

# South Carolina Office of Regulatory Staff

## Review of South Carolina Electric & Gas Company's **V. C. Summer Units 2 and 3** **Construction Status**

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**February 26, 2014**



# ORS Monitoring Activities

- Section 58-33-277(B) of the BLRA states: The Office of Regulatory Staff shall conduct on-going monitoring of the construction of the plant and expenditure of capital through review and audit of the quarterly reports under this article, and shall have the right to inspect the books and records regarding the plant and the physical progress of construction upon reasonable notice to the utility.

BLRA: <http://www.scstatehouse.gov/code/t58c033.php>



# ORS Monitoring Activities

- Although not required by the BLRA, ORS issues a review of each quarterly report filed by SCE&G.
- ORS's reviews focus on two monitoring priorities:
  - (1) SCE&G's ability to adhere to the approved construction schedule
  - (2) SCE&G's ability to adhere to the approved budget

BLRA: <http://www.scstatehouse.gov/code/t58c033.php>

ORS Rpt: <http://www.regulatorystaff.sc.gov/Documents/Electric%20and%20Gas/ORSs%20Review%20of%20SCEGs%202013%203rd%20Quarter%20Report.pdf>

SCE&G Rpt: <http://dms.psc.sc.gov/pdf/matters/5B5DC27C-155D-141F-238170CBF8747CC8.pdf>

Order 2012-884/Approved Construction Schedule: <http://dms.psc.sc.gov/pdf/orders/3BA3336C-155D-141F-1D7ADCA5C17C637A.pdf>



# ORS Monitoring Activities

- Visits to observe construction and fabrication activities
- On site meetings with SCE&G project leads
- Continuing document review
- Monthly management meetings with ORS and SCE&G staff and Quarterly meetings with the Consortium project lead
- Review and assessment of SCE&G quarterly reports
- Review of SCE&G expenditures
- Participate in NRC Public Meetings
- Testimony before the Public Service Commission



# ORS Schedule Monitoring

## Unit 2 Substantial Completion Date

Order No. 2012-884	Q4 2013	Change
3/15/2017	12/15/2017	+9 Months

## Unit 3 Substantial Completion Date

Order No. 2012-884	Q4 2013	Change
5/15/2018	12/15/2018	+7 Months

Order 2012-884: <http://dms.psc.sc.gov/pdf/orders/3BA3336C-155D-141F-1D7ADCA5C17C637A.pdf>  
SCE&G Rpt: <http://dms.psc.sc.gov/pdf/matters/5B5DC27C-155D-141F-238170CBF8747CC8.pdf>



# BLRA Milestone Schedule

As of the end of Q4 2013, of the Milestone Schedule's 146 activities:

- 95 milestone activities have been completed
- 51 milestone activities are yet to be completed

During Q4 2013:

- 4 milestone activities were scheduled to be completed
  - 1 of these milestones has been completed
  - 3 of these milestones have not been completed



# ORS Budget Monitoring

Budget in 2007\$ ("000")  
{Base Project Cost}

Order No. 2012-884	Q4 2013	Change
\$4,548,405	\$4,548,405	\$0

Budget in Future \$ ("000")  
{Gross Construction Cost}

Order No. 2012-884	Q4 2013	Change
\$5,754,565	\$5,680,188	(\$74,377)

