COMMISSION DIRECTIVE

SUBJECT:

DOCKET NO. 2008-196-E - Combined Application of South Carolina Electric and 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 – Discuss this Matter with the Commission.

COMMISSION ACTION:

Madam Chairman, before us for consideration is a Combined Application from South Carolina Electric & Gas Company requesting approval of the construction and operation of the proposed V.C. Summer Units 2 and 3, to be built and operated in a partnership with Santee Cooper.

This is the first Combined Application filed under the Siting Act and the Base Load Review Act that has come before this Commission. In considering such an Application, the Commission must make a number of legal findings under the two Acts.

SCE&G and the parties in this case presented a voluminous amount of evidence on every point. With that in mind, I would like to briefly review the various findings that must be made under the two statutes, and state my proposal as to how this Commission should rule on each one of them.

UTILITY FACILITY SITING and ENVIRONMENTAL PROTECTION ACT

As to the requirements of the Siting Act (S.C. Code § 58-33-160):

First, The Company must show the basis of the need for the facility. (S.C. Code § 58-33-160(1)(a)). In my opinion, SCE&G has shown that need. The Company’s established reserve margin target is 12% to 18% of forecasted peak demand, and Dr. Lynch’s forecast shows that the Company’s reserve margin will decline to 2% by 2016 and -3.9% by 2019, even in the face of the current economic downturn, unless new generating capacity is added before then. The need for the facility is clear. Although renewables, natural gas, and DSM are certainly desirable in the Company’s future mix, I do not believe they can replace the new base load generation needed in the Company’s portfolio for future use. History has shown that the Company’s load growth slowed, but did not stop, even in the most severe of recessions, and when they ended there was accelerated growth in load that offset much of the earlier reduction in growth.

Second, the Company must show the proposed units will serve the interests of system economy and reliability. (S.C. Code § 58-33-160(1)(d)). An analysis of the two proposed nuclear plants showed
that the new nuclear units would provide the most dependable contribution to system economy of all reasonably competitive alternatives. With regard to the contribution of Units 2 and 3 to system reliability, this Commission is required to assess the reliability of the facility and its ability to support reliable electric service to SCE&G’s customers. Proposed Units 2 and 3 meet these criteria.

Third, the Commission must assess the nature of the probable environmental impact of Units 2 and 3, and whether the impact of the units upon the environment is justified given the need for additional base load capacity, the alternative sources of energy available to meet that need, and the relative environmental impacts such alternative sources of energy would create. (S.C. Code § 58-33-160(1)(c). (S.C. Code § 58-33-160(1)(b)).

Madam Chairman, I believe that the overall nature of the probable environmental impact is small, and that it has been adequately considered and addressed to the extent possible by the Company.

The minimal impact of the proposed units upon the environment is justified, given the available alternatives for base load generation. If the need were met by coal plants, instead of the proposed nuclear reactors, the environmental impacts would be greater. On the other hand, natural gas plants are not ideally suited to meet base load generation needs, as the price of natural gas is simply too volatile. The intervenors broached concern about the storage of spent fuel that will be generated by Units 2 and 3. I fully expect the federal government to fulfill its contractual obligation to take possession of the spent fuel from all U.S. commercial nuclear units at some point in time. Until that time, SCE&G will have the means to safely and securely store spent fuel in spent fuel pools and in a dry cask storage facility on site at the Jenkinsville facility.

Next, we must decide whether the Company has provided reasonable assurance that the units will conform to applicable state and local laws and regulations. (S.C. Code § 58-33-160(1)(e)). The Company has sought, or is seeking, the permits and licenses required by state and federal law, and the plant will not be built or put into operation without them. We have no indication that construction of the plant runs afoul of any local laws or regulations.

Last, under the Siting Act, the Commission must examine whether the public convenience and necessity require the construction of the units. (S.C. Code § 58-33-160(1)(f)). I believe they do. The record demonstrates that Units 2 and 3 represent capacity that is needed to supply reasonably forecasted customer demands. In addition, I believe that the evidence shows that 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.

