency. In other words, it is the lowest stream flow for seven consecutive days that would be expected to occur once in ten years. (Tr. X, p. 2497, l. 3 – 7.) The 7Q10 for the Broad River downstream of the facility at the Alston USGS gauge calculated in March 2007 is 853 cfs. The normal water use during normal operations of the facility, which is approximately 83 cfs,

of which a portion is returned to the Broad River, represents less than 10% of the 7Q10 flow. (Tr. X, p. 2497, l. 8 – 12.)

At the point where Units 2 and 3 will be built, the Broad River is impounded by SCE&G's Parr Reservoir. The Units themselves will not draw cooling water directly from Parr Reservoir, but from the Monticello Reservoir, a 6,800 acre lake connected to Parr Reservoir which serves as the reservoir for the Fairfield Pumped Storage facility that SCE&G constructed in the 1970s. When full, Monticello Reservoir holds 29,000 acre feet of usable water, which is enough water to meet the needs of Units 1, 2 and 3 operating at full capacity for approximately 2.5 months. (Tr. III, p. 552, l. 20 – p. 553, l. 4; Vol. X, p. 2498, l. 5-8.) In addition, there are eight pumping turbines at the Fairfield Pumped Storage facility with a combined rating of 576 MW. These turbines can pump water up from the Parr Reservoir into Lake Monticello where it can be released to generate electricity or stored for use as cooling water for Units 2 and 3. The Fairfield Pumped Storage facility allows SCE&G to replenish Monticello Reservoir at any time that there is an adequate volume of water in the Broad River or the Parr Reservoir, even if that volume of water is available only for a short period of time. (See generally, Tr. III, p. 547, l. 9 - p. 553, l. 7.)

As indicated above, the record shows that the operation of Units 2 and 3 will require a modest amount of water compared to the amount of water available in the Broad River and Monticello Reservoir. Furthermore, the Jenkinsville site provides the Company with the unique ability to collect water in the Parr Reservoir and to use Fairfield Pumped Storage pumps to replenish Monticello Reservoir whenever conditions

in Parr Reservoir and the Broad River permit. (Tr. III, p. 551, l. 21 – p. 553, l. 7.) As witnesses for both the Company and ORS testified, the water supplies available at the site of Units 2 and 3 are more than adequate to support reliable operations of Units 2 and 3. (*See Id.*; Tr. IV, p. 757, l. 18 – 25; Tr. VIII, p. 2152, l. 9 – 18; Tr. X, p. 2514, l. 18 – p. 2515, l. 4.)

b. Transmission

Mr. Wojcicki also contended that the location of Units 2 and 3 in Jenkinsville does not support the reliability of the system because of its distance from load centers in coastal areas of SCE&G's service territory. However, as SCE&G's Manager of Transmission Planning, Mr. Young, testified SCE&G's largest load center is not located along the coast but in the central portion of South Carolina, where Units 2 and 3 will be located. If the units were located at the coast, new transmission lines connecting them to the load center in the central portion of the state would be required. Moreover, currently there are six SCE&G transmission lines and two Santee Cooper lines serving the site of Unit 1 and only four new SCE&G lines and two new Santee Cooper lines will be needed to move the additional power to be generated by Units 2 and 3. A coastal site would not have an existing transmission infrastructure such as the one at the Jenkinsville site and would require a full complement of six to ten new transmission lines to distribute the power generated to different areas of the system. (Tr. XII, p. 2793, l. 13 – 21.)

For these reasons, the decision to locate Units 2 and 3 in central South Carolina and not along the coast as advocated by Mr. Wojcicki is prudent and reasonable and does not impair the reliability of those Units to serve customer load from a transmission

standpoint. Neither water supply nor transmission issues are likely to compromise the reliability of those units. Mr. Wojcicki's motion to require relocation is denied.

E. Reasonable Assurance that the Facilities Can Comply with Applicable State and Local Laws

The fifth finding required by the Siting Act is whether "there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations." S.C. Code Ann. § 58-33-160 (1)(e). Hearing Exhibit 2 contains a list of the 19 major permits, apart from NRC permits, required to construct and operate Units 2 and 3. (Hearing Exhibit 2, SAB-7, p. 1 – 3.) Three of the 19 major permits are federal permits exclusively: a Federal Energy Regulatory Commission permit for work on Monticello Reservoir, a Corps of Engineers wetlands permit for site work, and a Federal Aviation Commission permit for construction cranes to be erected on site. The remaining 16 permits are state permits or joint state-federal permits administered by the state. (Hearing Exhibit 31, SES-1, p. 1 – 3.) The record reflects that, so long as SCE&G obtains these 16 permits and operates according to their terms, the construction and operations of Units 2 and 3 will be in compliance with all state and local laws. (Tr. X, p. 2428, l. 11 – p. 2429, l. 10.)

Company witness Byrne testified that in his opinion and in the opinion of the members of his new nuclear deployment team, all of these permits could be obtained in a timely fashion and that Units 2 and 3 could be operated in compliance with all applicable laws and regulations, both state and federal. (Tr. III, p. 610, l. 9 – 16.) Mr. Byrne's testimony on this point was not contradicted by any party. Accordingly, the record

supports the finding that Units 2 and 3 can be built and operated in compliance with all applicable state and local laws and regulations as the Siting Act requires.

F. Public Convenience and Necessity

The sixth and final finding required by the Siting Act is whether "public convenience and necessity require the construction" of the proposed facilities. S.C. Code Ann. § 58-33-160(1) (f). The Commission construes this provision of the statute as requiring a finding that integrates into a single determination all aspects of the public interest evaluation related to the plant. In this case, the record demonstrates that Units 2 and 3 represent capacity that is needed to supply reasonably forecasted customer demands. In addition, the size, type, location and technology of the Units are the preferable means of doing so with the greatest economy and reliability and with the least impact on the environment.

As discussed above, the principal benefit of nuclear generation, in addition to lower forecasted costs, is the fact that it helps insulate customers from the price volatility and supply risk that are increasingly associated with fossil fuel fired generation. Nuclear generation also insulates customers from future CO_2 and other environmental compliance costs associated with fossil fuels, which are likely to be significant. Alternative energy sources may provide useful supplemental energy for SCE&G's system going forward. However, the cost competitiveness, availability and reliability of alternative energy sources are subject to significant questions and concerns at this time. Public convenience and necessity would not be supported by forcing SCE&G's customers to rely on the

future availability and cost competitiveness of these energy sources as a substitute for SCE&G constructing additional base load capacity at this time.

The risks related to nuclear construction, and the steps that SCE&G has taken to mitigate them, are discussed extensively in the record. The Company's plans to manage licensing risks and delays and to oversee construction through its own personnel and processes are also discussed more fully below. The record shows that the Company has carefully evaluated the risks related to nuclear construction and operations and compared them to the risks and costs of other alternatives. The Commission agrees with this assessment and finds that the public convenience and necessity support the construction of Units 2 and 3 as proposed by SCE&G.

IV. BASE LOAD REVIEW ACT FINDINGS

The Base Load Review Act requires the Commission to go beyond the public convenience and necessity findings required under the Siting Act and to conduct a full pre-construction prudency review of the proposed Units and the EPC Contract under which they will be built. The Commission must also set out construction schedules and annual capital cost schedules which will establish the prudency and reasonableness of plant capital costs if such schedules are met.

A. The Prudence and Reasonableness of the Decision to Proceed with Construction of Units 2 and 3

The first finding that the Commission is required to make under the Base Load Review Act is whether "the utility's decision to proceed with construction of the plant is prudent and reasonable given the information available to the utility at the time." S.C. Code Ann. 58-33-270(a)(1). The discussion that follows describes in detail the support

for this Commission's findings on this standard. The Act also requires related findings concerning the "choice of the specific type of unit or units and the major components of the plant" as well as "the qualification and selection of the principal contractors and suppliers for the plant." S.C. Code Ann. 58-33-270(b)(4),(5). These findings are the heart of the pre-construction prudency review envisioned by the Base Load Review Act. They require the Commission to make a comprehensive assessment of the decision to build the plant to determine if that decision is reasonable and prudent based on all available information.

In addition to the Siting Act findings listed above, factors showing that the Company's decision to proceed with construction of Units 2 and 3 is prudent and reasonable include: a) the selection of the Jenkinsville site for Units 2 and 3; b) the selection of AP1000 technology as the appropriate reactor technology for this project; c) the related decision to select Westinghouse Electric Corporation, LLC and Stone & Webster, Inc. as the nuclear system supplier and construction contractor, respectively; d) the selection of other major contractors for the project; e) the structure and terms of the EPC Contract; f) the price at which the plant is being constructed; and g) the Company's ability to execute its financing plan for construction of the Units. Each of these matters is considered below.

1. The Selection of the Jenkinsville Site

The record shows that the Jenkinsville site was selected for Units 2 and 3 based on a series of four site evaluation studies conducted over 34 years. (Hearing Exhibit 2, SAB-1, p. 5.) These studies consistently identified the Jenkinsville site as being among

the most suitable of the sites on SCE&G's system for the construction of a new base load generating unit. (Id.; Tr. III, p. 548, l. 6 – p. 551, l. 9.)

The record shows that SCE&G selected the Jenkinsville site as the site for Units 2 and 3 for a number of appropriate reasons. The site is near SCE&G's principal load centers and is already served by extensive existing transmission infrastructure. (Tr. III, p. 653, l. 24 – p. 654, l. 2.) It is located on land that SCE&G owns and has operated as a nuclear generation site for decades. (Tr. III, p. 548, l. 6 – p. 551, l. 9.) Nuclear security, nuclear operations support, and nuclear training and administrative facilities are already in place on the site, along with rail transportation infrastructure necessary to support construction and operation of the new units. Id. The site has a superior water supply and superior geological and seismic suitability for use as a nuclear construction site. (Tr. III, p. 550, l. 20 – 21.) Because the site has supported successful nuclear operations for over 34 years, its geological and environmental features have been extensively studied, monitored and analyzed for an extended period of time. (Tr. III, p. 548, l. 6 – p. 551, l. 9.)

The ORS audited and evaluated the site selection process and criteria as well as the decision to select the Jenkinsville site. ORS Witness Crisp testified that the Jenkinsville site was particularly appropriate because the foundation at the proposed site is composed of bedrock as opposed to a coastal marl. A coastal plain site would significantly increase the cost of the project. (Tr. VIII, p. 2159, l. 1 – 6.) In addition, issues regarding potential wetlands, the necessity for obtaining transmission right of ways

and related environmental and property issues strongly favor the placement of this project at the Jenkinsville site. (Tr. VIII, p. 2159, l. 6 – 19.)

Specific concerns were raised at the hearing concerning the seismic suitability of the site. In response, Company witness Whorton, who was involved in the original geological work to license Unit 1, reviewed the detailed geological investigations of the site that have been conducted over more than 25 years. As Mr. Whorton testified, the geology of the site was extensively studied during the licensing and the construction of Unit 1. It was then subject to subsequent seismic reassessments by the NRC after Unit 1 went into operation and then again during the license extension evaluation for Unit 1. Further geological investigation and seismic evaluation was done in preparation of the NRC license application for Units 2 and 3.

Mr. Whorton testified that the seismic design of the AP1000 unit is more than sufficient to withstand the postulated design basis seismic event for the Jenkinsville site, including a recurrence of the largest recorded earthquake in the Southeastern Piedmont Province (the Union County earthquake of January 1, 1913) occurring at the plant. (Tr. X, p. 2533, l. 3 – 5.) Mr. Whorton also testified that nuclear plants are designed with significant margins of seismic safety. (Tr. X, p. 2528, l. 8 – 18.) Several Japanese nuclear units which were designed to approximately the same seismic standards as Unit 2 and 3 recently survived an earthquake of substantially higher magnitude than the design basis event for the Jenkinsville site, with no damage to plant safety functions. (Tr. X, p. 2639, l. 1 – 21.) The record clearly establishes the suitability of the site from a seismic perspective.

Based on the testimony of Mr. Whorton, the Commission finds that the record clearly supports the prudency and reasonableness of the selection of the Jenkinsville site as the location for Units 2 and 3.

2. The Selection of AP1000 Technology

The record shows that SCE&G selected AP1000 technology based on a comparative evaluation of the three leading nuclear reactor designs that are commercially available today. These three designs represent all but a small number of the nuclear generating units under consideration for siting in the United States at this time. (Tr. III, p. 562, l. 3 – p. 563, l. 5.) In 2005, SCE&G asked each of the three vendors of these designs to submit written responses to more than 400 technical and financial questions concerning its unit. SCE&G then used objective weighing criteria to evaluate and compare their responses. The evaluation of the technical and financial responses was made independently by separate groups within the Company. (Tr. III, p. 564, l. 6 – 12.) AP1000 technology was selected as preferable by both groups of evaluators. (Tr. III, p. 564, l. 4 – 8.)

In late 2006, SCE&G began a reevaluation of these vendors based on updated information concerning the status and pricing of their designs. The reevaluation was completed in March of 2007. SCE&G's financial evaluation of these competing designs showed that the AP1000 unit was competitive with or preferable to the two alternative designs from both a pure cost per megawatt basis and from a size, design, operational, and engineering perspective. (Tr. III, p. 564, l. 14 – 565, l. 1 - 3.)

From the perspective of size, the AP1000 unit at 1,117 MW allows SCE&G to site two units at the Jenkinsville site. (Tr. III, p. 566, l. 12 – 13.) The competing vendors' units are 1,550 MW and 1,600 MW in size. For transmission and other reasons, SCE&G determined that it would not be practical and cost effective to site two units of such larger size on the site. The selection of AP1000 units, however, allows a total of 2,234 MW of new generation capacity to be sited at Jenkinsville, which results in better utilization of that site and its existing infrastructure. (Tr. III, p. 566, l. 18 – 21.)

In addition, a single unit would have a single completion date, while constructing two 1,117 MW units gives SCE&G the ability to bring new capacity on line in two installments separated by approximately three years. Phasing the additional capacity allows the capacity additions to be more precisely timed to demand growth on the system. In addition, two 1,117 MW units are preferable from an operational standpoint to a single larger unit because two units allow more flexibility in outage scheduling and result in less power lost to the system if a unit trips off, thereby enhancing system reliability. (Tr. III, p. 566, l. 12 – 18.)

As to design suitability, the AP1000 unit was the only one of the three units evaluated that is a pressurized water reactor with passive safety features. The other units were either pressurized water units or passive safety units, but not both.

The pressurized water design was important to SCE&G because that is the type of unit SCE&G currently operates very successfully as Unit 1. Units 2 and 3 will share many of the same components, design features, and operating characteristics as Unit 1. These similarities will make staffing, training, operating and maintaining the Units much

simpler than if a different technology had been selected. (Tr. III, p. 572, l. 5 - 10; Tr. III, p. 567, l. 3 – 7.)

Passive safety design is also important because it dramatically reduces the amount of safety related equipment – including values, pumps and piping – that is included in the plant's design. Less safety related equipment greatly simplifies operation and maintenance of the Units and NRC regulatory compliance issues. None of the competing units had both features. (Tr. III, p. 572, l. 5 – 22.)

The Company also selected the AP1000 unit because at the time of selection it was the only one of the competing units that was fully design-certified by the NRC. The AP1000's nuclear safety systems received NRC staff approval in 2004, and full NRC design certification was granted thereafter. Furthermore, the AP1000 design is a similar but enhanced version of the AP600 design which the NRC design-certified in 1999. (Tr. III, p. 555, l. 10 – 11; Hearing Exhibit 2, SAB-1, p. 3.)

While no party testified in support of an alternative reactor technology, Ms. Brockway on behalf of FOE stated her concern that the Company places itself and its customers at great risk by using the "as-yet-unfinished AP1000 design." (Tr. III, p. 430, l. 4-8.) SCE&G President Marsh refuted this argument by stating that the plant has been certified by the NRC and that the pending revisions are enhancements to the existing design. (Tr. III, p. 334, l. 17-19.) Company witness Byrnes testified that Revisions 1-15 have been approved by the NRC and that he sees no problems with obtaining the approvals of the later revisions in time to meet the construction schedule in the EPC Contract (Tr. III, p. 635, l. 7-10.) ORS witness Dr. Jacobs also testified that the design is

finalized to the point that the probabilistic risk assessment (PRA) can be calculated, which is a condition precedent to design certification. (Tr. VIII, p. 2181, l. 19-22)

Finally, the AP1000 presents superior opportunities for collaboration among Southeastern utilities. At the time of the hearing, fourteen AP1000 units were being proposed for construction by six separate utilities in the Southeast. This number of AP1000 units increases the opportunity for cost and experience sharing among these utilities, both during construction and operation of the Units. The record shows that utilities are cooperating extensively in this regard. The fact that SCE&G's units will be among the first of the fourteen such units to be built in the region means that Westinghouse and Stone & Webster will have every incentive to complete these initial units efficiently and on schedule, and that vendors will be eager to be selected and retained as part of the supply chain for this extensive series of plants. The fact that so many other utilities have selected the AP1000 unit is further evidence of the strength of the design and competitiveness against alternative resources. (Tr. III, p. 570, l. 13 – p. 571, l. 5; Tr. III, p. 573, l. 3 – 17.)

The ORS has audited the Company's decision to select AP1000 units for construction at the Jenkinsville site. (*See generally,* Tr. VIII, p. 2020 – 2026.) ORS's independent expert witnesses testified without reservation in support of the reasonableness and prudence of this selection. (Tr. VIII, p. 2025, l. 15 – 23.) The Company and ORS have provided the Commission with an extensive and thorough record in regards to the appropriateness of this technology and the reasonableness of the

selection process. After review of that record, the Commission finds that SCE&G's selection of the AP1000 units as Units 2 and 3 was prudent and reasonable.

3. The Qualification and Selection of Principal Contractors and Suppliers

The Base Load Review Act requires the Commission to make a finding concerning the prudence and reasonableness of the selection of the principal contractors and suppliers for the construction of the plant, as well as their qualifications to perform the work. S.C. Code § 58-33-270(B) (5). Units 2 and 3 will be built by Westinghouse Electric Co., LLC, as the principal nuclear systems supplier, and Stone & Webster, Inc. as the principal contractor. These two companies have formed a consortium that is the signatory for the EPC Contract to build the plant. In addition, the EPC Contract between the Company and Westinghouse/Stone & Webster provides a list of qualified suppliers approved by the Company from which Westinghouse/Stone & Webster can select the principal contractors and suppliers for this project. (Tr. III, p. 579, p. 5 – 10; p. 585, l. 18 – 22; Hearing Exhibit 2, SAB-4, p. 3 – 10.)

a. Westinghouse/Stone & Webster

The record shows that the selection of Westinghouse and Stone & Webster to construct Units 2 and 3 is reasonable and prudent and that they are well qualified for the work. Westinghouse is recognized worldwide as a major supplier of nuclear technology and has been involved in nuclear power technology since the inception of the industry. (Tr. VIII, p. 2029, l. 11 – 14.) In the 1950s, Westinghouse built both the first military and the first commercial nuclear power plants. (Tr. VIII, p. 2027, l. 7 – 18.) Westinghouse has been involved with the Company and the V.C. Summer site for over

forty-four years. It designed the Parr demonstration nuclear plant which was constructed adjacent to the V.C. Summer site in the early 1960s. (Tr. VIII, p. 2028, l. 22 – p. 2029, l. 1.) Westinghouse also designed and built Unit 1, which went into commercial operation in January 1984. (Tr. VIII, p. 2029, l. 1 – 2.)

Currently, almost 60% of the United States' operating reactors are based on Westinghouse designs. (Tr. VIII, p. 2028, l. 2 – 3.) Westinghouse has also provided the design basis for almost 50% of the world's operating commercial nuclear power plants. (Tr. VIII, p. 2027, l. 11 – 13.) As mentioned above, the Westinghouse AP1000 design has been selected for 14 new nuclear units proposed to be built in the United States at this time. Westinghouse is clearly poised to continue to maintain a strong position in the industry and is fully qualified to be the supplier of nuclear systems to this project.

The construction contractor, Stone & Webster, is a 110-year old company that has been involved with design, construction and maintenance of nuclear power plants since 1957. It is currently a wholly owned subsidiary of The Shaw Group (Tr. VIII, p. 2029, l. 5 – 14.) Stone & Webster has recently been employed in the construction of a mixed-oxide fuel (MOx) facility at the Savannah River site and in the completion of construction of TVA's Brown's Ferry Plant. (Tr. III, p. 583, l. 19 – p. 584, l. 1.) Both Westinghouse and Stone & Webster are currently involved in construction of AP1000 reactors in China, two in Sanmen, China and two more in Haiyang, Shandong Province, China. (Tr. VIII, p. 2028, l. 13 – 15.) Westinghouse/Stone & Webster consortium has been contracted by the Southern Company to construct two new AP1000 units at Plant

Vogtle in Georgia, and is in contract negotiations with Duke Power, Progress Energy and TVA for the construction of multiple units on their behalf.

One of the key considerations regarding a nuclear supplier is the strength of the corporate quality assurance program that will be employed to meet applicable NRC requirements and to ensure that the plant can be built and operated in a reliable and dependable manner. (Tr. III, p. 583, l. 5 – p. 584, l. 5.) Westinghouse has a long-standing relationship with SCE&G involving maintenance and improvements to its existing nuclear and fossil facilities. SCE&G's witnesses testified to their familiarity and experience with the Westinghouse quality assurance program and their review and evaluation of the comparable program run by Stone & Webster. The Company's witnesses testified that these quality assurance programs are fully adequate to protect the Company's interests in the quality of the equipment, components and construction of Units 2 and 3. (Tr. III, p. 584, l. 3 - 5.)

Based upon the foregoing, the Commission finds that the selection of Westinghouse/Stone & Webster as the suppliers and contractors for Units 2 and 3 is reasonable and prudent.

b. Other Vendors

The EPC Contract between SCE&G and the Westinghouse/Stone & Webster consortium requires all subcontractors and suppliers be selected from a list of prescreened/preapproved vendors. (Hearing Exhibit 2, SAB-4, p. 1 - 2.) All suppliers performing nuclear safety related work will be required to comply with the consortium's quality assurance program. (Hearing Exhibit 2, SAB-4, p. 1.) The consortium's Project

Quality Assurance Program is an exhaustive process of evaluation and approval of all suppliers of safety-related products and services. The suppliers, including those that carry the ASME nuclear accreditation, are evaluated annually and audited every three years, including suppliers that carry the ASME nuclear certification. (Tr. VIII, p. 1901, l. 11 – 14.) The criteria to qualify potential suppliers for use in supplying components for the AP1000 under the quality assurance program include: the supplier being listed on the consortium's qualified suppliers list, the supplier having a standing relationship with the consortium for the supply of the specific type of component, and the supplier having a proven track record of successfully supplying quality components to the nuclear industry. (Hearing Exhibit 2, SAB-4, p. 1.) Once a vendor satisfies these criteria, the consortium conducts an on-site audit to perform an assessment of the potential supplier's facilities, capabilities, and programs. (Hearing Exhibit 2, SAB-4, p. 1.) All qualified suppliers are thereafter evaluated annually and audited, except under special circumstances, every three years. (Hearing Exhibit 2, SAB-4, p. 1.) A list of potential suppliers and vendors for the Units 2 and 3 was included as Exhibit P to the EPC.

In addition to the consortium's review and audit processes, SCE&G has evaluated the suppliers and subcontractors identified in Exhibit P to the EPC and the consortium's quality assurance programs under which they will operate. (Tr. III, p. 587, l. 8 – 11; Hearing Exhibit 2, SAB-3, p. 1.) Many of these subcontractors and vendors have been known by the Company for decades and have worked with the Company successfully in operating Unit 1 and other electric generating stations. (Tr. III, p. 587, l. 11 – 15.)

In addition, SCE&G has contracted with the Bechtel Corporation to serve as the lead contractor in preparing the site-specific Combined Construction and Operating License Application ("COLA") for Units 2 and 3 and in assisting SCE&G in obtaining the required license from the NRC. As Company witness Byrne testified, Bechtel is one of the most experienced and well-recognized firms internationally in power systems construction, engineering and consulting services. (Tr. III, p. 604, l. 9 – 11.) SCE&G has extensive knowledge of Bechtel Corporation both from past projects and from Bechtel's standing and involvement in the nuclear power industry. (Tr. III, p. 604, l. 11 – 14.) According to Mr. Byrne, the NRC has already completed its sufficiency review of the COLA prepared by Bechtel for Units 2 and 3 and has declared the COLA sufficient and available for review and comment. Mr. Byrne testified that SCE&G has been fully satisfied by the thoroughness, professionalism and competency of the work that Bechtel and its subcontractors have done to date and that Bechtel is capable of seeing the application through to its conclusion. (Tr. III, p. 604, l. 14 – 17.) The Commission finds that Bechtel and its subcontractors are well qualified to assist the Company in obtaining a license for the new Units.

Based on the foregoing, the Commission finds that the contractors and vendors, including those provided for in the EPC and otherwise, are competent and reliable to perform as subcontractors and vendors to the project and that their selection and qualifications were reasonable and prudent and fully satisfies the requirements of the Base Load Review Act.

4. The Terms of the EPC Contract

A key component of the prudency review envisioned by the Base Load Review Act is a review of the reasonableness and prudence of the contract under which the new units will be built. Units 2 and 3 will be constructed pursuant to the terms of an EPC Contract which SCE&G negotiated with Westinghouse/Stone & Webster over a two and a half-year period. Under that contract, SCE&G is responsible for providing the construction site and specified construction utilities and for obtaining permits and licenses needed to build and operate the Units. (Tr. III, p. 580, l. 12 – 14.) Westinghouse/Stone & Webster is responsible for other aspects of designing, engineering and constructing the Units. (Tr. III, p. 579, l. 13 – 16; Tr. III, p. 579, l. 21 – p. 580, l. 3.) Both a confidential and non-confidential version of the EPC Contract have been filed in the record of this proceeding as Exhibit C to Mr. Byrne's testimony. (Hearing Exhibit 2, SAB-3.)

a. Pricing Terms

The pricing under the EPC Contract divides the Westinghouse/Stone & Webster charges into seven specific categories. Each of those categories has distinct pricing terms that apply to those aspects of the work that fall within them.

- The Fixed with No Adjustment category includes some major plant components necessary to construct the Units. The price for these items is fixed in absolute dollars and no inflation adjustment or escalation rate applies to them. (Tr. III, p. 589, l. 5 - 11.)

- The Firm with Fixed Adjustment A category includes other items of major equipment for the plant. The price for this equipment is fixed in 2007 dollars. That price is subject to escalation based on a specified annual percentage rate that is established in the contract. (Tr. III, p. 589, l. 12 – 20.)
- The Firm with Fixed Adjustment B category includes specialized nuclear-specific labor, systems and material charges that will be incurred by Westinghouse Electric Corporation directly in designing and constructing the Units. The price for this work is fixed in 2007 dollars and is subject to escalation based on a specified annual percentage rate that is slightly higher than the rate for Firm with Fixed Adjustment A category. (Tr. III, p. 589, l. 21 – p.590, l. 9.)
- The Actual Craft Wages category includes all site craft labor, which is skilled construction labor such as welders, pipe fitters, riggers, and concrete finishers. These labor costs are charged at Westinghouse/Stone & Webster's actual cost at the time they are incurred. (Tr. III, p. 590, l. 19 – 21.)
- The Non-Labor Target category includes costs of construction material and supplies as well as the cost of ancillary buildings such as warehouses. These costs are charged based on Westinghouse/Stone & Webster's actual cost at the time they are incurred. (Tr. III, p. 591, l. 1 – 5.)

- The Time and Materials category includes charges for the time and materials supplied by Westinghouse/Stone & Webster in support of SCE&G's obtaining required licenses and permits for the Units, and testing and start-up of the Units. These costs are charged based on Westinghouse/Stone & Webster's actual cost at the time they are incurred. No escalation rate is specified in the EPC Contract. (Tr. III, p. 591, l. 6 – 10.)
- The Firm with Indexed Adjustment category includes all items not included in other categories. Specifically, it includes such things as non-craft labor and ancillary costs of the construction project such as insurance. For charges that fall within this cost category, the underlying price in 2007 dollars is fixed, but the price is subject to escalation based on the Handy-Whitman All Steam South Atlantic Region escalator as it is updated year to year. (TR. III, p. 590, l. 10 – 18.)

