

V.C. Summer Nuclear Station Units 2 & 3**Quarterly Report to the South Carolina Office of Regulatory Staff
Submitted by South Carolina Electric & Gas Company
Pursuant to Public Service Commission Order No. 2009-104(A)****Quarter Ending September 30, 2013****I. Introduction and Summary****A. Introduction**

This quarterly report is submitted by South Carolina Electric & Gas Company (SCE&G or the Company) to the Public Service Commission of South Carolina (the Commission) and the South Carolina Office of Regulatory Staff (ORS). It is submitted in satisfaction of the requirements of S.C. Code Ann. § 58-33-277 (Supp. 2012) and the terms of Commission Order No. 2009-104(A). This report provides updated information concerning the status of the construction of V.C. Summer Nuclear Station (VCSNS) Units 2 & 3 (the Units) and provides the current capital cost forecasts and construction schedules for the Units as of the close of the quarter. In Order No. 2012-884 dated November 15, 2012, the Commission approved updated construction schedules for the Units. This report provides a comparison of the current schedules and forecasts against those approved in Order No. 2012-884.

B. Structure of Report and Appendices

The current reporting period is the quarter ending September 30, 2013. The report is divided into the following sections:

- Section I: Introduction and Summary;
- Section II: Progress of Construction of the Units;
- Section III: Anticipated Construction Schedules;
- Section IV: Schedules of the Capital Costs Incurred Including Updates to the Information Required by S.C. Code Ann. § 58-33-270(B)(6) (the Inflation Indices);
- Section V: Updated Schedule of Anticipated Capital Costs; and
- Section VI: Conclusion.

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Appendices 1, 2, and 4 to this report contain detailed financial, milestone and other information updating the schedules approved by the Commission in Order No. 2012-884. For reference purposes, **Appendix 3** provides a copy of the capital cost schedule for the project as approved in Order No. 2012-884. **Appendix 5** provides a list of the License Amendment Requests (LARs) filed by SCE&G with the Nuclear Regulatory Commission (NRC).

A confidential and a public version of this report and its attachments are being provided. Unless otherwise specified, all cost information reflects SCE&G's share of the project's cost in 2007 dollars. Attached to the end of the report is a glossary of acronyms and defined terms used.

C. Construction Schedule and Milestones

As the report indicates, the Company has met all current construction milestones approved by the Commission in Order No. 2012-884, taking into account the contingencies authorized in Order No. 2009-104(A). There are 146 specific milestones for reporting purposes. As of September 30, 2013, 92 have been completed. Comparing the scheduled milestone completion dates as of the date of this report to the milestone completion dates approved by the Commission in Order No. 2012-884, the completion dates of 48 milestones have changed. Of these, three have been accelerated and 45 have been delayed for between one and 16 months.

The Revised Unit 2 and Unit 3 Construction Schedules. During the third quarter of 2013, WEC/CB&I provided SCE&G with revised Unit 2 and Unit 3 construction schedules (the Revised Unit 2 and Unit 3 Schedules) that are based on a reevaluation of the submodule production schedule at the former Shaw Modular Solutions (SMS) facility in Lake Charles, LA, which CB&I acquired in the first quarter of 2013. These new schedules show the substantial completion dates of Units 2 and 3 being extended from the current dates of March 2017 and May 2018, respectively, and remain consistent with the dates that were reported during the second quarter of 2013. Based upon the Revised Schedules, SCE&G projects that Unit 2 and Unit 3 will be substantially completed in the last quarters of 2017 and 2018 or the first quarters of 2018 and 2019, respectively. The projected substantial completion dates for both Units remain within the 18-month schedule contingency provided for in Order No. 2009-104(A).

D. Construction Costs and Cost Forecasts

Spending through December 31, 2013, in current dollars is forecasted to be approximately \$421 million below the capital cost schedule approved in Order No. 2012-884. The present cash flow forecast indicates that the Company will be able to complete the Units for \$4.548 billion in 2007 dollars, which is the amount approved in Order No.

2012-884. The current cost estimates include changes in timing of costs and minor shifts in costs among cost categories that occur in the normal course of managing the project.

Cash Flow Forecasts and the Revised Unit 2 and Unit 3 Schedules. The cash flow forecasts provided in this report reflect changes in the timing of certain payments to WEC/CB&I based on the Revised Unit 2 and Unit 3 Schedules. The information presented in the analyst call in October 2013, which took place subsequent to the end of this reporting period, was consistent with the June 2013 analyst call for SCANA and its subsidiaries. In these calls the Company reported that a reasonable estimate of the cost impact of the recent schedule changes would be approximately \$200 million in future dollars. This reflects SCE&G's 55% share of the Engineering, Procurement and Construction Agreement (EPC Contract), Owner's cost and escalation. This estimate was prepared by the Company and not WEC/CB&I and is the Company's best current estimate of the total amount of the costs. A detailed and itemized analysis of the impact of these schedule changes on individual budget and cost categories for the project has not been prepared and will require additional information from WEC/CB&I.

The impact of the schedule revisions on SCE&G's cost forecasts depends on how the costs involved are allocated between SCE&G and WEC/CB&I under the EPC Contract. SCE&G has not accepted responsibility for any of the estimated costs arising as a result of the schedule changes and expects to continue discussions with WEC/CB&I regarding responsibility for any resulting increase in costs. In addition, the EPC Contract provides for liquidated damages in the event of a delay in the completion of the Units which have not yet been factored into any estimated increase. Ultimately, SCE&G believes that the portion of the \$200 million estimate for which SCE&G will be responsible, if any, will be substantially reduced once all relevant factors are considered. Accordingly, although the timing of cash flows has been revised, no increases in costs in 2007 dollars resulting from the Revised Unit 2 and Unit 3 Schedules are included in the cash flow estimates provided in this report.

In Order No. 2009-104(A), the Commission recognized that forecasts of Allowance for Funds Used During Construction (AFUDC) expense and escalation would vary over the course of the project and required those forecasts to be updated with each quarterly report. Preliminary escalation indices were issued in October 2013 for the period of January through June 2013 and have been used in forecasting the construction costs for the project that are presented here.

Chart A below compares the current capital cost forecast to the forecast presented in the last quarterly report. This chart shows a decrease in Gross Construction Costs of \$149.0 million over the life of the project. With each quarterly update, a quarter that had been subject to the five-year escalation rate becomes subject to the one-year rate. The figures reported on **Chart A** also include the effect of calculating escalation on an updated cash flow projection for the project.

Chart A: Reconciliation of Capital Cost (\$000)

<u>Forecast Item</u>	<u>Projected @ 9/30/13 (Five-Year Average Escalation Rates)</u>	<u>Projected @ 6/30/13 (Five-Year Average Escalation Rates)</u>	<u>Change</u>
Gross Construction	\$5,651,338	\$5,800,337	(\$148,999)
Less: AFUDC	\$229,672	\$237,706	(\$8,034)
Total Project Cash Flow	\$5,421,666	\$5,562,631	(\$140,965)
Less: Escalation	\$873,261	\$1,014,226	(\$140,965)
Capital Cost, 2007 Dollars	\$4,548,405	\$4,548,405	\$0

Chart B compares the current forecast of gross construction costs, including current escalation, to the forecast on which the Commission relied in adopting Order No. 2012-884. Chart B shows that the forecasted capital cost of the Units in 2007 dollars has not changed. Due to the changes in forecasted escalation and AFUDC, see Section I.F, below, the cost of the plant in future dollars has decreased by approximately \$103.2 million since Order No. 2012-884 was issued.

Chart B: Reconciliation of Capital Cost (\$000)

<u>Forecast Item</u>	<u>Projected @ 9/30/13 (Five-Year Average Escalation Rates)</u>	<u>As Forecasted and Approved In Order 2012-884</u>	<u>Change</u>
Gross Construction	\$5,651,338	\$5,754,565	(\$103,227)
Less: AFUDC	\$229,672	\$237,715	(\$8,043)
Total Project Cash Flow	\$5,421,666	\$5,516,849	(\$95,183)
Less: Escalation	\$873,261	\$968,444	(\$95,183)
Capital Cost, 2007 Dollars	\$4,548,405	\$4,548,405	\$0

Chart C below shows the current forecasts of the cost of the Units compared to the cost forecasts underlying the initial Base Load Review Act (BLRA) order, which was issued by the Commission in 2009, and the update orders that the Commission issued subsequently. The decline in capital cost forecasts in 2007 dollars between Order No. 2010-12 and 2011-345 reflects the removal of Owner's contingency amounts from the forecasts as required by the opinion of the Supreme Court of South Carolina in *South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm'n*, 388 S.C. 486, 697 S.E.2d 587 (2010). This chart shows that while the cost of the project in 2007 dollars has

increased by \$13 million since the initial forecasts, the cost of the project in future dollars is approximately \$662 million below the initial forecast.

Chart C: Summary of Nuclear Filings (billions of \$)

<u>Forecast Item</u>	<u>Order No. 2009-104(A)</u>	<u>Order No. 2010-12</u>	<u>Order No. 2011-345</u>	<u>Order No. 2012-884</u>	<u>Projected @ 09/30/2013</u>
Capital Cost, 2007 Dollars	\$4.535	\$4.535	\$4.270	\$4.548	\$4.548
Escalation	\$1.514	\$2.025	\$1.261	\$0.968	\$0.873
Total Project Cash Flow	\$6.049	\$6.560	\$5.531	\$5.517	\$5.422
AFUDC	\$0.264	\$0.316	\$0.256	\$0.238	\$0.230
Gross Construction	\$6.313	\$6.875	\$5.787	\$5.755	\$5.651

E. Escalation Rates

As provided in Order No. 2009-104(A), the most current one-year inflation indices are used to escalate costs occurring in the twelve-month period after the date of each quarterly report. The most current escalation indices are found in the preliminary Handy-Whitman July 2013 update which was issued in October 2013 and reports data for the period January through June 2013. Those rates are reflected in this report. The approved capital cost targets have been adjusted to reflect the currently reported historical escalation rates. The forecasted costs provided here reflect SCE&G's calculations related to the WEC/CB&I Claims, which change the index applicable to Firm with Indexed Adjustment cost categories going forward from a floating Handy-Whitman adjustment to a fixed rate for the life of the project.

As shown on **Appendix 4**, utility construction cost escalation rates were at historically high levels during the period 2005-2008, and have since dropped. Preliminary escalation rates are shown below on **Chart D**. When compared to the previous Handy-Whitman release, the preliminary update shows a downward trend in the one-year and five-year average rates.