While one of the intervenors argued that a location closer to the Atlantic Ocean and the proposed Jasper Ocean Terminal would be preferable, we find the evidence presented by SCE&G with respect to site selection is comprehensive and convincing. Among other things, SCE&G has a unit already in place at the proposed Jenkinsville site, and has successfully operated and maintained a nuclear unit at that site for many years, so the Jenkinsville site offers a unique opportunity for the Company to pool its nuclear resources and achieve efficiencies of scale. Also, the potential load presented by the Jasper Ocean Terminal, and which particular entity would best be able to serve that load, are uncertain and cannot be accurately factored into SCE&G’s load forecast at this time. Also evidence was presented that the Company’s largest load center is not located along the coast, but is in the central portion of South
Carolina, and that substantial load growth will occur in the Midlands and the coastal region of SCE&G's assigned territory.

**BASE LOAD REVIEW ACT**

Under the Base Load Review Act, this Commission must go beyond the public convenience and necessity findings required under the Siting Act and must conduct a full pre-construction prudency review of the proposed units and the EPC Contract under which they will be built. (S.C. Code Ann. § 58-33-270) This Commission must also order construction schedules and annual capital cost schedules which will establish the prudency and reasonableness of plant capital costs if such schedules are met. *Id.*

This Commission must examine the prudence and reasonableness of the decision to proceed with construction of Units 2 and 3. (S.C. Code Ann. § 58-33-270(A)(1)) The Act also requires related findings concerning the “choice of the specific type of unit or units and the major components of the plant,” (S.C. Code Ann. § 58-33-270(B)(4)), as well as “the qualification and selection of the principal contractors and suppliers for the plant.” (S.C. Code Ann. § 58-33-270(B)(5))

Furthermore, this Commission must examine various matters bearing on the Commission's prudency findings under the Base Load Review Act. I move that we find that the Company has met its burden of proof on these findings. Specifically:

- The selection of the Jenkinsville site for Units 2 and 3 complied with the Utility Siting Act, an item which I have already covered (S.C. Code Ann. § 58-33-270(A)(2));
- The selection of the specific type of units and major components of the plant, in this case the AP 1000 design (S.C. Code Ann. § 58-33-270(B)(4)); The Company has shown that the choice of the AP1000 is reasonable for the following reasons: 1) it is actually a derivative of the same design used for the existing V.C. Summer Unit 1; 2) a number of southeastern US utilities have selected the AP1000 design, allowing for information exchange among those utilities; 3) the design has been certified by the NRC; and, 4) the design incorporates a number of passive safety features, which greatly reduces the amount of piping, number of valves, and number of motors needed and promises to be easier to operate and maintain.
- The related decision to select Westinghouse and Stone & Webster as the nuclear system supplier and construction contractor, respectively; and the selection of other major contractors for the project (S.C. Code Ann. § 58-33-270(B)(5)); The record shows that the other contractors selected by SCE&G, are experienced and competent to carry out the project.

As part of its prudency review, we must also consider factors such as: 1) the structure and terms of the EPC Contract; 2) the price at which the plant is being constructed; and 3) the Company’s ability to execute its financing plan for construction of the Units, the Company’s ability to oversee construction of the units, the Company’s ability to operate the units successfully, and the risks of construction and the allocation of risks among stakeholders. (S.C. Code § 58-33-270(A)(1).) I move that we find that the Company has met its burden of proof on these matters. The Company has established that the price of the project is the result of an extensive negotiation with suppliers, and that SCE&G has negotiated contractual terms that designed to protect it against cost overruns. SCE&G has also shown that it is capable of obtaining financing for the plan, even under the current market conditions.

SCE&G's partner in this venture, the Public Service Authority, is also an entity with an established record as a partner in a nuclear project. The Public Service Authority’s 45% stake in this venture adds to
the financial stability of this project, while delivering the added benefit providing a stable source of power for the customers of our state’s electric cooperatives.

I also move, that the Order in this matter clearly state 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.