Of these seven price categories, four are categories for which prices are fixed in absolute dollars, or are quoted in firm 2007 dollars with a stated escalation rate or specified inflation index. In these "fixed and firm" categories, SCE&G remains at risk for scope additions and change orders. Otherwise, substantially all of the non-inflation price risk is assumed by Westinghouse/Stone & Webster. (Hearing Exhibit 2, SAB-3, p. 3.)

The Target Price categories include Actual Craft Wages and Non-Labor Target. The EPC Contract sets a Target Price for these cost categories in 2007 dollars subject only to indexed inflation and to scope changes and change orders. If Westinghouse/Stone & Webster exceeds the Price Target, then it is at risk for a contractually determined portion of its profits on the excess work. (Tr. II, p. 179, l. 3 – 6.) If the work comes in under the Target Price, then Westinghouse/Stone & Webster are allowed to keep a majority of the savings. (Tr. II, p. 179, l. 6 – 8.) This combination of potential incentives and penalties provides Westinghouse/Stone & Webster with a strong motivation to complete the project at or below the Target Price.

The Time and Materials category is the only EPC cost category that is outside both the fixed and firm category and the target price category. It represents the cost of assistance that Westinghouse/Stone & Webster will provide to SCE&G in licensing, permitting and testing the Units and is a small component of the total price. (Tr.III, p. 592, l. 18 – p. 594, l. 11.)

A number of intervenors have raised questions concerning the degree of price certainty provided by the EPC Contract. SCE&G Witnesses Byrne and Marsh testified that in the EPC Contract negotiations, the Company sought to obtain the greatest degree of price assurance possible, with due consideration to the cost that Westinghouse/Stone & Webster's would charge for accepting additional price risk. (Tr. II, p. 178, l. 15 – p. 179, l. 9.) A review of the EPC Contract's pricing terms indicates that in excess of 50% of the total EPC price falls into fixed or firm categories. (Tr. III, p. 592, l. 5 – 7.) More specifically, these fixed and firm categories contain the major equipment and components

that are to be used in the Units, and the majority of nuclear-specific engineering and other services that will be provided by Westinghouse as the nuclear systems provider. (Tr. VIII, p. 2032, l. 1 – p. 2033, l. 5.) Westinghouse/Stone & Webster was able to provide fixed or firm pricing not only on the majority of the total price, but also on the majority of those elements of the equipment and services that were most uniquely nuclear in nature, and so subject to potential price risks that are unique as compared to more standard construction cost items. The Target Pricing provisions, quoted above, provide additional incentives to hold prices on other parts of the contract to anticipated levels. For these reasons, the Commission finds that the EPC Contract contains reasonable and prudent pricing provisions, as well as reasonable assurances of price certainty for a project of this scope.

b. Quality Assurance Terms

An important set of provisions in the EPC Contract are the terms related to ongoing quality control and quality assurance during the course of the project. The EPC Contract requires timely financial and status reporting by Westinghouse/Stone & Webster during the course of the project. SCE&G has the right to inspect all work, including fabrication conducted off-site by Westinghouse/Stone & Webster and in suppliers' and vendors' facilities. (Tr. VIII, p. 1901, l. 22 – p. 1902, l. 3.) SCE&G has the right to block any new vendors from being added to this list that do not meet its approval. (Tr. III, p. 586, l. 4 – 7.)

SCE&G has clear contractually-defined rights to access and inspect contractors' and subcontractors' facilities and to audit their quality assurance programs and

manufacturing techniques. (Tr. III, p. 586, l. 13 – 18.) The EPC Contract has specified witness points and hold points at which SCE&G personnel have the right to be present when certain key manufacturing processes take place, and to inspect the quality of partially completed equipment and components at designated stages of their production. (Tr. III, p. 586, l. 18 – 21.) SCE&G may designate additional witness and hold points at its expense. (Hearing Exhibit 2, SAB-3.) SCE&G has the right to reject work, equipment and components, the right to issue "stop work" orders to allow time to resolve questions concerning quality deficiencies, and the right to require contractors or subcontractors to change manufacturing processes to correct quality deficiencies. (Tr. VIII, p. 1902, l. 20 – 23.) The EPC includes detailed requirements for subcontractor quality assurance, reporting of defects and noncompliance to SCE&G and Westinghouse/Stone & Webster, quality control and inspection activities by SCE&G and Westinghouse/Stone & Webster to ensure performance, access and auditing of quality control by SCE&G at Westinghouse/Stone & Webster facilities and subcontractor facilities. (Tr. III, p. 586, l. 13 – 18.; Tr. VIII, p. 1902, l. 18 – 20.)

The record shows that the EPC Contract contains provisions that are reasonable and prudent and allow SCE&G to protect its interest and the interests of its customers in the quality of the work done to construct Units 2 and 3. The Commission points out that regardless of the terms of the EPC contract, SCE&G has the ultimate responsibility for the proper execution of the EPC contract and the construction of the units, including appropriate quality control and quality assurance.

c. Other Provisions of the EPC Contract

The EPC Contract sets definitive substantial completion deadlines for Units 2 and 3 of April 1, 2016 and January 1, 2019 respectively. Westinghouse/Stone & Webster must pay liquidated damages in material amounts if completion is delayed. (Tr. III, p. 598, l. 10 – 16.)

As to warranties, the EPC Contract contains warranties on materials, work and equipment which begin to run from substantial completion of each Unit or from the date that the equipment or component is placed into service if SCE&G places it into service before substantial completion of the Unit. (Tr. III, p. 599, l. 15 – p, 600, l. 9; Hearing Exhibit 2, SAB 3.) The EPC Contract contains provisions for SCE&G to purchase extended warranties on equipment at prices to be offered by Westinghouse/Stone & Webster. (Tr. III, p. 600, l. 6 – 9.) The EPC Contract contains clear capacity targets for Units 2 and 3, with liquidated damages if they are not met, and bonus payments if the plants demonstrate that they can reliably generate more power than specified in the EPC Contract. (Tr. III, p. 598, l. 10 – 16; Tr. III, p. 599, l. 1 – 6.) The EPC Contract contains clear processes and procedures for measuring compliance of the Units with capacity targets and guarantees. (Tr. III, p. 598, l. 20 – p. 599, l. 6; Tr. III, p. 599, l. 17 – p. 600, l. 9.)

As to change orders, the EPC Contract contains clear definitions of the sorts of conditions that entitle the contractors to change orders and associated price adjustments. Tr. III, p. 594, l. 17 – p. 595, l. 1.) These provisions are contained in Article 9 of the EPC Contract. These provisions specify in detail the sort of information required to be

submitted with a change order, the requirement for review and agreement by Westinghouse/Stone & Webster and SCE&G to change orders, the payment and schedule impacts of change orders and the handling of disputes as to change orders. (Tr. III, p. 595, l. 3 – 8.) Mr. Byrne testified that these change order provisions are reasonable and reflect standard practice in the industry and provide appropriate protection for SCE&G and its customers. (Tr. III, p. 595, l. 9 - 10.)

The EPC Contract contains guarantee provisions under which the parents of both Westinghouse (Toshiba, Corp.) and Stone & Webster (The Shaw Group) agree to stand behind the obligations of their subsidiaries up to certain defined amounts. (Hearing Exhibit 2, SAB-3.) It includes rights for SCE&G to terminate work under the contract during the construction process. (Tr. III, p. 669, l. 7 – 17.) In addition, it addresses such matters as Insurance; Limitation of Liability; Liens; Proprietary Data; Intellectual Property; Environmental Controls and Hazardous Materials; Title and Risk of Loss; Suspension and Termination of Work; Safety - Incident Reporting; Qualifications and Protection of Assigned Personnel (including provisions for fitness for duty and security screening; training to environmental, OSHA, NRC and other applicable Laws, NRC Whistleblower Provision and respirator protection); Records and Audits; Taxes; Dispute Resolution; Notices; Assignment; Waiver; Modification; Survival; Transfer; Governing Law - Waiver of Jury Trial - Certain Federal Laws; Relationship of Owner (SCE&G) and Contractor (Westinghouse/Stone & Webster); Third Party Beneficiaries; Representations and Warranties; and Miscellaneous Provisions. (Tr. III, p. 600 l. 12 – p. 601, l. 5.)

ORS experts conducted an extensive review of the EPC Contract and testified, as did Mr. Byrne, that its terms are reasonable and appropriate, consistent with industry standards, and reasonably protect SCE&G's and its customers' interests. (Tr. VIII, p. 1898, l. 6 – 20.) The evidence of record supports the conclusion that the terms of the EPC Contract are reasonable and prudent.

However, in any event, regardless of the terms of the EPC Contract, SCE&G has the ultimate responsibility for the proper execution of that contract and the construction of the Units, including appropriate quality control and quality assurance.

5. The Price of Units 2 and 3

The Combined Application, at Exhibit F, set out the estimated cost of Units 2 and 3 as $6,313,376,000 in escalated dollars. (Hearing Exhibit 16, EEB-1.) Of this amount, $1,514,340,000 represents escalations and inflation resulting in an unescalated cost of $4,799,036,000. (Hearing Exhibit 37.) Included in that amount is $264,289,000 of capitalized interest in the form of AFUDC. (Hearing Exhibit 16, EEB-1.) Accordingly, the estimated construction cost of the project in 2007 dollars is $4,534,747,000 (or $3,693 per KW), net of AFUDC.

The amount of $4,534,747,000, is the cost of Units 2 and 3 without AFUDC in 2007 dollars and is the capital cost which SCE&G asks this Commission to approve under the terms of the Base Load Review Act. (AFUDC and inflation will be calculated as set forth in this Order and added to it as the project proceeds.) The $4,534,747,000 is also the cost beyond which SCE&G must obtain Commission approval of a change in the project in order to remain eligible for revised rates under the Base Load Review Act.

Company witness Byrne testified that this cost was the result of intense negotiations which resulted in substantial price concessions from Westinghouse/Stone & Webster related to their interest in closing initial contracts to ensure that their technology led in the revitalization of the nuclear industry in the United States. (Tr. III, p. 633, l. 12 – p. 634, l. 1.) ORS Witness Crisp, who has international experience in power plant negotiations, testified that SCE&G was the clear winner in the EPC Contract negotiations and that the resulting price for Units 2 and 3 is quite reasonable. (Tr. VIII, p. 1954, l. 14 – 18.) No party has taken the position that this price is unreasonably high for the price for new nuclear capacity. (Hearing Exhibit 37; Tr. III, p. 575, l. 15 – 22.)

Instead, FOE argued that this price is unrealistically low. However, as discussed above, there is nothing in the EPC Contract or the cost schedules and estimates based on it to support the argument that SCE&G has underestimated the foreseeable cost of the Units. There are no terms or provisions in the EPC Contract or elsewhere that support the assertion made at the hearing that "bait and switch" pricing underlies the price presented in the Combined Application. The $4,534,747,000 price includes all major aspects of plant construction and licensing, reasonable estimates of owner's cost, including licensing and permitting costs and project oversight, reasonable estimates of the costs of transmission upgrades associated with the Units, and reasonable amounts of additional project contingencies in addition to those already included in the underlying price bids and estimates. (Hearing Exhibit 2, SAB-3.) Given the contractual commitments, inflation assumptions and contingencies that this price includes, the Company's price estimate constitutes an estimate of the price of the Units that is

reasonable and prudent and provides an appropriate basis for approved capital costs to be established in the requested base load review order.

6. The Company's Plan for Financing Units 2 and 3

Certain of the intervenors have raised questions about whether SCE&G can successfully finance the construction of Units 2 and 3. The concerns raised relate to a) the specificity of SCE&G's financing plan as presented in this proceeding, b) the overall ability of SCE&G to finance the project, and c) the ability of SCE&G to finance the project in the context of the liquidity and financial crisis that the nation is experiencing at this time.

a. The Reasonableness and Practicality of SCE&G's Financing Plan

The record shows that SCE&G will finance the immediate cash needs of its construction program using short-term borrowing. (Tr. IV, p. 932, l. 11 – 12.) Later, as short term debt reaches a sufficient amount, the Company will replace the short-term debt with medium to long term debt. (Tr. IV, p. 932, l. 14 – 16.) The timing, size, and terms of these medium-term to long-term debt issuances will depend on market conditions at those times and the cash needs of the project as they develop. As to capital structure, Mr. Addison testified that the Company will monitor its equity to capital ratios, and plans to issue equity sufficient to finance the nuclear investment on a 50-50 debt/equity basis over time. (Tr. IV, p. 932, l. 21 – p. 933, l. 1.) The timing and amount of these future equity issuances will also depend on future market conditions. (Tr. IV, p. 933, l. 1 – 3.)

As Company witness Addison testified, this approach is in keeping with the Company's standard practice when investing in major capital projects on its system. As

is typically the case, the timing and amount of future debt and equity issuances cannot be predicted with specificity. (Tr. IV, p. 932, l. 11 – 20.)

SCE&G will use revised rates under the provisions of the Base Load Review Act to generate funds to pay debt service on the newly issued debt, and to provide earnings to support the newly issued equity. (Tr. IV, p. 917, l. 14 – 19.) These revised rate filings will allow the Company to obtain a timely recovery of the cost of capital associated with its ongoing investment in the construction of the new units as that construction proceeds. In the Combined Application and the exhibits to the testimony of Company witness Best, the Company has provided a detailed schedule of the revenue requirements to support its investment in the new units year to year. It has also provided the projected rate adjustments year by year to support this investment. The anticipated rate adjustments will be made through revised rate filings under the Base Load Review Act. As Company witness Addison testified, these adjustments are self-calibrating and will reflect the current cost of debt, the current capital structure and the current amount of capital investment in the Units at the time of each revised rates proceeding. They will reflect a return on equity that is set at a rate, 11%, that is sufficient in current conditions, but can change if the Commission sets a different return in a future rate proceeding. The rate adjustments needed to support the construction of the Units will be spread over the period between 2009 and 2019. In no year is any projected increase related to the investment in the Units anticipated to exceed 4%. (Tr. IV, p. 924, l. 12 – 21.)

Based on the evidence on the record in this proceeding, the Commission finds that the financial plan set out here is reasonable, prudent and practical.

In addition, as Mr. Addison testified, this plan has been presented to the investment community, including rating agency personnel, investment analysts, institutional investors, and hedge-fund investors. They have been supportive of the plan and the Company's ability to raise capital under it, assuming a positive outcome to these proceedings. Their support is indicated in the strong investment grade debt ratings that have been affirmed for SCE&G's debt, and in the reasonable stock prices that the Company has maintained even in the face of current conditions. The evidence on the record clearly supports the Company's ability to finance the construction of Units 2 and 3 using its current financing plan and the mechanisms provided by the Base Load Review Act. (Tr. IV, p. 943, l. 5 – p. 944, l. 2.)

b. The Level of Detail Presented in the Plan

Certain of the intervenors challenged the level of detail presented concerning the Company's financial plan. The testimony on the record of this case, however, shows that the scope and detail of the financial plan as presented here is not in any way deficient for purposes of this proceeding. As Mr. Addison testified, the plan presented here is the same plan that has been presented to the rating agencies, to investment analysts and to investors. The plan does not contain details concerning the size and dates of future debt and equity issues, because those details depend on the timing of future cash needs, and the nature of future market conditions which cannot be known at this time. (Tr. IV, p. 931, l. 13 – 15.) Instead, under the Company's plan, the timing, size and terms of future debt and equity issuances remain flexible. The record shows that the scope and detail provided concerning this plan is sufficient to allow the Commission to evaluate the

reasonableness and prudence of the decision to build Units 2 and 3, and to determine that the plan is both practical and realistic. (See generally, Tr. IV, p. 951 – 955.)

c. SCE&G's Ability to Execute the Plan in Current Markets

FOE and other intervenors challenge the reasonableness and prudence of the Company's decision to proceed with the construction of Units 2 and 3 in the face of current economic conditions. For instance, FOE's witness Brockway questioned whether the Company will be able to raise the required funds given the recent liquidity crisis and the tight financial markets that have resulted.

The record shows, however, that the Company has been able to maintain access to capital even during the height of the liquidity crisis. The Company's CFO, Mr. Addison, testified concerning the Company's experience during this period. He testified that during the last week of September 2008, which was at the height of the liquidity crisis, SCE&G went to the market for $250 million in 10-year first mortgage bonds to fund its operations, including ongoing investments in Units 2 and 3, and to increase its cash reserves. (Tr. IV, p. 928, l. 17 - 19.) In all, the Company received formal expressions of interest in these bonds that totaled $1.3 billion. (Tr. IV, p. 928, l. 22 – p. 929, l. 1.) In light of this market response, SCE&G increased the size of the ultimate issue to $300 million and tightened the coupon interest rate on the bonds from 6⅞ percent interest to 6½ percent. (Tr. IV, p. 928, l. 17 – p. 929, l. 3; Tr. IV, p. 950, l. 19 – 20.) The bond issue was successfully closed during the first week in October and, according to Mr. Addison, the Company has continued to receive unsolicited inquiries from large investors wanting to acquire more SCE&G bonds. (Tr. IV, p. 928, l. 17 – p. 929, l. 11.)

At the same time, the Company has continued to maintain a stock price that supports its access to additional equity capital on reasonable terms. (Tr. IV, p. 928, l. 10 – 15.) As to debt ratings, Moody's affirmed a strong, investment grade rating for SCE&G in November, 2008. (Tr. VI, p. 1241, p. 7 - 21.) The rating agency specifically recognized SCE&G's ability to access capital bond markets under current market conditions as evidence of investors' "flight to quality and perceived comfort in lower risks associated with rate-regulated business activities." (Tr. VI, p. 1242, l. 4 – 12.)

As Mr. Addison points out, in times of economic uncertainty, the market tends to favor stable and predictable companies like SCE&G as "safe harbors" for capital. (Tr. IV, p. 929, l. 14 – 21.) The record supports the fact that SCE&G does maintain reasonable access to capital in spite of the recent economic downturn. Current conditions have not made it impossible or unduly difficult for SCE&G to finance the construction of Units 2 and 3. (Tr. IV, p. 951, l. 13 – 15.)

FOE states in its Brief that, as recently as the end of September 2008, Fitch's ratings gave the Company a "Negative Outlook," due to "substantial financial commitment of its plan to construct two nuclear generating units for service in 2016 and 2019, respectively as well as the construction risk and uncertainties associated with a project of this size and complexity." FOE Brief at 45. However, as SCE&G witness Addison pointed out, Fitch had stated in an August 4, 2008 press release: "Ultimately, the rating impact will depend on management's financing plan, its ability to control construction costs, the regulatory treatment of investment expenditures and capital market access." (Tr.IV, pp. 912, l. 24-913, l. 2) Addison noted that the Company

addressed the cost-related risk through the Firm/Fixed price elements of the EPC Contract and other measures. The Company has stated it has access to capital. Through this Order, the Commission has resolved the regulatory question. Addison opined that neither the drop in short term rating by Fitch, nor the 2007 downgrade of SCE&G's credit rating put into doubt the Company's ability to finance the new units successfully. (Tr. IV, p. 914, l. 12-14.) Fitch downgraded the short-term debt of SCANA and its subsidiaries, but affirmed its Single A– rating for SCE&G as an issuer and an A+ rating for SCE&G's senior secured debt. The rating changes do not cast doubt on the ability of the Company to issue long term debt on reasonable terms on a going forward basis. (Id.) SCE&G currently maintains a strong investment grade rating that has been affirmed by two rating agencies after a comprehensive review of the Company's plans for building and financing VCSNS Units 2 and 3. (Tr. IV, p. 914, l. 14-17.)

d. Santee Cooper as a Financial Partner

Certain of the intervenors have challenged the completeness of the record as to the role of Santee Cooper in this project. As stated above, SCE&G will own 55% of the two plants and Santee Cooper will own the remaining 45% share. (Tr. XIII, p.2918, l. 1-5.). The Commission is not required to rule on issues concerning Santee Cooper's need for the capacity it will purchase in Units 2 and 3 or the contribution to reliability and system economy those Units will make to its system. Nonetheless, evidence in the record shows that Santee Cooper and the cooperatives and municipalities it serves provide electricity to some of the fastest growing areas in South Carolina.

Certain of the intervenors have questioned whether the record in this case demonstrates Santee Cooper's ability to fulfill its financial obligations to the project. However, as the record shows, Santee Cooper is one of the largest public power utilities in the nation. (Tr. IV, p. 934, l. 7 – 9.) It has approximately $1.4 billion in annual revenue and $5.9 billion in assets. To support growth in its retail and wholesale service territory, Santee Cooper has accessed billions of dollars in capital in recent decades to build and upgrade power plants. (Tr. IV, p. 934, l. 10 – 12.) Santee Cooper's debt has been consistently rated AA by the major rating agencies. (Tr. IV, p. 934, l. 22 – p. 935, l. 1.) On October 24, 2008, Santee Cooper successfully marketed $667 million in revenue bonds in the midst of the ongoing market challenges. (Tr. IV, p. 935, l. 2 – 4.) Taken together, Santee Cooper and SCE&G provide wholesale or retail service for approximately 60% of the customers in South Carolina, have combined electric revenues of over $3.3 billion, and combined electric assets that exceed $13 billion. They have successfully partnered in building and operating Unit 1 for over 30 years. The record clearly indicates that Santee Cooper is a partner for this project that is capable of living up to its commitments to the project and of raising the capital necessary to defray its portion of the cost of constructing Units 2 and 3. Combined, Santee Cooper and SCE&G represent a capable team for this project. (Tr. IV, p. 935, 954 – 956.) There is no reason to doubt the commitment by Santee Cooper's board and leadership to participate in this project. (See generally, Tr. IV, p. 955)While the Commission does not have jurisdiction over Santee Cooper, the fact that 45% of the electricity generated by Units 2 and 3 will be

generated for the benefit of cooperative customers in South Carolina is a significant factor in its decision.

7. SCE&G's Ability to Oversee Construction of the Units

One important consideration concerning the reasonableness and prudence of the construction plan is how SCE&G intends to oversee that construction to protect its interests and the interests of its customers. The record in this proceeding contains a detailed description of resources and an approach that SCE&G will use to ensure that those interests are protected. (Tr. III, p. 617, l. 7 – p. 620, l. 7.)

a. Internal Oversight

The Commission finds that the Company will be able to manage and oversee the construction of Units 2 and 3. Company witness Byrne testified that the Company's new nuclear deployment team includes engineering, licensing, construction, quality assurance, operations, training and accounting personnel who will provide comprehensive oversight of project construction and administration of the EPC Contract. SCE&G was in the process of hiring additional individuals at the time of the hearing. (Tr. III, p. 617, l. 10 – 13.) Mr. Byrne testified that specific members of the team will be charged with oversight of each component of the construction program and EPC Contract such that SCE&G's oversight group will mirror the organizational structure of the Westinghouse/Stone & Webster team that is building the Units. (Tr. III, p. 617, l. 13 – 20.) Members of the oversight group will sit in on construction meetings, participate in inspection, testing and acceptance protocols, and review and monitor issues of cost, budget compliance and milestone progress. (Tr. III, p. 617, l. 20 – p. 618, l. 5.) All told, more than 50 SCE&G

personnel will be committed to the new nuclear deployment team. (Tr. II, p. 179, l. 15 – 17.)

This construction oversight group, reporting to SCE&G's General Manager of New Nuclear Deployment, will meet, as necessary with the Project Directors for Westinghouse/Stone & Webster to review project status and schedule and will also meet with them monthly for in-depth reviews of budget and payment issues. (Tr. III, p. 618, l. 1 – 11.) The new nuclear deployment organization will issue written reports monthly to SCE&G's Senior Vice President for Generation and Chief Nuclear Officer and will meet quarterly with the Executive Steering Committee for the Project which is comprised of the President of SCE&G and the Chief Operating Officer of Santee Cooper. (Tr. III, p. 618, l. 11 – 15.) The General Manager of the New Nuclear Deployment group also has the authority to escalate issues to this senior leadership group at any time. (Tr. III, p. 618, l. 15 – 16.)

b. Third-Party Oversight

In addition to the oversight functions discussed above, the plant construction will be subject to oversight and review by the NRC. As testified by Company witness Byrne, the level of NRC oversight and control over the site will be significant and will be comparable to what it would be for an operating nuclear power plant, although focused specifically on construction and fabrication rather than operations. (Tr. III, p. 584, l. 8 – 14.) The Company expects as many as seven NRC inspectors to be on-site full time during construction. (Tr. III, p. 584, l. 14 – 16.) According to Mr. Byrne, the number of inspectors will be staged, beginning with module fabrication on site, and additional NRC

inspection teams will be sent to the site on a regular basis to inspect specific activities such as welding, ITAACs, start-up and testing. (Tr. III, p. 584, l. 16 – 20.)

In addition, this project will be subject to regular and continuous review and oversight by the ORS pursuant to the Base Load Review Act. S.C. Code Ann. § 58-33-277. Based upon the foregoing, the Commission finds that the Company has produced sufficient evidence to show that it will be able to sufficiently monitor and manage the construction of the Units 2 and 3 at the Jenkinsville site.

8. SCE&G's Ability to Operate Units 2 and 3 Successfully

Certain of the intervenors challenged SCE&G's ability to operate Units 2 and 3 successfully when constructed. Their concerns centered on SCE&G's size as a utility and its lack of a fleet of nuclear plants. However, the record clearly indicates that SCE&G has very successfully operated Unit 1 as a single unit for decades and has compiled an excellent operating record. As Company witness Byrne testified, utilities that operate fleets of nuclear plants nationally or regionally have not performed better or established a better nuclear operating culture than SCE&G. (Tr. IV, p. 864, l. 7 – 20.) In fact, he testified that fleet utilities may be at a disadvantage in retaining and managing a skilled operating team because their operations are widely disbursed and the chain of command is longer. (Tr. IV, p. 864, l. 77 – p. 865, l. 21.) Both Company witness Byrne and ORS Witness Crisp testified concerning the strength of SCE&G's current nuclear operations and culture. (Tr. III, p. 551, l. 8 – 19; Tr. IV, p. 858, l. 20 – p. 859, l. 4.) The record shows that SCE&G has been consistently successful in operating Unit 1 as a single unit. There is nothing to indicate that SCE&G cannot also successfully operate Units 2 and 3.

9. Risks of Construction

As required by S.C. Code Ann. § 58-27-250(8), SCE&G presented a comprehensive list of the risk factors it had identified concerning the construction and operation of the Units. (*See* Hearing Exhibit 2, SAB-7.) In his testimony, Company witness Byrne discussed those risks and the steps that SCE&G is taking to mitigate their potential to adversely affect the cost of the Units or the construction schedule for them. (See generally, Tr. III, p. 615 – 617.)

The record shows that the risks of proceeding with construction of these Units include licensing and regulatory risks, which include the risk that the NRC or other licensing agencies might delay the project by delaying the issuance of necessary permits, or might change regulatory or design requirements so as to increase costs or create construction delays. Risks of the project also include the risks related to the design and engineering that remains to be done on the Units; risks of procurement, fabrication and transportation related to equipment and components for the Units; construction and quality assurance risks generally; risks related to hiring, training and retaining the personnel needed to construct and operate the Units; financial and inflation risks; and disaster and weather-related risks. (Tr. III, p. 615, l. 14 – 21.)

In ruling on whether the decision to construct Units 2 and 3 is reasonable and prudent, the Commission must evaluate the risks of constructing these units compared to the risks of meeting the energy needs of SCE&G's customers by other means. As Mr. Byrne and Mr. Marsh testified, the risks related to other alternatives include the uncertainty as to future CO_2 emissions cost; the uncertainty as to future coal and natural

gas prices and supplies; the relatively large amount of coal and gas-fired generation already included in SCE&G's generation mix; the uncertainty as to the future costs and availability of AP1000 units or other nuclear units; the loss of special federal tax incentives if construction is deferred and other factors. (Tr. III, p. 616, l. 4 – 20; Tr. II, p. 170, l. 15 – p. 172, l. 16.)

There is no risk-free means to meet the future energy needs of SCE&G's customers or of the state of South Carolina. Based on the evidence of record, the Commission finds that it is reasonable and prudent to proceed with the construction of Units 2 and 3 in light of the information available at this time and the risks of the alternatives. As the record also indicates, the Company has taken reasonable steps to identify and mitigate risk factors related to this project. The Commission has reviewed the risks of the project as mitigated by SCE&G and has determined that it is reasonable and prudent to assume these risks in light of the risks of reliance on other energy sources to meet customers' future energy needs.