Chart D: Preliminary Handy-Whitman Escalation Rates

<u>Escalation Rate Comparison</u>		
	Jul-Dec 2012	Jan-June 2013
<u>HW All Steam Index:</u>		
One-Year Rate	4.84%	2.23%
Five-Year Average	3.25%	2.22%
Ten-Year Average	4.95%	4.78%
<u>HW All Steam/Nuclear Index:</u>		
One-Year Rate	5.19%	2.40%
Five-Year Average	3.32%	2.28%
Ten-Year Average	4.99%	4.83%
<u>HW All Transmission Plant Index:</u>		
One-Year Rate	3.29%	1.71%
Five-Year Average	2.10%	1.09%
Ten-Year Average	4.90%	4.91%

F. AFUDC

Consistent with Order No. 2009-104(A), SCE&G computes AFUDC based on the Federal Energy Regulatory Commission (FERC) approved methodology as applied to the balance of Construction Work in Progress (CWIP) that is outstanding between rate adjustments. SCE&G's projected AFUDC rate is currently 6.09%, compared to the rate of 5.28% that applied when Order No. 2012-884 was issued.

G. Compliance with the Commission-Approved Cumulative Project Cash Flow Target

The current Cumulative Project Cash Flow target for the project was adopted by the Commission in Order No. 2012-884. In Order No. 2009-104(A), the Commission provided that the applicable Cumulative Project Cash Flow target would be adjusted with each quarterly report to reflect updated escalation data.

Appendix 2 provides the Commission-approved Cumulative Project Cash Flow target updated for current escalation data. The cash flow targets through June of 2013 have been updated to reflect preliminary actual escalation rates. The cash flow targets for

the third quarter of 2013 and beyond have been updated based on the most recently available inflation indices, which for purposes of this report, are the preliminary indices provided in October 2013 that report data for the period January through June 2013. When final actual indices for 2013 become available, the cash flow data for 2013 will be revised to reflect the actual escalation rates.

Appendix 2 compares the approved Cumulative Project Cash Flow target to the current cumulative cash flow schedules for the project, which include actual costs where available and SCE&G's working forecasts of annual cash flows for future years. In addition, the project cash flow targets presented on **Appendix 2** for 2012 have been adjusted to reflect timing differences between the billing methodology under the EPC Contract and the calculation of the escalated cash flow targets under Order No. 2009-104(A). Under the EPC Contract, for periods where actual escalation rates are not available, WEC/CB&I bills SCE&G based on a rolling 2-year average of the applicable Handy-Whitman rate and provides adjustments to reflect the actual rate when it is known. An adjustment has been made to **Appendix 2** target calculations to offset the timing differences that arise as a result of WEC/CB&I's approach to estimated billings and credits. This adjustment applies to those EPC Contract cost categories that are subject to indexed escalation.

II. Progress of Construction of the Units

A. Construction

The project continues to maintain an excellent safety record that exceeds industry expectations for projects of comparable size.

During the period, WEC/CB&I issued Revised Schedules showing the substantial completion dates for Unit 2 and Unit 3 in the last quarters of 2017 and 2018 or the first quarters of 2018 and 2019, respectively.

WEC/CB&I reports that the critical path for the Unit 2 substantial completion date runs through the delivery of submodules from the CB&I Lake Charles facility (CB&I-LC) to the site followed by the successful fabrication of the larger structural modules and the setting of the same on the Nuclear Island (NI) or in the Containment Vessel (CV). The critical path for Unit 2 then continues through completion of the concrete structures in the NI buildings, installation of the horizontal transition between the NI foundations and the shield wall, and completion of the shield wall itself. The critical path for Unit 3 follows a similar course.

1. Placement of Module CA04 into the Unit 2 Containment Vessel Bottom Head (CVBH)

On September 27, 2013, Module CA04 was set in place inside the Unit 2 Containment Vessel Bottom Head (CVBH) using the Bigge Heavy Lift Derrick. Module CA04 is the structure that forms the cavity in which the lower portion of the Reactor Vessel (RV) will rest. Module CA04 was fabricated on site rather than at the CB&I-LC facility to allow the CB&I facility to focus on fabrication of other structural submodules.

2. Unit 3 Basemat

During the period, form work, rebar installation and the installation of drain piping and other fittings for the Unit 3 NI basemat were ongoing in preparation for pouring the basemat. The basemat forms the foundation for the Unit 3 NI. At the close of the quarter, installation of three of five layers of rebar required for the basemat was substantially complete and the final two layers were in their final stages of completion.

On November 4, 2013, after the end of the reporting period, the project team successfully completed placement of the Unit 3 NI basemat. The placement required approximately 43 hours of continuous production of concrete by the onsite batch plants and the uninterrupted placement of 7,025 cubic yards of concrete.

3. Units 2 and 3 Turbine Buildings and Condensers

The lower portion of Unit 2 Condenser B, which is the first of three condensers that will be installed in the Unit 2 Turbine Building, was set in place in the Turbine Building Basement during the reporting period. Fabrication continued on the lower portions of Condensers A and C and on the upper portions of all three condensers in preparation for placing them within the Unit 2 Turbine Building Basement.

Modules CH80 and CH81 provide floor beams, columns and other structural steel components for the Unit 2 Turbine Building and provide the support for the floor on which the Turbine Generator will rest. During the period, CH80 was completed and set in place and CH81 was nearing completion.

At the close of the period, backfilling around the Unit 3 Turbine Building was ongoing in preparation for starting construction of the basemat for that building.

4. Unit 2 CV Rings and Unit 3 CVBH

The vertical walls of the CV will be composed of three rings of steel plates that CB&I Services is fabricating onsite. When completed, these rings will be lifted into place and welded to each other and to the CVBH which forms the bottom of the CV. Welding of the Unit 2 CV Ring 1 external stiffeners, the upper equipment hatch and air baffle supports is complete. Radiographic Testing (RT) of the external stiffener welds and the equipment hatch welds was also completed. Welding of attachment plates and RT of other welds is ongoing in preparation for completion of the Unit 2 CV Ring 1.

At the close of the period, CB&I Services was welding the fourth of four courses of plates that will form Unit 2 CV Ring 2.

Welding and RT examination continues on the initial courses of steel plates that will form the Unit 3 CVBH.

Acceptance rates based on the RT testing of welds on the Units 2 and 3 CVBH and CV Rings remain above 99%.

5. Cooling Towers and Cooling Water Pump Houses

As of September 30, 2013, the structural work on Cooling Tower 2A was substantially complete and remaining mechanical and electrical work necessary to complete Cooling Tower 2A was ongoing. At the close of the period, approximately 60% of the precast panels that make up Cooling Tower 3A had been set in place. During the period, structural work began on Cooling Tower 3B and at the close of the period, 50% of the precast panels for Cooling Tower 3B had been installed.

An initial section of the basemat for Cooling Tower 2B was placed during the period. Form work and rebar installation continued in preparation for placing the other sections.

The basemat for the Unit 2 Pump House was placed during the period and work on the facility was proceeding as expected.

6. Workforce

The project continues to recruit and utilize the majority of construction employees from a skilled craft workforce in the state of South Carolina. More than half of these local workers are from Fairfield, Lexington, Richland, and Newberry

counties. CB&I plans to employ approximately 3,000 – 3,500 employees at points during the project, with these numbers fluctuating during the various phases of construction activity. Currently, approximately 2,000 WEC/CB&I personnel and subcontractor personnel are employed on site.

B. Equipment and Fabrication

1. Steam Generators

Unit 2 Steam Generators have been completed and are awaiting the installation of the Reactor Coolant Pump (RCP) casings prior to shipment from South Korea.

Machining, cladding and welding of components of the Unit 3 Steam Generators continued at Doosan's facility in South Korea with no significant issues.

2. Reactor Coolant Pumps (RCPs)

Fabrication and inspection of the remaining components of the RCPs continue at the Curtiss-Wright EMD facility in Pennsylvania.

3. Core Make-Up Tanks and Accumulator Tanks

The fabrication, inspection and packaging for shipment of the Unit 2 Core Make-Up Tanks and Accumulator Tanks have been completed. At the close of the reporting period the Unit 2 Accumulator Tanks were in route from Mangiarotti Nuclear, S.p.A.'s (Mangiarotti) facilities in Italy to the site. The Core Make-Up Tanks were completed and awaiting shipment. The Unit 3 Core Make-Up Tanks and Accumulator Tanks are in fabrication at the Mangiarotti facilities with work proceeding as expected.

4. Supplier Financial Issues

SCE&G is aware of financial difficulties at a supplier responsible for certain significant components of the project. SCE&G has asked WEC/CB&I to monitor the potential for disruptions in such equipment fabrication and possible responses. Any disruptions could impact the project's schedule or costs, and such impacts could be material.

5. Transformers

At the close of the period, fabrication and testing of the Unit 2 Step Up Transformers were completed and the transformers were in route to the site from

Japan. Fabrication of the Unit 2 and Unit 3 Auxiliary and Reserve Auxiliary Transformers is proceeding as expected.

6. Reactor Coolant Loop Piping (RCL)

The installation of fittings and instrumentation access points and other welding activities on the Unit 2 RCL cold and hot legs have been completed at the Carolina Energy Solutions (CES) facility in Rock Hill. These components are being packaged and prepared for shipping to the site.

Final fabrication work on the Unit 3 RCL cold leg piping and surge lines is underway and is expected to be completed in the fourth quarter of 2013.

7. Turbine Generator

The final receipt on site of the major components for the Unit 2 Turbine Generator was essentially completed during the period. Fabrication of the Unit 3 Turbine Generator components is ongoing at Toshiba's manufacturing facilities in Japan and work is proceeding as expected.

8. Squib Valves

Shipment of the completed squib valves for the Units remains on hold as SPX addresses anomalies uncovered during the equipment qualification testing of the valves for use in AP1000 reactors. SCE&G continues to monitor WEC's and SPX's work to demonstrate that the valves will perform their design basis functions.

WEC/CB&I identified deficiencies in the document packages related to certain squib valve parts manufactured by SPX sub-contractors. SPX must either properly document these parts or replace them with parts that are properly documented.

Neither of these issues is expected to impact the site construction schedule.

9. Information Technology

Site Fiber Optic System. The installation of the new fiber optic cable system for the site was approximately 80% complete at the close of the period. At the close of the period, Fiber Hut 5, which is the principal hub for fiber optic cable serving the Units, was approximately 95% complete and high bandwidth service was being provided through this facility to the site. At the close of the period, Fiber Hut 2, which will provide redundancy for the system, was approximately 30% complete. Work on the fiber optic cable system was progressing as expected.

