SOUTH CAROLINA OFFICE OF REGULATORY STAFF'S REVIEW OF THE SOUTH CAROLINA ELECTRIC & GAS COMPANY 2nd QUARTERLY REPORT FOR THE PERIOD ENDING JUNE 30, 2009 ON THE BUDGET AND SCHEDULE OF V.C. SUMMER UNITS 2 & 3 CONSTRUCTION



OCTOBER 2, 2009

South Carolina Electric & Gas Company ("SCE&G" or "the Company") submitted its 2nd Quarterly Report ("Quarterly Report") on construction activities at its V.C. Summer Nuclear Station Units 2 & 3 ("Units 2 & 3") on August 14, 2009. The Quarterly Report covers the quarter ending June 30, 2009, and is submitted pursuant to S.C. Code Ann. § 58-33-277 of the Base Load Review Act ("BLRA"). The BLRA requires SCE&G to document the construction schedule, budget expenditures, completed activities, forecasts of activities to be completed, and any revisions to the original schedule and budget of Units 2 & 3.

There are two distinct schedules: (1) the Milestone Schedule, and (2) the engineering, procurement and construction schedule, together known as the Performance Measurement Baseline Schedule ("PMBS"). The Milestone Schedule adopted in Public Service Commission of South Carolina ("Commission") Order Number 2009-104A ("BLRA Order") is composed of significant activities that provide an overall assessment of the construction progress. The Commission's Order allows Milestone Schedule accelerations of up to 24 months and delays of up to 18 months. The Milestone Schedule is not designed to provide a detailed view of the PMBS.

On July 21, 2009, SCE&G filed with the Commission an "Update of Construction Progress and Request for Updates and Revisions to Schedules." This filing was entered as Docket No. 2009-293-E by the Commission and contained a request by the Company to update its Milestone Schedule. The updated Milestone Schedule in Docket No. 2009-293-E revises the BLRA Milestone Schedule by expanding the original 123 milestones to 146 milestones. The expansion to 146 milestones does not omit any original milestones and simply expands the existing milestones into additional milestones to more closely track activities in the PMBS.

The Consortium of Westinghouse, Shaw, and Stone & Webster submitted to SCE&G the final PMBS during spring, 2009. The PMBS is the contractual schedule used by the Consortium and SCE&G to establish the scheduling goals and accountabilities required in the Engineering, Procurement and Construction ("EPC") contract. The PMBS contains the detailed completion dates, compliance dates for payments, and critical dates for completion of certain activities prior to the start of other activities. It is important to note that the PMBS will change over time due to numerous internal and external influences including such issues as weather, delivery schedules, efficiency of construction, and manufacturing. These schedule changes are normal to any construction project of this magnitude and complexity. The Milestone Schedule will not be changed without Commission approval.

ORS's analysis of the critical path activities on the PMBS does not identify any issue that will impact substantial completion. However, since ORS has only recently received a working version of the schedule, ORS's detailed review is on-going. ORS's initial review of significant activities in the PMBS has not identified any activity that causes concern with schedule compliance. The earlier concern for the lack of integration

of the Milestone Schedule with the PMBS, as reported in ORS's review of the 1st Quarterly Report, has now been resolved with the issuance of the PMBS.

Subsequent to the Consortium delivering the PMBS to SCE&G, the Consortium also provided SCE&G with the payment milestones associated with its PMBS. ORS is currently reviewing the payment milestones for coordination with Project Cash Flow forecasts.

SCE&G's 2nd Quarterly Report and Milestone Schedule activities show the overall construction is progressing in accordance with the Commission Order and allowed 18-month milestone deviation. Schedule compliance is being compared to the BLRA Order-approved Milestone Schedule, but this schedule is subject to modification with approval from the Commission. ORS is cognizant that the Company has requested, and the Commission has docketed, a hearing on the Company's request for Milestone Schedule modifications.