10. Risk Shifting

FOE has proposed that the Commission should attempt, in its base load review order, to preclude SCE&G from seeking recovery of any additional costs that might arise due to the occurrence of specified or unspecified risks of the project. The Commission finds that this request is contrary to the language and intent of the Base Load Review Act. That Act envisions a thorough prudency review of the decision to construct the Units at this juncture. As the Act envisions, ORS and the other parties to this case have been given a full opportunity to conduct discovery and present evidence on the prudency of the

Company's decision to proceed with the construction. ORS has in fact conducted a thorough investigation of the decision to construct the Units and has employed a diverse panel of well-qualified internal and external experts to do so. For its part, the Company has presented comprehensive and candid testimony concerning its risk assessment and decision making process related to these Units.

The Commission's approval of the reasonableness and prudency of the Company's decision to proceed with construction of the Units rests on a thorough record and detailed investigation of the information known to the Company and the parties at this time. Once an order is issued, the Base Load Review Act provides that the Company may adjust the approved construction schedule and schedules of capital cost if circumstances require, so long as the adjustments are not necessitated by the imprudence of the Company. S.C. Code Ann. § 58-27-270(E). The statute does not allow the Commission to shift risks back to the Company, as Ms. Brockway suggests, nor does the Commission find any justification for doing so in the record of this proceeding. In addition, risk shifting could jeopardize investors' willingness to provide capital for the project on reasonable terms which, in turn, could result in higher costs to customers.

B. Anticipated Construction Schedules and Contingencies and Anticipated Components of Capital Cost and the Schedules for Incurring Them with Contingencies

The Base Load Review Act requires the Commission to determine "the anticipated construction schedule for the plant including contingencies [and] the anticipated components of capital costs and the anticipated schedule for incurring them, including specified contingencies." S.C. Code Ann. § 58-33-270(B)(1), (2).

1. Construction Schedule

As discussed above, Westinghouse/Stone & Webster has contractually committed to have substantially completed Unit 2 by April 1, 2016 and Unit 3 by January 1, 2019. An anticipated construction schedule, in the form of a milestone schedule leading to completion of the two Units by the substantial completion dates mentioned above, was included in the Combined Application as Exhibit E and was introduced into the evidence as Hearing Exhibit 2, SAB-5 ("Exhibit E"). As to Exhibit E, the Commission finds that the milestone schedule it contains represents an appropriate anticipated construction schedule for the plant as required by the Base Load Review Act and approves it as such. The Commission has also reviewed the detailed construction schedule comprising Exhibit E to the EPC Contract which was entered into the record as Hearing Exhibit 5. This detailed construction schedule lists thousands of individual activities and tasks. Certain interveners suggested that this document might form a suitable approved construction schedule for purpose of this order, but this schedule is too detailed and subject to too much change and amendment to serve as the approved construction schedule envisioned by S.C. Code Ann. § 58-33-270(B)(1).

2. Plant Construction Cost Forecasts

The anticipated components of capital cost for the Units are set forth on Exhibit F to the Combined Application, which was entered into the record of this proceeding as Hearing Exhibit 16, EEB-1 ("Exhibit F" – Public Version). This capital cost schedule shows the anticipated capital cost of the plant and associated transmission, by year, broken down into the seven cost categories contained in the EPC Contract, as well as

owner's cost, transmission cost, and the forecasted amount of AFUDC. This schedule also sets forth the capital cost contingency associated with the plant costs and transmission costs by year. The base dollars in the schedule are all 2007 dollars, and inflation or escalation adjustments are separately stated by year for each of the major types of cost (plant cost, transmission cost, and contingencies).

SCE&G Witness Byrne testified that the estimates of EPC and owner's costs contained in Exhibit F are reasonable and provide a reliable forecast of plant costs based on the information known to the Company at this time. The Commission accepts this testimony as credible and finds that the plant construction cost projections set forth on Exhibit F, specifically the Cumulative Project Cash Flow, provide an appropriate schedule of capital cost of Units 2 and 3 for purposes of this proceeding. (Tr. III, p. 601, l. 10 – p. 602, l. 12.) As the Base Load Review Act envisions, the Commission is approving an overall capital cost per year for the project. The anticipated schedule of construction cost for the project is the Cumulative Project Cost Flow in Exhibit F (Public Version). The more detailed cost categories set forth in Exhibit F (Confidential Version) should be updated for reporting and monitoring purposes, but are not the basis on which compliance with capital cost schedules established herein will be determined going forward.

3. Transmission Cost Forecasts

Company witness Young testified concerning the transmission upgrades that would be needed to deliver the power produced by Units 2 and 3 to customers and the cost of those upgrades. (See generally, Tr. XII, p. 2716 – p. 2729.) His testimony supports the reasonableness of those cost estimates. Id.) The Commission accepts this testimony as credible and finds that the transmission cost projections set forth on Exhibit F provide an appropriate basis for establishing the anticipated cost of transmission improvements associated with Units 2 and 3 for purposes of this proceeding.

Company witness Young further testified that SCE&G intends to reroute the new transmission line it will build to support Unit 2 to better serve growth along the Interstate 77 corridor north of Columbia. (Tr. XII, p. 2721, l. 6 – 20.) The estimated cost of the line as originally routed is 74.2% of the estimated cost of the rerouted line. (Tr. XII, p. 2722, l. 20 – p. 2723, l. 3.) In keeping with standard practice in such cases, SCE&G intends to treat 74.2% of the rerouted line as a cost of Unit 2 with the balance being considered as a routine increase in transmission system investment and not as a plant cost under the Base Load Review Act. SCE&G has asked to be allowed to adjust this percentage if such an adjustment is required due to an expansion in the scope of the line construction project in the future. (Tr. XII, p. 2723, l. 3 – 5.) The Commission finds that this request is reasonable and appropriate and grants it on the term set forth in Mr. Young's testimony.

4. The Construction Cost Contingency Pool

The Base Load Review Act requires that the Commission establish contingencies to apply to the estimate of plant capital costs approved under its terms. S.C. Code Ann. § 58-33-270(b)(2). As set forth in the testimony of Company witnesses Byrne and Best, in preparing Exhibit F, the company established a cost contingency percentage for each pricing category under the EPC Contract, as well as for owner's costs and transmission costs. These contingency percentages were determined as a matter of sound engineering judgment based on SCE&G's assessment of the potential for actual costs to be greater than the forecasted costs based on such things as the anticipated need for change orders, the potential for work delays due to weather or unanticipated conditions, the potential for delays in receiving licenses and permits, the possibility that actual inflation would exceed applicable estimates or indices, and the possibility that the estimates of the units of time and materials used to price the project might understate actual requirements. (Tr. III, p. 620, l. 13 – p. 621, l. 11; Tr. VII, p. 1634, l. 17 – p. 1635, l. 8; Exhibit 16, EEB-2, p. 4)

The Commission has reviewed these contingencies and finds that they represent a reasonable set of contingencies for use in forecasting the cost of this project under S.C. Code Ann.§ 58-33-270(B)(2). The contingency percentage applied to each cost category bears a reasonable relationship to the risk of additional costs being incurred in that category. In total, the contingency pool included on Exhibit F represents a significant but not excessive percentage of the total project budget. The Commission finds that it is reasonable and prudent to include the contingencies proposed by the Company in the cost estimates for Units 2 and 3 as approved in this order.

In reaching this decision, the Commission has considered two arguments made by the South Carolina Energy Users. The first is the argument that S.C. Code Ann. § 58-33-270(B)(2) does not allow the Commission to establish a construction cost contingency pool. The statutory provision in question requires that the Commission establish "the anticipated components of capital costs and the anticipated schedule for incurring them, including contingencies." (Id.) The Commission finds that the plain meaning and grammatical structure of this statutory provision intends that contingencies be provided both for capital costs and for the schedule for incurring capital costs. In addition, cost contingencies are a standard and recognized feature of construction budgets. If such contingencies were not allowed under the Act, the Company would be required to seek an amendment to the base load review order for every change order, scope or design change, or mis-forecast of owner's cost or transmission cost during the life of the project. This is not a reasonable reading of the statute. Instead, the Commission reads the statute as authorizing the Company to include a reasonable capital cost contingency in its filings, for evaluation and approval by this Commission. There is no logical or policy reason to read the statute otherwise.

The second argument made by the Energy Users is that the Company double-counted inflation in calculating the amount of the contingency presented in Exhibit F. The Energy Users did not present any testimony concerning this point from its witness Mr. O'Donnell, but instead attempted to develop this point on cross examination of Ms. Best and Mr. Addison. (See generally, Tr. VII, p. 1738, l. 13 – p. 1741, l. 2; Tr. VI, p. 1204, l. 23 – p. 1207, l. 5.) Both denied any such double counting. (Tr. VII, p. 1740, l. 4

– p. 1741, l. 2; Tr. VII, p. 1741, l. 23; Tr. VI, p. 1206, l. 10 – p. 1207, l. 5.) Moreover, a review of Exhibit F establishes that the Company in fact allocated contingency amounts by year in 2007 dollars, and then escalated them to current year dollars only once. The Commission finds that the Company did not double escalate any contingency amounts.

5. Administration of the Construction Cost Contingency Pool

As Company witness Byrne points out, the timing of the use of contingencies is by definition unpredictable and may occur in one part of the project and not in others. (Tr. III, p. 622, l. 20 – p. 623, l. 4.) For that reason, the Company asked for the right to treat the total amount of contingency for the project as a single pool of funds such that it can allocate contingencies among categories and years as circumstances dictate. (Tr. III, p. 622, l. 8 – 11.) According to the Company, doing so would not change the overall cost of the project in 2007 dollars, but would allow for greater flexibility in administering the cumulative cash flow as issues arise in the construction process. As contingency amounts are moved from year to year, they would be adjusted to properly account for any applicable inflation related to them. (Tr. III, p. 622, l. 18 – p. 623, l. 4.)

We reject this proposal. We believe that the Company's proposal allows too much flexibility in the use of the funds. A better plan is to allow these amounts to be pooled on a prospective basis. In other words, the Company should be allowed to carry any unspent balance of its allocated yearly contingencies in Exhibit F from a current project year into the following years with appropriate inflation adjustments. Further, the Company is allowed to spend contingency amounts from future years sooner than anticipated on the schedule in Exhibit F, Chart A, provided that those contingencies are

associated with capital costs which are being accelerated up to 24 months ahead of schedule, as also allowed under this Order. We hold that these conditions balance the Company's need for flexibility with the accountability advocated by the intervenors.

6. Schedule Contingencies

The Base Load Review Act requires that the Commission establish contingencies to apply to the plant construction schedule approved under its terms. S.C. Code Ann. § 58-33-270(B)(1). In its application and testimony, the Company asked for a construction schedule contingency of 30 months that would apply to the substantial completion dates of each unit and to each of the milestones set forth on Exhibit E. These schedule contingencies reflect the fact that there are inevitable risks and uncertainties surrounding a construction project as complex as that envisioned here. As Company witness Byrne testified, SCE&G's most significant schedule risks concern the issuance of a COL which is a prerequisite to Westinghouse/Stone & Webster being able to proceed with nuclear safety-related construction. Other schedule concerns would involve major components being damaged in transit or their manufacturing being delayed for any number of reasons. Mr. Byrne testified that a delay of up to 30 months, while unlikely, is not inconceivable, and would not be likely to change SCE&G's commitment to complete the plant. (Tr. III, p. 623, l. 20 – p. 624, l. 3; Tr. III, p. 629, l. 7 – 13; Tr. III, p. 709 l. 1 – 9.) Given the full scope of the project, 30 months reflects a schedule contingency of approximately 20%.

As both Mr. Addison and Mr. Byrne testified, a reasonable schedule contingency allows SCE&G to assure the financial community that even a significant delay would not take away the assurances provided by the Base Load Review Act. Such assurances are a

valuable means of increasing investor confidence in the project, whether or not the schedule contingency is ever used. Furthermore, a longer schedule contingency does not undercut the Company's commitment regarding price. Regardless of how the schedule contingency may be used, the Company must still meet the financial target of completing the plant for $4,534,747,000 in 2007 dollars (net of AFUDC) to remain eligible to benefit from the Base Load Review Act's provisions.

ORS Witness Crisp stated that the schedule contingency should be limited to 15 months, and that SCE&G be required to receive ORS approval to extend it to 30 months if cost projections are not being met. However, Crisp also cited a number of possible reasonable scheduling contingency periods, including an 18 month alternative. Tr. IX, p. 2281, l. 13.

We hold that, for a project of this magnitude, a possible delay of 30 months is simply too long a period in the absence of Commission review of the circumstances surrounding the delay. The Company will have to seek approval of this Commission if it desires to delay its anticipated milestone schedule, or a component of its milestone schedule, by more than 18 months.

7. Capital Cost Rescheduling

The Base Load Review Act provides for the Commission to establish contingencies to apply to the schedule on which capital costs are incurred. In the Combined Application, the Company has requested that the order in this proceeding allow it to shift costs within Exhibit F to the Combined Application, by accelerating amounts listed there by up to 24 months, or by delaying amounts listed there by up to 30

months. As the Company's Witness Byrne testified, it may be possible to accelerate some or all aspects of construction of the Units if NRC licensing takes less time than expected, if weather and site conditions are more favorable than expected, or if other circumstances permit. It is in the interest of the Company and its customers to complete the Units as early as possible, and advancing elements of the schedule may allow this. However, without a schedule contingency allowing the amounts reflected in Exhibit F to be advanced, SCE&G could be in a position of exceeding the Cumulative Project Cash Flow because the project was ahead of schedule. (Tr. III, p. 624, l. 6 – 22.) For the reasons stated in the Combined Application and the testimony of Mr. Byrne, the Commission finds that the requested 24-month cost acceleration contingency is reasonable and should be granted.

The other aspect of the Company's request is that, consistent with the construction schedule contingency of 30 months, it be allowed a 30-month contingency to move portions of forecasted plant costs into the future where circumstances require. This delay contingency will allow the forecasted plant cost category expenditures as listed on Exhibit F to remain in step with the construction schedule as it evolves and will otherwise provide the Company with a means to insure investors that the protections of the Base Load Review Act will not be lost if delays push capital cost payments into the future. As mentioned above, such assurances are a valuable means of increasing investor confidence in the project whether or not they are ever used. Furthermore, the Company must still complete the plant for $4,534,747,000 in 2007 dollars (net of AFUDC) to remain eligible for revised rates under the Base Load Review Act. This Commission

finds, however, that in the absence of Commission review of the circumstances surrounding the delay, a 30-month capital cost rescheduling contingency is unreasonable and should be denied. For a project of this magnitude, the 30-month period is simply too long a period without Commission review.

We hold that an 18-month capital cost rescheduling contingency period, which is consistent with the construction schedule contingency period granted above, should be approved. The Company may therefore shift into the future any part of the funds contained within any of Plant Cost Categories or the Transmission Project cost categories listed on Exhibit F by up to 18 months, as circumstances indicate, consistent with the provisions of this Order. A shifting into the future of any part of the funds any further than 18 months will require the approval of this Commission.

C. Inflation Indices

The Base Load Review Act requires the Commission to establish inflation indices covering major cost components or groups of related cost components of the plants. The inflation indices used by the Company in preparing Exhibit F, and proposed for adjusting those capital costs during plant construction are set forth in Exhibit I. (Hearing Exhibit 16, EEB-2-P.) As set forth in Exhibit I, the project costs have been allocated into nine cost categories that are defined by risk profiles for each category. (Tr. VII, p. 1634, l. 17 – 19; Hearing Exhibit 16, EEB-2-P.) Three of these cost categories involve costs that are fixed or firm with contractually fixed rates of escalation. (Tr. VII, p. 1634, l. 19 – 21.) As to these items, there is no need for the Commission to specify a different inflation

index, since escalation is already included in the price, or will be included when the cost is billed using the contractually established escalation rate.

Company witness Best has testified concerning the inflation indices that the Company proposes to use in adjusting the other cost categories. In Exhibit I, Ms. Best has submitted the specific year-by-year values for each index as well as three, five and ten-year averages. Ms. Best testified that each of the indices is widely-accepted in the industry and is appropriate for use in escalating the particular category of cost to which it intended to apply. (Tr. IV, p. 923, l. 22 – p. 924, l. 3.) These indices are discussed separately below.

1. Handy-Whitman Indices

Five of the above-enumerated cost categories provide for the fixed or actual costs to be adjusted through application of various Handy-Whitman indices. (Exhibit I, pp. 2 – 3.) As testified to by Company witness Best, the Handy-Whitman indices are well-recognized and commonly used in the utility industry to estimate the cost of constructing facilities. (Tr. VII, p. 1639, l. 9 – 11.) According to Ms. Best, SCE&G has used these indices for decades and has determined that they are reliable and useful for estimating the cost of construction of utility facilities. (Tr. VII, p. 1639, l. 11 – 13.) Depending upon the category of costs, SCE&G has proposed the use of the Handy-Whitman All Steam Generation Plant Index, the All Steam & Nuclear Generation Plant Index, and the All Transmission Plant Index to determine the escalation amount relative to specified cost categories. (Hearing Exhibit 16, EEB-2, p. 2 – 3.) The Handy-Whitman indices also are broken down by region, and SCE&G is using the South Atlantic Region indices for

purposes of calculating the escalation adjustment in this proceeding. (*Id.*) ORS witness Crisp testified that Handy-Whitman is an industry standard for escalating construction costs and using the South Atlantic Region package assures that costs are reflective of regional economic considerations. (Tr. VIII, p. 1912, l. 1 – 4.)

The Handy-Whitman indices set forth in Exhibit I are indices that are targeted to the specific types of utility construction involved in this project as well as the region in which that construction will take place. For these reasons, the Commission finds the use of the Handy-Whitman inflation indices to be appropriate for use as proposed by the Company in Exhibit I.

2. Chained GDP Index

The Company has, for planning purposes, utilized the Gross Domestic Product Chained Price Index (GDP-CPI) to escalate owner's costs. This cost category includes SCE&G's internal labor cost associated with overseeing and managing the project as well as materials, insurance, overheads, and similar costs incurred directly by SCE&G. (Tr. VII, p. 1642, l. 7 – 11.)

The GDP-CPI is a commonly-used index of general escalation published by the U.S. government. (Tr. VII, p. 1642, l. 10 – 11.) The Commission finds the use of the GDP-CPI inflation index to be appropriate for use in escalating owner's costs in this project as proposed by the Company in Exhibit I.

3. EPC Fixed Adjustments

Within the EPC Contract, the Firm with Fixed Adjustment A and Firm with Fixed Adjustment B cost categories, are subject to escalation based upon fixed escalation

percentages. Firm with Fixed Adjustment A represents certain plant components specified in the EPC Contract. Firm with Fixed Adjustment B represents specific Westinghouse charges. (Tr. VII, p. 1637, l. 19 – 22.) These costs are escalated based on the escalation percentage specified in the EPC Contract. According to Company witness Best, the difference between these two categories regarding an inflation adjustment is that Firm with Fixed Adjustment B requires, in addition to the escalation percentage contained in Firm with Fixed Adjustment A, a modest additional amount intended to compensate Westinghouse for the additional anticipated cost of attracting and retaining qualified nuclear engineers and other nuclear specialists and for assuming the cost risks involved in the specifically nuclear aspects of this project. (Tr. VII, p. 1637, l. 22 – p. 1638, l. 6.) The Actual escalation percentages assigned to each of these risk categories are set forth in confidential version of Exhibit I. (Hearing Exhibit 16, EEB-2)

The Commission finds that these contractual fixed escalators reflect reasonable escalation percentages that are the result of extended negotiations between Westinghouse/Stone & Webster and SCE&G. These percentages will in fact be used to determine the charges that SCE&G will pay for costs incurred under the EPC Contract. As such, it is appropriate that the Commission allow them to be used in escalating the cost categories to which they pertain, as set forth in Exhibit F.

4. Administration of the Inflation Indices

In the Combined Application, and in the testimony of Company witness Best, the Company specified how it proposed to update the schedule of capital costs approved in

this order for changes in the inflation indices. Specifically, in the Combined Application the Company requested:

For past periods for which actual index information is available at the time SCE&G files its report, SCE&G proposes to use that actual index information in recalculating its capital cost projections;

For past periods for which actual index data is not yet available at the time SCE&G files its report, SCE&G proposes to use the average for the most recent 12-month period for which actual data is then available (the "Current 12-Month Data"). If Current 12 Month Data is used for any past period, that data will be updated in future reports when actual index information becomes available.

SCE&G also proposes to use Current 12-Month Data to update forecasts for the 12-month period that follows the close of each current reporting period.

For periods more than 12 months beyond the close of the current reporting period, SCE&G proposes to use the most current five-year average for the applicable inflation index.

In cases where out-of-period adjustments are made in index information, those adjustments will be reflected in the next report filed.

During construction of the Units, the Company will be required to calculate the escalation associated with actual payments made or cost incurred. The Company proposes to do this by converting the actual cost incurred to 2007 dollars using the appropriate escalation adjustment. It would then account for the base cost of the item and the associated escalation using the resulting figures. Such an adjustment will be required

for all costs except for Fixed with No Adjustment items where no escalation adjustment is required.

This approach to updating cost data is consistent with the approach used in forecasting the cost of the Units, as set forth in Exhibit F to the Combined Application. The Commission finds that this approach to updating the schedules of capital costs is reasonable and approves its use.

5. Conclusion as to Escalators

Based upon the foregoing, the Commission hereby establishes the cost escalators as specified in Exhibit I to be the escalators to be used by the Company for updating the forecasts of plant and transmission construction costs approved in this order. The Commission directs the Company to use those indices to update the forecasted costs in its quarterly reports to the ORS and the Commission using the protocols set forth above.

D. Return on Equity

Pursuant to the Base Load Review Act, the Commission is required to establish the return on equity related to the base load plant construction. For the purposes of the Combined Application, SCE&G is requesting that the 11.0% return on equity established in Order 2007-855-E apply to revised rates filings related to Units 2 and 3. (Tr. IV, p. 924, l. 12 – 15.) The Company has testified that it believes that, currently, a return on equity set at that 11.0% level will provide sufficient cash flow to support financing of the Units, and will meet investors' reasonable expectations of a return given the risks involved in base load construction. (Tr. IV, p. 924, l. 17 – 20.) The Commission finds

that the Company's request regarding return on equity is authorized under the Base Load Review Act, S.C. Code Ann. §§ 58-33-250, and 58-33-220(16), and is approved.

E. Rate Design/Class Allocation Factors

Pursuant to the Base Load Review Act, the Commission, in a base load review order, shall establish the rate design and class allocation factors to be used in calculating revised rates related to a base load plant. In establishing revised rates, all factors, allocations, and rate designs shall be as determined in the utility's last rate order or as otherwise previously established by the Commission, except that the additional revenue requirement to be collected through revised rates shall be allocated among customer classes based on the utility's South Carolina firm peak demand data from the prior year. S.C. Code Ann. § 58-33-270(D).

The Company's electric rates were last approved by the Commission in Order No. 2007-855. As required by the Base Load Review Act, in establishing the proposed revised rates, SCE&G has utilized the factors, allocations, and rate design used to establish revised rates approved by the Commission in the prior rate order. (Tr. XII, p. 2836, l. 1 – 3.)

In the Combined Application, the Company indicated a target revenue increase of $8,986,000. The ORS audit of the Company's application revealed that the Company had not allocated any of the proposed revenue requirements to its wholesale service. (Tr. IX, p. 2355, l. 5 – 8.) As indicated above, SCE&G's major wholesale customers are anticipated to leave the system in the near future, but those departures have not taken place yet. Taking the Company's wholesale jurisdiction into account, and based on the

Company's summer 2007 coincident peak, ORS proposed an allocation of the target revenue increase to retail and wholesale of 94.33% and 5.67%, respectively. (Tr. IX, p. 2355, l. 8 – 9.) ORS witness Mrs. Malini Gandhi testified that based on ORS's examination of the books and records of the Company, the total additional revenue requirement is $8,271,484, with a resulting retail service class revenue increase of $7,802,491. (Tr. IX, p. 2335, l. 19-22.) These amounts were calculated using total Company CWIP of $65,960,797, as reviewed and examined by ORS audit staff, through June 30, 2008. (Tr. IX, p. 2335, l. 7-8.) Applying the updated tax grossed up cost of capital of 12.54% supplied by Dr. Carlisle in Hearing Exhibit 26, Mrs. Gandhi determined the additional revenue requirement is $8,271,484. The application of the retail jurisdictional factor of 94.33% to the total Company revenue requirement of $8,271,484 results in an additional retail revenue requirement of $7,802,491. (Tr. IX, p. 2356, l. 1 – 3.) The Company reviewed the ORS recommendation and agreed that the allocation factors in its proposed rate increases should be adjusted to reflect an allocation of a part of the total revenue requirement to wholesale customers accordingly. (Tr. XII, p. 2844, l. 8 – p. 2845, l. 18.)[5] Based upon the ORS testimony, the Company modified Exhibit K to the Application (Hearing Exhibit 36) to reflect a recalculated retail revenue requirement of $7,800,664. (Tr. XII, p. 2846, l. 15 – 19.)[6] The Commission notes that these allocations may need to be reviewed and readjusted in future revised rates filings if wholesale customers depart the system as anticipated.

[5] A typographical error in the Court Reporter's transcript identifies these pages as pp. 2744 and 2745.

[6] A typographical error in the Court Reporter's transcript identifies this page as p. 2746.

As further required by the Base Load Review Act, the additional revenue requirement to be collected through revised rates has been allocated among customer classes based on the Company's South Carolina firm peak demand data from the prior year. For the purposes of allocating the proposed revised rates in this case, SCE&G utilized data from the summer peak for 2007. (Tr. IX, p. 2836, l. 3 – 7.) According to Company witness Jackson, the Summer 2007 peak demand occurred on August 10, 2007. (Tr. IX, p. 2836, l. 16.) Using this peak demand data, the relative percentages of retail demand allocation for the various classes, as reflected in Hearing Exhibit 35, KRJ-1, p. 1, are as follows: Residential Service is 48.10%; Small General Service is 17.98%; Medium General Service is 11.27%, and; Large General Service is 22.65%. (Tr. IX, p. 2836, l. 16 – 20.) The summer peak demand allocation methodology used by SCE&G to determine these percentages is the peak demand methodology historically used by the Commission in setting SCE&G's rates. (Tr. XII, p. 2836, l. 20 – 2837, l. 1.)

In reviewing the proposed rate design and class allocation factors, the Commission notes that the Company is not requesting to make any adjustment to the basic facilities or demand charges in the revised rates associated with this proceeding. (Tr. XII, p. 2839, l. 2 – 8.) The Company testified that it has been its practice over the last twenty years to adjust basic facilities charges for retail electric service in even increments, typically of $0.50 or more, and no such change is being requested in this proceeding. The Company reserved its right to adjust these charges in future proceedings if the indicated increase to any of these charges is $0.50 or more after rounding in $0.50 increments. (Tr. XII, p. 2839, l. 2 – 8.) The Company also seeks authorization to

increase demand charges in future revised rates filings when the size of the indicated increase in demand charges makes it reasonable to do so.

Based upon the evidence and testimony, the Commission adopts as just and reasonable and in the public interest, the rate design and class allocation factors proposed by the Company in this proceeding.

F. Revised Rates: Current Investment

Pursuant to the Base Load Review Act, the Commission shall specify in a Base Load Review Order, the initial revised rates, reflecting the utility's current investment in the plant. The proposed revised rates for each customer class were submitted in this proceeding in Hearing Exhibit 36. Under the proposed revised rates, the Residential class will have an average increase in rates of 0.43%, the Small General Service class will have an average increase in rates of 0.39%, the Medium General Service class will have an average increase in rates of 0.41%, and the Large General Service class will have an average increase in rates of 0.34%. (Hearing Exhibit 36).

The Commission adopts as just and reasonable and in the public interest, the proposed rates as submitted by the Company in Hearing Exhibit 36 in this proceeding and authorizes the use of these rates for bills rendered for retail electric service thirty (30) days following the issuance of this Order.