Configuration Management Information System (CMIS). The CMIS is the system which will store documents and data related to the design and engineering of the Units, the Quality Assurance/Quality Control (QA/QC) records of equipment and construction, operating programs and protocols for the Units, and related documents and data. Phase 1 of the CMIS project involves configuration of the databases and functionality to store this information and make it available for operational purposes. During the period, further review of the project resulted in the implementation date for Phase 1 being shifted from late 2014 to early 2015. The new date fully supports the overall project schedule. Work on the system is progressing as expected.

Work Management System. The CHAMPS work management system is being delivered and tested as individual application modules are developed. Of the 24 application modules, eight were installed by the end of the period and eight were in active development. During the period, preliminary testing of the Inventory Module was completed. Integrated testing of all modules will take place before final acceptance of the system. The CHAMPS implementation project is approximately 40% complete.

10. CB&I-LC Structural Module Fabrication

Challenges related to fabrication of submodules at the CB&I-LC facility continue to be a focus area of the project:

The Revised Module Production Schedule. As indicated in Section II.A, the schedule for fabrication and delivery of the submodules required for the fabrication of larger structural modules is a critical path item for both Units. Accordingly, production of these submodules remains a very important focus area for the project. SCE&G maintains personnel onsite at CB&I-LC to monitor activities at CB&I-LC and interact with CB&I-LC leadership on a regular basis.

CB&I-LC has taken a number of steps during the period to mitigate further delays to the project. CB&I-LC has begun working two 12-hour shifts, seven days a week. To expedite work on the CA01 submodules at the Lake Charles facility, CB&I has decided to move the final inspection, documentation review and minor punch list items for certain CA20 submodules to the V.C. Summer construction site. This decision will free up floor space at CB&I-LC for the fabrication of CA01 submodules, which is a critical path item. A CB&I-LC work area has been established onsite where this work will occur. Onsite inspection and related activities will begin during the fourth quarter of 2013. In addition, the fabrication of CA04 was moved to the site. As of the end of the period, all of the essential submodules required to assemble CA20 to be able to meet its on-hook date (the

date on which the module is ready to be set in place by the Bigge Heavy Lift Derrick) are onsite.

CB&I has also moved fabrication of several components to other vendors in an effort to relieve the burden on their facility and is considering outsourcing additional module fabrication activities to other contractors as appropriate. Fabrication of module CA03 is in progress at Pegasus Steel's facilities in North Charleston, SC. Fabrication of Shield Building structural modules is ongoing at Newport News Industries' (NNI) facilities in Virginia. Initial mockups of the Shield Building structural modules have been produced by NNI and shipped to the site. Monitoring the start-up activities at NNI is a focus area for the project.

Shear Stud Spacing. A LAR package related to the procedure for approving the placement of sheer studs in obstructed areas within submodules has been reviewed and finalized and will be submitted to the NRC shortly after the close of the period.

Fillet Welds. During the quarter, work to remove all CA20 fillet welds in preparation for rewelding these areas with full penetration welds was nearing completion.

Conclusion. Senior management from both SCE&G and WEC/CB&I continue to monitor the fabrication and delivery process related to submodules. WEC personnel continue to provide onsite engineering support for production at CB&I-LC. SCE&G continues to maintain a permanent resident inspector at the CB&I-LC facility who provides additional monitoring. The fabrication of the submodules continues to be an important area of focus for the project.

C. Licensing and Permitting

As licensee for the Units, SCE&G is directly accountable to the NRC for contractors meeting nuclear safety-related QA/QC requirements both at the project site and at the facilities of its component manufacturers and equipment suppliers worldwide. WEC/CB&I through the EPC Contract is responsible to SCE&G for making sure that these requirements are met.

1. NRC Inspections

The NRC conducted multiple inspections during the period. No significant concerns or findings of safety significance greater than very low (Green) were identified.

2. LARs

The NRC approves changes from the approved licensing basis for nuclear units through the LAR request and review process. SCE&G envisions that filings for LARs will be a normal part of the construction program for the Units going forward under the Combined Operating Licenses (COL). Additionally, if needed, a licensee can submit a Preliminary Amendment Request (PAR) associated with a LAR. Through the PAR process, the licensee can request a notification that the NRC does not object to the licensee installing and testing the proposed changed design feature, at the licensee's risk, pending NRC's review of the LAR.

During the third quarter of 2013, SCE&G filed seven new LARs with the NRC. The NRC has granted a total of eight LARs. Three LARs were granted during the reporting period. Ten LARs were pending on September 30, 2013. For ease of reference, a report that tabulates all the LARs submitted by SCE&G to the NRC as of September 30, 2013, is attached as **Appendix 5**.

3. Inspections, Tests, Analyses and Acceptance Criteria (ITAACs)

During the third quarter of 2013, WEC submitted three ITAAC Completion Packages for review by SCE&G prior to submission of ITAAC Closure Notifications (ICNs) to the NRC. The initial ICNs are anticipated to be submitted to the NRC in the fourth quarter of 2013.

4. Major Construction Permits

No other major construction-related permits are outstanding. Other construction-related permits are anticipated to be obtained in the ordinary course of administering the project.

5. BLRA Regulatory Proceedings

The briefing of the appeals of Commission Order No. 2012-884, which authorized updates to the cost and construction schedules for the Units under S.C. Code Ann. § 58-33-270(E), will be concluded during the first quarter of 2014.

D. Engineering

1. Engineering Completion Status

As of September 30, 2013, the Units 2 & 3 plant design packages issued for construction (IFC) are 90% complete. IFC delivery from WEC/CB&I continues to

be a focus area and SCE&G is conducting monthly oversight meetings with WEC/CB&I concerning this issue.

2. Site Specific Design Activities

Site specific design work is ongoing in support of site specific systems, to include the Circulating Water System (CWS), Yard Fire System (YFS), Power Distribution Center (PDC), Construction and Offsite Power System (ZRS), Raw Water System (RWS), Sanitary Drain System (SDS), Offsite Water System (OWS) and Waste Water System (WWS).

E. Training

1. Plant Reference Simulator. The implementation schedule for the Plant Reference Simulator (PRS) continues to support the schedule for training and licensing the AP1000 reactor operators required for the initial fuel load for Unit 2. However, there is little margin for error in the current schedule. The four teams created to oversee validation and testing of the PRS convened in the second quarter of 2013. In June 2013, a combined WEC, SCE&G and Southern Nuclear Company (SNC) team conducted a readiness assessment to evaluate the schedule for delivery of the PRS. The assessment confirmed a need to delay the scheduled delivery date of the PRS by five and one-half months to allow Westinghouse sufficient time to complete the required Human Factors Engineering/Integrated Systems Validation (HFE/ISV) testing. SCE&G continues to monitor progress in this area. Timely NRC inspection of the PRS is vital to licensing of AP1000 reactor operators. Given its importance to the project schedule, the validation and testing of the PRS will remain an area of focus.

2. Initial Licensed Operator Training. Twenty-four students continue in the Initial Licensed Operator (ILO) class that began in 2012. The duration of this class is approximately two years and will culminate with the NRC written and simulator exams in May 2015. A second class of 24 students began the ILO training in June 2013 and is scheduled to take the NRC written and simulator exams in November 2015. A third class of 18 students is scheduled to begin ILO training in September 2014 and to take the NRC written and simulator exams in September 2016. These revised examination dates are a result of the delay in the scheduled delivery date of the PRS.

3. Non-Licensed Operator Training. In July 2013, 18 students completed the Non-Licensed Operator (NLO) program and are currently receiving on-the-job training and supplemental training to support their qualifications. A second NLO class of 19 students began in August 2013 and is scheduled to be completed in December 2013.

F. Operational Readiness

1. **Mission Critical Hiring.** By the close of the period, SCE&G had completed hiring for 84% of the operational staffing positions for the Units that have been identified as mission critical. The Company is on target to meet this goal.

2. **Programs and Procedures.** The preparation of operations, maintenance and technical training programs and procedures is proceeding as expected, and as of the end of the period, goals for producing these programs and procedures were being fully met. SCE&G is meeting periodically with WEC/CB&I to develop the details for the transfer of data and documentation to the SCE&G Information Technology system. A pilot program covering five plant systems to identify the needs for this data and document transfer is currently underway.

G. Change Control/Owners Cost Forecast

1. **Change Order 16.** The language of Change Order No. 16 is being finalized. Change Order 16 incorporates the agreement entered into between SCE&G and WEC/CB&I resolving the WEC/CB&I claims related to the COL Delay, Shield Building Redesign, Module Redesign, and Unit 2 Rock Conditions.

2. **Cyber Security.** During the period, SCE&G submitted a counter proposal to WEC/CB&I for Phase II of the Cyber Security work. Negotiations on this issue were ongoing at the end of the period.

3. **WEC Costs Related to the Implementation of the Health Care and Education Reconciliation Act of 2010 and Prior Health Care Acts (“Health Care Act”).** SCE&G continues to review information provided by WEC related to its increased costs of compliance with the Health Care Act. A change order to reflect these costs is anticipated.

H. Transmission

1. **VCS1-Killian 230 kV Line.** As of September 30, 2013, construction of the VCS1-Killian 230 kV Line was nearing completion with the exception of a small scope of work that will be completed during the spring VCS1 refueling outage.

2. VCS2-Lake Murray 230 kV Line No. 2 and Segment of the VCS2-St. George 230 kV Line No. 1. As of September 30, 2013, construction of these two lines was approximately 95% complete and the VCS2-Lake Murray 230 kV Line No. 2 was scheduled to be energized in the fourth quarter of 2013. The current plan is for the segment of the VCS2-St. George 230 kV Line No. 1 that will be built as a part of this project to be energized when the remainder of that line is built and energized.

3. The Remaining Segment of VCS2-St. George 230 kV Line No. 1 and the VCS2-St. George 230 kV Line No. 2. Preliminary construction activities for these lines were ongoing including initial installation of erosion control measures, spotting and framing of structures, and similar activities. Construction activities will accelerate upon completion of the VCS2-Lake Murray 230 kV Line No. 2 which is required to be energized before the existing line that is being rebuilt as a part of this project can be taken out of service.

4. St. George Switching Station. As of September 30, 2013, the overall engineering layout of the station was complete and the site plan and storm water permit application were being developed.

5. Saluda River Substation. At the close of the period, preparations were underway to begin clearing and prepping of the substation site for construction.