The 2nd Quarterly Report indicates, and ORS has verified, that as of June 30, 2009; 49 activities have been accelerated; 46 activities have been pushed out into the future; and 51 activities are unchanged; totaling 146 milestones. (It should be noted that these numbers are overall numbers and not individually reflected in the tables below.) Of the 146 milestones 33 activities have been completed and 113 activities still remain to be completed. The Milestone Schedule in the 2nd Quarterly Report, as issued, continues to meet the schedule, within the parameters of the 18-month window, approved in the BLRA Order. There are seven (7) milestones that did not meet their original scheduled completion dates but fall within the allowed 18-month deviation. If the Company's request to update the construction schedule is approved by the Commission in Docket 2009-293-E, the overall schedule will be adjusted. As a result, all milestones will be on schedule and match Table 2 below.

Table 1 below summarizes the status of the Milestone Schedule as of June 30, 2009, and as compared to the original BLRA Order. Table 1 lists milestones completed on-time, early, completed within the 18-month deviation and milestones that are not complete. Table 2 summarizes the status of the Milestone Schedule as of June 30, 2009, compared to the updated Milestone Schedule presented by the Company in Docket No. 2009-293-E. The modifications proposed by the Company in the updated Milestone Schedule do not impact the Commercial Operation Date ("COD") of Units 2 & 3. ORS will continue to monitor the Milestone Schedule for signs of more systemic issues.

Table 1: Summary of the SCE&G Milestone Schedule compared to the BLRA Order

Period of 2009-2Q and prior (38 Milestones Total)		
	Milestones Completed on Schedule: 15, 40%	
	Milestones Completed Early: 5, 13%	
	Milestones Completed Within 18 Mos. Deviation: 11, 29%	
	Milestones Not Complete: 7, 18%	
	Milestones Outside 18 Mos. Deviation: 0	
Period of 2009-3Q and after (108 Milestones Total)		
	Milestones Completed Early: 2, 2%	
	Milestones Projected Completion on Schedule: 36, 33%	
	Milestones Projected Completion Early: 42, 39%	
	Milestones Projected Completed Within 18 Mos. Deviation: 28, 26%	
	Milestones with No Established Completion Time: 0	

Note: SCE&G lists a total of 146 milestones in its 2nd Quarterly Report.

Table 2: Summary of the SCE&G Milestone Schedule Compared to the updatedMilestone Schedule presented in Docket No. 2009-293-E

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Period of 2009-2Q and prior (33 Milestones Total)		
	Milestones Completed on Schedule: 33, 100%	
	Milestones Completed Early: 0	
	Milestones Completed Within 18 Mos. Deviation: 0	
	Milestones Not Complete: 0	
	Milestones Outside 18 Mos. Deviation: 0	
Period of 2009-3Q and after (113 Milestones Total)		
	Milestones Completed Early: 0	
	Milestones Projected Completion on Schedule: 113, 100%	
	Milestones Projected Completion Early: 0	
	Milestones Projected Completed Within 18 Mos. Deviation: 0	
	Milestones with No Established Completion Time: 0	

Note: SCE&G lists a total of 146 milestones in its 2nd Quarterly Report.

ORS's review of the budget shows an increase in the total cost. This budget deviation is due primarily to the calculation of escalation as allowed by the BLRA Order. The budget for SCE&G's portion of Units 2 & 3 was established in 2007 dollars at \$6.3 Billion, including escalation and estimated contingencies. SCE&G's 2nd Quarterly Report shows a budget revision to \$6.5 Billion as of June 30, 2009, as opposed to \$6.875 Billion as of the 1st Quarterly Report dated March 31, 2009. The reduction of cost over the amount reported in the 1st Quarterly Report is due to reductions in the indices used to calculate the escalations. As discussed in the 1st Quarterly Report, the BLRA requires the Company to show a 5-year average of index rates in calculating the escalation on capital cost items.