V. PROCEDURAL AND EVIDENTIARY MATTERS

During the course of the hearing several objections and motions were raised by various parties that were taken under advisement by this Commission. The Commission's rulings on those objections and motions are as follows:

First, during the public comment portion of this proceeding, the Company asked for a standing objection to the introduction of and reliance upon opinion testimony by lay witnesses regarding subject matters at issue in this proceeding that require special skill, knowledge, experience, and training. *See* South Carolina Rules of Evidence, Rule 702 (regarding expert testimony on issues of scientific, technical, or other specialized knowledge). The Company specifically raised concerns that lay witnesses would offer unqualified opinions regarding SCE&G's financial health and well-being, entitlement to rate recovery under the Base Load Review Act, the terms and provisions of the Base Load Review Act itself, the AP1000 units themselves, SCE&G's need for power, demand-side management programs, including energy efficiency and conservation, as well as rate recovery. (Tr. I, p. 13, l. 13 – p. 14, l. 14.) The Commission holds that this rule is permissive, in that it states that if expert testimony would be helpful in understanding a case, expert testimony may be offered. In our view, this rule does not bar opinion testimony by lay witnesses. Although expert testimony in the present case was clearly warranted, we believe that it was reasonable and prudent to hear the views of the public on topics related to the proposed construction of the new nuclear units. This Commission sits as a trier of fact, akin to a jury of experts. Hamm v. SCE&G, 309 S.C. 282, 422 S.E. 2d 110 (1992). The role of a jury is to weigh the evidence. South Carolina State Highway Department v. Townsend, 265 S.C. 253, 217 S.E. 2d 778 (1975). Accordingly, this Commission is entitled to hear testimony and give that testimony whatever weight it deems appropriate during the course of the hearing. We would note that some of the testimony objected to by the Company was actually favorable to the

Company's position. In any event, the Company's objection must be overruled.

Second, The Company objected to portions of the prefiled testimony of FOE Witness Brockway on the grounds that they contained recommendations that are contrary to the express language of the Base Load Review Act. (Tr. III, pg. 349, l. 18 – 21.) Specifically, the Company objected to recommendations found on page 9 at line 13 to page 10 at line 11, and page 48 at line 3 to page 49 at line 13. (Tr. III, pg. 353, l. 11 – 15.)

Ms. Brockway's testimony, in relevant part, contained two recommendations. In the first, Ms. Brockway recommended that the Commission rule that the Company assumes the risks that pertain to its choice of two nuclear generation facilities by ordering that no further adjustment to the approved schedule or budget for completion of the plant may be made on account of the risks determined by the Commission to have been inadequately considered by the Company. To the extent the Company makes changes to the schedule or the budget as the result of the occurrence of the factor found to pose such a risk, the Company may not seek an increase in rates or extension of depreciation or amortization to recovery any costs above those approved in this docket. (Tr. III, p. 366, l. 13 – p. 367, l. 3.) In the second, Ms. Brockway recommended that the Commission, if it were not inclined to deny the application outright, defer the consideration of any Base Load Review Act application pending (a) a return of the financial markets to solvency and stability, (b) a reassessment of the load forecast and financial analysis underlying the proposal in light of recent economic events, (c) an adequate assessment of the risks of the present proposal, (d) an adequate assessment of the opportunities for other means to meet

forecast proposal needs, and (e) a full opportunity for stakeholder involvement in the Commission's determination regarding any new proposal the Company may make to construct one or more large central-station nuclear generation plants and obtain pre-approval of any associated costs. (Tr. III, p. 405, l. 3 – 14.)

As to the first recommendation, counsel for the Company points out that the recommendation is contrary to Section 270(E) of the Base Load Review Act that provides: "As circumstances warrant, the utility may petition the Commission, with notice to the Office of Regulatory Staff, for an order modifying any of the schedules, estimates, findings, class allocation factors, rate designs, or conditions that form a part of any Base Load Review order issued under this section." S.C. Code Ann. § 58-33-270(E). In addition, Company counsel also cites Section 58-33-270(B) that provides that a Base Load Review order shall establish the anticipated construction schedule for the plant, including contingencies; the capital costs and anticipated schedule for incurring them, including contingencies and inflation indices used for the utility for cost in plant construction. (*Id.* at 58-33-270(B).) The Base Load Review Act clearly contemplates a utility's ability to include contingencies in its schedule, recover capital costs related to the project, and seek modification of a Base Load Review Order, subject to approval by the Commission.

We do find that Ms. Brockway is entitled to make whatever recommendations that she sees fit, and this Commission will be the ultimate arbiter of whether the recommendations are contrary to the Act. In this case, the Commission does find that the recommendations are contrary to the Act and are not justified. However, the

Commission also finds, on factual and regulatory policy grounds, that Ms. Brockway's suggestions should remain in the record, as their inclusion in the record is not prejudicial to any party.

As to the second recommendation, the Company properly points out that the Base Load Review Act mandates a final determination and order on the part of the Commission within nine months of the filing of the application and that the Act does not provide a means whereby the Commission can defer judgment on an application. (Tr. III, p. 349, l. 22 – p. 350, l. 7.) Counsel for FOE argues that the Commission is authorized to reject an application as inadequate in certain respects and to send it back to the utility with a statement of its inadequacies. (Tr. III. p. 355, l. 1 – 13.) However, the Commission finds that the Act does not allow this Commission to defer judgment on an application as Ms. Brockway suggests.

Third, the Company has also objected to certain testimony offered on cross examination by Ms. Greenlaw's witness Dr. Wilder. At the hearing, Ms. Greenlaw sought to substitute an expanded version of Dr. Wilder's testimony for the direct testimony Dr. Wilder had prefiled in this docket. The Company objected to the admission of this expanded testimony on the grounds that it was not timely prefiled as required by the rules governing this proceeding.[7] The Company's objection was sustained. In response, counsel for FOE cross examined Dr. Wilder concerning the matters contained in the expanded testimony that was excluded, specifically matters related to the subject of demand-side management (DSM). The Company objected on the

[7] See S.C. Reg. 103-869. Dr. Wilder's additional testimony was marked for identification purposes only as Hearing Exhibit No. 10.

grounds that the subject matter was outside the admitted portions of Dr. Wilder's testimony and that, given the alignment of interest between Ms. Greenlaw and FOE, allowing FOE to elicit the excluded testimony through cross examination constituted an evasion of the prefiling requirements. (Tr. VI, p. 1292, l. 19 – p. 1293, l. 4.) FOE responded that the Commission's rules permit open cross examination of witnesses regarding matters that are otherwise relevant. (Tr. VI, p. 1295, l. 24 – p. 1296, l. 4.)

The Commission overrules the Company's objection. In general, the Commission allows broad cross examination. Although, it is clear from the record that FOE and Ms. Greenlaw agreed in many areas of this case, there is no showing of a true alignment of interests between the two parties. In addition, the Commission notes that this testimony was somewhat cumulative to testimony of other witnesses and in no way would its admission change the outcome of this proceeding. Therefore, it was not prejudicial to any party. We will still not admit the expanded written testimony, but the cross-examination shall remain in the record.

Fourth, the Company sought to include in the record of this preceding the affidavit of Mr. Fredrick P. Hughes, Consortium Project Director, Westinghouse Electric Company, LLC. The affidavit was offered by the Company in support of its position regarding the confidential treatment of Hearing Exhibit # 5. The Affidavit was submitted and marked for identification purposes as Hearing Exhibit # 15. Counsel for FOE objected to the admissibility of this affidavit on the grounds that it constituted inadmissible hearsay, that Mr. Hughes was not available for cross examination, and that it would be erroneous to accept any of the unchallenged, un-cross-examined assertions of

fact or opinion in support of any finding in the record. (Tr. VIII, pg. 1870, l. 8 – 15.) The Company responded that the affidavit was essentially duplicative of content already in the record in the form of a letter to the Commission in support of a motion for protective order, and was proffered in support of a procedural issue. (Tr. VIII, pg. 1870, l. 18 – 20.) The Company further responded that it was the Commission's practice to allow affidavits in support of motions of this nature. (Tr. VIII, pg. 1870, l. 20 – 22.) For the reasons cited by FOE, the objection is sustained. The affidavit will not be admitted.

Fifth, counsel for FOE also placed a continuing objection in the record regarding the ORS' refusal to make ORS Director Dukes Scott testify regarding the conduct of the ORS and its process for reaching its position in this docket. During the course of this proceeding, Ms. Greenlaw had attempted to compel the testimony of Mr. Scott through the issuance of a subpoena. ORS moved to quash the subpoena and the Commission, after much discussion and careful consideration, granted the motion to quash. (Tr. VIII, p. 1794, l. 1 – p. 1795, l. 3.) Counsel for FOE was heard at length in regard to the motion to quash, and FOE's later continuing objection failed to raise any new issues which would alter the Commission's earlier ruling. For this reason, FOE's objection to the ORS testimony is overruled.

Sixth, SCE&G objects to the admissibility of composite Exhibit 8 as being hearsay. The Exhibit was presented by Mr. John Hartz, Chair of the John Bachman Group of the Sierra Club, during his public testimony. (Tr. V, p. 1057-1059.) The Exhibit consists of three documents: 1) a press release describing the activities of the John Bachman Group of the Sierra Club; 2) a resolution by that same group opposing the

construction of new nuclear plants; and 3) a document entitled "The Basics of Nuclear Power." We admit items 1 and 2 into the evidence of the case, since Mr. Hartz said during the hearing that he prepared these documents. (Tr. V, p. 1059, l. 4-7.) Accordingly, these were his statements made available by him in the Commission room at the time of the hearing, and are not therefore hearsay, which requires "out-of-court" statements. This portion of the Company's objection is overruled. However, Document #3 is clearly hearsay, since Mr. Hartz stated that it was a document prepared by the national Sierra Club. *Id.* This portion of the Company's objection is sustained. FOE's blanket objection to the admission of all Company documents is overruled as lacking specificity, since we examine the admissibility of documents on a case-by-case basis. FOE was free to object to the admissibility of individual documents, which it did as shown with the following objection.

Seventh, FOE moved to strike on hearsay grounds Company witness Connor's Exhibits SJC-4 and SJC-5 after the exhibits had already been admitted into the evidence. (Tr. X at p. 2463, l. 7 - Tr. X at 2454, l. 3.) Significantly, the exhibits were admitted into evidence and the witness was well into a summary of his testimony before counsel for FOE rose and moved to strike the exhibits on hearsay grounds. Counsel for the Company noted for the record that the subject exhibits were already in evidence. Clearly, objections to the admission of evidence must be made when the evidence is presented to preserve error for appeal. Parr v. Gaines, 309 S.C. 477, 424 S.E. 2d 515 (1992). However, even if counsel for FOE had objected contemporaneously at the time the evidence was offered, the objection would have been overruled. Counsel for the

Company correctly noted that the exhibits were merely demonstrative of opinions that the witness held, and were therefore admissible. (Tr. X, p. 2467, l. 16-20.) This proved to be the case, as the witness proceeded to use the materials to demonstrate his opinions as he continued to testify in the case. (Tr. X, p. 2468, l. 1-14.) Such demonstrative materials adopted by a witness during a proceeding would not constitute hearsay. This scenario differs from the one presented by Mr. Hartz above, who merely offered the national Sierra Club document. (Tr. V, p. 1059, l. 11-15.) The FOE motion to strike is denied.

Any other outstanding objections not addressed herein are overruled, and any outstanding motions which are inconsistent with the rulings contained in this Order are denied.

VI. FINDINGS OF FACT AND CONCLUSIONS OF LAW

Based upon the Combined Application, the testimony, and exhibits received into evidence at the hearing and the entire record of these proceedings, the Commission makes the following findings of fact and conclusions of law:

1. The Combined Application of SC&G to construct, operate, and own 55% of the plant and output of the two AP1000 nuclear units with a total expected capacity of 2,234 MW to be located at the V.C. Summer Nuclear Station site near Jenkinsville, South Carolina, is hereby approved. SCE&G's approved ownership is 55% of the plant and output which is 1,228 MW, and Santee Cooper's ownership is 45% of the plant and output which 1,006 MW. Any change in ownership interest, output allocation, sharing of costs, or control, as set forth herein is subject to the approval of this Commission.

2. A Certificate of Environmental Compatibility and Public Convenience and Necessity is granted for construction of the two Units.

3. The Units are needed to meet the growing needs of the Company's customers for electric power, to support the continued economic development and prosperity of the State of South Carolina, and to maintain the efficiency and reliability of the Company's electrical system.4. The Units will serve the interests of system economy and reliability as the most efficient, cost effective, practicable, and reliable means of meeting the demonstrated needs of the Company for the generation of electric power.5. The nature of the probable environmental impact, as discussed herein, is small and has been adequately considered and addressed to the extent possible by the Company.

6. The impact of the Units upon the environment is justified given the demonstrated need for additional base load capacity, the alternative sources of energy available to meet that need, and the greater environmental impacts such alternative sources of energy would create.

7. The Company has provided reasonable assurance that the Units will conform to applicable state and local laws and regulations issued thereunder through the rigorous application for and adherence to the numerous major permits that are required and the Company has sought in connection with this proposed construction.

8. Based upon the record and the factors considered herein, public convenience and necessity require the construction of the Units.

9. The selection of the Jenkinsville site is reasonable and prudent and it is appropriate for the construction of the Units.

10. The selection of the AP1000 technology for use at this site is reasonable and prudent.

11. The Company's overall decision to proceed with construction of the Units is reasonable and prudent.

12. The anticipated construction schedule, including contingencies, presented by SCE&G is reasonable and prudent as granted above.

13. The anticipated components of capital costs and the anticipated schedule for incurring them, including specified contingencies, are reasonable and prudent as granted above.

14. The principal contractors and suppliers for construction of the Units are sufficiently qualified and their selection was reasonable and prudent.

15. The EPC Contract which governs the relationship between SCE&G and Westinghouse/Stone & Webster is reasonable and prudent as set forth above.

16. The Company's plans for financing the construction of the Units are reasonable and prudent.

17. The Company has adequately demonstrated its ability to manage and oversee the construction of the Units through its internal oversight and management programs and through the oversight of third parties, including the NRC and ORS. SCE&G has the ultimate responsibility for the proper execution of the EPC contract and the construction of the units, including appropriate quality control and quality assurance.

18. The inflation indices used by the utility for costs of Unit construction, covering major cost components or groups of related cost components are reasonable and appropriate for use in this project.

19. The amount of outstanding CWIP in the plant not yet reflected in rates as of June 30, 2008 is $65,960,797.

20. The return on equity of 11% as selected by the Company is affirmed.

21. The Company's weighted average cost of capital as of June 30, 2008 for purposes of establishing revised rates in this proceeding is 8.77%.

22. The retail revenue requirement for establishing revised rates in this proceeding is $7,802,491.

23. The rate design and class allocation factors used by the Company in calculating the proposed revised rates related to this project are just and reasonable.

24. The revised rates proposed by the Company in Hearing Exhibit 36 of $7,800,664 are just and reasonable and are authorized for use for bills rendered for retail electric service thirty (30) days following the issuance of this Order. This approximates the retail revenue requirement of $7,802,491.

25. The Company shall continue to investigate appropriate additional DSM programs as per the testimony of Company witness Pickles, as there is room for improvement in this area, and shall report back to the Commission by June 30, 2009.

26. In order that the public and the Commission remain informed about the project, the Company will provide the Commission with a yearly status report on its

progress and other significant developments on a schedule arranged by the Commission's staff.

Now, therefore, IT IS HEREBY ORDERED:

1. The Combined Application of the South Carolina Electric & Gas Company, filed May 30, 2008, to construct and operate two 1,117 net megawatt nuclear power plants to be located at the V.C. Summer Nuclear Station site near Jenkinsville, South Carolina is hereby approved as set forth herein.
2. A Certificate of Environmental Compatibility and Public Convenience and Necessity is hereby granted for construction of the Units as requested in SCE&G's Combined Application and approved herein.
3. SCE&G shall complete and file, in a separate docket, the results of the DSM assessment currently being conducted as testified to by Company witnesses Marsh and Pickles by June 30, 2009.
4. The Approved Construction Schedule, pursuant to S.C. Code Ann. § 58-33-270(B)(1), shall be as set forth in Hearing Exhibit 2, SAB-5 and attached hereto.
5. The schedule contingencies permitted under S.C. Code Ann. § 58-33-270 (B)(1) shall be eighteen (18) months to delay the substantial completion date of each Unit and each milestone date set forth in the Approved Construction Schedule as set forth in Hearing Exhibit 2, SAB-5 attached hereto.
6. The Approved Capital Cost, pursuant to S.C. Code Ann. § 58-33-270(B)(2), shall be $4,534,747,000 in 2007 dollars, net of AFUDC, as derived from

Hearing Exhibit 16, EEB-1 and Hearing Exhibit 37 and subject to escalation as provided herein.

7. The Approved Inflation Indices, pursuant to S.C. Code Ann. § 58-33-270(B)(6), applicable to the Approved Capital Costs of construction shall be as set forth in Hearing Exhibit 16, EEB-2, the public version of which is attached hereto.

8. The Approved Schedule for Incurring Capital Costs for the Units shall be the Annual Cumulative Project Cash Flow as set forth in Hearing Exhibit 16, EEB-1, the public version of which is attached hereto.

9. SCE&G is authorized to employ a Cost Rescheduling contingency such that it may accelerate amounts set forth in Hearing Exhibit 16, EEB-1 by up to twenty-four (24) months or delay them by up to eighteen (18) months as it shall determine to be appropriate, provided that the cost of the project shall not exceed $4,534,747,000 in 2007 dollars (net of AFUDC) and before escalation. Any changes in costs shall be adjusted for escalation at the established escalation rates as set forth herein.

10. A Construction Contingency Pool of $438,293,000 in 2007 dollars shall be established consisting of the Plant Cost Contingency and Transmission Projects Contingency set forth in the confidential version of Hearing Exhibit 16, EEB-1. This pool shall be tracked as a single item of cost. The Company may move unused Construction Contingency funds forward year to year as outlined above with appropriate inflation adjustments.

11. SCE&G shall compute AFUDC on construction work in progress pursuant to the terms of the Base Load Review Act.

12. In making its quarterly reports pursuant to S.C. Code Ann. § 58-33-277, SCE&G shall update and amend the schedule of Approved Capital Costs to show the effect of the use of all contingencies and escalation factors as approved in this Order and the calculation of AFUDC on construction work in progress not included in rates. Actual payments (except for Fixed with No Adjustment items) shall be discounted to 2007 dollars using the appropriate escalation rates and an escalation shall be separately stated for them.

13. The return on equity for revised rates calculations, pursuant to S.C. Code Ann. § 58-33-270(B)(3), shall be 11.0% as established in Commission Order 2007-855-E unless and until the Company files for a different rate.

14. The rate design as set forth by Company witness Jackson in Hearing Exhibit 36, attached hereto, is approved provided that changes to basic facilities charges shall be made in increments of $0.50 or more and shall be made when the approved rate design yields a charge that will round up to an adjustment of $0.50 or more. The Company may increase demand charges in future revised rates filings when the size of the indicated increase in demand charges makes it reasonable to do so.

15. The Company shall charge the revised rates contained in Hearing Exhibit 36, said rates being attached hereto, for bills rendered for retail electric service thirty (30) days following the date of this Order.

16. The Company shall continue to investigate additional appropriate DSM programs as indicated, and shall report back to this Commission accordingly by June 30, 2009.
17. The Company will provide the Commission with a yearly status report on its progress and other significant developments on a schedule arranged by the Commission's staff.
18. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:

Elizabeth B. Fleming

Elizabeth B. Fleming, Chairman

ATTEST:

John E. Howard

John E. Howard, Vice Chairman

(SEAL)

EXHIBIT E

ANTICIPATED CONSTRUCTION SCHEDULE

Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order
Public Service Commission Docket No. 2008-196-E

1. INTRODUCTION

This **Exhibit E** sets forth the current projected milestones under the EPC Contract that are proposed for use of the Office of Regulatory Staff in evaluating the progress of construction of VCSNS Units 2 and 3. These dates are subject to the schedule contingency requested in the Application.

This schedule is based on the generic schedule for Westinghouse AP1000 reactor construction which does not include project and site specific requirements. Certain activities such as the clearing, grubbing and grading at the site will need to commence earlier than listed here for reasons related to specific conditions at the VCSNS site (*i.e.*, the need to complete the site rail line relocation in advance of VCSNS Unit 1 Outage 18).

V. C. SUMMER PROJECT MILESTONES

Year	Quarter	Milestone
2008	2	08-2Q-1 Approve Engineering, Procurement and Construction Agreement. 08-2Q-2 Issue Purchase Orders to nuclear component fabricators for Units 2 and 3 Containment Vessels, Passive Residual Heat Removal Heat Exchangers, Accumulator Tanks, Core Makeup Tanks, Squib Valves, Steam Generators, Reactor Coolant Pumps, Pressurizer Vessels, Reactor Coolant Loop Hot Leg A Piping, Reactor Vessel Internals, Reactor Vessels, Reactor Integrated Head Packages, Control Rod Drive Mechanisms and Nuclear Island structural CA20 Modules.
2008	3	08-3Q-1 Start site specific and balance of plant detailed design. 08-3Q-2 Issue PO and submit payment to fabricator via Westinghouse for Units 2 and 3 Simulators. 08-3Q-3 Issue final Purchase Orders and submit payments to fabricators via Westinghouse for Units 2 and 3 Steam Generators, Reactor Vessel Internals and Reactor Vessels. 08-3Q-4 Issue Purchase Order and submit payment via Westinghouse to fabricator for Units 2 and 3 Transformers.
2008	4	08-4Q-1 Start clearing, grubbing and grading. 08-4Q-2 Issue final Purchase Orders and submit payments to fabricators via Westinghouse for Units 2 and 3 Core Makeup Tanks, Accumulator Tanks, Pressurizers, Reactor Coolant Loop Piping, Integrated Head Packages, Control Rod Drive Mechanisms and Passive Residual Heat Removal Heat Exchangers.

2009	1	09-1Q-1 Start Parr Road Intersection work. 09-1Q-2 Issue final Purchase Order and submit payment via Westinghouse to fabricator for Units 2 and 3 Reactor Coolant Pumps. 09-1Q-3 Issue Purchase Order for Long Lead Material and submit payment via Westinghouse to fabricator for Units 2 and 3 Integrated Head Packages. 09-1Q-4 Submit partial payment to Westinghouse for Design Finalization.
2009	2	09-2Q-1 Start site development. 09-2Q-2 Issue Purchase Orders and submit payments via Westinghouse for Units 2 and 3 Turbine/Generators and Main Transformers. 09-2Q-3 Receive Units 2 and 3 Core Makeup Tank material at fabricator. 09-2Q-4 Submit partial payment to Westinghouse for Design Finalization.
2009	3	09-3Q-1 Issue Purchase Order and submit payment via Westinghouse for Unit 2 Turbine Generator Condenser material. 09-3Q-2 Submit payments to fabricators via Westinghouse for Units 2 and 3 Reactor Coolant Pumps and Passive Residual Heat Removal Heat Exchangers. 09-3Q-3 Submit partial payment to Westinghouse for Design Finalization.
2009	4	09-4Q-1 Start erection of construction buildings, to include craft facilities for personnel, tools and equipment; first aid facilities; field offices for site management and support personnel; temporary warehouses; and construction hiring office. 09-4Q-2 Receive Unit 2 Reactor Vessel flange nozzle shell forging at fabricator. 09-4Q-3 Submit partial payment to Westinghouse for Design Finalization. 09-4Q-4 Issue Purchase Order and submit payment via Westinghouse to fabricator for Units 2 and 3 Radiation Monitoring Systems.
2010	1	10-1Q-1 Receive Unit 2 Reactor Vessel Internals core shroud material at the fabricator. 10-1Q-2 Payment to fabricator via Westinghouse for Unit 2 Turbine/Generator Feedwater Heater material. 10-1Q-2 Receive raw material at fabricator for Unit 2 Reactor Coolant Loop piping.
2010	2	10-2Q-1 Receive Unit 2 Reactor Vessel Internals upper guide tube Material at the fabricator. 10-2Q-2 Submit payment to Westinghouse for the Unit 2 Control Rod Drive Mechanisms. 10-2Q-3 Perform cladding on Unit 2 Pressurizer bottom head at fabricator.

2010	3	10-3Q-1 Start excavation and foundation work for the standard plant for Unit 2. 10-3Q-2 Receive Unit 2 Steam Generator tube sheet forging at the fabricator. 10-3Q-3 Complete Unit 2 Reactor Vessel outlet nozzle weld to flange at the fabricator. 10-3Q-4 Start Unit 2 Condenser fabrication at the fabricator.
2010	4	10-4Q-1 Complete preparations for receiving the first module on site for Unit 2. 10-4Q-2 Receive Unit 2 Steam Generator transition cone forging at the fabricator. 10-4Q-3 Complete Unit 2 Reactor Coolant Pump casing fabrication. 10-4Q-4 Complete machining, heat treatment and Nondestructive examination of Unit 2 Reactor Coolant Loop Hot Leg A piping at the fabricator.
2011	1	11-1Q-1 Complete Unit 2 hydrotests for Core Makeup Tanks. 11-1Q-2 Issue Purchase Order and submit payment via Westinghouse to fabricator for Units 2 and 3 Polar Crane main hoist drums and wire rope.
2011	2	11-2Q-1 Receive Unit 3 Control Rod Drive Mechanism latch housing/rod travel housing material at the fabricator. 11-2Q-2 Complete Unit 2 Condenser shipment preparation at the fabricator.
2011	3	11-3Q-1 Start placement of mud mat for Unit 2. 11-3Q-2 Receive Unit 2 Steam Generator tubing at the fabricator. 11-3Q-3 Complete upper head welding on Unit 2 Pressurizer at the fabricator. 11-3Q-4 Complete Unit 3 Reactor Vessel closure head cladding at the fabricator.
2011	4	11-4Q-1 Begin Unit 2 first nuclear concrete placement. 11-4Q-2 Complete fabrication of Unit 2 Reactor Coolant Pump stator core at the fabricator. 11-4Q-3 Begin Unit 2 Reactor Vessel Internals welding of core shroud panel ring at the fabricator. 11-4Q-4 Complete 1st Unit 2 Steam Generator tubing installation at the fabricator. 11-4Q-5 Ship Unit 2 Reactor Coolant Loop pipe to site. 11-4Q-6 Ship Unit 2 Control Rod Drive Mechanism to site. 11-4Q-7Complete weld for Unit 2 Pressurizer lower shell to head at the fabricator. 11-4Q-8 Complete 2nd Steam Generator tubing installation for Unit 3 at the fabricator. 11-4Q-9 Submit partial payment to Westinghouse for Design Finalization.

2012	1	12-1Q-1 Set module CA04 for Unit 2. 12-1Q-2 Complete post weld heat treat of 2nd tubesheet for Unit 2 Passive Residual Heat Removal Heat Exchanger. 12-1Q-3 Complete 1st tubesheet drilling for Unit 2 Passive Residual Heat Removal Heat Exchanger. 12-1Q-4 Complete girder fabrication for Unit 2 Polar Crane. 12-1Q-5 Complete preparations for Unit 3 Turbine Generator Condenser shipment.
2012	2	12-2Q-1 Set Containment Vessel ring #1 for Unit 2. 12-2Q-2 Deliver Unit 2 Reactor Coolant Pump casings to the site. 12-2Q-3 Complete Unit3 Reactor Coolant Pump stator core. 12-2Q-4 Receive core shell forging for Unit 3 Reactor Vessel. 12-2Q-5 Complete Unit 3 Pressurizer cladding on bottom head.
2012	3	12-3Q-1 Set Nuclear Island structural module CA03 for Unit 2. 12-3Q-2 Complete 1st Unit 2 Squib Valve factory operational test . 12-3Q-3 Complete Unit 3 Accumulator Tank hydrotest. 12-3Q-4 Complete electrical panel assembly for Unit 2 Polar Crane.
2012	4	12-4Q-1 Start containment large bore pipe supports for Unit 2. 12-4Q-2 Ship Unit 2 Reactor Integrated Head Package to site from fabricator. 12-4Q-3 Complete Unit 2 Reactor Coolant Pump stator fabrication. 12-4Q-4 Complete 2nd Unit 3 Steam Generator tubing installation at fabricator. 12-4Q-5 Complete 1st Unit 2 Steam Generator hydrotest at fabricator.
2013	1	13-1Q-1 Start concrete fill of Nuclear Island structural modules CA01 and CA02 for Unit 2. 13-1Q-2 Ship Unit 2 Passive Residual Heat Removal Heat Exchanger to site from fabricator. 13-1Q-3 Complete Unit 2 Refueling Machine Assembly factory acceptance test. 13-1Q-4 Ship Unit 2 Reactor Vessel Internals to site from fabricator.