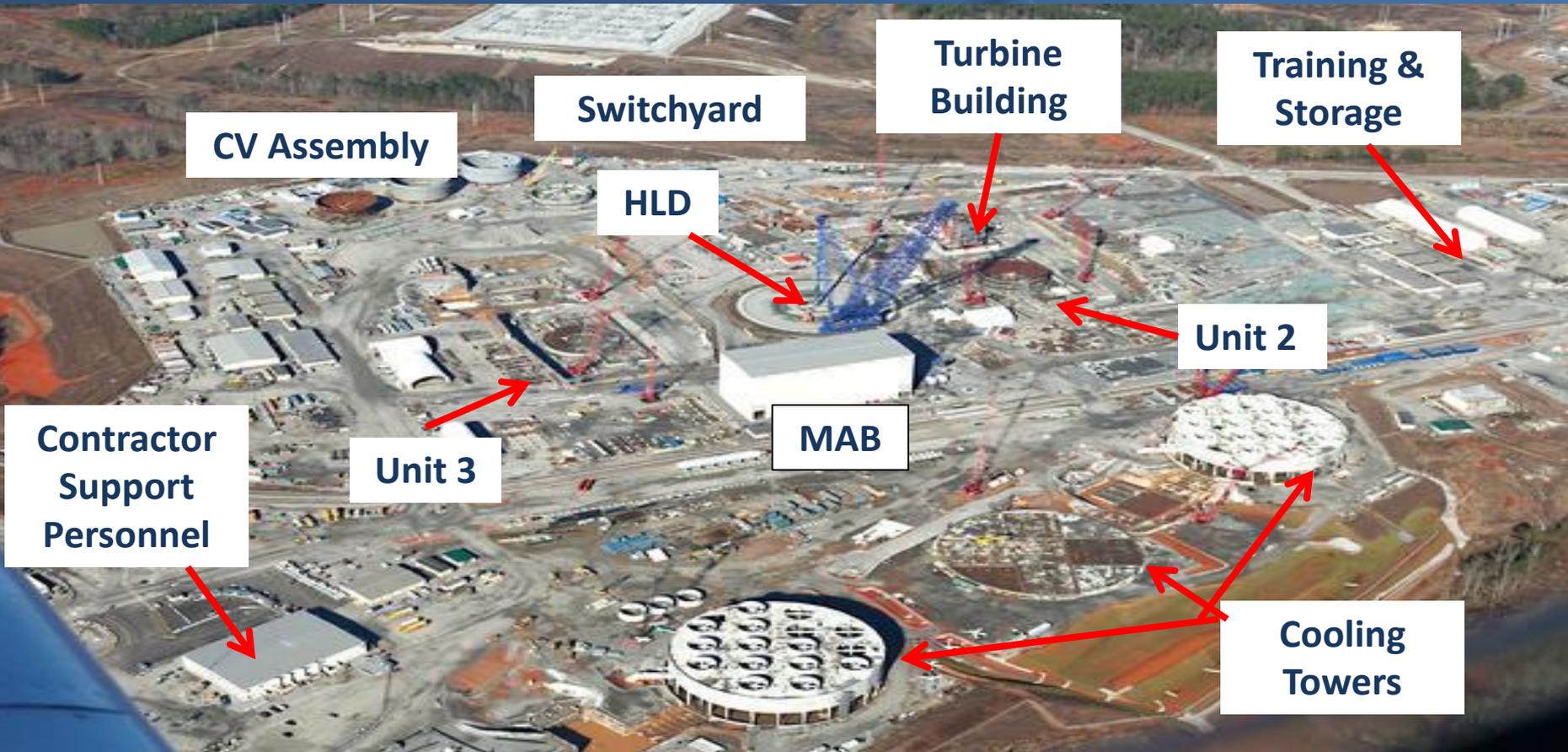


# ORS Budget Monitoring

- Budget in 2007\$
  - Change Orders may impact the base project cost and may result in a filing to increase the budget.
  - Pending Change Orders:
    - Change Order 16 – Related to previous update filing – No additional dollar impact
    - Change Order for Commercial Issues – \$0 Impact
    - Change Order for Cyber Security – Dollar Impact TBD
    - Change Order for Fabrication Delays – Dollar Impact TBD
- Budget in Future \$
  - The Handy-Whitman escalator indices may increase or decrease the gross construction cost of the project. Since the PSC Order allows for escalation, the impact of escalation cost on the project will not result in a filing to increase the budget.
- Total amount spent on the project as of Q4 2013 is \$2.311B.