III. Anticipated Construction Schedules

As of September 30, 2013, the Company and its contractors remain on schedule to complete all required milestones as adjusted pursuant to the milestone schedule contingencies approved by the Commission in Order No. 2009-104(A). Each of those adjustments is itemized in the BLRA Milestone section that follows. Accordingly, the project is in compliance with the updated construction schedules approved by the Commission in Order No. 2012-884 and with the provisions of S.C. Code Ann. § 58-33-275(A)(1).

A. Construction Schedule

The Project Licensing and Permitting, Engineering, Procurement and Construction work remains on schedule to meet the Units' Substantial Completion Dates taking into account the schedule contingencies approved in Order 2009-104(A).

B. BLRA Milestones

Appendix 1 to this quarterly report lists and updates each of the specific milestones constituting the anticipated construction schedules for the Units pursuant to S.C. Code Ann. § 58-33-270(B)(1) and Order No. 2012-884. Comparing the current milestone target completion dates to the dates in Order No. 2012-884, 3 milestones have been accelerated and 45 have been delayed.

IV. Schedules of the Capital Costs Incurred Including Updates to the Information Required by S.C. Code Ann. § 58-33-270(B) (6) (the Inflation Indices)

The Capital Costs section of this report (Section IV.A) provides an update of the cumulative capital costs incurred and forecasted to be incurred in completing the project. These costs are compared to the cumulative capital cost targets approved by the Commission in Order No. 2012-884. The approved capital cost targets have been adjusted to reflect the currently reported historical escalation rates. There has not been any use by the Company of the capital cost timing contingencies that were approved by the Commission in Order No. 2009-104(A). The Inflation Indices section (Section IV.B) of this report provides updated information on inflation indices and the changes in them.

A. Capital Costs

Appendix 2 shows the Cumulative Project Cash Flow target as approved in Order No. 2012-884 and as updated for escalation and other Commission-approved adjustments under the heading “**Per Order 2012-884 Adjusted.**”

Appendix 2 also shows the cumulative cash flow for the project based on actual expenditures to date and the Company’s current forecast of cost and construction schedules under the heading “**Actual through September 2013 plus Projected.**”

As shown on **Appendix 2**, the projected expenditure for the project for the 12 months ended December 31, 2013, is approximately \$680 million. As shown on **Appendix 2**, line 39, the cumulative amount projected to be spent on the project as of December 31, 2013, is approximately \$2.453 billion. As shown on **Appendix 2**, line 18, the Cumulative Project Cash Flow target approved by the Commission for year-end 2013 adjusted for current escalation and WEC/CB&I billing differences is approximately \$2.845 billion. As a result, the cumulative cash flow at year-end 2013 is projected to be approximately \$392.1 million less than the target.

For comparison purposes, **Appendix 3** sets out the cash flow schedule for the project as it was approved in Order No. 2012-884. **Appendix 3** does not include any adjustments to the cash flow schedule for changes in inflation indices or adjustments in capital cost schedules made by the Company. The AFUDC forecast presented on **Appendix 3** is the AFUDC forecast that was current at the time of Order No. 2012-884.

B. Inflation Indices

Appendix 4 shows the preliminary updated inflation indices approved in Order No. 2009-104(A). Included is a history of the annual Handy-Whitman All Steam Index, South Atlantic Region; the Handy-Whitman All Steam and Nuclear Index, South Atlantic Region; the Handy-Whitman All Transmission Plant Index, South Atlantic Region; and the Chained GDP Index for the past 10 years. The changes in these indices and the escalation-related effects of cost rescheduling resulted in a decrease in the projected cost of the Units in future dollars from approximately \$6.3 billion as forecast in Order No. 2009-104(A) to a forecast of approximately \$5.7 billion using current inflation data.

V. Updated Schedule of Anticipated Capital Costs

The updated schedule of anticipated capital costs for Units 2 & 3 is reflected in **Appendix 2**.

VI. Conclusion

The Units are currently anticipated to be completed at a cost of approximately \$4.5 billion in 2007 dollars. The Company maintains a staff that monitors the work of its contractors and continues to monitor closely areas of concern related to either the cost or schedule for the project. The Company will continue to update the Commission and the ORS of progress and concerns as the project proceeds.

ATTACHMENT 1**GLOSSARY OF ACRONYMS OR DEFINED TERMS**

Acronym or Defined Term	Reference
7Q10	A standard low-water flow condition used for evaluating the environmental effects of discharges and withdrawals from rivers and streams. The conditions are calculated to reflect the lowest average 7-day flow expected to be encountered during any 10-year period.
ACI	American Concrete Institute.
AFUDC	Allowance for Funds Used During Construction.
AP1000	The WEC designed Advanced Pressurized water nuclear reactor of approximately 1000 megawatts generating capacity.
APOG	A group of utilities who have submitted applications for AP1000 COLs.
BLRA	The Base Load Review Act, S.C. Code Ann. § 58-33-210 et seq. (Supp. 2009).
CA	The designation for a specific pre-fabricated construction module that forms part of the reactor building, such as Module CA20.
CAP	Corrective Action Program.
CAR	A Corrective Action Report related to design, engineering or construction of the Units, or related processes, that must be corrected.
CB&I	Chicago Bridge & Iron, a sub-contractor on the project which, upon acquisition of the Shaw Group, became a member of the Consortium and a prime contractor on the project.
CB&I-LC	CB&I Lake Charles --the module fabrication unit formerly known as Shaw Modular Solutions or SMS and located in Lake Charles, Louisiana.
CB&I Services	A subsidiary of CB&I that is fabricating the containment vessels onsite under contract with Westinghouse.
CES	Carolina Energy Solutions, a subcontractor located in Rock Hill, South Carolina.
CMIS	Configuration Management Information System.
COLs	Combined Operating Licenses for construction and operation of a nuclear unit issued by the NRC.
COLA	A Combined Operating License Application.
Commission	The Public Service Commission of South Carolina.
Consortium	The joint venture between WEC Electric Company, LLC and CB&I to construct the Units under the terms of the EPC Contract.
CR	A Condition Report communicating and memorializing concerns with the design, engineering or construction of the Units, or related processes, which in some cases can become the basis for a Corrective Action Report.
CV	The Containment Vessel which provides containment for the reactor vessel and associated equipment.
CVBH	The Containment Vessel Bottom Head that forms the bottom of the Containment Vessel.
CWIP	Construction Work in Progress.
CWS	The Circulating Water System --the system that will transport waste heat from the turbines to the cooling towers.
Cyber Security	Technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.

ATTACHMENT 1**GLOSSARY OF ACRONYMS OR DEFINED TERMS**

Acronym or Defined Term	Reference
DCD	Design Control Document which is approved by the Nuclear Regulatory Commission and sets forth the approved design of a nuclear reactor.
Departures	Departures are minor deviations from the approved Design Control Document included in the licensing basis for the Units that do not rise to the level requiring a LAR.
EMD	Electro-Mechanical Division of Curtiss-Wright Corp., the sub-contractor for the Reactor Coolant Pumps.
EPA	The United States Environmental Protection Agency.
EPC Contract	The Engineering, Procurement and Construction Agreement for construction of the Units entered into by SCE&G and WEC/CB&I.
Exit Debriefing	A meeting held between the NRC and the licensee at the conclusion of an NRC inspection to discuss the results of the inspection.
FEIS	A Final Environmental Impact Statement as required by the National Environmental Policy Act of 1969.
FERC	The Federal Energy Regulatory Commission.
FFD	Fitness For Duty, a program that seeks to provide reasonable assurance that site personnel are trustworthy, will perform their tasks in a reliable manner, and are not under the influence of substances or otherwise impaired in a way that may adversely affect their ability to safely and competently perform their duties.
Fixed/Firm	Prices under the EPC Contract which are either fixed or are firm but subject to defined escalation rates.
FLEX	A diverse, flexible strategy led by NEI for adding more backup systems to cool nuclear reactors and used fuel storage pools and to maintain the integrity of reactor containment structures in response to lessons learned from Fukushima.
FNC	First Nuclear Concrete.
FNTP	Full Notice to Proceed authorizing all remaining safety-related work to commence.
FSAR	Final Safety Analysis Report – a report by the applicant providing support to the NRC’s approval and certification of the standard power plant design.
GDP	Gross Domestic Product.
HFE/ISV	Human Factors Engineering/Integrated Systems Validation –part of the development of a training simulator for the Units.
HL or Hot Leg	That part of the Reactor Cooling Loop that transports steam to the steam generators.
HLD	Heavy Lift Derrick - the derrick that was erected on site to move large modules and equipment.
IBF	Subcontractor of Tioga that manufactures the Reactor Coolant Loop piping.
ICN	ITAAC Closure Notification – the letter from the licensee to notify the NRC that an ITAAC is complete in accordance with 10 CFR 52.99(c)(1).
IFC	Issued for Construction – engineering drawings that include information necessary for construction of specific structures, systems and components.
ILO	Initial Licensed Operator.
INPO	Institute of Nuclear Power Operations.
IPS	Integrated Project Schedule for licensing and construction of the Units.

ATTACHMENT 1**GLOSSARY OF ACRONYMS OR DEFINED TERMS**

Acronym or Defined Term	Reference
ITAAC	Inspections, Tests, Analyses, and Acceptance Criteria which are the inspections, tests, analyses and acceptance criteria that the NRC has determined to be necessary and sufficient to demonstrate that a nuclear unit has been constructed and will operate in conformity with the COLs, the Atomic Energy Act of 1954, as amended, and the NRC's regulations.
LAR	License Amendment Request – A formal request made by VCSNS to amend the combined operating license, its appendices, or its associated bases.
LNTF	Limited Notice to Proceed authorizing a vendor to commence specific work.
LSS	Limited Scope Simulator –a training simulator with limited functionality that can be used for the initial stages of operator training.
MAB	Module Assembly Building - a building on site where large modules will be constructed and equipment will be prepared for installation in a space that is protected from the elements.
Mangiarotti	Mangiarotti Nuclear, S.p.A.
Near Term Task Force	A senior level task force created by the NRC to address lessons learned from the 2011 earthquake and tsunami in Fukushima, Japan with operating nuclear plants and new reactor applicants.
NEI	Nuclear Energy Institute.
Nelson Studs	Metal studs used in composite construction to secure concrete to steel components. The studs project out of the steel components and are surrounded by the concrete when it is poured.
NI	Nuclear Island, comprising the steel containment vessel, the reactor building, and the auxiliary building.
NLC	Nuclear Learning Center - a training facility operated by SCE&G at the Jenkinsville site.
NLO	Non-Licensed Operator.
NND	The New Nuclear Deployment Team within SCE&G.
NNI	Newport News Industries --a module fabrication subcontractor to WEC/CB&I.
NPDES	National Pollutant Discharge Elimination System.
NRC	The United States Nuclear Regulatory Commission.
ORS	South Carolina Office of Regulatory Staff.
OWS	Off Site Water System – the system that withdraws water from Monticello Reservoir and provides potable and filtered water for the Units.
PAR	Preliminary Amendment Request - A formal request made by VCSNS which allows VCSNS to proceed at its own risk with work consistent with an amendment request contained in an LAR prior to approval.
PDC	Power Distribution Center - prefabricated, modular enclosures housing electrical equipment such as switchgear, motor control center equipment and other auxiliary equipment.
Pike	Pike Energy Solutions, a contractor for transmission and switchyard related work.
PRA	Probabilistic Risk Assessment.
PRHR	The Passive Residual Heat Removal Exchanger unit –a heat exchanger unit that is part of the passive safety system which provides cooling to the AP1000 reactor during emergency situations.