2013	2	13-2Q-1 Set Unit 2 Containment Vessel ring #3. 13-2Q-2 Ship Unit 2 Steam Generator to site from fabricator. 13-2Q-3 Complete preparation for Unit 2 Turbine/Generator shipment from Toshiba fabrication facility. 13-2Q-4 Complete Unit 3 Pressurizer hydrotest at fabricator. 13-2Q-5 Ship Unit 2 Polar Crane to site. 13-2Q-6 Receive Unit 2 Reactor Vessel on site from fabricator.
2013	3	13-3Q-1 Set Unit 2 Reactor Vessel. 13-3Q-2 Weld Unit 3 Steam Generator tubesheet to channel head. 13-3Q-3 Complete Unit 3 Reactor Coolant Pump final stator assembly at fabricator. 13-3Q-4 Ship Unit 2 Reactor Coolant Pumps to site from fabricator. 13-3Q-5 Place first nuclear concrete for Unit 3.
2013	4	13-4Q-1 Set Unit 2 Steam Generator. 13-4Q-2 Preparations complete for shipment of Unit 2 Main Transformers. 13-4Q-3 Complete Unit 3 Steam Generator hydrotest at fabricator. 13-4Q-4 Set Unit 2 Containment Vessel Bottom Head on basemat legs.
2014	1	14-1Q-1 Set Unit 2 Pressurizer Vessel. 14-1Q-2 Complete Unit 3 Reactor Coolant Pump Factory Acceptance Test at fabricator. 14-1Q-3 Ship Unit 3 Reactor Vessel Internals to site from fabricator. 14-1Q-4 Issue Purchase Order and submit payment to fabricator via Westinghouse for Unit 3 Main Transformers.
2014	2	14-2Q-1 Complete welding of Unit 2 Passive Residual Heat Removal System piping. 14-2Q-2 Ship Unit 3 Steam Generator to site from fabricator. 14-2Q-3 Ship Unit 3 Refueling Machine Assembly to site.
2014	3	14-3Q-1 Set Unit 2 Polar Crane. 14-3Q-2 Ship Unit 3 Reactor Coolant Pumps to site from fabricator. 14-3Q-3 Complete shipment preparations for Unit 3 Main Transformers from fabricator.
2014	4	14-4Q-1 Ship last Unit 3 Spent Fuel Storage Rack module to site.
2015	1	15-1Q-1 Start electrical cable pulling in Unit 2 Auxiliary Building. 15-1Q-2 Complete Unit 2 Reactor Coolant System cold hydro.
2015	2	15-2Q-1 Activate class 1E DC power in Unit 2 Auxiliary Building.

2015	3	15-3Q-1 Complete Unit 2 hot functional test. 15-3Q-2 Install Unit 3 ring 3 for containment vessel.
2015	4	15-4Q-1 Load Unit 2 nuclear fuel.
2016	1	16-1Q-1 Unit 2 Substantial Completion.
2016	2	16-2Q-1 Set Unit 3 Reactor Vessel.
2016	3	16-3Q-1 Set Unit 3 Steam Generator #2.
2016	4	16-4Q-1 Set Unit 3 Pressurizer Vessel.
2017	1	17-1Q-1 Complete welding of Unit 3 Passive Residual Heat Removal System piping.
2017	2	17-2Q-1 Set Unit 3 polar crane.
2017	3	17-3Q-1 Start Unit 3 Shield Building roof slab rebar placement.
2017	4	17-4Q-1 Start Unit 3 Auxiliary Building electrical cable pulling.
2018	1	18-1Q-1 Activate Unit 3 Auxiliary Building class 1E DC power.
2018	2	18-2Q-1 Complete Unit 3 Reactor Coolant System cold hydro. 18-2Q-1 Complete Unit 3 hot functional test.
2018	3	18-3Q-1 Complete Unit 3 nuclear fuel load.
2018	4	18-4Q-1 Begin Unit 3 full power operation.
2019	2	19-1Q-1 Unit 3 Substantial Completion.

EXHIBIT F

ANTICIPATED COMPONENTS OF CAPITAL COSTS AND SCHEDULE

Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order
Public Service Commission Docket No. 2008-196-E

1. INTRODUCTION

Chart A to this **Exhibit F** provides a summary of the anticipated components of capital cost and the forecasted schedule for incurring them as used by SCE&G in projecting the cash flows, construction work in progress balances, and other financial matters related to the construction of two Westinghouse AP1000 units as V. C. Summer Nuclear Station Units 2 & 3. These projections reflect the applicable inflation adjustments and indices as set forth in **Exhibit I** to this Application and are subject to the risk factors set forth in **Exhibit J** to this Application and to the cost and schedule contingencies requested in the Application. As set forth in the Application, SCE&G will update these projections periodically in its filings with the Office of Regulatory Staff to reflect the actual levels of inflation measured for past periods by the inflation factors and indices reflected in **Exhibit I** to this Application and to reflect any changes related to the contingencies requested in the Application. SCE&G will update the projections of capital costs for remaining future periods based on the same methodology reflected in this **Exhibit F**.

2. THE PUBLIC AND CONFIDENTIAL VERSIONS OF CHART A

Chart A to this **Exhibit F** is being filed in both a public and a confidential version. Both versions provide the full anticipated cost of the Units, year-by-year and in total, including all costs anticipated to be paid under the EPC Contract, all owner's costs and all transmission costs. The only difference between the two versions of the exhibits is the amount of detail given for EPC costs and Owner's costs.

Specifically, the confidential version differs from the public version in that it includes twelve rows of data not included on the non-confidential version. Those rows of data:

A. Show the anticipated annual payments in 2007 dollars under the EPC Contract with Westinghouse/Stone & Webster broken out into the seven "EPC Categories" that are listed on **Exhibit I** to this Application;
B. Show the estimated annual payments in 2007 dollars for the "Owner's Cost Categories: Project Target Estimates," that are listed on **Exhibit I** to this Application;
C. Sum the unescalated project costs by and adjust the yearly sum by the applicable inflation factors, all consistent with the inflation factors listed on **Exhibit I** to this Application for the cost categories involved;

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D. Set forth the contingency amount applicable to each year's estimated construction costs in 2007 dollars, all consistent with the contingency factors listed on **Exhibit I** to this Application for the cost categories involved; and
E. Adjusts the yearly contingency amount by the inflation factors applicable to the cost categories with which the contingencies are associated, all consistent with the inflation factors listed on **Exhibit I** to this Application.

The sum of these categories of cost data (EPC costs and Owner's costs) and the associated contingencies and inflation amounts equal the first row of data on the public version of **Chart A** to **Exhibit F**, "Plant Cost: Total Net Cash Flow."

SCE&G would emphasize that the public version of **Chart A** to this **Exhibit F** sets forth the full projected cost of the Facility. The public version of **Chart A** provides the specific year-by-year cost projections on which the Commission is asked to establish as the "approved capital cost estimate including specified contingencies" for the Facility, as required in S.C. Code Ann. §§ 58-33-275(A)(2) of the Code of Laws of South Carolina, 1976.

SCE&G is seeking confidential treatment of the data not included in the public version of **Chart A** to **Exhibit F** (the "Confidential Data"), because if disclosed in un-aggregated form, those data could allow competitors of Westinghouse/Stone & Webster to calculate specific prices being charged by Westinghouse/Stone & Webster under the EPC Contract, both in aggregate and for particular items or categories of items supplied. Westinghouse/Stone & Webster considers this pricing information to be proprietary information in the nature of a trade secret and has taken careful steps to maintain the confidentiality of this information. Westinghouse/Stone & Webster believes that public release of such data could injure Westinghouse/Stone & Webster commercially in its negotiations for the sale of other units.

SCE&G intends to make the Confidential Data available to parties who sign an appropriate confidentiality agreement.

EXHIBIT F, Chart A

ANTICIPATED CONSTRUCTION SCHEDULE

Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order

(Thousands of $)

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

Plant Cost Categories	*Total*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*
Fixed with 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													
Total Unescalated Project Costs													
Project Cost Escalation													
Contingency(2007 $)													
Contingency Escalation													
Total Net Cash Flow	5,411,067	21,473	182,826	458,170	637,192	696,561	734,258	752,043	680,621	502,767	376,627	240,217	128,312
Transmission Projects													
Total Net Cash Flow	638,020	-	-	378	-	-	1,666	15,555	46,282	73,014	4,286	189,523	307,316
Total Project Cash Flow	6,049,087	21,473	182,826	458,548	637,192	696,561	735,924	767,598	726,903	575,781	380,913	429,740	435,628
Cumulative Project Cash Flow		21,473	204,299	662,847	1,300,039	1,996,600	2,732,524	3,500,122	4,227,025	4,802,806	5,183,719	5,613,459	6,049,087
AFUDC(Capitalized Interest)	264,289	645	5,204	17,292	24,459	31,461	34,135	34,466	33,650	28,726	13,395	17,577	23,279
Gross Construction	6,313,376	22,118	188,030	475,840	661,651	728,022	770,059	802,064	760,553	604,507	394,308	447,317	458,907
Construction Work in Process		22,118	210,148	685,988	1,347,639	2,075,661	2,845,720	3,647,784	4,408,337	5,012,844	5,407,152	5,854,469	6,313,376

Confidential

Notes:
AFUDC rate applied *5.52%*

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.

Public

EXHIBIT I

INFLATION INDICES

PUBLIC VERSION

Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order
Public Service Commission Docket No. 2008-196-E

1. INTRODUCTION

This Exhibit I provides the inflation indices and escalators, and contingency factors used by SCE&G in projecting the capital cost of the two Westinghouse AP1000 Advanced Passive Safety Power Plant (AP1000) units it proposes to construct as V. C. Summer Nuclear Station (VCSNS) Units 2 & 3 (the Units or the Facilities).

2. EXPLANATION OF COST ELEMENTS SUBJECT TO ESCALATION (See Attached Chart A)

Chart A of Exhibit I provides the categories of capital investment that have been established for the project. These categories are defined by risk profiles documenting the escalations and contingencies that are applied to base project cash flow. The definitions of these profiles are determined by either contract terms or sound engineering and planning assumptions. Project cash flow is assigned to each risk profile based on common risk characteristics; and escalations and contingencies are applied to generate future cash flow for use in regulatory and planning schedules. Risk profiles are defined below:

1) **Fixed with No Adjustment** – These costs are fixed per the EPC Contract and escalation is not applied. Contingency risk for this cash flow is principally related to change orders and is predicted to be relatively low.

2) **Firm with Fixed Adjustment A** – These costs have a fixed escalation of a specified percentage applied as part of the EPC Contract. Contingency risk for this cash flow is principally related to change orders and is predicted to be relatively low.

3) **Firm with Fixed Adjustment B** – These costs have a fixed escalation of a specified percentage applied as part of the EPC Contract. Under the EPC Contract, this factor is expressed in two parts. One part is an inflation escalator equal to the percentage in item 2 above. The other is a small additional factor that is designated a nuclear industry administration adjustment to compensate Westinghouse for the undertaking the project.

Public

Contingency risk for this cash flow is principally related to change orders and is predicted to be relatively low.

4) **Firm with Indexed Escalation** – Escalation for this schedule of costs is applied periodically under the EPC Contract based on the Handy–Whitman All Steam Generation Plant Index, South Atlantic Region. Handy-Whitman is a well recognized and commonly used construction index. The adjustment as billed under the EPC Contract will reflect the percentage increase in the Handy-Whitman All Steam Generation Plant Index, South Atlantic Region as measured between each bi-annual release of the index. For planning purposes, SCE&G is using the most recent one-year index change for 2008, and the most recent five-year average of the index for 2009 and beyond to escalate these costs. Contingency risk for this cash flow is predicted to be relatively low.

5) **Actual Craft Wages** – Site craft wages will be paid at actual costs. For planning purposes, SCE&G is using the most recent one–year index change of the Handy–Whitman All Steam & Nuclear Generation Plant Index, South Atlantic Region, for 2008, and the most recent five-year average of this index for 2009 and beyond to escalate these costs. Contingency risk for this cash flow is expected to be higher than average.

6) **Non-Labor Costs** – This schedule is paid at actual costs. For planning purposes, SCE&G is using the most recent one-year index change of the Handy–Whitman All Steam & Nuclear Generation Plant Index, South Atlantic Region, for 2008, and the most recent five-year average of this index for 2009 and beyond to escalate these costs. Contingency risk for this cash flow is expected to be moderately high.

7) **Time & Materials** – This schedule is paid at actual costs. For planning purposes, SCE&G is using the most recent one–year index change of the Handy–Whitman All Steam & Nuclear Generation Plant Index, South Atlantic Region, for 2008, and the most recent five-year average of this index for 2009 and beyond to escalate these costs. Contingency risk for this cash flow is expected to be moderately high.

8) **Owners Costs Target Estimates** – This schedule is paid at actual costs. For planning purposes, SCE&G is using the most recent one-year factor of the GDP Chained Price Index, a commonly used U.S. Government published general escalation index, to escalate 2008 costs. The most recent five-year average of this index is used to escalate costs for 2009 and beyond. Contingency risk for this cash flow is expected to be moderately high.

9) **Transmission Costs** – This schedule is paid at actual costs. For planning purposes, the base estimate is escalated based on the most recent Handy–Whitman Transmission Plant Index, South Atlantic Region index, and the most recent five-year average of this index,

Public

is used to escalate costs for 2009 and beyond. Contingency risk for this cash flow is expected to be moderately high.

3. PUBLIC AND CONFIDENTIAL VERSION OF THE INTRODUCTION TO EXHIBIT I AND CHART A TO EXHIBIT I

In response to a claim of confidentiality made by Westinghouse under the provisions of the EPC Contract, SCE&G has prepared public and confidential versions of this introduction to **Exhibit I**, and of **Chart B** to **Exhibit I**. The differences between the two versions are as follows:

a. The public version of this introduction to **Exhibit I** does not specify the percentage of the costs under the EPC Contract that fall within the Fixed/Firm pricing category and the additional percentage of cost that Westinghouse and Stone & Webster have agreed to offer for conversion to Fixed/Firm pricing. The confidential version of the introduction provides these percentages.
b. The public version of this introduction to **Exhibit I**, and of **Chart B** to **Exhibit I** does not provide the specific inflation factors that the EPC Contract has established for the two Firm with Fixed Adjustment Categories. The confidential version sets forth these factors.
c. The public version of **Chart B** to **Exhibit I** does not list the specific items of equipment or cost included in the four Fixed/Firm categories of cost. The confidential version of that document lists the specific items of equipment or cost under the heading "Cost Make-up."

SCE&G intends to make the confidential version of the introduction to **Exhibit I** and of **Chart B** to **Exhibit I** available to parties who sign an appropriate confidentiality agreement.

4. HANDY-WHITMAN AND GDP INDICES
(See Attached Chart B)

Chart B to **Exhibit I** provides five years of historical data for the Handy-Whitman (HW) All Steam Generation Plant, All Steam & Nuclear Generation Plant, and Transmission Plant, for the South Atlantic Region; as well as the Gross Domestic Product (GDP) inflation index. These are the indices discussed in **Chart A** of **Exhibit I** and used by SCE&G in preparing cost projections related to the Facility.

Public

Cost Elements Subject to Escalation & Contingency

	EPC Category	Cost Make-up*	Escalation Indices/Assumptions	Contingency Assumptions
1)	Fixed with no Adjustment	Various specified plant components	*Fixed Price not subject to escalation under the EPC Contract.*	*Low Risk – 5%*
2)	Firm with Fixed Adjustment A	Other specified plant components	*Fixed escalation of a specified percentage under the EPC Contract.*	*Low Risk – 5%*
3)	Firm with Fixed Adjustment B	Specific Westinghouse charges	*Fixed adjustment of different specified percentage under the EPC Contract.* - One part of the total percentage is base escalation, and - Another part is a nuclear industry administration adjustment.	*Low Risk – 5%*
4)	Firm with Indexed Adjustment	All equipment not listed elsewhere and other costs.	*Adjusted periodically under the EPC Contract by the Handy-Whitman All Steam Generation Plant Index.*	*Low Risk – 5%*
5)	Actual Craft Wages	All site craft labor.	*Paid at actual costs. Base estimate is escalated at Shaw/Stone Webster developed market index for target purposes. Handy-Whitman All Steam & Nuclear Generation Index used to escalate for planning purposes.*	*High Risk – 20%*
6)	Non-Labor Target	Construction Materials, consumables, furnish & erect subcontractors.	*Paid at actual costs. Base estimate is escalated at a Handy-Whitman All Steam & Nuclear Generation Index for planning purposes.*	*Moderate-High Risk – 15%*
7)	T&M	Startup and COLA and other permitting and licensing support.	*Paid at actual costs under the EPC Contract. Base estimate is escalated at Handy-Whitman All Steam & Nuclear Generation Index for planning purposes.*	*Moderate-High Risk – 15%*

	Owners' Cost Category	Cost Make-up	Escalation Indices/Assumptions	Contingency Assumptions
8)	Project Target Estimates	All equipment, labor, materials, insurance, overhead, etc. not covered under the EPC Contract.	*Paid at actual costs. Base estimate is escalated at Gross Domestic Product Chained Price Index historical average for planning purposes.*	*Moderate-High risk – 15%*
9)	Transmission Projections	New Transmission Lines and Transmission System upgrades to support interconnection of new Nuclear units per Generator Interconnection Facilities Studies.	*Paid at actual costs. Base estimate is escalated at Handy-Whitman Transmission Plant Construction Index for planning purposes.*	*Moderate-High risk – 15%*

* Associated overheads and profits will be included in cost elements.

Public

Exhibit I, Chart B

HW All Steam Generation Plant

Year	Index	Yr/Yr change	Three year Average	Five Year Average	Ten Year Average
2007	491	7.7%	7.0%	5.74%	4.1%
2006	456	7.5%	6.6%	4.8%	
2005	424	5.7%	4.5%	3.7%	
2004	401	6.6%	3.5%	3.6%	
2003	376	1.1%	2.0%	2.3%	
2002	372	2.8%	3.4%	2.5%	
2001	362	2.3%	2.6%		
2000	354	5.0%	2.5%		
1999	337	0.6%			
1998	335	1.8%			
1997	329				

Exhibit I, Chart B

HW All Steam + Nuclear Generation Plant

Year	Index	Yr/Yr change	Three year Average	Five Year Average	Ten Year Average
2007	490	7.7%	7.0%	5.75%	4.1%
2006	455	7.6%	6.7%	4.8%	
2005	423	5.8%	4.5%	3.7%	
2004	400	6.7%	3.5%	3.6%	
2003	375	1.1%	2.0%	2.4%	
2002	371	2.8%	3.4%	2.5%	
2001	361	2.3%	2.6%		
2000	353	5.1%	2.5%		
1999	336	0.6%			
1998	334	1.8%			
1997	328				

Exhibit I, Chart B

HW All Transmission Plant

Year	Index	Yr/Yr change	Three year Average	Five Year Average	Ten Year Average
2007	518	8.8%	8.1%	6.86%	4.5%
2006	476	9.2%	8.6%	5.3%	3.6%
2005	436	6.3%	5.4%	4.0%	
2004	410	10.2%	3.6%	4.0%	
2003	372	-0.3%	1.1%	1.6%	
2002	373	0.8%	3.4%	2.1%	
2001	370	2.8%	2.4%		
2000	360	6.5%	2.4%		
1999	338	-2.0%			
1998	345	2.7%			
1997	336				

Exhibit I, Chart B

SERIESTYPE	UNIT	SHORT LABEL	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Chained Price Index—Gross Domestic Product												
U.S. Macro - 10 Year Basel (2000=100)		Chained price index-gross domestic product	96.48	97.87	100.00	102.40	104.19	106.41	109.46	113.01	116.57	119.67
Annual Percent change				1.44%	2.18%	2.40%	1.75%	2.13%	2.87%	3.24%	3.15%	2.66%
3-Year Annual Percent change							2.11%	2.09%	2.25%	2.74%	3.09%	3.02%
5-Year Annual Percent change									2.26%	2.48%	2.63%	2.81%
10-Year Annual Percent change												
Consumer Price Index, All-Urban												
U.S. Macro - 10 Year Basel Index		Consumer price index, all-urban	1.63	1.67	1.72	1.77	1.80	1.84	1.89	1.95	2.02	2.07
Percent change				2.19%	3.37%	2.82%	1.60%	2.30%	2.67%	3.37%	3.23%	2.86%
3-Year Annual Percent change							2.59%	2.24%	2.19%	2.78%	3.09%	3.15%
5-Year Annual Percent change									2.55%	2.55%	2.63%	2.88%
10-Year Annual Percent change												
Producer Price Index—Finished Goods												
U.S. Macro - 10 Year Basel (1982=1.0)		Producer price index-finished goods	1.31	1.33	1.38	1.41	1.39	1.43	1.48	1.56	1.60	1.67
Percent change				1.82%	3.76%	1.94%	-1.30%	3.18%	3.62%	4.85%	2.95%	3.92%
3-Year Annual Percent change							1.44%	1.26%	1.81%	3.68%	3.81%	3.91%
5-Year Annual Percent change									2.22%	2.44%	2.64%	3.71%
10-Year Annual Percent change												

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RATE DESIGN SUMMARY
INCREASE ON MAY, 2008 RATES

RATE	MAY, 2008 REVENUE [1]	PROPOSED REVENUE [1]	$ CHANGE	% CHANGE
	COL. 1	COL. 2	COL. 3	COL. 4
RESIDENTIAL				
Rate 1 - Good Cents	$ 40,502,914	$ 40,670,633	$ 167,719	0.41%
Rate 2 - Low Use	$ 3,399,080	$ 3,411,473	$ 12,393	0.36%
Rate 5 - Time-of-Use (KWH Only)	$ 171,837	$ 172,440	$ 603	0.35%
Rate 6 - Energy Saver / Conservation	$ 54,903,275	$ 55,130,996	$ 227,721	0.41%
Rate 7 - Time-of-Use Demand	$ 1,328	$ 1,334	$ 6	0.45%
Rate 8 - Residential	$ 779,737,304	$ 783,081,763	$ 3,344,459	0.43%
Total Residential Class	$ 878,715,738	$ 882,468,639	$ 3,752,901	0.43%
SMALL GENERAL SERVICE				
Rate 3M - Municipal Power	$ 14,036,377	$ 14,087,166	$ 50,789	0.36%
Rate 9 - Small General	$ 284,919,571	$ 286,072,314	$ 1,152,743	0.40%
Rate 29 - Small General (Unmetered)	$ 695,405	$ 698,216	$ 2,811	0.40%
Rate 10 - Small Construction	$ 1,064,616	$ 1,067,611	$ 2,995	0.28%
Rate 11 - Irrigation	$ 1,124,326	$ 1,127,951	$ 3,625	0.32%
Rate 12C - Church	$ 15,510,709	$ 15,558,820	$ 48,111	0.31%
Rate 13 - Municipal Lighting	$ 476,666	$ 478,263	$ 1,597	0.34%
Rate 14 - Farm	$ 2,153,887	$ 2,162,050	$ 8,163	0.38%
Rate 16 - Time-of-Use	$ 316,199	$ 317,239	$ 1,040	0.33%
Rate 22S - School	$ 37,084,918	$ 37,215,874	$ 130,956	0.35%
Total Small General Service Class	$ 357,382,674	$ 358,785,504	$ 1,402,830	0.39%
MEDIUM GENERAL SERVICE				
Rate 20 - Medium General	$ 178,806,710	$ 179,535,561	$ 728,851	0.41%
Rate 21 - Time-of-Use	$ 7,196,028	$ 7,228,807	$ 32,779	0.46%
Rate 21A - Experimental Time-of-Use	$ 29,435,304	$ 29,553,013	$ 117,709	0.40%
Total Medium General Service Class	$ 215,438,042	$ 216,317,381	$ 879,339	0.41%
LARGE GENERAL SERVICE				
Rate 23 - Industrial Power	$ 268,491,733	$ 269,415,684	$ 923,951	0.34%
Rate 24 - Time-of-Use	$ 147,428,394	$ 148,011,377	$ 582,983	0.40%
Contracts	$ 102,825,829	$ 103,084,489	$ 258,660	0.25%
Total Large General Service Class	$ 518,745,956	$ 520,511,550	$ 1,765,594	0.34%
TOTAL			$ 7,800,664	

[1] - These columns have been updated to reflect the new fuel factors approved by the Public Service Commission of South Carolina in Order No. 2008-742 relating to the Company's Request for Mid-Period Adjustment

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SOUTH CAROLINA ELECTRIC & GAS COMPANY
PROPOSED ELECTRIC RATE SCHEDULES

Listed are the proposed electric rate schedules included as follows:

Rate	Description
1 (RGC)	Good Cents Residential Service
2	Low Use Residential Service
3	Municipal Power Service
5	Time-of-Use Residential Service
6 (RGCC)	Energy Saver/Conservation Residential Service
7	Time-of-Use Demand Residential Service
8	Residential Service
9	General Service
10	Small Construction Service
11	Irrigation Service
12 (C)	Church Service
13 (ML)	Municipal Lighting Service
14	Farm Service
15 (SS-1)	Supplementary and Standby Service
16	Time-of-Use General Service
19	Concurrent Demand Time-of-Use General Service
20	Medium General Service
21	General Service Time-of-Use Demand
21A	Experimental Program – General Service Time-of-Use Demand
22 (S)	School Service
23	Industrial Power Service
24	Large General Service Time-of-Use

Contract Rates

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 1 (RGC)

RESIDENTIAL SERVICE
GOOD CENTS RATE

AVAILABILITY

Effective January 15, 1996 this schedule is closed and not available to any new structure.

This rate is available to customers who meet the Company's Good Cents requirements and use the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system to individually metered private residence and individually metered dwelling units in apartment structures or other multi-family residential structures. It is not available for resale service nor shall service be supplied to dwelling units having a total of more than ten rooms, five or more of which are rented or offered for rent to any person or persons not a member, or members, of the immediate family of the owner or lessor of the dwelling units.

A dwelling unit is defined as a room or group of rooms having, in addition to living quarters, kitchen facilities for the sole use of the family or individual occupying such dwelling unit.

CERTIFICATION REQUIREMENTS

Prior to construction, the customer or prospective customer must contact the Company to ascertain the requirements of the Good Cents Program and to arrange for on-site inspections for compliance.

The dwelling unit must be certified by the Company to meet or exceed the Company's Good Cents Program requirements in force at the time of application in order to qualify for service under this rate schedule.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, 120 volts, 2 wire or 120/240 volts 3 wire.

RATE PER MONTH

	Summer (Billing Months June-September)	Winter (Billing Months October-May)
Basic Facilities Charge:	$ 8.00	$ 8.00
Plus Energy Charge:		
First 800 Kwhrs. @	$ 0.10279 per Kwhr.	$ 0.10279 per Kwhr.
Excess over 800 Kwhrs. @	$ 0.11241 per Kwhr.	$ 0.09884 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03392 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00043 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when customer pays the difference in costs between non-standard service and standard service or pays the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

Contracts shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 2

LOW USE RESIDENTIAL SERVICE

AVAILABILITY

This rate is available to customers that meet the special conditions listed below, and are served by the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system to individually metered private residences and individually metered dwelling units in apartment structures or other multi-family residential structures. It is not available for resale service nor shall service be supplied to dwelling units having a total of more than ten rooms, five or more of which are rented or offered for rent to any person or persons not a member, or members, of the immediate family of the owner or lessor of the dwelling units.

A dwelling unit is defined as a room or group of rooms having, in addition to living quarters, kitchen facilities for the sole use of the family or individual occupying such dwelling unit.

SPECIAL CONDITIONS OF SERVICE

1) This rate schedule is available to those accounts where the consumption has not exceeded 400 Kwhrs. for each of the twelve billing months preceding the billing month service is to be initially billed under this rate schedule. The customer must have occupied the dwelling unit for the entire time necessary to determine eligibility under this rate schedule.
2) Consumption during a billing period of more than 30 days, used to determine eligibility under this rate schedule, shall be adjusted to a 30 day billing period by application of a fraction, the numerator of which shall be 30 and the denominator of which shall be the actual number of days in the billing period.
3) The second billing month within a twelve billing month period that consumption under this rate schedule exceeds 400 Kwhrs. will terminate eligibility under this rate schedule.
4) Service will be billed under the previous rate schedule the next twelve billing periods before the customer will again be eligible for the Low Use Rate.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, 120 volts, 2 wire or 120/240 volts 3 wire.