# Construction Site Overview



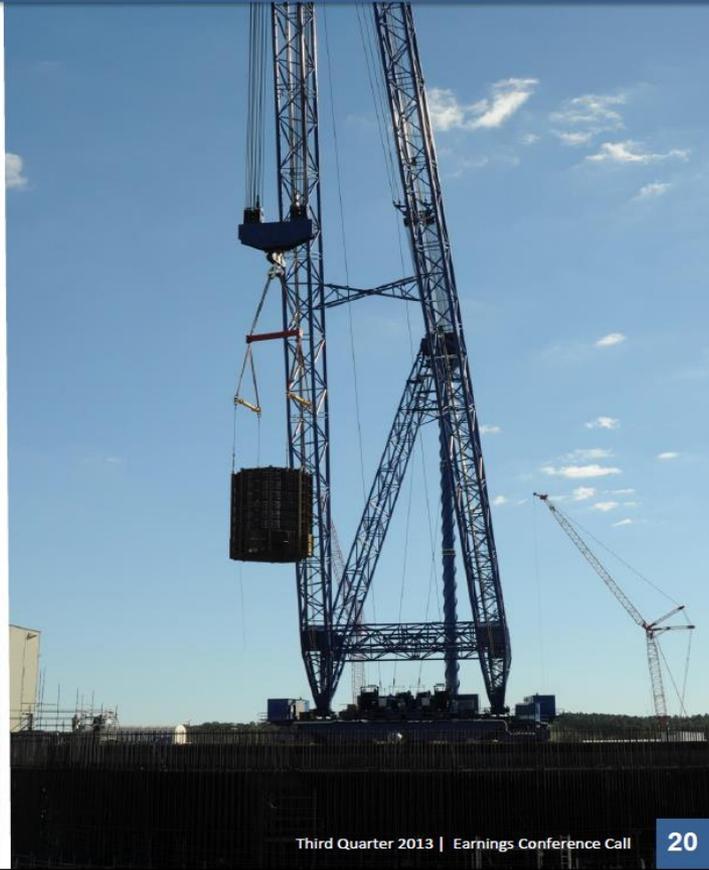
# Major Construction Activities

## CA20 Submodule Assembly in the MAB



# Major Construction Activities

Unit 2 CA-04 Reactor Vessel Cavity Lift



Third Quarter 2013 | Earnings Conference Call

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# Major Construction Activities

## Unit 2 Turbine Building Erection



# Major Construction Activities

## Unit 2 Nuclear Island



# Major Component Deliveries



Unit 2 Reactor Vessel



Unit 2 Accumulator Tanks



Unit 2 Moisture Separator Reheater



Unit 2 Core Makeup Tank

December 2013



# Cooling Tower



# Unit 3 Basemat Pour



# Construction Challenges

- Structural Modules (CA01 Fabrication and Delivery)
- Shield Building Erection
- Structural Design Compliance
- Instrumentation and Control Design
- Timely Delivery of Plant Reference Simulator
- Overlapping Unit 2 and Unit 3 Construction
- Manufacturing of Major Equipment
- License Amendment Reviews
- Multiple Work-arounds and Priorities



# Emerging Issues

- Concurrent Critical Path Activities
- As of 1/31/2014, 3 BLRA milestones have been delayed 16 months, and 1 milestone has been delayed 17 months.
- SCE&G estimates the potential budget impact from delays to be approximately \$200M.
- ORS expects SCE&G to contest its responsibility for the cost of these delays.
- SCE&G has advised that a revised fully integrated schedule and cost estimate will be finalized in Q3 2014.



# Emerging Issues

## SCE&G Purchase of Additional 5% of Ownership from Santee Cooper\*

Timing	Incremental Percentage	Current Cost Estimate	Unit 2 and 3 Ownership	MWs
COD of Unit 2	+1%	\$100 million	56%	+22 MWs
1 <sup>st</sup> Anniversary of Unit 2 COD	+2%	\$200 million	58%	+44 MWs
2 <sup>nd</sup> Anniversary of Unit 2 COD	+2%	\$200 million	60%	+44 MWs
<b>Total</b>	<b>+5%</b>	<b>\$500 million</b>	<b>60%</b>	<b>+110 MWs</b>