ATTACHMENT 1**GLOSSARY OF ACRONYMS OR DEFINED TERMS**

Acronym or Defined Term	Reference
PRS	Plant Reference Simulator – a training simulator with full functionality that can be used in all stages of operator training.
PWS	The Potable Water System --which provides potable water to the site.
QA	Quality Assurance – The planned and systematic activities implemented in a quality system so that the quality requirements for a product or service will be fulfilled.
QA/QC	Quality Assurance/Quality Control.
QC	Quality Control – The observation techniques and activities used to fulfill requirements for quality.
RAI	Requests for Additional Information issued by the NRC staff to license applicants.
RCA	Root Cause Analysis – identification and evaluation of the reason for non-conformance, an undesirable condition, or a problem which (when solved) restores the status quo.
RCL	The Reactor Coolant Loop – the piping and related equipment that transports heat from the reactor to the steam generator.
RCP	The Reactor Cooling Pump which forms part of the Reactor Coolant System.
RCS	The Reactor Coolant System - the complete system for transferring and transporting heat from the reactor to the steam generator.
RFI	Requests for Information issued by the NRC staff to licensees.
ROW	Right-of-way.
RT	Radiographic Testing - a nondestructive testing method of inspecting materials for hidden flaws by using the ability of short wavelength electromagnetic radiation (high energy photons) to penetrate various materials.
RV	Reactor Vessel.
RWS	Raw Water System – the system for withdrawing and transporting raw water from the Monticello Reservoir.
SAT	Site Acceptance Testing.
SCDHEC	The South Carolina Department of Health and Environmental Control.
SCDNR	The South Carolina Department of Natural Resources.
SCE&G or The Company	South Carolina Electric & Gas Company.
SDS	Sanitary Drain System.
Shaw	The Shaw Group.
SMS	Shaw Modular Solutions, LLC.
SNC	Southern Nuclear Company – a subsidiary of Southern Company and licensed operator of the Vogtle Nuclear Units and two other nuclear plants.
SRO	Senior Reactor Operator.
SROC	Senior Reactor Operator Certification.
Target	Costs under the EPC Contract where targets have been established but where SCE&G pays actual costs as incurred.
TEi	Thermal Engineering International – a subsidiary of Babcock Power which manufactures moisture separator reheaters and other power plant equipment.
UFSAR	Updated Final Safety Analysis Report.
Units	V. C. Summer Nuclear Station Units 2 & 3.
Update Docket	A proceeding under the BLRA seeking Commission approval of updated cost and construction schedules for the Units.

ATTACHMENT 1**GLOSSARY OF ACRONYMS OR DEFINED TERMS**

Acronym or Defined Term	Reference
URI	Unresolved Items – A term used by the NRC during inspections for items that require further action.
USACOE	The United States Army Corps of Engineers.
VCSNS or VCSN	V. C. Summer Nuclear Station.
WEC	Westinghouse Electric Company, LLC.
WEC/CB&I	The consortium formed by Westinghouse Electric Company, LLC and CB&I.
WEC/CB&I Claims	WEC/CB&I's claims for additional charges associated with the COL delay, the Shield Building design changes, the structural modules design changes, and the lower than anticipated rock elevations encountered in certain areas within the Unit 2 Nuclear Island.
WTP	The Off-Site Water Treatment Plant which will take water from Lake Monticello and treat it to potable water standards.
WWS	The Waste Water System – the system for collection, treatment and disposal of domestic waste water generated on site.
YFS	The Yard Fire System – the system that provides fire detection and protection outside of the plant.
ZRS	The Construction and Offsite Power System –the system which provide electrical power to the site.

APPENDIX 1**V. C. Summer Nuclear Station Units 2 & 3****Quarterly Report to the South Carolina Office of Regulatory Staff
Submitted by South Carolina Electric & Gas Company
Pursuant to Public Service Commission Order No. 2009-104(A)****Quarter Ending September 30, 2013**

Appendix 1 lists and updates each of the milestones which the Commission adopted as the Approved Construction Schedule for the Units, pursuant to S.C. Code Ann. § 58-33-270(B)(1) in Order No. 2012-884. **Appendix 1** provides columns with the following information:

1. Milestone tracking ID number.
2. The description of the milestone as updated in Order No. 2012-884.
3. The BLRA milestone date as approved by the Commission in Order No. 2012-884.
4. The current milestone date.
5. For each completed milestone, the date by which it was completed. For milestones completed prior to the current reporting quarter, the milestone entry is shaded in gray. For milestones completed during the current reporting quarter, the milestone entry is shaded in green.
6. Information showing the number of months, if any, by which a milestone has been shifted. For milestones with planned completion dates that vary in days instead of months, the milestone entry is shaded in yellow.
7. Information as to whether any milestone has been shifted outside of the +18/-24 Month Contingency approved by the Commission.
8. Notes.

On the final page of the document, there is a chart summarizing milestone completion and movement comparing the current milestone date to the milestone date approved in Order No. 2012-884. This movement is shown for only the milestones that have not been completed.

Appendix 1
VC Summer Units 2 and 3

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
1	Approve Engineering Procurement and Construction Agreement	Complete		5/23/2008		No	
2	Issue POs to nuclear component fabricators for Units 2 & 3 Containment Vessels	Complete		12/3/2008		No	
3	Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - First Payment - Unit 2	Complete		8/18/2008		No	
4	Contractor Issue PO to Accumulator Tank Fabricator - Unit 2	Complete		7/31/2008		No	
5	Contractor Issue PO to Core Makeup Tank Fabricator - Units 2 & 3	Complete		9/30/2008		No	
6	Contractor Issue PO to Squib Valve Fabricator - Units 2 & 3	Complete		3/31/2009		No	
7	Contractor Issue PO to Steam Generator Fabricator - Units 2 & 3	Complete		5/29/2008		No	
8	Contractor Issue Long Lead Material PO to Reactor Coolant Pump Fabricator - Units 2 & 3	Complete		6/30/2008		No	
9	Contractor Issue PO to Pressurizer Fabricator - Units 2 & 3	Complete		8/18/2008		No	
10	Contractor Issue PO to Reactor Coolant Loop Pipe Fabricator - First Payment - Units 2 & 3	Complete		6/20/2008		No	
11	Reactor Vessel Internals - Issue Long Lead Material PO to Fabricator - Units 2 & 3	Complete		11/21/2008		No	
12	Contractor Issue Long Lead Material PO to Reactor Vessel Fabricator - Units 2 & 3	Complete		5/29/2008		No	
13	Contractor Issue PO to Integrated Head Package Fabricator - Units 2 & 3	Complete		7/31/2009		No	
14	Control Rod Drive Mechanism Issue PO for Long Lead Material to Fabricator - Units 2 & 3 - first payment	Complete		6/21/2008		No	

Legend  = Completed.  = Completed this Quarter.  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
15	Issue POs to nuclear component fabricators for Nuclear Island structural CA20 Modules	Complete		8/28/2009		No	
16	Start Site Specific and balance of plant detailed design	Complete		9/11/2007		No	
17	Instrumentation & Control Simulator - Contractor Place Notice to Proceed - Units 2 & 3	Complete		10/31/2008		No	
18	Steam Generator - Issue Final PO to Fabricator for Units 2 & 3	Complete		6/30/2008		No	
19	Reactor Vessel Internals - Contractor Issue PO for Long Lead Material (Heavy Plate and Heavy Forgings) to Fabricator - Units 2 & 3	Complete		1/29/2010		No	
20	Contractor Issue Final PO to Reactor Vessel Fabricator - Units 2 & 3	Complete		9/30/2008		No	
21	Variable Frequency Drive Fabricator Issue Transformer PO - Units 2 & 3	Complete		4/30/2009		No	
22	Start clearing, grubbing and grading	Complete		1/26/2009		No	
23	Core Makeup Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete		10/31/2008		No	
24	Accumulator Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete		10/31/2008		No	
25	Pressurizer Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete		10/31/2008		No	
26	Reactor Coolant Loop Pipe - Contractor Issue PO to Fabricator - Second Payment - Units 2 & 3	Complete		4/30/2009		No	
27	Integrated Head Package - Issue PO to Fabricator - Units 2 and 3 - second payment	Complete		7/31/2009		No	
28	Control Rod Drive Mechanisms - Contractor Issue PO for Long Lead Material to Fabricator - Units 2 & 3	Complete		6/30/2008		No	

Legend  = Completed.  = Completed this Quarter.  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18-24 Months Contingency?	Notes
29	Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - Second Payment - Units 2 & 3	Complete		10/31/2008		No	
30	Start Parr Road intersection work	Complete		2/13/2009		No	
31	Reactor Coolant Pump - Issue Final PO to Fabricator - Units 2 & 3	Complete		6/30/2008		No	
32	Integrated Heat Packages Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete		10/1/2009		No	
33	Design Finalization Payment 3	Complete		1/30/2009		No	
34	Start site development	Complete		6/23/2008		No	
35	Contractor Issue PO to Turbine Generator Fabricator - Units 2 & 3	Complete		2/19/2009		No	
36	Contractor Issue PO to Main Transformers Fabricator - Units 2 & 3	Complete		9/25/2009		No	
37	Core Makeup Tank Fabricator Notice to Contractor Receipt of Long Lead Material - Units 2 & 3	Complete		12/30/2010		No	
38	Design Finalization Payment 4	Complete		4/30/2009		No	
39	Turbine Generator Fabricator Issue PO for Condenser Material - Unit 2	Complete		8/28/2009		No	
40	Reactor Coolant Pump Fabricator Issue Long Lead Material Lot 2 - Units 2 & 3	Complete		4/30/2009		No	
41	Passive Residual Heat Removal Heat Exchanger Fabricator Receipt of Long Lead Material - Units 2 & 3	Complete		5/27/2010		No	
42	Design Finalization Payment 5	Complete		7/31/2009		No	

Legend

 = Completed.