RATE PER MONTH

Basic Facilities Charge: $ 8.00

Plus Energy Charge:

All Kwhrs. @ $ 0.07883 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03392 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00043 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

Contracts shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

Effective Upon Approval Of The Public Service Commission Of South Carolina

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY
MUNICIPAL
POWER SERVICE

RATE 3 (M)

AVAILABILITY

This rate is available to municipal customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system. This includes all municipally owned and operated facilities for power purposes including, but not restricted to public buildings and pumping stations. It is not available for resale or standby service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

Basic Facilities Charge:	$ 16.50	
Plus Energy Charge:		
Summer Billing Months (June-September) All Kwhrs. @	$ 0.09070	per Kwhr.
Winter Billing Months (October-May) All Kwhrs. @.	$ 0.09070	per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, provided however, when construction costs exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction of the excess cost or pay the Company's standard facility rate on the excess construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

Service shall not be supplied under this rate for establishments of a commercial nature, nor to operations primarily non-municipal. Under no conditions will the Company allow the service to be resold to or shared with others.

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

Contracts shall be written for a period of not less than ten (10) years.Contracts shall be written for a period of not less than ten (10) years.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

Effective Upon Approval Of The Public
Service Commission Of South Carolina

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RATE 5

RESIDENTIAL SERVICE
TIME OF USE

AVAILABILITY

This rate is available on a voluntary basis to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system to individually metered private residences and individually metered dwelling units in apartment structures or other multi-family residential structures. It is not available for resale service nor shall service be supplied to dwelling units having a total of more than ten rooms, five or more of which are rented or offered for rent to any person or persons not a member, or members, of the immediate family of the owner or lessor of the dwelling units.

A dwelling unit is defined as a room or group of rooms having, in addition to living quarters, kitchen facilities for the sole use of the family or individual occupying such dwelling unit.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, 120 volts, 2 wire or 120/240 volts 3 wire.

RATE PER MONTH

I. Summer Months of June-September

A. Basic Facilities Charge: $ 12.00

B. Energy Charge:

All on-peak Kwhrs.@ $ 0.22941 per Kwhr.

All off-peak Kwhrs.@ $ 0.08087 per Kwhr.

C. Minimum Bill:

The monthly minimum charge shall be the basic facilities charge

II. Winter Months of October-May

A. Basic Facilities Charge: $ 12.00

B. Energy Charge:

All on-peak Kwhrs.@ $ 0.21614 per Kwhr.

All off-peak Kwhrs.@ $ 0.08087 per Kwhr.

C. Minimum Bill:

The monthly minimum charge shall be the basic facilities charge

DETERMINATION OF ON-PEAK HOURS

A. On-Peak Hours:

Summer Months of June-September:

The on-peak summer hours are defined as the hours between 2:00 p.m.-7:00 p.m., Monday-Friday, excluding holidays.*

Winter Months of October-May:

The on-peak winter hours are defined as the hours between 7:00 a.m.-12:00 noon, Monday-Friday, excluding holidays.*

B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03392 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00043 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

The Company shall have the right to install and operate special metering equipment to measure customer's loads or any part thereof and to obtain any other data necessary to determine the customer's load characteristics.

The Company's levelized payment plans are not available to customers served under this rate schedule.

TERM OF CONTRACT

Contracts shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 6 (RGCC)

RESIDENTIAL SERVICE
ENERGY SAVER/
CONSERVATION RATE
(Page 1 of 2)

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system to individually metered private residences and individually metered dwelling units in apartment structures or other multi-family residential structures. It is not available for resale service nor shall service be supplied to dwelling units having a total of more than ten rooms, five or more of which are rented or offered for rent to any person or persons not a member, or members, of the immediate family of the owner or lessor of the dwelling units.

A dwelling unit is defined as a room or group of rooms having, in addition to living quarters, kitchen facilities for the sole use of the family or individual occupying such dwelling unit.

The builder or homeowner must provide the following:

1) For new homes only - Proof that home meets the Council of American Building Officials Model Energy Code.
2) Receipts showing the purchase and installation of a new AC unit that meets the requirements as shown below.
3) A certificate issued by an installer showing a wall total cavity R value of 15 (R-15).
4) Certification from builder stating that requirements have been met.

The Company may perform an on-site audit to verify that customer meets availability requirements as stated herein.

THERMAL AND AIR CONDITIONING REQUIREMENTS FOR ENERGY CONSERVATION

The following requirements are predicated on the Council of American Building Officials Model Energy Code and subject to change with a change in the Council of American Building Officials Model Energy Code. Sufficient application of thermal control products and specified air conditioning requirements must be met to satisfy the minimum standards outlined below:

Ceilings: Ceilings of newly constructed homes shall be insulated with a total "as installed" thermal resistance (R) value of 30 (R-30).
Ceilings of manufactured housing shall be insulated with a thermal resistance (R) value of 30 (R-30).
Ceilings of existing housing shall be insulated with a total "as installed" thermal resistance (R) value of 38 (R-38).

Lighting: Recessed ceiling lights shall be sealed.

Walls: Walls exposed to the full temperature differential (TD), or unconditioned areas, shall have a total cavity R value of 15 (R-15).
*This is not a requirement for existing housing.

Floors: Floors over crawl space or crawl space walls shall have insulation installed having a total R value of 19 (R-19).
100% of the exposed earth in a crawl space shall be covered with a vapor barrier of no less than (4) mills.

Windows: Windows shall be insulated (double) glass or have storm windows.

Doors: Doors exposed to full TD areas must be weather-stripped on all sides and of solid construction.

Ducts: Air ducts located outside of conditioned space must have: 1) all joints properly fastened and sealed, and, 2) the duct shall have a minimum installed insulation R-value of 6.0. All joints in ductwork outside of the conditioned space must be permanently sealed with the application of duct sealant. Transverse joints, take-offs, transitions, supply/return connections to the air handler, boot connections to the floor/ceiling/wall, and framed-in and panned passages must be made airtight with duct sealant.

Attic Vent: Attic ventilation must be a minimum of one square foot of net free area for each 150 square feet attic floor area.

Water Heaters: Electric water heaters must have insulation surrounding the tank with minimum total R value of 8 (R-8).

Air Condition: All air conditioners must have a SEER rating of 1.5 SEER higher than the rating shown in the Council of American Building Officials Model Energy Code or 12 SEER or any federal or state mandated energy codes, whichever is higher.

Other: Chimney flues and fireplaces must have tight fitting dampers.

*Insulation thermal resistance values are shown for insulation only, framing corrections will not be considered.

The "as installed" thermal resistance (R) value for all loose fill or blowing type insulation materials must be verifiable either by installed density using multiple weighted samples, the manufacturer's certification methods, Federal Trade Commission's procedures or other methods specified by local governing agencies.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 6 (RGCC)

RESIDENTIAL SERVICE
ENERGY SAVER/
CONSERVATION RATE
(Page 2 of 2)

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, 120 volts, 2 wire or 120/240 volts 3 wire.

RATE PER MONTH

		Summer (Billing Month June-September)	Winter (Billing Month October-May)
Basic Facilities Charge:		$ 8.00	$ 8.00
Plus Energy Charge:			
First	800 Kwhrs. @	$ 0.10279 per Kwhr.	$ 0.10279 per Kwhr.
Excess over	800 Kwhrs. @	$ 0.11241 per Kwhr.	$ 0.09884 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03392 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00043 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

Contracts shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RESIDENTIAL SERVICE
TIME-OF-USE DEMAND

RATE 7

AVAILABILITY

This rate is available on a voluntary basis to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system to individually metered private residences and individually metered dwelling units in apartments structures or other multi-family residential structures. It is not available for resale service nor shall service be supplied to dwelling units having a total or more than ten rooms, five or more of which are rented or offered for rent to any person or persons not a member, or members, of the immediate family of the owner or lessor of the dwelling units.

A dwelling unit is defined as a room or group of rooms having, in addition to living quarters, kitchen facilities for the sole use of the family or individual occupying such dwelling unit.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, 120 volts, 2 wire or 120/240 volts 3 wire.

RATE PER MONTH

I. Basic Facilities Charge:	$ 12.00	
II. Demand Charge:		
A. On-Peak Billing Demand		
Summer Months of June-September @	$ 10.25	per KW
Non-Summer Months of October-May @	$ 6.44	per KW
III. Energy Charge:		
All on-peak Kwhrs.@	$ 0.07436	per Kwhr.
All off-peak Kwhrs.@	$ 0.05871	per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above.

BILLING DEMAND

The maximum integrated fifteen minute demand for the current month occurring during the on-peak hours specified below. The maximum integrated fifteen minute demand for any period may be recorded on a rolling time interval.

DETERMINATION OF ON-PEAK HOURS

A. On-Peak Hours:

Summer Months of June-September:

The on-peak summer hours are defined as the hours between 2:00 p.m.-7:00 p.m., Monday-Friday, excluding holidays.*

Non-Summer Months of October-May:

The on-peak winter hours are defined as the hours between 7:00 a.m.-12:00 noon, Monday-Friday, excluding holidays.*

B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03392 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00043 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

The Company shall have the right to install and operate special metering equipment to measure customer's loads or any part thereof and to obtain any other data necessary to determine the customer's load characteristics.

The Company's levelized payment plans are not available to customers served under this rate schedule.

TERM OF CONTRACT

Contracts shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RESIDENTIAL SERVICE

RATE 8

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system to individually metered private residences and individually metered dwelling units in apartment structures or other multi-family residential structures. It is not available for resale service nor shall service be supplied to dwelling units having a total of more than ten rooms, five or more of which are rented or offered for rent to any person or persons not a member, or members, of the immediate family of the owner or lessor of the dwelling units.

A dwelling unit is defined as a room or group of rooms having, in addition to living quarters, kitchen facilities for the sole use of the family or individual occupying such dwelling unit.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, 120 volts, 2 wire or 120/240 volts 3 wire.

RATE PER MONTH

		Summer (Billing Month June-September)	Winter (Billing Month October-May)
Basic Facilities Charge:		$ 8.00	$ 8.00
Plus Energy Charge:			
First	800 Kwhrs. @	$ 0.10656 per Kwhr.	$ 0.10656 per Kwhr.
Excess over	800 Kwhrs. @	$ 0.11656 per Kwhr.	$ 0.10246 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03392 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00043 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

Contracts shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 9

GENERAL SERVICE

(Page 1 of 2)

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system for general light and/or power purposes such as commercial, industrial, religious, charitable and eleemosynary institutions. It is not available for resale service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

	Summer (Billing Months June-September)	Winter (Billing Months October-May)
Basic Facilities Charge:	$ 16.50	$ 16.50
Demand Charge:		
First 250 KVA of Billing Demand	No Charge	No Charge
Excess over 250 KVA of Billing Demand @	$ 3.05 per KVA	No Charge

The Billing Demand (to the nearest whole KVA) shall be the maximum integrated fifteen (15) minute demand measured during the billing months of June through September.

Energy Charge:		
First 3,000 Kwhrs. @	$ 0.10602 per Kwhr.	$ 0.10602 per Kwhr.
Over 3,000 Kwhrs. @	$ 0.11239 per Kwhr.	$ 0.09896 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge and demand charge as stated above, provided however, when construction costs exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction of the excess cost or pay the Company's standard facility rate on the excess construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

POWER FACTOR

If the power factor of the Customer's installation falls below 85%, the Company may adjust the billing to a basis of 85% power factor.

TEMPORARY SERVICE

Temporary service for construction and other purposes will be supplied under this rate in accordance with the Company's Terms and Conditions covering such service.

PAYMENT TERMS

All bills are net and payable when rendered.

Effective Upon Approval Of The Public Service Commission Of South Carolina

SPECIAL PROVISIONS

This rate is available for residential service where more than one dwelling unit is supplied through a single meter, provided service to such dwelling unit was established prior to July 1, 1980.

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

UNMETERED SERVICE PROVISION

When customer's usage can be determined and in the sole opinion of the Company, installation of metering equipment is impractical or uneconomical, monthly Kwhrs. may be estimated by the Company and billed at the above rate per month, except that the basic facilities charge shall be $5.25.

TERM OF CONTRACT

Contracts for installation of a permanent nature shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 10

SMALL CONSTRUCTION SERVICE

AVAILABILITY

This rate is available as a temporary service for builders using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system for general lighting and/or power purposes during construction. It is not available for resale or standby service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, single phase, two or three wire at Company's standard secondary service voltages of 240 volts or less.

RATE PER MONTH

Basic Facilities Charge: $ 8.00

Plus Energy Charge:
All Kwhrs. @ $ 0.10637 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

If providing temporary service requires the Company to install transformers and other facilities which must be removed when temporary service is no longer required, then the customer may be required to pay the cost of installing and removing the Company's temporary facilities.

TERM OF CONTRACT

Contracts shall be written for a period of time commencing with establishment of service and ending when construction is suitable for occupancy or one year, which is less. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

IRRIGATION SERVICE

RATE 11

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system. It is not available for resale. This schedule is available for service furnished for the operation of electric motor driven pumps and equipment supplying water for the irrigation of farmlands and plant nurseries, and irrigation to provide adequate moisture for vegetative cover to control erosion and provide runoff. The pumping units served hereunder shall be used solely for the purpose of irrigation.

All motors of more than 5 H.P. shall be approved by the Company. The Company reserves the right to deny service to any motor which will be detrimental to the service of other customers. Upon request, customer may pay all cost associated with upgrading the system to the point at which starting the customer's motor will not degrade the service to the other customers.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

I. Summer Months of June-September		
A. Basic Facilities Charge:	$ 20.15	
B. Energy Charge:		
All on-peak Kwhrs.@	$ 0.18811	per Kwhr.
All shoulder Kwhrs.@	$ 0.11348	per Kwhr.
All off-peak Kwhrs.@	$ 0.06623	per Kwhr.
II. Winter Months of October-May		
A. Basic Facilities Charge:	$ 20.15	
B. Energy Charge:		
All Kwhrs.@	$ 0.06623	per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, except when the revenue produced by the customer does not sufficiently support the investment required to serve the load. The Company will determine in each case the amount and form of payment required to correct the revenue deficiency.

DETERMINATION OF ON-PEAK SHOULDER, AND OFF-PEAK HOURS

A. On-Peak Hours:

Summer Months of June-September:

The on-peak summer hours are defined as the hours between 2:00 p.m.-6:00 p.m., Monday-Friday, excluding holidays.*

B. Shoulder Hours:

Summer Months of June-September:

The shoulder summer hours are defined as the hours between 10:00 a.m.-2:00 p.m. and 6:00 p.m.-10:00 p.m., Monday-Friday, excluding holidays.*

C. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak or shoulder hours.

*Holidays are Independence Day and Labor Day

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

The Company shall have the right to install and operate special metering equipment to measure customer's loads or any part thereof and obtain any other data necessary to determine the customer's load characteristics.

TERM OF CONTRACT

Contracts for installations shall be written for a period of not less than ten (10) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

CHURCH SERVICE

RATE 12 (C)

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system for general light and/or power service to churches. It is not available for resale or standby service. It is only available to recognized churches.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

Basic Facilities Charge:	$	10.80	
Plus Energy Charge: All Kwhrs. @	$	0.09098	per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, provided however, when construction costs exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction of the excess cost or pay the Company's standard facility rate on the excess construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Under no conditions will the Company allow the service to be resold to or shared with others. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

When a church offers activities that, in the sole opinion of the Company, are of a commercial nature such as day care, camps or recreational activities, the Company may require that the account be served under the appropriate general service rate.

TERM OF CONTRACT

Contracts shall be written for a period of not less than five (5) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

MUNICIPAL
LIGHTING SERVICE

RATE 13 (ML)

AVAILABILITY

This rate is available to municipal customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system. This includes all municipally owned and operated facilities for lighting streets, highways, parks and other public areas, or other signal system service. It is not available for resale or standby service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

Basic Facilities Charge: $ 16.50

Plus Energy Charge:
All Kwhrs. @ $ 0.08565 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, provided however, when construction costs exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction of the excess cost or pay the Company's standard facility rate on the excess construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

Service shall not be supplied under this rate for establishments of a commercial nature, nor to operations primarily non-municipal. Under no circumstances will the Company allow the service to be resold or shared with others.

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

Contracts shall be written for a period of not less than ten (10) years.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

Effective Upon Approval Of The Public
Service Commission Of South Carolina

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

FARM SERVICE

RATE 14

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system on farms for producing but not processing agricultural, dairy, poultry and meat products.

Service shall not be supplied under this rate for establishments of a commercial nature such as stores, shops, stands, restaurants, service stations or any non-farm operations; nor for processing, distributing or selling farm or other products not originating through production on the premises served. Motors rated in excess of 20 H.P. will not be served on this rate. It is available for farm commercial operations including irrigation, grain elevators and crop drying for farm products produced on the premises served. It is not available for resale service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

	Summer (Billing Months June-September)	Winter (Billing Months October-May)
Basic Facilities Charge:	$ 8.00	$ 8.00
Plus Energy Charge:		
First 800 Kwhrs.@	$ 0.10637 per Kwhr.	$ 0.10637 per Kwhr.
Excess over 800 Kwhrs.@	$ 0.11637 per Kwhr.	$ 0.10227 per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, provided however, when construction costs Exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction of the excess cost or pay the Company's standard facility rate on the excess construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state and governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. No contract shall be written for a period of not less than five (5) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

Effective Upon Approval Of The Public Service Commission Of South Carolina

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

SUPPLEMENTARY AND STANDBY SERVICE

RATE 15 (SS-1)

AVAILABILITY

Available to Small Power Producers and co-generators that are a Quality Facility as defined by the Federal Energy Regulatory Commission (FERC) Order No. 70 under Docket No. RM 79-54. This schedule is not available to Qualifying Facilities with a power production capacity greater than 100 KW.

SUPPLEMENTARY SERVICE

Supplementary service is defined herein as power supplied by the Company to a Qualifying Facility in addition to that which the Qualifying Facility generates itself. Supplementary service will be provided by the Company under a retail electric service schedule which the customer will establish in conjunction with the implementation of this Supplementary and Standby Service rate.

SUPPLEMENTARY SERVICE

1) Standby service under this schedule is defined herein as power supplied by the Company to a Qualifying Facility to replace energy ordinarily generated by a Qualifying Facility during a scheduled or unscheduled outage.
2) Standby service is available to customers establishing a firm demand which is billed under a retail electric service schedule of the Company. If no firm demand is established by the customer for the purpose of taking Supplementary power, then Standby service will be provided as Supplementary service and billed on the applicable retail electric service schedule.
3) Standby service is defined for each 15-minute interval as the minimum of: (1) the Standby contracted demand, and, (2) the difference between the measured load and the contracted firm demand, except that such difference shall not be less than zero.
4) Supplementary Service is defined as all power supplied by the Company not defined herein as Standby Service.
5) The Standby contract demand shall be limited to the power production capacity of the Qualifying Facility.

STANDBY SERVICE POWER RATE PER MONTH

Basic Facilities Charge	$ 155.00
Demand Charge per KW of Contract Demand	$ 4.49
Energy Charge:	
On-Peak KWH	$ 0.05251
Off-Peak KWH	$ 0.04158

DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

A. On-Peak Hours:
On-peak hours are defined to be 10:00 a.m. - 10:00 p.m. for the months of June-September, excluding weekends.

B. Off-Peak Hours:
All hours not defined as on-peak hours are considered to be off-peak.

POWER FACTOR

The customer must maintain a power factor of as near unity as practicable. If the power factor of the customer's installation falls below 85%, the Company shall adjust the billing demand to a basis of 85% power factor

LIMITING PROVISION

The Standby Service power rate will be available for 1325 annual hours of consumption beginning in May and ending in April, or for a prorated share thereof for customers who begin to receive service in months other than May. Accounts on this rate are subject to the following condition: Standby service will be available for a maximum of 120 On-Peak Hours.

If this account exceeds: (1) 1325 hours of Standby service annually, or (2) 120 on-peak hours of Standby service, the account will be billed on the rate normally applied to customer's Supplementary service load for the current billing month and the subsequent eleven months.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03366 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00008 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The customer is responsible for all costs associated with interconnection to the Company's system for the purpose of obtaining Supplementary or Standby power.

TERM OF CONTRACT

Contracts shall be written for a period of not less than three (3) years.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and a part of this rate schedule.

Effective Upon Approval Of The Public Service Commission Of South Carolina

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

GENERAL SERVICE
TIME-OF-USE

RATE 16

AVAILABILITY

This rate is available to any non-residential customer using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system for power and light requirements and having an on-peak demand of less than 1,000 KW. The second billing month within a twelve billing month period that on-peak demand exceeds 1,000 KW will terminate eligibility under this rate schedule. It is not available for resale service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

I. Basic Facilities Charge:	$ 20.15	
II. Energy Charge:		
A. On-Peak Kwhrs.		
1. Months of June-September	$ 0.18811	per Kwhr.
2. Months of October-May	$ 0.14961	per Kwhr.
B. Off-Peak Kwhrs.		
First 1,000 off-peak Kwhrs. @	$ 0.07916	per Kwhr.
Excess over 1,000 off-peak Kwhrs. @	$ 0.08374	per Kwhr.

DETERMINATION OF ON-PEAK HOURS

A. On-Peak Hours:

June-September:

The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

October-May:

The on-peak non-summer hours are defined as those hours between 6:00 a.m.-10:00 a.m. and 6:00 p.m.-10:00 p.m. Monday-Friday, excluding holidays.*

B. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, provided however, when construction costs exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina..

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

POWER FACTOR

If the power factor of the customer's installation falls below 85%, the Company may adjust the billing to a basis of 85% power factor.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. Contracts for installations of a permanent nature shall be written for a period of not less than one (1) year. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

Effective Upon Approval Of The Public Service Commission Of South Carolina

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RATE 19

GENERAL SERVICE
CONCURRENT DEMAND
TIME-OF-USE

(Page 1 of 2)

AVAILABILITY

This rate is available at the Company's discretion, to a maximum of 10 business entities using the Company's standard electric service. Each business entity shall be comprised of at least 2 non-contiguous premises having a total combined contract demand of at least 1,000 KVA. In addition, each premises shall have a minimum contract demand of 50 KVA. A business entity is defined as a single corporation, partnership, or individual owner. This rate is not available for individual franchise units of a business, nor for subsidiaries operating as a separate corporation or partnership. The individual premises which comprise the business entity should possess similar characteristics and/or load patterns common to the industry in which the entity does business. This schedule is not available to entities which form an association or similar organization solely in an attempt to qualify for service under this rate. The Company reserves the right to make a final determination on what constitutes a business entity as well as the premises making up that entity. This rate is not available for residential customers or resale service.

Service under this rate schedule is dependent on the Company procuring and installing necessary metering equipment and may not be available to premises where multiple delivery points on contiguous properties are not currently combined under contract

CHARACTER OF SERVICE

Alternating Current, 60 hertz, three phase metering at the delivery voltage which shall be standard to the Company's operation.

RATE PER MONTH

I. The Diversity Charge will be computed utilizing actual data or modeled using available sample data from similar entities. Once actual data is available for a twelve month period, the Diversity Charge will be reviewed and may be adjusted. The Diversity charge will not be less than zero. The Diversity Charge will be computed according to the following formula:

$$\text{Diversity Charge} = \frac{AC1 - AC2}{12}$$

Where AC1 = Annual Cost Under Current Rate(s)
AC2 = Annual Cost Projected Under Concurrent Rate

II. Basic Facilities Charge: $ 155.00 per Premises

III. Demand Charge:

A. Concurrent On-Peak Billing Demand

1. Summer Months of June-September @ $ 19.15 per KVA
2. Non-Summer Months of October-May @ $ 12.72 per KVA

B. Concurrent Off-Peak Billing Demand

1. All Off-Peak Billing Demand @ $ 3.56 per KVA

IV. Energy Charge:

A. On-Peak Kwhrs.

1. Summer Months of June-September @ $ 0.07631 per Kwhr.
2. Non-Summer Months of October-May @ $ 0.05251 per Kwhr.

B. Off-Peak Kwhrs.

1. All Off-Peak Kwhrs. @ $ 0.04158 per Kwhr.

BILLING DEMAND

The concurrent billing demand for the entity will be the maximum integrated 15 minute concurrent demand which may be on a rolling time interval for all the premises' metering points during the calendar month.

For the summer months, the concurrent on-peak billing demand shall be the maximum integrated fifteen minute concurrent demand measured during the on-peak hours of the current month.

For the non-summer months, the concurrent on-peak billing demand will be the greater of: (1) the maximum integrated fifteen minute concurrent demand measured during the on-peak hours of the current month, or (2) eighty percent (80%) of the maximum integrated concurrent demand occurring during the on-peak hours of the preceding months.

The concurrent off-peak billing demand shall be the greatest of the following positive differences: (1) the maximum integrated fifteen minute concurrent demand measured during the off-peak hours minus the on-peak billing demand, (2) the contract demand minus the on-peak billing demand, or (3) 50 KVA per premises minus the on-peak billing demand.

Effective Upon Approval Of The Public
Service Commission Of South Carolina

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 19

GENERAL SERVICE
CONCURRENT DEMAND
TIME-OF-USE
(Page 2 of 2)

DETERMINATION OF ON-PEAK AND OFF PEAK HOURS

A. On-Peak Hours During Summer Months:

June-September:
The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

B. On-Peak Hours During Non-Summer Months:

May and October:
The on-peak non-summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

November-April:
Thpeak non-summer hours are defined as the hours between 6:00 a.m.-12:00 noon and 5:00p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

C. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified above as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

ADDITION OR REMOVAL OF A PREMISES

An additional premises may be added subsequent to the initial five (5) year contract without an increase in the diversity charge if the entity extends the existing concurrent contract so that the term extends five (5) years after the addition of the new premises. A premises existing at the time that the entity initially elects to take service under this rate schedule may be added without an extension in the concurrent contract term; however, there will be an increase in the diversity charge as each pre-existing premises is added. If an entity wants to terminate service to a premises under this rate schedule and the same time does not add another premises which includes an extension of the contract term, the Company will determine the appropriate termination charge. Alternatively, if the entity adds an additional premises and prefers not to extend the contract term, the diversity charge will increase accordingly and the entity agrees to reimburse the Company for the total cost of connection to the Company's system if service to the new premises is terminated within five (5) years of the service date.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03366 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00022 per Kwhr. for accumulation of a storm damage reserve.

BILLING AND PAYMENT TERMS

Bills will be calculated on a monthly basis. Each premises will receive an individual information bill and the entity will receive a combined bill summarizing all of the premises. All payments, as well as any credit and collection activities, will be at the entity level. All bills are net and payable when rendered.

SALES AND FRANCHISE TAX

For each premises served under this rate, any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body, will be added to the monthly bill..

METERING

Service under this rate will be provided only after the Company procures and installs at each premises metering which has interval data capabilities to allow for the aggregation of demand for each 15 minute interval in the billing period. Each entity may be required to contribute to the cost of metering installed by the Company to qualify for service under this rate. In addition, the entity must provide a dedicated phone line at each metering point.

TERM OF CONTRACT

The contract terms will depend on the conditions of service above. No contract shall be written for a period of less than five (5) years. A master contract shall be written to include all premises amended as premises are added or deleted.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

MEDIUM GENERAL SERVICE

RATE 20

AVAILABILITY

This rate is available to any non-residential customer using the Company's standard service for power and light requirements and having a contract demand of 75 KVA or over. It is not available for resale service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, three phase, metering at the delivery voltage which shall be standard to the Company's operation.

RATE PER MONTH

Demand Charge:

First 75 KVA of Billing Demand	$ 1,260.50	
Excess over 75 KVA of Billing Demand @	$ 14.94	per KVA

The billing demand (to the nearest whole KVA) shall be the greatest of: (1) the maximum integrated fifteen minute demand measured (which may be on a rolling time interval) during the current month; or (2) eighty percent (80%) of the highest demand occurring during the billing months June through September in the eleven preceding months; or (3) sixty percent (60%) of the highest demand occurring during the billing months of October through May in the eleven preceding months; or (4) the contract demand; or (5) 75 KVA.

Plus Energy Charge:

First 75,000	$ 0.04594	per Kwhr.
Excess over 75,000	$ 0.04360	per Kwhr.

MINIMUM CHARGE

The monthly minimum charge is the demand as determined above. The Company may allow a buildup period not to exceed six months for new and expanding accounts during which time the contract demand and/or the minimum demand specified in the rate schedule may be waived. The Company shall not commit itself to a buildup period exceeding six months without prior approval of the Commission for the specific account involved.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03366 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00022 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. No contract shall be written for a period of less than five (5) years. A separate contract shall be written for each meter.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RATE 21

GENERAL SERVICE
TIME-OF-USE-DEMAND
(Page 1 of 2)

AVAILABILITY

This rate is available to any customer using the Company's standard service for power and light requirements and having a contract demand of 50 KVA and a maximum demand of less than 1,000 KVA. It is not available for resale service.