The escalation of construction costs during the last 5 years has been higher than average due to increases in building material costs. However, as predicted in ORS's review of the 1st Quarterly Report, the indices are beginning to roll out some of the higher rates that occurred during the early years of the 5-year average. As each year passes, an older, higher rate is dropped from the 5-year average and a new, more current rate is

included. Currently, the cost effect taking place is advantageous as lower rates are being incorporated into the 5-year average. The overall change to Project Cash Flow as reported in the 1st Quarterly Report of \$562 Million has been reduced to \$542 Million. If the Gross Construction costs were evaluated on an annual basis, the budgeted cost for Units 2 & 3, net of AFUDC, would decrease by \$106 Million from the budget approved in the BLRA Order. A ten-year average shows the Gross Construction cost, net of AFUDC, would be reduced by \$181 Million. These two figures continue to move in a positive direction, as predicted by ORS (1st Quarterly Report: 1-Year = \$97 Million reduction, 10-Year = \$172 Million reduction vs. 2nd Quarterly Report: 1-Year = \$106 Million reduction and 10-Year = \$181 Million reduction).

As shown above, the gross construction cost is sensitive to escalation rates. It is reasonable and prudent to monitor the gross construction costs based on trends that are longer and shorter than the 5-year requirement of the BLRA. In addition, the construction period of this project is closer to a 10-year program, and indicates the need to look at not only the 5-year average, but the 10-year average, as well.

If the current economic trends in the southeast continue to lower the costs of construction and construction-related materials, the overall cost of SCE&G's portion of Units 2 & 3 should remain at or below the \$6.3 Billion approved in the BLRA Order. However, most econometric forecasters believe inflation will increase as the economy gains traction in late 2009 and 2010. With this possibility, it is very important that SCE&G make appropriate purchasing decisions. For example, SCE&G should move certain purchases into the near term and delay some purchases, dependent on favorable procurement terms, to mitigate inflationary influences on the overall cost of Units 2 & 3.

Basic budget and schedule tracking in the Quarterly Report is adequate for comparison to conditions approved in the BLRA Order. However, there are significant inputs to the various sections that require substantiation. For example, SCE&G reports that AFUDC has increased from 5.52% to 8.08% in the 1st Quarterly Report. SCE&G further suggests that AFUDC rates will decrease to 5.87% "as capital markets recover." The actual AFUDC rate is calculated by a defined Federal Energy Regulatory Commission ("FERC") methodology. As of May 2008, the AFUDC rate was 5.52% as opposed to the rate of 8.08% reported in the 2nd Quarterly Report, which is reflective of current economic conditions. Based on the FERC formula, the Company forecasts that AFUDC will be 5.87% at the end of 2009. As a result of recommendations in the 1st Quarterly Report, SCE&G is monitoring the financial conditions that impact AFUDC and will provide a descriptive analysis of AFUDC at the end of each quarter.

SCE&G increased its efforts to provide details on construction progress relative to the Milestone Schedule. Each adjustment recommended in the updated Milestone Schedule has been reviewed by ORS. The modifications do not change the COD. The schedule updates are more in keeping with the overall goal of completing the project on time and more importantly, on budget. The Milestone Schedule has been increased from 123 milestones to 146 milestones to better track construction activities. Increasing the number of milestones has neither changed the dates in the Milestone Schedule nor the COD. The revisions have been made and suggested to the Commission in order to integrate the Milestone Schedule with the Performance Measures Baseline Schedule ("PMBS").

The Company's 2nd Quarterly Report identifies the PMBS and related "owner's costs and other items" as affecting the project's cash flow. As this project moves forward, the Company should continue to make every effort to report any details that impact cash flow and gross construction cost, whether it is an actual cost adjustment or a schedule adjustment that results in a cost modification. While a blanket statement of the reason for multiple adjustments may be appropriate in response to a global resetting of the schedule such as occurred when the PMBS was issued, ORS does not consider such global statements to provide it with sufficient information where individual changes in construction milestones or cash flow schedules are concerned. To this end, ORS requests the Company to provide specific information concerning such future changes rather than state that they are due to schedule modifications or changes in owner's costs.