 = Completed this Quarter

 = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
43	Start erection of construction buildings, to include craft facilities for personnel, tools, equipment; first aid facilities; field offices for site management and support personnel; temporary warehouses; and construction hiring office	Complete		12/18/2009		No	
44	Reactor Vessel Fabricator Notice to Contractor of Receipt of Flange Nozzle Shell Forging - Unit 2	Complete		8/28/2009		No	
45	Design Finalization Payment 6	Complete		10/7/2009		No	
46	Instrumentation and Control Simulator - Contractor Issue PO to Subcontractor for Radiation Monitor System - Units 2 & 3	Complete		12/17/2009		No	
47	Reactor Vessel Internals - Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	Complete		7/29/2011		No	
48	Turbine Generator Fabricator Issue PO for Moisture Separator Reheater/Feedwater Heater Material - Unit 2	Complete		4/30/2010		No	
49	Reactor Coolant Loop Pipe Fabricator Acceptance of Raw Material - Unit 2	Complete		2/18/2010		No	
50	Reactor Vessel Internals - Fabricator Start Weld Neutron Shield Spacer Pads to Assembly - Unit 2	Complete		8/28/2012		No	
51	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 2	Complete		6/30/2009		No	
52	Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 2	Complete		12/23/2010		No	
53	Start excavation and foundation work for the standard plant for Unit 2	Complete		3/15/2010		No	
54	Steam Generator Fabricator Notice to Contractor of Receipt of 2nd Steam Generator Tubesheet Forging - Unit 2	Complete		4/30/2010		No	

Legend = Completed = Completed this Quarter = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside + 18-24 Months Contingency?	Notes
55	Reactor Vessel Fabricator Notice to Contractor of Outlet Nozzle Welding to Flange Nozzle Shell Completion - Unit 2	Complete		12/30/2010		No	
56	Turbine Generator Fabricator Notice to Contractor Condenser Fabrication Started - Unit 2	Complete		5/17/2010		No	
57	Complete preparations for receiving the first module on site for Unit 2	Complete		1/22/2010		No	
58	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Transition Cone Forging - Unit 2	Complete		4/21/2010		No	
59	Reactor Coolant Pump Fabricator Notice to Contractor of Manufacturing of Casing Completion - Unit 2	Complete		11/16/2010		No	
60	Reactor Coolant Loop Pipe Fabricator Notice to Contractor of Machining, Heat Treating & Non-Destructive Testing Completion - Unit 2	Complete		3/20/2012		No	
61	Core Makeup Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 2	Complete		11/26/2012		No	
62	Polar Crane Fabricator Issue PO for Main Hoist Drum and Wire Rope - Units 2 & 3	Complete		2/1/2011		No	
63	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 3	Complete		6/14/2011		No	
64	Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 2	Complete		3/26/2012		No	
65	Start placement of mud mat for Unit 2	Complete		7/20/2012		No	
66	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Tubing - Unit 2	Complete		9/28/2010		No	

Legend  = Completed  = Completed this Quarter  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
67	Pressurizer Fabricator Notice to Contractor of Welding of Upper and Intermediate Shells Completion - Unit 2	Complete		10/28/2011		No	
68	Reactor Vessel Fabricator Notice to Contractor of Closure Head Cladding Completion - Unit 3	Complete		6/28/2012		No	
69	Begin Unit 2 first nuclear concrete placement	Complete		3/9/2013		No	
70	Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 2	Complete		12/1/2011		No	
71	Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	Complete		7/29/2011		No	
72	Steam Generator Fabricator Notice to Contractor of Completion of 1st Steam Generator Tubing Installation - Unit 2	Complete		1/27/2012		No	Delay due to engineering review and evaluation of bend radius for RCL hot and cold legs.
73	Reactor Coolant Loop Pipe - Shipment of Equipment to Site - Unit 2	12/31/2012	10/21/2013		+10 Month(s)	No	
74	Control Rod Drive Mechanism - Ship Remainder of Equipment (Latch Assembly & Rod Travel Housing) to Head Supplier - Unit 2	Complete		7/16/2012		No	
75	Pressurizer Fabricator Notice to Contractor of Welding of Lower Shell to Bottom Head Completion - Unit 2	Complete		12/22/2011		No	
76	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 2	Complete		5/4/2012		No	
77	Design Finalization Payment 14	Complete		10/31/2011		No	

Legend = Completed = Completed this Quarter = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
78	Set module CA04 for Unit 2	11/6/2012	9/10/2013		+10 Month(s)	No	Delay due to First Nuclear Concrete (FNC) delay and fabrication delay for CA04.
79	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Final Post Weld Heat Treatment - Unit 2	Complete		5/24/2011		No	
80	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Completion of Tubing - Unit 2	Complete		5/29/2012		No	
81	Polar Crane Fabricator Notice to Contractor of Girder Fabrication Completion - Unit 2	Complete		10/23/2012		No	
82	Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 3	8/31/2013		8/26/2013		No	
83	Set Containment Vessel ring #1 for Unit 2	1/7/2013	1/10/2014		+12 Month(s)	No	Due to FNC delay.
84	Reactor Coolant Pump Fabricator Delivery of Casings to Port of Export - Unit 2	7/31/2012		7/6/2013		No	
85	Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 3	8/31/2013		7/18/2013		No	
86	Reactor Vessel Fabricator Notice to Contractor of Receipt of Core Shell Forging - Unit 3	Complete		3/29/2012		No	
87	Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 3	Complete		11/9/2011		No	
88	Set Nuclear Island structural module CA03 for Unit 2	6/26/2013	10/5/2014		+16 Month(s)	No	Due to delays associated with delivery, receipt and fabrication of the CA01 module.
89	Squib Valve Fabricator Notice to Contractor of Completion of Assembly and Test for Squib Valve Hardware-- Unit 2	Complete		5/10/2012		No	

Legend = Completed. = Completed this Quarter. = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
90	Accumulator Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	3/31/2013		9/16/2013		No	
91	Polar Crane Fabricator Notice to Contractor of Electric Panel Assembly Completion - Unit 2	Complete		3/6/2013		No	
92	Start containment large bore pipe supports for Unit 2	6/28/2013	9/22/2014		+15 Month(s)	No	Due to delays associated with engineering and licensing approvals and delay of F.NC.
93	Integrated Head Package - Shipment of Equipment to Site - Unit 2	3/31/2013	2/14/2014		+11 Month(s)	No	Due to design changes and subsequent delays in predecessor schedule activities.
94	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 2	5/31/2013	1/21/2014		+8 Month(s)	No	Due to delay in predecessor schedule activities.
95	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 3	6/30/2013	10/30/2013		+4 Month(s)	No	Due to schedule refinement and review.
96	Steam Generator Fabricator Notice to Contractor of Satisfactory Completion of 1st Steam Generator Hydrotest - Unit 2	Complete		1/14/2013		No	
97	Start concrete fill of Nuclear Island structural modules CA01 and CA02 for Unit 2	4/3/2014	4/6/2015		+12 Month(s)	No	Due to delays associated with fabrication and setting of the CA01 module.
98	Passive Residual Heat Removal Heat Exchanger - Delivery of Equipment to Port of Entry - Unit 2	12/31/2012	1/22/2014		+13 Month(s)	No	Due to schedule refinement and required engineering design approval prior to shipment.
99	Refueling Machine Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 2	11/30/2013	3/20/2014		+4 Month(s)	No	Due to schedule refinement and review.

Legend  = Completed.  = Completed this Quarter.  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
100	Deliver Reactor Vessel Internals to Port of Export - Unit 2	1/31/2014	7/28/2014		+6 Month(s)	No	Due to schedule refinement and review.
101	Set Unit 2 Containment Vessel #3	4/24/2014	4/8/2015		+12 Month(s)	No	Due to delays associated with fabrication and setting of the CA01 module.
102	Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 2	7/31/2013	5/26/2014		+10 Month(s)	No	Due to schedule refinement and review.
103	Turbine Generator Fabricator Notice to Contractor Turbine Generator Ready to Ship - Unit 2	Complete		5/28/2013		No	
104	Pressurizer Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	3/31/2014	3/28/2014			No	Due to schedule refinement and review.
105	Polar Crane - Shipment of Equipment to Site - Unit 2	1/31/2014	2/6/2015		+13 Month(s)	No	Due to schedule refinement and resequencing.
106	Receive Unit 2 Reactor Vessel on site from fabricator	5/13/2014		7/31/2013		No	
107	Set Unit 2 Reactor Vessel	6/23/2014	5/18/2015		+11 Month(s)	No	Due to delays associated with delivery, receipt and fabrication of the CA01 module.
108	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Channel Head to Tubesheet Assembly Welding - Unit 3	12/31/2013	4/30/2014		+4 Month(s)	No	Due to schedule refinement and review.
109	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 3	8/31/2014	12/1/2014		+4 Month(s)	No	Due to schedule refinement and review.
110	Reactor Coolant Pump - Shipment of Equipment to Site (2 Reactor Coolant Pumps) - Unit 2	10/31/2013	6/11/2014		+8 Month(s)	No	Due to schedule refinement and review.
111	Place first nuclear concrete for Unit 3	10/9/2013	10/25/2013			No	Due to schedule refinement and review.

Legend  = Completed.  = Completed this Quarter.  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
112	Set Unit 2 Steam Generator	10/23/2014	8/18/2015		+10 Month(s)	No	Due to delays associated with fabrication and setting of the CA01 module.
113	Main Transformers Ready to Ship - Unit 2	9/30/2013		7/31/2013		No	
114	Complete Unit 3 Steam Generator Hydrotest at fabricator	2/28/2014	10/30/2014		+8 Month(s)	No	Due to schedule refinement and review.
115	Set Unit 2 Containment Vessel Bottom Head on basemat legs	Complete		5/22/2013		No	
116	Set Unit 2 Pressurizer Vessel	5/16/2014	5/29/2015		+12 Month(s)	No	Due to delays associated with fabrication and setting of the CA01 module.
117	Reactor Coolant Pump Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 3	2/28/2015	1/16/2015		-1 Month(s)	No	Schedule ahead of plan.
118	Deliver Reactor Vessel Internals to Port of Export - Unit 3	6/30/2015	6/12/2015			No	Due to schedule refinement and review.
119	Main Transformers Fabricator Issue PO for Material - Unit 3	2/28/2015	2/2/2015			No	Due to schedule refinement and review.
120	Complete welding of Unit 2 Passive Residual Heat Removal System piping	2/5/2015	10/30/2015		+8 Month(s)	No	Due to delays associated with fabrication and setting of the CA01 module.
121	Stream Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 3	4/30/2015	1/2/2015		-3 Month(s)	No	Schedule ahead of plan.
122	Refueling Machine - Shipment of Equipment to Site - Unit 3	2/28/2015	4/3/2015		+2 Month(s)	No	Due to schedule refinement and review.
123	Set Unit 2 Polar Crane	1/9/2015	9/28/2015		+8 Month(s)	No	Due to delays associated with fabrication and setting of the CA01 module.