CHARACTER OF SERVICE

Alternating current, 60 hertz, three phase, metering at the delivery voltage which shall be standard to the Company's operation.

RATE PER MONTH

I. Basic Facilities Charge:	$	155.00	
II. Demand Charge:			
A. On-Peak Billing Demand:			
1. Summer Months of June-September @	$	19.15	per KVA
2. Non-Summer Months of October-May @	$	12.72	per KVA
B. Off-Peak Billing Demand			
1. All Off-Peak Billing Demand @	$	3.56	per KVA
III. Energy Charge:			
A. On-Peak Kwhrs.			
1. Summer Months of June-September @	$	0.07631	per Kwhr.
2. Non-Summer Months of October-May @	$	0.05251	per Kwhr.
B. Off-Peak Kwhrs.			
1. All Off-Peak Kwhrs. @	$	0.04158	per Kwhr.

BILLING DEMAND

The billing demands will be rounded to the nearest whole KVA. The maximum integrated fifteen minute demand for any period may be recorded on a rolling time interval.

For the summer months, the on-peak billing demand shall be the maximum integrated fifteen minute demand measured during the on-peak hours of the current month.

For the non-summer months, the on-peak billing demand will be the greater of: (1) the maximum integrated fifteen minute demand measured during the on-peak hours of the current month, or (2) eighty percent (80%) of the maximum integrated demand occurring during the on-peak hours of the preceding summer months.

The off-peak billing demand shall be the greatest of the following positive differences: (1) the maximum integrated fifteen minute demand measured during the off-peak hours minus the on-peak billing demand, (2) the contract demand minus the on-peak billing demand or (3) 50 KVA minus the on-peak billing demand.

DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

A. On-Peak Hours During Summer Months:

June-September:

The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

B. On-Peak Hours During Non-Summer Months:

May and October:

The on-peak non-summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

November-April:

The on-peak non-summer hours are defined as these hours between 6:00 a.m.-12:00 noon and 5:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

C. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03366 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00022 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. No contract shall be written for a period less than five (5) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 21A

EXPERIMENTAL PROGRAM - GENERAL SERVICE
TIME-OF-USE-DEMAND

(Page 1 of 2)

AVAILABILITY

This rate is available on a voluntary "first come, first serve" basis to the first 250 Rate 20 customer accounts and any Rate 21 customer account that qualify under the provisions of the stipulation approved by the South Carolina Public Service Commission in Docket #2002-223-E order No. 2003-38 dated January 31, 2003. This rate will be closed after the initial participant group is established, except there will be 25 additional customer accounts that will be allowed to participate on a "first come first serve' basis for new facilities constructed by customers in the initial participant group and as provided for in the stipulation as referenced above. The stipulation referenced above shall provide guidance as to any issue regarding availability on this rate. It is not available for resale service.

CHARACTER OF SERVICE

Alternating current, 60 hertz, three phase, metering at the delivery voltage which shall be standard to the Company's operation.

RATE PER MONTH

I. Basic Facilities Charge:	$	155.00	
II. Demand Charge:			
A. On-Peak Billing Demand:			
1. Summer Months of June-September @	$	18.38	per KVA
2. Non-Summer Months of October-May @	$	11.41	per KVA
B. Off-Peak Billing Demand			
1. All Off-Peak Billing Demand @	$	3.56	per KVA
III. Energy Charge:			
A. On-Peak Kwhrs.			
1. Summer Months of June-September @	$	0.07209	per Kwhr.
2. Non-Summer Months of October-May @	$	0.04973	per Kwhr.
B. Off-Peak Kwhrs.			
1. All Off-Peak Kwhrs. @	$	0.03946	per Kwhr.

BILLING DEMAND

The billing demands will be rounded to the nearest whole KVA. The maximum integrated fifteen minute demand for any period may be recorded on a rolling time interval.

For the summer months, the on-peak billing demand shall be the maximum integrated fifteen minute demand measured during the on-peak hours of the current month.

For the non-summer months, the on-peak billing demand will be the greater of: (1) the maximum integrated fifteen minute demand measured during the on-peak hours of the current month, or (2) eighty percent (80%) of the maximum integrated demand occurring during the on-peak hours of the preceding summer months.

The off-peak billing demand shall be the greatest of the following positive differences: (1) the maximum integrated fifteen minute demand measured during the off-peak hours minus the on-peak billing demand, (2) the contract demand minus the on-peak billing demand or (3) 50 KVA minus the on-peak billing demand.

DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

A. On-Peak Hours During Summer Months:

June-September:

The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

B. On-Peak Hours During Non-Summer Months:

May and October:

The on-peak non-summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

November-April:

The on-peak non-summer hours are defined as these hours between 6:00 a.m.-12:00 noon and 5:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

C. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

RATE 21A

EXPERIMENTAL PROGRAM - GENERAL SERVICE
TIME-OF-USE-DEMAND

(Page 2 of 2)

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03366 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00022 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. The contract for this experimental program shall be written for a period of 48 months as provided for in the stipulation approved by the South Carolina Public service Commission in docket No. 2002-223-E, order No. 2003-38 dated July 31, 2003. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and a part of this rate schedule.

Effective Upon Approval Of The Public
Service Commission Of South Carolina

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

SCHOOL SERVICE

RATE 22 (S)

AVAILABILITY

This rate is available to customers using the Company's standard service which is specified as a single point of delivery per premises from an existing overhead distribution system for general light and/or power service to schools. It is not available for resale service. It is only available to recognized non-boarding schools with up through grade twelve.

CHARACTER OF SERVICE

Alternating Current, 60 hertz. Voltage and phase at the option of the Company.

RATE PER MONTH

Basic Facilities Charge:		$ 10.80	
Plus Energy Charge:			
First	50,000 Kwhrs.@	$ 0.09309	per Kwhr.
Excess over	50,000 Kwhrs.@	$ 0.10694	per Kwhr.

MINIMUM CHARGE

The monthly minimum charge shall be the basic facilities charge as stated above, provided however, when construction costs exceed four (4) times the estimated annual revenue excluding fuel revenue to be derived by the Company, the customer may make a contribution in aid of construction of the excess cost or pay the Company's standard facility rate on the excess construction cost in addition to the rate charges above.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03378 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00038 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Under no conditions will the Company allow the service to be resold to or shared with others. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

When a school offers activities that, in the sole opinion of the Company, are of a commercial nature such as day care, camps or recreational activities, the Company may require that the account be served under the appropriate general service rate.

TERM OF CONTRACT

Contracts shall be written for a period of not less than five (5) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and are a part of this rate schedule.

ELECTRICITY

SOUTH CAROLINA ELECTRIC & GAS COMPANY

INDUSTRIAL POWER SERVICE

RATE 23

AVAILABILITY

This rate is available to any customer classified in the major industrial group of manufacturing with 10-14 or 20-39 as the first two digits of the Standard Industrial Classification or 21 or 31-33 as the first two digits of the six digit North American Industry Classification System using the Company's standard service for power and light requirements and having a contract demand of 1,000 KW or over. It is not available for resale service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, three phase, metering at the delivery voltage which shall be standard to the Company's operation.

RATE PER MONTH

Demand Charge:

First 1,000 KW of Billing Demand	$ 13,600.00	
Excess over 1,000 KW of Billing Demand @	$ 12.20	per KW

The billing demand (to the nearest whole KW) shall be the greatest of: (1) the maximum integrated fifteen minute demand measured (which may be on a rolling time interval) during the current month; or (2) eighty percent (80%) of the highest demand occurring during the billing months of June through September in the eleven preceding months; or (3) sixty (60%) of the highest demand occurring during the billing months of October through May in the eleven preceding months; or (4) the contract demand; or (5) 1,000 KW.

The customer shall maintain a power factor of as near unity as practicable. If the power factor of the customer's installation falls below 85%, the Company will adjust the billing demand to a basis of 85% power factor.

Plus Energy Charge:

All Kwhrs. @	$ 0.04216	per Kwhr.

DISCOUNT

A discount of $0.60 per KW of billing demand will be allowed when the service is supplied at a delivery voltage of 46,000 volts or higher.

MINIMUM CHARGE

The monthly minimum charge is the demand as determined above. The Company may allow a buildup period not to exceed six months for new and expanding accounts during which time the contract demand and/or the minimum demand specified in the rate schedule may be waived. The Company shall not commit itself to a buildup period exceeding six months without prior approval of the Commission for the specific account involved.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03335 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00008 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmental body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. No contract shall be written for a period less than five (5) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and a part of this rate schedule.

Effective Upon Approval Of The Public Service Commission Of South Carolina

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRICITY

RATE 24

LARGE GENERAL SERVICE
TIME-OF-USE
(Page 1 of 2)

AVAILABILITY

This rate is available to any customer using the Company's standard service for power and light requirements and having a contract demand of 1,000 KW or over. It is not available for resale service.

CHARACTER OF SERVICE

Alternating Current, 60 hertz, three phase, metering at the delivery voltage which shall be standard to the Company's operation.

RATE PER MONTH

I. Basic Facilities Charge:	$ 1,400.00	
II. Demand Charge:		
A. On-Peak Billing Demand		
1. Summer Months of June-September @	$ 14.97	per KW
2. Non-Summer Months of October-May @	$ 10.48	per KW
B. Off-Peak Billing Demand		
1. All Off-Peak Billing Demand @	$ 4.49	per KW
III. Energy Charge:		
A. On-Peak Kwhrs.		
1. Summer Months of June-September @	$ 0.06948	per Kwhr.
2. Non-Summer Months of October-May @	$ 0.04884	per Kwhr.
B. Off-Peak Kwhrs.		
1. All Off-Peak Kwhrs. @	$ 0.03880	per Kwhr.

BILLING DEMAND

The billing demands will be rounded to the nearest whole KW. If the power factor of the customer's current month maximum integrated fifteen minute KW demand for the on-peak and off-peak time periods are less than 85%, then the Company will adjust same to 85%. The maximum integrated fifteen minute demand for any period may be recorded on a rolling time interval.

For the summer months, the on-peak billing demand shall be the maximum integrated fifteen minute demand measured during the on-peak hours of the current month.

For the non-summer months, the on-peak billing demand will be the greater of: (1) the maximum integrated fifteen minute demand measured during the on-peak hours of the current month, or (2) eighty percent (80%) of the maximum integrated demand occurring during the on-peak hours of the preceding summer months.

The off-peak billing demand shall be the greatest of the following positive differences: (1) the maximum integrated fifteen minute demand measured during the off-peak hours minus the on-peak billing demand, or (2) the contract demand minus the on-peak billing demand, or (3) 1,000 KW minus the on-peak billing demand.

DISCOUNT

A discount of $0.60 per KW of on-peak and off-peak billing demand will be allowed when the service is supplied at a delivery voltage of 46,000 volts or higher.

DETERMINATION OF ON-PEAK HOURS

A. On-Peak Hours During Summer Months:

June-September:

The on-peak summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

B. On-Peak Hours During Non-Summer Months:

May and October:

The on-peak non-summer hours are defined as the hours between 1:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

November-April:

The on-peak non-summer hours are defined as those hours between 6:00 a.m.-12:00 noon and 5:00 p.m.-9:00 p.m., Monday-Friday, excluding holidays.*

C. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified as on-peak hours.

*Holidays are: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Effective Upon Approval Of The Public
Service Commission Of South Carolina

MINIMUM CHARGE

The monthly minimum charge is the demand as determined above. The Company may allow a buildup period not to exceed six months for new and expanding accounts during which time the contract demand and/or the minimum demand specified in the rate schedule may be waived. The Company shall not commit itself to a buildup period exceeding six months without prior approval of the Commission for the specific account involved.

ADJUSTMENT FOR FUEL AND VARIABLE ENVIRONMENTAL COSTS

Fuel costs of $.03335 per Kwhr. are included in the energy charge and are subject to adjustment by order of the Public Service Commission of South Carolina.

STORM DAMAGE COMPONENT

The energy charges above include a storm damage component of $.00008 per Kwhr. for accumulation of a storm damage reserve.

SALES AND FRANCHISE TAX

To the above will be added any applicable sales tax, franchise fee or business license tax which may be assessed by any state or local governmnetal body.

PAYMENT TERMS

All bills are net and payable when rendered.

SPECIAL PROVISIONS

The Company will furnish service in accordance with its standard specifications. Non-standard service will be furnished only when the customer pays the difference in costs between non-standard service and standard service or pays to the Company its normal monthly facility charge based on such difference in costs.

TERM OF CONTRACT

The contract terms will depend on the conditions of service. No contract shall be written for a period of less than five (5) years. A separate contract shall be written for each meter at each location.

GENERAL TERMS AND CONDITIONS

The Company's General Terms and Conditions are incorporated by reference and a part of this rate schedule.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRIC CONTRACTED RATES

Name of Customer	Rate
State Line Accounts*	23

U. S. Department of Energy
Savannah River Operations

Base Contract

Demand Charge:			
Basic Facility Charge	$	1,400.00	
First 20,000 Kw	$	10.37	per KW
Excess over 20,000 Kw	$	12.20	per KW
Energy Charge:			
All KWhr. @	$	0.04216	per KWhr.

INTERNATIONAL PAPER
Eastover Mills

Economy Power Rate

Administrative Charges:	$	1,400.00	per month
On-Peak Energy Charge:			
Fuel cost of highest cost generation unit or purchased power (other than cogeneration) plus	$	0.01099	per KWhr.
Off-Peak Energy Charge:			
Fuel cost of highest cost generation unit or purchased power (other than cogeneration) plus	$	0.00605	per KWhr.
Excess Demand Charge:	$	17.50	per KW

Standby Power Rate

Demand Charge:			
On-peak June-September	$	0.32449	per KW/Day
On-peak October-May	$	0.17688	per KW/Day
Off-peak	$	0.12789	per KW/Day
Energy Charge:			
Same as that for Economy Power above			
Excess Demand Charge:	$	17.50	per KW

SOUTH CAROLINA ELECTRIC & GAS COMPANY

ELECTRIC CONTRACTED RATES

INTERNATIONAL PAPER - continued

Maintenance Power Rate	Demand Charge:	$	0.38137	per KW/Day
	Energy Charge:	$	0.04216	per Kwhr.
	Company Provided KVAR	$	0.14773	per KVAR

Montenay Charleston Recovery Inc

Standby Power Rate	Facility Charge:	$	1,400.00	per Month
	Demand Charge:			
	First 1325 hours of standby service	$	5.49	per KW
	Excess over 1325 hours of standby service	$	12.20	per KW
	Energy Charge:			
	On-peak	$	0.04937	per Kwhr.
	Off-peak	$	0.04216	per Kwhr.
Maintenance Power Rate	Demand Charge:	$	0.27676	per KW/Day
	Energy Charge:	$	0.04216	per Kwhr.

Contracted lighting, signal and roadway lighting, etc. — Negotiated Contracts

* After contractual (1925 and 1955) adjustments

Note: (1) Fuel costs of $.03335 per KWhr are included in the Energy Charge and subject to adjustment by order of the Public Service Commission of South Carolina.

(2) The Energy Charges above include a storm damage component of $.00008 per KWhr for accumulation of a storm damage reserve except contracted lighting, including signal and roadway lighting, which is $.00152 per KWhr.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2008-196-E - ORDER NO. 2009-218

APRIL 21, 2009

IN RE: Combined Application of South Carolina Electric & Gas Company 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	))))))	ORDER DENYING PETITIONS

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on Petitions for Rehearing and/or Reconsideration of Commission Order Nos. 2009-104 and 2009-104(A)[1] related to the Base Load Review Application submitted by South Carolina Electric & Gas Company ("SCE&G" or "the Company"), which were filed by Friends of the Earth ("FOE"), the South Carolina Energy Users Committee ("SCEUC"), and Mr. Joseph Wojcicki ("Mr. Wojcicki "). The Petitions are denied, for the reasons stated below.

II. FOE PETITION

With regard to the FOE Petition, the allegations of error are generic for the most part, simply stating that this Commission erred in approving the SCE&G Base Load Review Act Application where there was an alleged failure of the Company to meet its burden of proof under the provisions of the Utility Facility Siting and Environmental

[1] This Commission initially issued its final order, Order No. 2009-104, in this Docket on February 27, 2009. On March 2, 2009, the Commission issued Order No. 2009-104(A) which corrected certain typographical or scrivener's errors.

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Protection Act, S.C. Code Ann. Section 58-33-10, *et. seq.* ("the Siting Act"), and the Base Load Review Act, S.C. Code Ann. Section 58-33-210, *et. seq.* ("the Base Load Review Act"). In general, we reaffirm the explanations and reasoning found in Order No. 2009-104(A) in response to these allegations, since we thoroughly explained our findings on most of the points raised by FOE. However, we believe that various paragraphs in the FOE Petition merit individual explanation.

1. Due Process

In Paragraph 1 of the FOE Petition, FOE alleges that the Base Load Review Act on its face and as applied in the Order deprives FOE and all other taxpayers of their property without due process of law in violation of the United States and South Carolina Constitutions. FOE raises this issue for the first time in its petition. There is nothing in the record indicating that FOE has raised the issue of the constitutionality of the Base Load Review Act for a decision by this Commission before Order No. 2009-104 was issued. No written motions raising constitutional challenges to the Base Load Review Act were filed on behalf of FOE before the hearing and no oral motions were made during the hearing to this effect. No testimony was elicited during the hearing regarding this issue.

It is axiomatic that "[a] party cannot raise issues in a Motion to Reconsider that were not raised during the proceeding." In Re Carolina Water Service, Inc., Docket No. 2006-92-WS, Order No. 2007-140, at 17 (South Carolina Public Service Commission November 19, 2007); see also Kiawah Property Owners Group v. Public Service Commission, 359 S.C. 105, 597 S.E. 2d 145 (2004) ("Since KPOG first broached the

transfer line issue in its petition for rehearing to the PSC, the issue is not preserved."); South Carolina Coastal Conservation League v. DHEC, 380 S.C. 349, 380, 669 S.E.2d 899, 915 (Ct. App. 2008) ("A party cannot use a Rule 59(e) motion to present an issue to the court that could have been raised prior to judgment but was not so raised."); McMillan v. S.C. Dep't of Agric., 364 S.C. 60, 67, 611 S.E.2d 323, 327 (Ct. App. 2005) (issue not preserved "because it cannot be raised for the first time in a motion to alter or amend.").

Second, the purpose of a petition for rehearing and reconsideration is to allow the Commission to identify and correct specific errors and omissions in its orders. Conclusory statements that amount to general and non-specific allegations of error do not satisfy the requirements of the rule. Under the operative Commission regulation, S.C. Code Ann. Regs. § 103-825(4):

A Petition for Rehearing or Reconsideration shall set forth clearly and concisely:

(a) The factual and legal issues forming the basis for the petition;

(b) The alleged error or errors in the Commission order;

(c) The statutory provision or other authority upon which the petition is based.

As a matter of law, conclusory statements are insufficient to support a petition for rehearing or reconsideration. See Public Service Commission of South Carolina, Order No. 2003-641, at 6 ("a conclusory statement based upon speculation and conjecture is no evidence at all and is legally insufficient to support [a petition for reconsideration]"); see also Camp v. Camp, 378 S.C. 237, 662 S.E.2d 458 (Ct. App. 2008) (motion to reconsider,

alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity).

FOE has failed to adequately state its grounds for alleging that the Base Load Review Act is unconstitutional on its face or as applied. A general, non-specific and conclusory statement as to the alleged unconstitutionality of the Base Load Review Act on "due process" grounds is insufficient to put the Commission and parties on notice of any specific alleged constitutional defect in the Act and the Order. Such general and conclusory allegations do not provide a sufficient opportunity for the Commission to identify a specific problem with the application of the Act or the Order and address it on rehearing. See e.g., South Carolina Dept. of Social Services v. Mother ex rel. Minor Child, 375 S.C. 276, 283, 651 S.E.2d 622, 626 (Ct. App. 2007) (finding claim of violation of due process abandoned where party made a conclusory argument without citation of any authority to support her claim); see also R & G Const., Inc. v. Lowcountry Regional Transp. Authority, 343 S.C. 424, 437, 540 S.E.2d 113, 120 (Ct. App. 2000) ("An issue is deemed abandoned if the argument in the brief is only conclusory."). The allegation of error must be rejected.

2. Permission for Initial Clearing and Construction

In Paragraph 2 of its Petition, FOE alleges that the Commission erred in approving the Combined Application because SCE&G "has failed to establish that: public convenience and necessity justify permission to proceed with initial clearing, excavation, dredging and construction in contravention of S.C. Code Ann. § 58-33-110(7)." FOE Petition, ¶ 2.

The record fully supported the Commission's decision in October of 2008 to allow SCE&G to proceed with initial construction. The hearing on SCE&G's request for permission to undertake initial construction took place on September 10, 2008. SCE&G presented testimony of three witnesses establishing that public convenience and necessity supported its requests. These witnesses testified convincingly as to the public convenience and necessity of starting initial construction at SCE&G's sole risk pending a decision on the merits in this matter. All requirements for granting the requested relief were addressed in that testimony. There is more than adequate evidence supporting the Commission's decision in Order No. 2008-673. The Commission findings in Order No. 2008-673 are reaffirmed. The request for reconsideration in Paragraph 2 of FOE's Petition must be denied.

3. Description of the Facility

In Paragraph 3 of its petition, FOE alleges that the Commission erred in approving the Combined Application because SCE&G has failed to fully and accurately describe and establish a description of the facility to be built, the environmental impacts of the facility, the need for the facility, and other relevant information in contravention of S.C. Code Ann. § 58-33-120. There are multiple grounds that require denial of reconsideration.

First, the allegations of Paragraph 3 fail to satisfy the requirements of the Commission's Regulations regarding the content of a petition for rehearing or reconsideration and must, therefore, be denied. S.C. Code Ann. Regs. 103-825(4). FOE does not point the Commission to any specific defect of law or specific inadequacy in the

factual record in this case making any decisions as to the sufficiency of the description of the facility, its environmental effects or any other relevant matter defective. FOE's allegations provide no basis for the Commission to determine which specific legal conclusions or factual findings contained in the Order are improper and should be reconsidered. Such conclusory allegations fail to comply with the requirements of S.C. Code Ann. Regs. § 103-825(4). Therefore, the relief sought in Paragraph 3 must be denied. See Camp v. Camp, 378 S.C. 237, 662 S.E.2d 48 (Ct. App. 2008).

Second, S.C. Code Ann. § 58-33-120 deals only with the required content of a Siting Act application. That application was filed with the Commission on May 30, 2008, over nine months ago. FOE did not move to strike the application nor has it properly raised any objection to the sufficiency of the application in this matter prior to the Order being issued. To the extent that FOE is challenging the sufficiency of SCE&G's application under the Siting Act, such a challenge is untimely and not properly before the Commission in a Motion for Rehearing or Reconsideration.

Third, and contrary to the allegations of FOE, the descriptions of the facility contained in the record are more than adequate to met the provisions of S.C. Code Ann. § 58-33-120. Those descriptions are supported by ample evidence in the record. The record shows that SCE&G fully and accurately described the facility to be built, both in the Combined Application it filed on May 30, 2008 and in the extensive testimony in the record on this point. Company witnesses Marsh, Byrne, Connor and Summer, and ORS witnesses Crisp and Evans testified at length in the hearing on this matter describing the technology, processes, configuration, capacity and location of units to be built. Their

testimony describing the units was full and accurate and was subject to extensive cross examination at the hearing in this matter.

FOE also contends that the Commission erred on the basis that SCE&G "failed to fully and accurately describe and establish a description of . . . the environmental impact of the facility." The Order directly contradicts this contention. Company witnesses Steven Connor and Stephen Summer testified concerning the most recent environmental report and its conclusions. That report is over 1,100 pages long and represents the work of over 25 major contributors and over 25,000 hours of work by environmental experts and others. The report examined a comprehensive list of possible environmental impacts of the plant and provided a detailed analysis of Site and Vicinity Land Use; Air Quality; Water Quality; Water Quantity and Use; Terrestrial Ecosystems; Aquatic Ecosystems; Threatened and Endangered Species; Historic and Cultural Resources; and Transportation. The report specifically examined the likely radiological impacts of the plant and the provisions for the storage and disposal of low-level wastes and spent fuel assemblies. The report concluded that the impact of the plant on each of the areas enumerated above would be "small," which is defined as environmental effects which are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. The only exception was in the area of transportation. The report concluded that the effect of the Units on traffic patterns in the vicinity of the Units would be small to large, with the greatest impact due to the increased road use in the area caused by construction traffic but would be moderate during the operation of the facility.

ORS Witness Crisp testified concerning ORS's review and audit of this environmental information. ORS witness Crisp testified that SCE&G had fulfilled its obligation for filing its environmental report with the NRC and had established a protocol to address the necessary permitting from state and federal agencies to protect the South Carolina environment, and he supported the conclusion that the environmental effects of the plant would be as set forth in that report. Order No. 2009-104(A) at 29-30 (citations omitted). In addition, the Commission considered evidence regarding the long-term disposal of spent fuel (Order at pp. 30-32), radioactive solid waste (Order at p. 32), and the availability of disposal sites (Order at pp. 32-33). The Order and the Record directly contradict the assertions of FOE on this issue.

FOE also contends that the Commission erred in issuing the Order because SCE&G "failed to fully and accurately describe and establish a description of . . . the need for the facility." However, as the Order states:

> As the testimony of record indicates, base load capacity is fuel efficient generating capacity intended to run for thousands of hours a year and at high capacity factors. Such plants are the foundation upon which an electric system operates and on which it relies for the majority of the energy used to serve customers. Peaking and intermediate units are intended to run for substantially fewer hours per year.

Order No. 2009-104(A), pp. 25-26 (citations omitted). As Mr. Marsh testified, SCE&G last added a base load resource to its electric system when Cope Station went into commercial operation in 1996. Since that time, energy use on SCE&G's system has grown by 31%. By 2016, energy use on SCE&G's system is forecasted to have grown by a total of 44%. Current operating statistics demonstrate the importance of base load generation to serving customers' energy needs. During 2007, base load plants constituted

56% of SCE&G's generation capacity. However, they produced over 80% of the energy used by SCE&G's customers during that year. Base load capacity-which represented 75% of SCE&G's generating capacity in 1996-is forecasted to drop to 45% as a share of total generation capacity by 2020 unless new base load resources are added in the interim. Order No. 2009-104(A), pp. 25-27 (citations omitted).

Based on the stated information, the Commission finds that the record supports the Company's testimony that the specific capacity need for 2016 and 2019 is most reliably and efficiently met through the addition of new base load capacity to its system. Units 2 and 3 represent such capacity.

As the foregoing shows, the Commission's decision and Order concerning the description of the facility to be built, the environmental impacts of the facility, the need for the facility, and other relevant information was supported by ample evidence in the record which the Commission weighed and considered. For this reason, the relief sought in Paragraph 3 of the FOE Petition must be denied.

4. Need, Environmental Impacts and Compliance, Economy and Reliability, Convenience and Necessity

Paragraph 4 of FOE's Petition alleges that the Commission erred in approving the Combined Application because SCE&G failed to satisfy the six requirements of S.C. Code Ann. § 58-33-160 which it repeats from the statute without elaboration. Again, FOE's contentions are wholly conclusory. The petition does not "clearly and concisely" set forth any specific factual or legal basis for the contention that the requirements of § 58-33-160 have not be met. The Commission is left to guess as to which specific

findings or rulings made in the Order were incorrect or in what way they were legally or factually deficient. As a matter of law, such conclusory statements are insufficient to support a petition for rehearing or reconsideration. See Order No. 2003-641, at 6 ("As a matter of law, however, a conclusory statement based upon speculation and conjecture is no evidence at all and is legally insufficient to support [a petition for reconsideration]"); see also Camp, 378 S.C. 237, 662 S.E.2d 458 (motion to reconsider, alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity).

The conclusory allegations contained in Paragraph 4 of FOE's Petition fail to comply with the requirements of S.C. Code Ann. Regs. § 103-825(4). For this reason, the relief sought in Paragraph 4 must be denied.

In addition, with regard to the specifics of FOE's allegation of error, the Order clearly shows that the Commission's decisions in the Order were supported by ample evidence in the record.