The current budget indicates a change in the annual expenditures from the original budget. This revised budget illustrates efforts by the Company to take advantage of early purchasing of materials and equipment, and to delay the purchasing of certain "packages" so that the packages go directly to installation instead of warehousing. The budget changes are related to the schedule modifications requested in Docket No. 2009-293-E.

The Company has included in the 2nd Quarterly Report a section on Construction Progress that details significant activities on-going at the site. It is important to reiterate a number of the activities in order to establish the importance of these activities.

With regard to issuance of the Combined Operating License ("COL"), the NRC and Westinghouse ("WEC") are working towards resolution of Design Change Document ("DCD") Revision 17. The current NRC schedule for issuance of the COL is August 2011. In contrast, the PMBS shows an issuance date of July 2011. While this is a nominal difference in schedule dates, it is an important milestone and one that will impact the schedule absent additional effort by SCE&G and the Consortium. If the NRC is unable or unwilling to address the schedule differences, then it is possible the COD may be affected. SCE&G notified ORS that it is in the process of actively working to address this schedule difference. SCE&G is following two tracks to address this:

- 1) SCE&G is working with the Consortium to formulate a strategy to accommodate the schedule difference by investigating changes to the schedule that will allow multiple activities to proceed simultaneously; and,
- 2) SCE&G is working closely with Westinghouse and the NRC to address issues with Revision 17 of the DCD which appear to be the reason for the NRC's August 2011 COL issuance date.

During the current reporting period, there have been a number of significant activities completed or initiated. Instead of listing all of the activities, we will focus on the areas that present concern. For a complete discussion of the *"Progress of Construction of the Units"* see Section II. B. (Page 9), of the SCE&G 2nd Quarterly Report. WEC has reported to SCE&G that several "below-expectation" items or activities have been flagged in the design finalization schedule for major engineering work. It should be noted that "below-expectation" does not mean the engineering design is substandard. The items flagged in this instance are schedule-related. WEC has provided SCE&G with an explanation and recovery plan. At this time, SCE&G does not anticipate an impact to the COD.

In conclusion, the 2nd Quarterly Report filed by SCE&G complies with the requirements of the BLRA and the Commission's Order. The 2nd Quarterly Report also contains responses to all recommendations provided by ORS following the review of the 1st Quarterly Report and includes expanded discussions of the construction progress, equipment procurement, milestones, cash flow, problem areas and suggested resolutions, engineering design status, NRC status and COL status.

NOTABLE ITEMS:

- SCE&G is requested to provide to ORS a copy of the "tracking system" report, referred to in Section II. B. 2. F of its 2nd Quarterly Report, maintained by WEC to track major engineering categories and their schedule for completion
- SCE&G activities associated with the Nuclear Regulatory Commission's issuance of the Combined Operating License appear to be continuing on schedule to meet the mid-2011 date. However, the DCD Revision 17 activities of WEC continue to present concern. ORS will continue to make this a priority item during all monitoring and update meetings.
- Permitting activities for external construction permits such as U.S. Army Corps of Engineers 404 Permit, State of South Carolina Wetlands, NPDES and Erosion Control continue on schedule for issuance as needed.
- The NRC completed the Phase I Scoping for the Environmental Impact Statement ("EIS"). The NRC schedule to finalize the EIS is March 2010. It is imperative that the NRC keep this schedule in order to support the issuance of Corps 404 permits and the timely issuance of the COL.
- SCE&G has filed with the Commission an Update of Construction Progress and Request for Updates and Revisions to Schedules (Docket No. 2009-293-E). SCE&G pre-filed testimony with the Commission on September 8th, 2009. A hearing on this issue is scheduled for November 4th, 2009.

• SCE&G's 3rd Quarterly Report is due 45 days after September 30, 2009, or no later than November 16, 2009.