Legend = Completed = Completed this Quarter = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
124	Reactor Coolant Pumps - Shipment of Equipment to Site - Unit 3	6/30/2015	6/8/2015			No	Due to schedule refinement and review.
125	Main Transformers Ready to Ship - Unit 3	7/31/2015	4/13/2015		-3 Month(s)	No	Schedule ahead of plan.
126	Spent Fuel Storage Rack - Shipment of Last Rack Module - Unit 3	7/31/2014	7/4/2014			No	Due to schedule refinement and review.
127	Start electrical cable pulling in Unit 2 Auxiliary Building	8/14/2013	9/24/2014		+13 Month(s)	No	Due to delays associated with engineering and licensing approvals and delay of FNC.
128	Complete Unit 2 Reactor Coolant System cold hydro	1/22/2016	10/5/2016		+9 Month(s)	No	Delay associated with delivery, receipt and fabrication of module CA01.
129	Activate class 1E DC power in Unit 2 Auxiliary Building	3/15/2015	1/12/2016		+10 Month(s)	No	Due to delays associated with engineering and licensing approvals and delay of FNC.
130	Complete Unit 2 hot functional test	5/3/2016	2/8/2017		+9 Month(s)	No	Delay associated with delivery, receipt and fabrication of module CA01.
131	Install Unit 3 ring 3 for containment vessel	8/25/2015	12/9/2015		+4 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
132	Load Unit 2 nuclear fuel	9/15/2016	7/25/2017		+10 Month(s)	No	Delay associated with delivery, receipt and fabrication of module CA01.
133	Unit 2 Substantial Completion	3/15/2017	12/15/2017		+9 Month(s)	No	Delay associated with delivery, receipt and fabrication of module CA01.

Legend  = Completed  = Completed this Quarter  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
134	Set Unit 3 Reactor Vessel	10/22/2015	2/16/2016		+4 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
135	Set Unit 3 Steam Generator #2	2/25/2016	5/17/2016		+3 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
136	Set Unit 3 Pressurizer Vessel	7/16/2015	2/2/2016		+7 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
137	Complete welding of Unit 3 Passive Residual Heat Removal System piping	6/16/2016	7/27/2016		+1 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
138	Set Unit 3 polar crane	5/9/2016	7/11/2016		+2 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
139	Start Unit 3 Shield Building roof slab rebar placement	5/26/2016	9/22/2016		+4 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.

Legend  = Completed.  = Completed this Quarter  = Movement in Days Only

Appendix 1
VC Summer Units 2 and 3

13-3Q

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
140	Start Unit 3 Auxiliary Building electrical cable pulling	11/7/2014	6/2/2015		+7 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
141	Activate Unit 3 Auxiliary Building class 1E DC power	5/15/2016	11/8/2016		+6 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
142	Complete Unit 3 Reactor Coolant System cold hydro	3/22/2017	8/21/2017		+5 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
143	Complete Unit 3 hot functional test	7/3/2017	12/26/2017		+5 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
144	Complete Unit 3 nuclear fuel load	11/15/2017	6/22/2018		+7 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
145	Begin Unit 3 full power operation	4/8/2018	11/28/2018		+7 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.

Legend  = Completed.  = Completed this Quarter.  = Movement in Days Only

**Appendix 1
VC Summer Units 2 and 3**

Tracking ID	Order No. 2012-884 Description	Order No. 2012-884 Date	13-3Q Targeted Milestone Completion Date	Actual Completion Date	Delta Months from Order No. 2012-884 Date	Outside +18/-24 Months Contingency?	Notes
146	Unit 3 Substantial Completion	5/15/2018	12/15/2018		+7 Month(s)	No	Delay due to rescheduling of Unit 3 work impacted by delay associated with delivery, receipt, and fabrication of module CA01.
SUMMARY							
Total Milestones Completed		92	out of	146 =	63%		
Milestone Movement - Order No. 2012-884 vs. 13-3Q:							
a) Forward Movement		45	out of	146 =	31%		
b) Backward Movement		3	out of	146 =	2%		
Milestones Within +12 to +17 Month range		9	out of	146 =	6%		

Legend  = Completed.  = Completed this Quarter  = Movement in Days Only

APPENDIX 2**V. C. Summer Nuclear Station Units 2 & 3****Quarterly Report to the South Carolina Office of Regulatory Staff
Submitted by South Carolina Electric & Gas Company
Pursuant to Public Service Commission Order No. 2009-104(A)****Quarter Ending September 30, 2013**

Appendix 2 is an updated and expanded version of the information contained in the capital cost schedule approved by the Commission in Order No. 2012-884.

Appendix 2 shows:

1. The actual expenditures on the project by plant cost category through the current period.
2. The changes in capital costs reflecting the Company's current forecast of expenditures on the project for each future period by plant cost category. In updating its cost projections the Company has used the current construction schedule for the project and the Commission-approved inflation indices as set forth in **Appendix 4** to this report.
3. The cumulative CWIP for the project and the balance of CWIP that is not yet reflected in revised rates.
4. The current rate for calculating AFUDC computed as required under applicable FERC regulations.

The Cumulative Project Cash Flow target as approved in Order No. 2012-884 and as updated for escalation and other Commission-approved adjustments is found under the heading "**Per Order 2012-884 Adjusted.**" The adjustments reflect:

1. Changes in inflation indices.
2. Budget Carry-Forward Adjustments used, where appropriate to track the effect of lower-than-expected cumulative costs on the future cumulative cash flow of the project.

Appendix 2 also shows the cumulative cash flow for the project based on actual expenditures to date and the current construction schedule and forecast of year-by-year costs going forward. This information is found under the heading "**Actual through September 2013 plus Projected.**"

APPENDIX 3**V. C. Summer Nuclear Station Units 2 & 3****Quarterly Report to the South Carolina Office of Regulatory Staff
Submitted by South Carolina Electric & Gas Company
Pursuant to Public Service Commission Order No. 2009-104(A)****Quarter Ending September 30, 2013**

For comparison purposes, **Appendix 3** provides the schedule of capital costs for the project which was approved by the Commission in Order No. 2012-884 as the Approved Capital Cost of the Units, pursuant to S.C. Code Ann. § 58-33-270(B)(2). **Appendix 3** also reflects the forecast of AFUDC expense based on these adjusted schedules and the AFUDC rates that were current at the time of Order No. 2012-884. **Appendix 3** is intended to provide a fixed point of reference for future revisions and updating. While the schedule of costs contained on **Appendix 3** is subject to revision for escalation, changes in AFUDC rates and amounts, capital cost scheduling contingencies and other contingency adjustments as authorized in Order No. 2009-104(A), no such adjustments have been made to the schedules presented here.

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of \$)

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

Per Order 2012-884

Plant Cost Categories	Actual					Projected						
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total												
Fixed with No Adjustment	-	26	724	927	11,964	57,206	56,903	57,508	77,990	64,727	1,537	-
Firm with Fixed Adjustment A	21,723	97,386	319,073	374,810	314,977	613,678	780,753	792,394	647,295	386,537	142,999	56,781
Firm with Fixed Adjustment B	-	3,519	20,930	23,741	34,084	99,630	169,425	215,175	183,987	134,815	58,409	24,729
Firm with Indexed Adjustment												
Actual Craft Wages												
Non-Labor Costs												
Time & Materials												
Owners Costs												
Transmission Costs												
Total Base Project Costs(2007 \$)												
Total Project Escalation												
Total Revised Project Cash Flow	21,723	100,905	340,003	398,551	349,061	713,307	950,179	1,007,569	831,281	521,351	201,408	81,510
Cumulative Project Cash Flow(Revised)	21,723	122,629	462,632	861,183	1,210,244	1,923,551	2,873,730	3,881,299	4,712,580	5,233,931	5,435,339	5,516,849
AFUDC(Capitalized Interest)	645	3,497	10,564	17,150	14,218	20,449	38,384	42,868	40,888	27,518	15,391	6,144
Construction Work in Progress	22,368	126,771	477,338	893,039	1,256,317	1,990,074	2,978,637	4,029,074	4,901,243	5,450,113	5,668,911	5,754,565

CONFIDENTIAL

APPENDIX 4

V. C. Summer Nuclear Station Units 2 & 3

**Quarterly Report to the South Carolina Office of Regulatory Staff
Submitted by South Carolina Electric & Gas Company
Pursuant to Public Service Commission Order No. 2009-104(A)**

Quarter Ending September 30, 2013

Appendix 4 shows the changes in the inflation indices approved in Order No. 2009-104(A). Included is a ten year history of the Handy-Whitman All Steam Index, South Atlantic Region; the Handy-Whitman All Steam and Nuclear Index, South Atlantic Region; the Handy-Whitman All Transmission Plant Index, South Atlantic Region; and the Chained GDP Index. The change in the relevant indices from the Combined Application is also provided.