(a) Environmental Impacts

In addition to the matters discussed above in response to Paragraph 3, the Commission's Order made the following determinations regarding the justification of the environmental impacts of the facility:

> The environmental report concluded that wind, solar, biomass and hydro generation were not feasible alternatives to nuclear or fossil fired generation. As to solar and wind generation, the environmental report concluded that these energy sources would have greater environmental impacts than nuclear given the amount of area that would need to be dedicated to them and the new transmission facilities they would require. For purposes of the environmental assessment, coal and gas generation were identified as the principal alternatives to nuclear generation. Both

> coal and gas alternatives were found to have significantly greater environmental impacts than Units 2 and 3, due principally to significantly higher air emissions, specifically the amount of additional CO_2, nitrous oxides, SO_2 and particulates that would be emitted by either gas or coal generation. The environmental report concluded that from an environmental standpoint, nuclear generation was the best alternative for meeting the energy needs of SCE&G's customers with the least impacts on the environment. The Commission finds that this conclusion is amply supported on the record.

Order No. 2009-104(A), pp. 33-34 (citations omitted).

(b) Economy and Reliability, Convenience and Necessity

Regarding system economy and reliability, the Commission discussed, in detail, such factors as alternative energy resources, the cost of constructing the nuclear facility, the terms of the EPC contract, cost contingencies, inflation, delay, the ability of the facility to meet projected capacity, water supply, and transmission from the proposed location. See Order No. 2009-104(A), pp. 34-55. Based on these factors, and detailed evidence in the record, the Commission concluded:

> For all these reasons, the Commission finds that the cost projections and comparative economic analyses on which the selection of Units 2 and 3 was made are reasonable and appropriate. Based on these specific economic analyses and the broader evaluation of system needs by SCE&G's leadership team, the Company properly concluded that the construction of Units 2 and 3 would provide the greatest and most dependable contribution to system economy of all reasonably competitive alternatives.

Order No. 2009-104(A), pp. 51-52.

> The Commission further concluded, "[a]s witnesses for both the Company and ORS testified, the water supplies available at the site of Units 2 and 3 are more than adequate to support reliable operations of Units 2 and 3."

Id. at 54.

(c) Environmental and Other Compliance

As to the reasonable assurances that the proposed facility will conform to applicable State and local laws and regulations, the Order discussed the detailed evidence presented in the record concerning the permits needed to proceed with the construction and operation of the nuclear facility and SCE&G's ability to obtain them. As stated in the Order:

> The fifth finding required by the Siting Act is whether "there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations." Hearing Exhibit 2 contains a list of the 19 major permits, apart from NRC permits, required to construct and operate Units 2 and 3. Three of the 19 major permits are federal permits exclusively: a Federal Energy Regulatory Commission permit for work on Monticello Reservoir, a Corps of Engineers wetlands permit for site work, and a Federal Aviation Commission permit for construction cranes to be erected on site. The remaining 16 permits are state permits or joint state-federal permits administered by the state. The record reflects that, so long as SCE&G obtains these 16 permits and operates according to their terms, the construction and operations of Units 2 and 3 will be in compliance with all state and local laws.
>
> Company witness Byrne testified that in his opinion and in the opinion of the members of his new nuclear deployment team, all of these permits could be obtained in a timely fashion and that Units 2 and 3 could be operated in compliance with all applicable laws and regulations, both state and federal. Mr. Byrne's testimony on this point was not contradicted by any party. Accordingly, the record supports the finding that Units 2 and 3 can be built and operated in compliance with all applicable state and local laws and regulations as the Siting Act requires.

Order No. 2009-104(A) at 55-56 (citations omitted).

(d) Public Convenience and Necessity

Finally, the Commission made the following determination regarding the issue of public convenience and necessity:

> The Commission construes this provision of the statute as requiring a finding that integrates into a single determination all aspects of the public interest evaluation related to the plant. In this case, the record demonstrates that Units 2 and 3 represent capacity that is needed to supply reasonably forecasted customer demands. In addition, the size, type, location and technology of the Units are the preferable means of doing so with the greatest economy and reliability and with the least impact on the environment.
>
> As discussed above, the principal benefit of nuclear generation, in addition to lower forecasted costs, is the fact that it helps insulate customers from the price volatility and supply risk that are increasingly associated with fossil fuel fired generation. Nuclear generation also insulates customers from future CO_2 and other environmental compliance costs associated with fossil fuels, which are likely to be significant. Alternative energy sources may provide useful supplemental energy for SCE&G's system going forward. However, the cost competitiveness, availability and reliability of alternative energy sources are subject to significant questions and concerns at this time. Public convenience and necessity would not be supported by forcing SCE&G's customers to rely on the future availability and cost competitiveness of these energy sources as a substitute for SCE&G constructing additional base load capacity at this time.
>
> The risks related to nuclear construction, and the steps that SCE&G has taken to mitigate them, are discussed extensively in the record. The Company's plans to manage licensing risks and delays and to oversee construction through its own personnel and processes are also discussed more fully below. The record shows that the Company has carefully evaluated the risks related to nuclear construction and operations and compared them to the risks and costs of other alternatives. The Commission agrees with this assessment and finds that the public convenience and necessity support the construction of Units 2 and 3 as proposed by SCE&G.

Order No. 2009-104(A) at 56-57.

(e) <u>Conclusion</u>

As the foregoing shows, the Commission's decision and Order on SCE&G's Combined Application was carefully considered and supported by ample evidence in the record. FOE has not pointed to any specific factual or legal insufficiency in the findings

set forth above. For all the above reasons, the relief sought in Paragraph 4 must be denied.

5. Imprudent Obligations or Costs

Paragraph 5 of the Petition cites to the Purposes and Findings adopted by the General Assembly in enacting the Base Load Review Act, 2007 Act. No. 16, Section 1(A), and alleges that the Commission erred in some respect regarding the protection of consumers from responsibility for imprudent obligations or costs. The language FOE quotes is a legislative statement of intent that was not codified in the Base Load Review statutory provisions, and which is not operative in its own right but is given substance by the specific statutory requirements found in the Code. Bayle v. South Carolina Dept. of Transp., 344 S.C. 115, 122, 542 S.E.2d 736, 740 (Ct. App. 2001) ("What a legislature says in the text of a statute is considered the best evidence of legislative intent or will.").

As legislative findings, these policy statements do not constitute a legal basis or standard against which to review the material presented by SCE&G in this docket separate from the substantive provision of the Act. In fact, as discussed herein, the Commission has reviewed the application and the substantial evidence compiled in this docket against the substantive requirements of the Act and has found that SCE&G has demonstrated that the financial obligations and costs that it seeks to undertake are prudent and reasonable. The intent of the General Assembly is found in the substantive terms of the statute, and the Commission has properly found that SCE&G's application in this matter has met those terms.

Moreover, once again, FOE does not provide the Commission with any guidance to show what specific findings or conclusions in the Order are factually or legally defective. In Order 2008-104, the Commission clearly determined that the cost and obligations SCE&G proposed to assume in constructing these units were not imprudent. FOE has not pointed to any specific legal or factual reason why this decision is defective. For that reason, FOE has failed meet the requirements of S.C. Code Ann. Regs. § 103-825(4) and the relief sought in Paragraph 5 of the Petition must be denied. See also Camp, 378 S.C. 237, 662 S.E.2d 458 (motion to reconsider, alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity).

6. Prudency of the Units

In Paragraph 6, FOE alleges in summary and conclusory fashion that SCE&G has in some unspecified manner failed to meet is burden of proof as it relates to the Combined Application and the prudency of the decision to build the plant. Again this set of contentions is entirely conclusory and fails to meet the requirements of S.C. Code Ann. Regs. § 103-825(4) as a basis for a motion for rehearing or reconsideration. See also Camp, 378 S.C. 237, 662 S.E.2d 458 (motion to reconsider, alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity).

In addition, the allegations in Paragraph 6 are plainly contradicted by the Commission's Order and the record in this proceeding. In discussing the prudency requirement of the Base Load Review Act, the Commission noted multiple factors

showing that the Company's decision to proceed with construction of the facility was prudent and reasonable. These factors included: a) the selection of the Jenkinsville site for Units 2 and 3; b) the selection of AP 1000 technology as the appropriate reactor technology for this project; c) the related decision to select Westinghouse Electric Corporation, LLC and Stone & Webster, Inc. as the nuclear system supplier and construction contractor, respectively; d) the selection of other major contractors for the project; e) the structure and terms of the EPC Contract; f) the price at which the plant is being constructed; and g) the Company's ability to execute its financing plan for construction of the Units. Order No. 2009-104(A), p. 58. The Commission analyzed the record regarding each of these factors in detail and concluded with respect to each that they supported the reasonableness and prudency of the SCE&G's decision. *See generally* Order No. 2009-104(A) at 57-91.

As the foregoing shows, the Commission's decision and Order as to prudency was carefully considered and supported by ample evidence in the record. No specific legal or factual error has been identified. For these reasons, the relief sought in Paragraph 6 must be denied.

7. S.C. Code Ann. § 53-33-250

In Paragraph 7 of the Petition, FOE alleges, again in a summary and conclusory fashion, that the Commission erred in approving the Combined Application because SCE&G failed to satisfy in some undisclosed respect each of the specific requirements of S.C. Code Ann. § 58-33-250. Once again, the Commission is left to guess in what manner FOE believes SCE&G legally or factually failed to meet its statutory burden and

what specific findings and conclusions in the Order would need to be corrected. As this allegation fails to comply with the requirements of S.C. Code Ann. Regs. § 103-825(4), the relief sought in Paragraph 7 of FOE's Petition must be denied. See also Camp, 378 S.C. 237, 662 S.E.2d 458 (motion to reconsider, alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity).

In addition, FOE's allegations in Paragraph 7 appear to pertain to matters required to be included within an application for a base load review order under the Base Load Review Act. To the extent that FOE is challenging the sufficiency of SCE&G's application under the Base Load Review Act, and for the same reasons set forth related to the Siting Act discussion in Paragraph 3 above, no such a challenge has been properly raised and is untimely.

8. Decision to Proceed with Construction

In Paragraph 8 of its petition, FOE alleges again that SCE&G has failed in some unspecified manner to demonstrate that its decision to proceed with construction of the plant is prudent and reasonable. Once again, this entirely conclusory allegation fails to comply with the requirements of S.C. Code Ann. Regs. § 103-825(4) and the relief sought in Paragraph 8 of FOE's Petition must be denied. See also Camp, 378 S.C. 237, 662 S.E.2d 458 (motion to reconsider, alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity). Moreover, as discussed in response to Paragraph 6, the Commission's decision and Order regarding the prudency of SCE&G's decision to undertake construction of these Units was carefully

considered and supported by ample evidence in the record. For these reasons, the relief sought in Paragraph 8 must be denied.

9. Used and Useful, Prudency of Costs

In Paragraph 9 of its Petition, FOE alleges that SCE&G has not demonstrated that the proposed plant will be used and useful for utility purposes or that its costs will be prudent utility costs and expenses when the units are constructed. Once again, the allegations are entirely conclusory. FOE fails to allege and specify the way in which the Order misconstrues the applicable law or rests on factual findings that are not supported by the evidence of record. For these reasons, the allegations of Paragraph 9 fail to comply with the requirements of S.C. Code Ann. Regs. § 103-825(4) and the relief sought in Paragraph 9 of FOE's Petition must be denied. See also Camp, 378 S.C. 237, 662 S.E.2d 458 (motion to reconsider, alter, or amend judgment under [SCRCP] Rule 59(e) is insufficient where it does not state the grounds with particularity). For these reasons, the relief sought in Paragraph 9 must be denied.

Current Economic Conditions

In Paragraph 10 of the Petition, FOE alleges that SCE&G has not adequately analyzed its options, its forecast needs and resources, and the impacts of recent developments in the economy and financial markets or the current economic crisis. Contrary to this allegation, the Commission, in its Order, specifically recognized that SCE&G has considered these factors in making its determination to proceed with construction of the facilities. Order No. 2009-104(A) at 23-24. Moreover, the Commission found that SCE&G had also considered the historical effects of economic

downturns on load growth. Id. Finally, the Commission recognized the benefit of not basing the State's long-term energy supply strategy on short-term economic conditions. Order No. 2009-104(A) at 24. As stated by the Commission:

> While the current economic downturn is a matter of concern to all South Carolinians, it is important that long-term infrastructure projects needed to meet the state's future energy demands not be shelved too quickly. To prosper and compete in global markets in the future, South Carolina will need efficient, reliable energy sources. The generation capacity SCE&G now seeks to build will take 12 years to complete and will serve the state for as many as 60 years thereafter. The Commission agrees with Company witness Addison who testified that long-term decisions related to energy capacity should be based on the long-range needs of the system and the state economy, not shorter-term considerations.

Id.

For these reasons, FOE's allegations in Paragraph 10 are without merit and the relief sought in Paragraph 10 should be denied.

10. Energy Efficiency and Related Matters

In Paragraph 11, FOE contends that SCE&G could lower its risk profile if it pursued a more modular resource development program and that the Commission should reject the Application or at least defer it to allow SCE&G to better develop its integrated resource plan and complete its review of energy efficiency and demand side management opportunities. The Commission has fully and adequately considered this recommendation as advanced by FOE Witness Ms. Brockway, and has found it to be contrary to the terms of the Base Load Review Act. As stated by the Commission:

> As to the second recommendation, the Company properly points out that the Base Load Review Act mandates a final determination and order on the part of the Commission within nine months of the filing of the application and that the Act does not provide a means whereby the Commission can defer judgment on an application. Counsel for FOE

> argues that the Commission is authorized to reject an application as inadequate in certain respects and to send it back to the utility with a statement of its inadequacies. However, the Commission finds that the Act does not allow this Commission to defer judgment on an application as Ms. Brockway suggests.

Order No. 2009-104(A) at 115 (citations omitted).

In addition, the Commission has considered the impact that additional energy efficiency and demand side management opportunities would have and concluded that they are inadequate substitutes for additional base load capacity.

> Based on the evidence cited above, the Commission finds that additional savings due to DSM programs are not a viable substitute for the base load capacity that SCE&G seeks to build. Contrary to the testimony of FOE witness Brockway, who opined that the Company had failed to adequately consider DSM in its planning, the Commission finds Dr. Lynch's forecasts and analyses have properly accounted for or analyzed the potential for additional DSM-related savings. Moreover, SCE&G's resource plans contain room for additional DSM related energy savings even with the addition of Unit 2 and 3 to the system. DSM is a useful supplement to the generation capacity needed on SCE&G's system. It is not a substitution for it.

Order No. 2009-104(A) at 20 (citations omitted).

FOE offers no basis for rejecting the sound reasoning of this Commission in its Order and, for these reasons, the relief sought in Paragraph 11 must be denied.

11. Conditioning BLRA Cost Recovery

In Paragraph 12 of the Petition, FOE proposes conditioning SCE&G's recovery of costs on achieving the benefits implicit in its analysis of the merits of the proposal. Contrary to FOE's assertion that such a condition is entirely consistent with the Base Load Review Act, this Commission has thoroughly considered this recommendation and has found it be contrary to the terms of the Act.

In addition, Company counsel also cites Section 58-33-270(B) that provides that a Base Load Review order shall establish the anticipated construction schedule for the plant, including contingencies; the capital costs and anticipated schedule for incurring them, including contingencies and inflation indices used for the utility for cost in plant construction. The Base Load Review Act clearly contemplates a utility's ability to include contingencies in its schedule, recover capital costs related to the project, and seek modification of a Base Load Review Order, subject to approval by the Commission. Order No. 2009-104(A) at 114. FOE offers no basis for rejecting the reasoning of the Commission in its Order and, for this reason, the relief sought in Paragraph 12 should be denied. The Commission's reasoning is in full compliance with the Base Load Review Act, and the allegation must be rejected.

12. General Allegations of Error

In Paragraph 13 of the Petition, FOE alleges that that Commission's Order is arbitrary, capricious, an abuse of discretion, clearly erroneous, unsupported by substantial evidence, in violation of constitutional or statutory provisions, made upon unlawful procedure or affected by other error of law. This paragraph simply restates the grounds for appeal under the S.C. Administrative Procedures Act, S.C. Code An. § 1-23-380 (2005). This paragraph is entirely conclusory and lacks sufficient particularity to comply with the requirements of S.C. Code Ann. Regs. § 103-825(4). Moreover, as discussed in the response to Paragraph 1, no claim of unconstitutionality as to the Base Load Review Act or the procedures it mandates has been made in this proceeding. FOE cannot insert new issues into the docket in its Petition for Rehearing or Reconsideration. Finally, it is

unclear what "unlawful procedure" or "other error of law" is being alleged by FOE and these allegations are so vague as to deprive the Commission and SCE&G with sufficient information to respond to them. For all these reasons, the relief sought in Paragraph 13 of the Petition must be denied.

Because of the reasoning stated above, the Petition of Friends of the Earth is denied and dismissed.

III. SCEUC PETITION

In its petition, SCEUC asks the Commission to reconsider certain of its findings and conclusions within the Order in this docket.[2] These allegations are also rejected, and the Petition is denied and dismissed.

1. Contingency Costs as a Component of SCE&G's Capital Costs

SCEUC asserts that the Commission erred in including capital cost contingencies as a component of capital costs. Contrary to the assertions of SCEUC, the Commission has fully considered the propriety of the inclusion of such costs and has concluded they are properly included and authorized by the Base Load Review Act.

SCEUC asserts that the Commission "overlooked and misapprehended the nature of the authority granted it by statute to establish the anticipated components of capital costs under the Base Load Review Act." SCEUC Petition at p. 2. Contrary to this assertion, the Order evidences the fact that this Commission considered the statutory

[2] We note that SCEUC misquotes part of Order No. 2009-104(A) at page 97, when it states: "the Commission reads the statute as authorizing the Company to include a reasonable capital cost contingency in its filings, for evaluation and approval by this Commission. There is no logical or policy reason to read the statute." (emphasis added). It appears SCEUC inadvertently left out the word "otherwise" at the end of the last quoted sentence. The sentence in the Order actually reads: "There is no logical or policy reason to read the statute otherwise." (emphasis added). Id.

authority under the Act and correctly concluded that such costs were authorized. In the Order, this Commission stated that "[a]n important part of evaluating the reasonableness of the Company's price projection for the Units is evaluating the degree to which they include reasonable provisions for the contingencies and inflation over the construction, as the Base Load Review Act envision." Order No. 2009-104(A) at 47. In concluding that a contingency pool of $438,293,000.00 was reasonable and should be established, the Commission further found that:

> This amount of contingency is reasonable in light of what is known about the project and its risks today. It provides further assurance that the Company's price projections do not underestimate the cost of nuclear capacity and so provide a reasonable basis for comparing nuclear capacity to other alternatives.

Id., p. 47-48. Finally, as stated in the Order:

> The Commission has reviewed these contingencies and finds that they represent a reasonable set of contingencies for use in forecasting the cost of this project under S.C. Code Ann. § 58-33-270(B)(2). The contingency percentage applied to each cost category bears a reasonable relationship to the risk of additional costs being incurred in that category. In total, the contingency pool included on Exhibit F represents a significant but not excessive percentage of the total project budget. The Commission finds that it is reasonable and prudent to include the contingencies proposed by the Company in the cost estimates for Units 2 and 3 as approved in this order.

Id., p. 96.

SCEUC also misconstrues § 58-33-270 of the Base Load Review Act in its argument that capital costs contingencies are not authorized under the Act. SCEUC argues that the phrase "including specified contingencies" as used in § 58-33-270(B)(2) "modifies the term 'anticipated schedule for incurring [anticipated components of capital costs]' and cannot be read to authorize the Commission to include a capital cost

contingency as a component of capital costs." SCEUC Petition, p.4. This interpretation is in direct conflict with the terms of § 58-33-275. Under this section:

> (A) A base load review order shall constitute a final and binding determination that a plant is used and useful for utility purposes, and that its capital costs are prudent utility costs and expenses and are properly included in rates so long as the plant is constructed or is being constructed within the parameters of:
>
> 1. the approved construction schedule including contingencies;
>
> and
>
> 2. *the approved capital costs estimates including specified contingencies.*

S.C. Code Ann. § 58-33-275 (emphasis added). As evidenced by this section, it is clear that the intent of the General Assembly is that cost contingencies are properly considered as a component of capital costs under the Base Load Review Act. Not only has this Commission considered its statutory authority under the Act but it has expressly considered and rejected the argument that SCEUC raises in its Petition:

> In reaching this decision, this Commission has considered two arguments made by the South Carolina Energy Users. The first is the argument that S.C. Code Ann. § 58-33-270(B)(2) does not allow the Commission to establish a construction cost contingency pool. The statutory provision in question requires that the Commission establish "the anticipated components of capital costs and the anticipated schedule for incurring them, including contingencies." The Commission finds that the plain meaning and grammatical structure of this statutory provision intends that contingencies be provided both for capital costs and for the schedule for incurring capital costs. In addition, cost contingencies are a standard and recognized feature of construction budgets. If such contingencies were not allowed under the Act, the Company would be required to seek an amendment to the base load review order for every change order, scope or design change, or mis-forecast of owner's cost or transmission cost during the life of the project. This is not a reasonable reading of the statute. Instead, this Commission reads the statute as authorizing the Company to include a reasonable capital cost contingency in its filings, for evaluation

> and approval by this Commission. There is no logical or policy reason to read the statute otherwise.

Order No. 2009-104(A) at 47. In its Petition, SCEUC merely reiterates arguments expressly considered and rejected by the Commission. The Commission finds no basis for granting rehearing or reconsideration on these issues.

In addition, SCEUC argues that the availability of the ability to seek an order modifying a Base Load Review Order supports its contention that the Commission is without authority to address unanticipated contingencies. SCEUC Petition, ¶ 6. As stated in the Order, however:

> If such contingencies were not allowed under the Act, the Company would be required to seek an amendment to the base load review order for every change order, scope or design change, or mis-forecast of owner's cost or transmission cost during the life of the project. This is not a reasonable reading of the statute.

Order No. 2009-104(A) at 97. As discussed, the Commission's decision rests upon the plain language of the statute as well as the logic and policy of the Act and the arguments of SCEUC are without merit.

3. **Capital Cost Contingencies and Inflation Indices**

SCEUC also asserts in its Petition that the Commission erred in authorizing a capital cost contingency in addition to inflation indices. SCEUC Petition, ¶ 3. SCEUC also contends that the inflation indices operate to inflate the unauthorized capital cost contingency and, therefore, that the amounts owing to inflation of the capital cost contingency are unauthorized. SCEUC Petition, ¶ 5. The Commission has considered these arguments and has rejected them.

The second argument made by the Energy Users is that the Company double-counted inflation in calculating the amount of the contingency presented in Exhibit F. The Energy Users did not present any testimony concerning this point from its witness Mr. O'Donnell, but instead attempted to develop this point on cross examination of Ms. Best and Mr. Addison. Both denied any such double counting. Moreover, a review of Exhibit F establishes that the Company in fact allocated contingency amounts by year in 2007 dollars, and then escalated them to current year dollars only once. The Commission finds that the Company did not double escalate any contingency amounts. See Order No. 2009-104(A) at 97-98.

As the Order shows, the Commission has considered SCEUC's argument and has found that the inclusion of contingency costs is authorized under the statute and that the need for such costs is not vitiated by the application of the approved inflation indices. The contingency dollars SCE&G sought were calculated in 2007 dollars. Clearly, contingencies priced in 2007 dollars must be escalated to account for inflation if they are to be sufficient for use in future years, in some cases in as much as 10 years in the future. The approach to contingency escalation approved in Order No. 2009-104(A) is legally sound, logically necessary, and fully authorized by the Base Load Review Act.

4. **Reasonableness of Contingency Costs**

SCEUC asserts that the Commission erred in finding and concluding that the authorized contingency costs of approximately $438,293,000.00 was reasonable. The basis for this assertion is that "there exists no reasonable evidence to support the amount

of the contingent costs, fixed adjustment costs and other similar costs." SCEUC Petition, ¶ 4. The Commission's Order states:

> As to these contingencies, Company witness Addison testified that the capital cost estimates included in the Company's price forecasts include a pool of contingency funds above those already included in the EPC Contract cost and the owner's cost and transmission cost estimates. [cit] The amount of that contingency pool is $438,293,000 in 2007 dollars, subject to escalation. (Hearing Exhibit 16, EEB-I.) This contingency pool represents approximately 10% of the base cost of the Units. This amount of contingency is reasonable in light of what is known about the project and its risks today. It provides further assurance that the Company's price projections do not underestimate the cost of nuclear capacity and so provide a reasonable basis for comparing nuclear capacity to other alternatives.

Order No. 2009-104(A), at 47-48. The Commission has, therefore, considered the arguments of SCEUC in light of the evidence in the record and has rejected them and concluded that the amount of the contingency costs component is reasonable.

5. **Burden of Proof Regarding Capital Costs Contingency**

Finally, SCEUC contends that the Commission erred in concluding that the intervenors failed to meet their burden of proof with respect to the capital cost contingency. SCEUC Petition, ¶ 7. SCEUC states that "[t]he intervenors such as SCEUC have no burden of proof of [sic] this issue." Id. Contrary to the contention of SCEUC, this Commission's Order in no way indicates that the Commission has imposed any burden of proof on the intervenors in this matter. The Order merely indicates that the Commission has considered and rejected the arguments of SCEUC. SCEUC's contention that the Commission has improperly shifted the burden of proof in this matter is without a factual basis.

For the foregoing reasons, this Commission denies the relief sought by South Carolina Energy Users Committee in its Petition for Reconsideration and denies and dismisses the Petition in its entirety.

IV. JOSEPH WOJCICKI PETITION

The gravamen of the Petition for Rehearing or Reconsideration of Joseph Wojcicki is that SCE&G failed to adequately consider an alternative Atlantic Coast location and that the Commission erred in not requiring additional documentation and consideration of an alternative Atlantic Coast location and its suitability over the selected Jenkinsville site. As noted by the Order, however, the arguments of Mr. Wojcicki have been adequately heard and considered by the Commission and have been rejected as a basis for denying the Combined Application.

Mr. Wojcicki challenged the proposed site of Units 2 and 3 as being unsuitable from a reliability standpoint because of concerns about the sufficiency of water supply for the Units during drought conditions and because of their location in relation to system load centers.

As witnesses for both the Company and ORS testified, the water supplies available at the site of Units 2 and 3 are more than adequate to support reliable operations of Units 2 and 3. Order No. 2009-104(A) at 52-54 (citations omitted).

In addition, the Commission has considered and rejected Mr. Wojcicki's contention that an Atlantic Coast site would be preferable from the standpoint of transmission. Mr. Wojcicki a contended that the location of Units 2 and 3 in Jenkinsville does not support the reliability of the system because of its distance from load centers in

coastal areas of SCE&G's service territory. However, as SCE&G's Manager of Transmission Planning, Company witness Young testified that SCE&G's largest load center is not located along the coast but in the central portion of South Carolina, where Units 2 and 3 will be located. If the units were located at the coast, new transmission lines connecting them to the load center in the central portion of the state would be required. Moreover, currently there are six SCE&G transmission lines and two Santee Cooper lines serving the site of Unit I and only four new SCE&G lines and two new Santee Cooper lines will be needed to move the additional power to be generated by Units 2 and 3. A coastal site would not have an existing transmission infrastructure such as the one at the Jenkinsville site and would require a full complement of six to ten new transmission lines to distribute the power generated to different areas of the system.

For these reasons, the decision to locate Units 2 and 3 in central South Carolina and not along the coast as advocated by Mr. Wojcicki is prudent and reasonable and does not impair the reliability of those Units to serve customer load from a transmission standpoint. Neither water supply nor transmission issues are likely to compromise the reliability of those units. Mr. Wojcicki's motion to require relocation is again denied. Order No. 2009-104(A) at 54-55 (citations omitted). As the Commission has adequately considered and rejected the contentions of Mr. Wojcicki, his petition for rehearing or reconsideration is denied and dismissed.

V. CONCLUSION

Any remaining allegations of any of the three Petitions not specifically addressed herein are hereby expressly denied and dismissed. The Petitions of FOE, SCEUC, and

Mr. Wojcicki are also hereby denied and dismissed. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Elizabeth B. Fleming

Elizabeth B. Fleming, Chairman

ATTEST:

John E. Howard

John E. Howard, Vice Chairman

(SEAL)