Further, in terms of accountability, Madam Chairman, as you will recall, the total gross construction and transmission cost of the two units in the Company’s application was $6.313 billion which includes AFUDC and projected escalation costs. Therefore, the Company must complete the plant for $4,534,747,000 in 2007 dollars (net of AFUDC) or obtain Commission approval of a change in the project in order to remain eligible for revised rates under the Base Load Review Act.

With regard to construction schedules and scheduling contingencies (S.C. Code § 58-33-270(B)(1)) (S.C. Code § 58-33-270(B)(2)) and the expenditure of capital costs with contingencies, I move that we approve the proposed milestone construction schedule and proposed capital costs, as well as the proposed accelerated 24 month cost schedule contingency.

However, the proposed construction schedule contingency which includes a possible delay of 30 months is too long without Commission review. A project of this magnitude warrants more frequent review by the Commission. ORS’s expert witness Mark W. Crisp cited a number of possible reasonable scheduling contingency periods, including an 18 month alternative. Madam Chairman, I believe that an 18 month period is more reasonable than a 30 month period, both as a construction schedule contingency period and as a capital cost contingency period. I therefore move that the Company should have to seek approval of the Commission if it desires to delay its anticipated milestone schedule, or a component of its milestone schedule, by more than 18 months.

I also move that we approve the proposed construction contingency costs, and the pooling by category, subject to certain conditions. (S.C. Code § 58-33-270(B)(2)):

- I move that the Commission find that the proposed contractual contingencies summarized in the confidential version of Exhibit F, Chart A, are reasonable further move that the Company be allowed to pool these contingency costs 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, Chart A from a current project year into the following years.

- In addition, I propose that the Company be 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. I believe that these conditions balance the Company’s need for flexibility with the closure for accountability advocated by the intervenors.

Madam Chairman, I also move that we approve the Company’s proposed inflation indices as supported by valid sources and methodologies. (S.C. Code § 58-33-270(B)(6)) as well as, the proposed return on equity (S.C. Code § 58-33-270(B)(3)), the proposed rate design/class allocation factors (S.C. Code § 58-33-270(D)), and the revised rates as proposed by the Company (S.C. Code § 58-33-270(C)). I move that we find that the proposed revised rates were shown to be just and reasonable.

Madam Chairman, I would also like to briefly address the subject of Demand Side Management or “DSM” programs. It appears to me that the Company is not doing enough on this front. However, the
Company’s witnesses have told us that the Company is conducting a study of potential DSM offerings and through its proposed order, the Company has committed to bring a DSM proposal before the Commission by June 30, 2009.

I move that the Commission state its expectation that the Company will present us with a viable, proposal to achieve measurable and sustainable gains in energy efficiency for all of the Company’s customer classes. I fully expect that a successful DSM program will result in less use of coal-fired generation and purchased power in the future.

In summary, Madam Chairman, I move that this Commission approve, as set forth above, the combined application of South Carolina Electric & Gas Company to construct and operate two 1,117 net megawatt nuclear power plants in partnership with Santee Cooper, to be located at the V.C. Summer Nuclear Station site near Jenkinsville, South Carolina, and that we grant a Certificate of Environmental Compatibility and Public Convenience and Necessity for the project. I also move that we deny all outstanding motions that are inconsistent with my motion. Lastly, I move that this Commission order SCE&G to complete and file, in a separate docket, the results of the DSM assessment currently being conducted as testified to by the Company witnesses by June 30, 2009.

PRESIDING  FLEMING

MOTION  YES  NO  OTHER

CLYBURN  □  ☒  □
FLEMING  □  ☒  □
HAMILTON  □  ☒  □
HOWARD  ☒  ☒  □
MITCHELL  □  ☒  □
WHITFIELD  □  ☒  □
WRIGHT  □  ☒  □

Session:  Regular
Time of Session  2:30 PM

APPROVED
APPROVED STC 30 DAYS
ACCEPTED FOR FILING
DENIED
AMENDED
TRANSFERRED
SUSPENDED
CANCELED
SET FOR HEARING
ADvised
CARRIED OVER
RECORDED BY  SCHMIEDING