Appendix 4, Chart A

Inflation Indices, Chart A

HW All Steam Generation Plant Index, July 2013

<u>Year</u>	<u>Index</u>	<u>Yr/Yr change</u>	<u>Three Year Average</u>	<u>Five Year Average</u>	<u>Ten Year Average</u>
2013	597	2.23%	2.97%	2.22%	4.78%
2012	584	1.92%	3.82%	3.60%	4.67%
2011	573	4.75%	2.31%	4.75%	
2010	547	4.79%	3.78%	5.31%	
2009	522	-2.61%	4.74%	5.50%	
2008	536	9.16%	8.13%	7.35%	
2007	491	7.68%	6.99%	5.74%	
2006	456	7.55%	6.64%	4.75%	
2005	424	5.74%	4.49%		
2004	401	6.65%	3.50%		
2003	376	1.08%			
2002	372	2.76%			
2001	362				

BLRA
Filing
Jul-07
7.68%
5.74%

Order 2010-12	Order 2011-345	Order 2012-884	Update
Jan-09	Jul-10	Jan-12	Jul-13
4.83%	4.79%	4.51%	2.23%
7.19%	5.31%	3.91%	2.22%

HW All Steam Index:

One year
Five Year

Appendix 4, Chart B

Inflation Indices, Chart B

HW All Steam and Nuclear Generation Plant Index, July 2013

<u>Year</u>	<u>Index</u>	<u>Yr/Yr change</u>	<u>Three Year Average</u>	<u>Five Year Average</u>	<u>Ten Year Average</u>
2013	598	2.40%	3.09%	2.28%	4.83%
2012	584	2.10%	3.82%	3.64%	4.70%
2011	572	4.76%	2.31%	4.76%	
2010	546	4.60%	3.78%	5.32%	
2009	522	-2.43%	4.82%	5.55%	
2008	535	9.18%	8.15%	7.37%	
2007	490	7.69%	7.00%	5.75%	
2006	455	7.57%	6.66%	4.77%	
2005	423	5.75%	4.50%		
2004	400	6.67%	3.50%		
2003	375	1.08%			
2002	371	2.77%			
2001	361				

BLRA
Filing
Jul-07
7.69%
5.75%

Order 2010-12	Order 2011-345	Order 2012-884	Update
Jan-09	Jul-10	Jan-12	Jul-13
4.84%	4.60%	4.52%	2.40%
7.20%	5.32%	3.87%	2.28%

HW All Steam/Nuclear Index:
 One year
 Five Year

Appendix 4, Chart C

Inflation Indices, Chart C

HW All Transmission Plant Index, July 2013

<u>Year</u>	<u>Index</u>	<u>Yr/Yr change</u>	<u>Three Year Average</u>	<u>Five Year Average</u>	<u>Ten Year Average</u>
2013	594	1.71%	2.13%	1.09%	4.91%
2012	584	-0.17%	3.25%	2.56%	4.71%
2011	585	4.84%	1.30%	4.36%	
2010	558	5.08%	2.71%	5.23%	
2009	531	-6.02%	3.96%	5.48%	
2008	565	9.07%	9.02%	8.73%	
2007	518	8.82%	8.11%	6.86%	
2006	476	9.17%	8.58%	5.25%	
2005	436	6.34%	5.43%		
2004	410	10.22%	3.59%		
2003	372	-0.27%			
2002	373	0.81%			
2001	370				

BLRA Filing Jul-07	Order 2010-12 Jan-09	Order 2011-345 Jul-10	Order 2012-884 Jan-12	Update Jul-13
8.82%	7.41%	5.08%	2.48%	1.71%
6.86%	8.60%	5.23%	3.00%	1.09%

HW All Transmission Plant Index

One year
Five Year

Appendix 4
Inflation Indices, Chart D
 GDP Chained Price Index, 2013

SERIESTYPE	UNIT	SHORT LABEL	ID	2007	2008	2009	2010	2011	2012	2013
Chained Price Index--Gross Domestic Product										
(2005=100) Chained price index-gross domestic product , Source: BEA , Units: index- 2005=100.0										
U.S. Macro - 10 Year Baseline			45158933	97.02	99.21	100.00	101.22	103.20	105.01	106.08
Annual Percent change					2.20%	0.88%	1.34%	2.14%	1.78%	1.49%
3-Year Annual Percent change					2.78%	1.67%	1.47%	1.45%	1.75%	1.74%
5-Year Annual Percent change					2.90%	2.51%	2.11%	1.70%	1.67%	1.45%
Consumer Price Index, All-Urban										
U.S. Macro - 10 Year Baseline										
Index										
Consumer price index, all-urban , Source: BLS , Units: - 1982-84=1.00										
Percent change			45158182	2.07	2.16	2.15	2.18	2.25	2.30	2.32
3-Year Annual Percent change					4.17%	-0.46%	1.40%	3.21%	2.22%	1.55%
5-Year Annual Percent change					3.42%	2.17%	1.68%	1.37%	2.27%	2.33%
					3.26%	2.62%	2.23%	2.22%	2.10%	1.58%
Producer Price Index--Finished Goods										
(1982=1.0) Producer price index-finished goods , Source: BLS , Units: index- 1982=1.0										
U.S. Macro - 10 Year Baseline			45159751	1.67	1.78	1.73	1.80	1.91	1.94	1.96
Percent change					6.59%	-2.81%	4.05%	6.11%	1.57%	1.54%
3-Year Annual Percent change					4.50%	2.64%	2.53%	2.38%	3.89%	3.07%
5-Year Annual Percent change					4.43%	3.03%	2.90%	3.61%	3.04%	2.05%

BLRA Filing	Jul-07
2.66%	
2.81%	

Order 2010-12	Jan-09	Order 2011-345	Jul-10	Order 2012-984	Jan-12	Update	Jul-13
2.24%		0.43%		2.11%		1.49%	
2.86%		1.97%		1.65%		1.45%	

GDP Chained Price Index
 One Year
 Five Year

APPENDIX 5

V. C. Summer Nuclear Station Units 2 & 3

**Quarterly Report to the South Carolina Office of Regulatory Staff
Submitted by South Carolina Electric & Gas Company
Pursuant to Public Service Commission Order No. 2009-104(A)**

Quarter Ending September 30, 2013

Appendix 5 indicates those LARs that have been submitted by SCE&G to the NRC for review. Included is the title of each LAR, a brief description of the change(s) associated with the LAR, the date the LAR was submitted to the NRC, and the status of the requests.

Appendix 5

V.C. Summer Units 2 and 3 License Amendment Requests (LARs)

PUBLIC VERSION

Topic	Description of Change	Submittal Date	Status
LAR 12-01 - Additional Electrical Penetration Assemblies	Provide additional penetrations of the Containment Vessel to allow sufficient space for electrical and instrument cables.	8/29/2012	Approved on 7/1/2013
LAR-12-02 – Tier 1 Table 3.3-1 Discrepancies – PAR Utilized	Conform the current ITAAC standards used to verify the shield building wall thickness to align with those approved in DCD Rev. 19	9/26/2012	Approved on 5/30/2013
LAR 13-01 - Basemat Shear Reinforcement Design Spacing Requirements - PAR Utilized	Clarify the provisions for maximum spacing of the shear reinforcement in the basemat below the auxiliary building to be consistent with requirements shown in existing FSAR figures.	1/15/2013	Approved on 2/26/2013
LAR 13-02 - Basemat Shear Reinforcement Design Details - PAR Utilized	Revises the requirements for development of basemat shear reinforcement in the licensing basis from ACI 349 Appendix B to ACI 318-11, Section 12.6. The use of ACI 318 criteria for headed reinforcement results in longer shear ties and thicker concrete in areas below the elevator pits and a sump in the nuclear island basemat.	1/18/2013	Approved on 3/1/2013
LAR 13-03 - Turbine Building Eccentric and Concentric Bracing	Revises the turbine building main area to use a mixed bracing system using eccentrically and concentrically braced frames as a means of preventing the turbine building from collapsing onto the Nuclear Island (NI) during a seismic event. The structural design code is also changed to a code that includes adequate provisions for the new bracing system.	2/7/2013	Approved on 7/1/2013

Appendix 5

V.C. Summer Units 2 and 3 License Amendment Requests (LARs)

PUBLIC VERSION

Topic	Description of Change	Submittal Date	Status
LAR 13-04 - Reconciliation of Tier 1 Valve Differences	Reconciles valve related information contained in Tier 1 material to be consistent with corresponding Tier 2 material currently incorporated in the UFSAR.	2/7/2013	Under NRC Review
LAR 13-05 - Structural Modules Shear Stud Size and Spacing	Revises Note 2 of UFSAR Figure 3.8.3-8, Sheet 1, which presents typical structural wall module details. This information needs to be changed to be consistent with the design basis calculations.	2/14/2013	Approved on 5/23/2013
LAR 13-06 - Primary Sampling System Changes	Alters the design of the Primary Sampling System (PSS) by replacing a check valve with a solenoid-operated gate valve, modifying the PSS inside-containment header and adding a PSS containment penetration.	2/7/2013	Approved on 8/22/2013
LAR 13-07 - Changes to the Chemical and Volume Control System (CVS)	Alters the design of the Chemical and Volume Control System (CVS) by adding/changing valves, separating the zinc and hydrogen injection paths and relocating the zinc injection point.	3/13/2013	Under NRC Review
LAR 13-08 - Module Obstructions and Details	Withdrawn after review with NRC-see Letter NND-13-202.	2/28/2013	Withdrawn
LAR 13-10 - Human Factors Engineering Integrated System Validation Plan	Revises referenced document APP-OCS-GEH-320 From revision D to Revision 2.	3/13/2013	Under NRC Review
LAR 13-11 - NI Wall Reinforcement Criteria -PAR Utilized	Revises structural code criteria for anchoring reinforcement bar within the NI walls (adopts ACI-318 for this purpose).	3/26/2013	Approved on 6/6/2013

V.C. Summer Units 2 and 3 License Amendment Requests (LARs)

Topic	Description of Change	Submittal Date	Status
LAR 13-12 - Fire Area Boundary Changes	Revises various information to support fire area boundaries (HVAC information, stairwell changes, and other layout changes.)	7/17/2013	Under NRC Review
LAR 13-13 - Turbine Building Layout Changes	Revises the door location, clarifies column line designations, changes floor to ceiling heights and increases elevations and wall thickness in certain areas.	7/30/2013	Under NRC Review
LAR 13-16 - Revision to Human Factors Engineering Design Verification Plan (GEH-120)	Revises referenced document APP-OCS-GEH-120 from Revision B to Revision 1.	9/25/2013	Under NRC Review
LAR 13-17 - Revision to Human Factors Engineering Task Support Verification (GEH-220)	Revises referenced document APP-OCS-GEH-220 from Revision B to Revision 1.	9/25/2013	Under NRC Review
LAR 13-20 - Modules / Stud Channel Obstructions Revision	Revises requirements for design spacing of shear studs and wall module trusses and the design of structural elements of the trusses such as angles and channels. These revisions are to address interferences and obstructions.	7/17/2013	Under NRC Review
LAR 13-25 - Tier 1 Editorial and Consistency Changes	Revises information to correct consistency and editorial issues. This submittal does not contain any technical changes.	7/2/2013	Under NRC Review
LAR 13-32 - WLS Changes	Clarifies the description of the WLS, including changing depiction of valves to be consistent with Tier 1 figure conventions, ensuring consistency between Tier 1 and Tier 2 descriptions, and clarifying the safety classification of the drain hubs.	8/30/2013	Under NRC Review