*\*Purchase requires PSC approval*

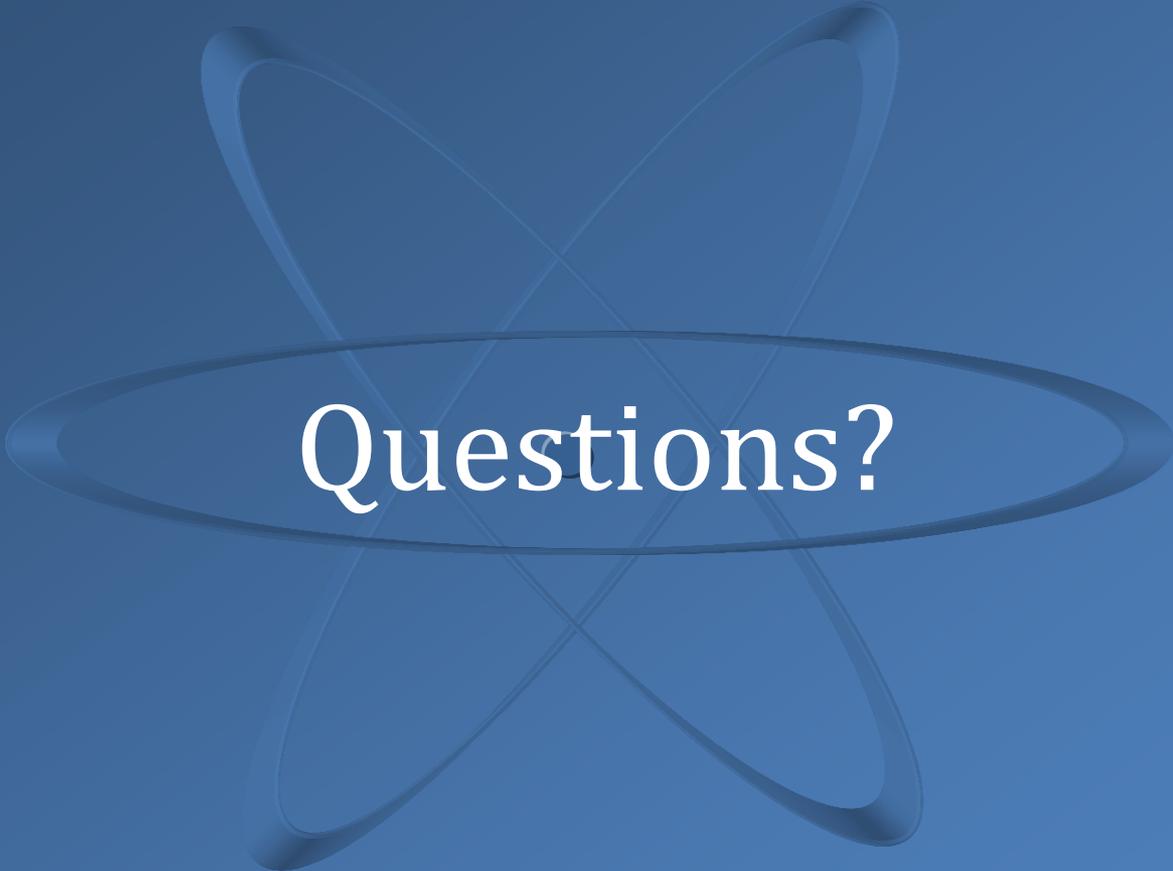
SCE&G Financial Rpt: <http://www.scana.com/en/investor-relations/webcasts-and-presentations/>



# Conclusions

- Major progress has been demonstrated and SCE&G plans to hold the current Unit 2 Substantial Completion Date of 12/15/2017. ORS finds that meeting the current Unit 2 Substantial Completion Date will continue to be a challenge. SCE&G reports to ORS that a revised integrated project schedule will be available in Q3 2014. At that time, any impact on the Units 2 and 3 Substantial Completion Dates will be determined. SCE&G reports to ORS that it does not expect the Units 2 and 3 Substantial Completion Dates to fall outside the 18 month boundary.
- Should the integrated project schedule revise the Unit 2 Substantial Completion Date, it may also revise the Unit 3 Substantial Completion Date.
- Currently, ORS finds that the project can be completed in accordance with the approved budget. However, pending and future change orders may ultimately impact the budget.





Questions?

