

BEFORE THE  
GEORGIA PUBLIC SERVICE COMMISSION  
STATE OF GEORGIA

**FILED**

**JAN 30 2015**

**EXECUTIVE SECRETARY  
G.P.S.C.**

In Re:	]	
	]	
Review of Proposed Revisions and	]	
Verification of Expenditures Pursuant	]	Docket No. 29849
To Georgia Power Company's Certificate	]	
Of Public Convenience and Necessity for	]	
Plant Vogtle Units 3 and 4,	]	
Eleventh Semi-annual Construction	]	
Monitoring Report	]	

**Brief of the Southern Alliance for Clean Energy**

**Summary of Argument**

The current commercial operation dates of December 31, 2017 and 2018 cannot be achieved according to Staff Advocacy witnesses. [Tr. 327, 406] Without a complete Integrated Project Schedule ("IPS") to review there is no way to verify whether Staff's current assessment of an additional year delay in the construction schedule is over or under stating the current situation. [Tr. 406] But it is undisputed that delays will further erode Project benefits. [Tr. 292]

The Company reported in their response to STF-68-5 that three critical path activities are at least six months behind schedule. Additionally, the Advocacy Staff's testimony indicates that the setting of the CA01 Module in the nuclear island is 369 days delayed and the setting of the Shield Building transition panels

at elevation 100 feet is 401 days delayed. (Roetger and Jacobs pre-filed testimony, p. 28) Another critical path activity, the setting of the CA03 Module is 501 days behind schedule [Tr. 349], and the possibility of schedule compression declines as delays increase. [Tr. 351]

After six years, not having a complete Integrated Project Schedule is imprudent (Tr. 301), and the Company has an obligation based on its commitments and promises made in the certification docket (Docket 27800) to actively manage the Project. [Tr. 404] Additionally, the Engineering, Procurement and Construction (“EPC”) Agreement between the Consortium<sup>1</sup> and the Owners<sup>2</sup> requires that an IPS be produced. The Advocacy Staff stated that, “. . . prudent management requires a full IPS that is realistic, understood and agreed upon by all parties.” [Tr. 290] This Commission should insist that a complete IPS be provided when the Company files its 12<sup>th</sup> VCM and find that the failure to have a complete IPS in place in the 12<sup>th</sup> VCM represents a clearly imprudent act by the Company.

The Company should not be allowed to over-collect financing costs through the Nuclear Construction Cost Recovery (“NCCR”) tariff above the current certified cost of \$6.113 billion, and the Commission Staff should report on the

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<sup>1</sup> Chicago Bridge & Iron and Westinghouse Electric Corporation

<sup>2</sup> Georgia Power Company (45.7%), Oglethorpe Power Corporation (30%), Municipal Electric Association of Georgia (22.7%) and the City of Dalton (1.6%)

amount collected through the NCCR tariff. [Tr. 454] Additionally, the Company should not be allowed to collect its return on equity in the pre-collected portion of the financing costs.

I. Argument

A. The Current Commercial Operation Dates of December 31, 2017 for Unit 3 and December 31, 2018 for Unit 4 Cannot be Met

The Advocacy Staff witnesses repeatedly stated their belief that it was impossible to meet the second revised commercial operation dates of December 31, 2017 for Unit 3 and December 31, 2018 for Unit 4. [Tr. 289-290] At the December 16, 2014 hearing the Staff Advocacy panel stated, “We’ve provided significant evidence to the contrary, that there is an implicit almost additional year delay built into the production or the construction that is currently ongoing on the site.” [Tr. 291](Emphasis supplied)

The Advocacy Staff opinion is a fair and realistic assessment of the current state of construction for the Project and not an unsupported or malicious prediction of failure. [Tr. 350] Time and time again the dates for critical path construction activities have slipped and this consistent trend has not changed. The Company’s responses to Staff data requests confirm that critical path construction activities, such as the setting of the CA01 Module in the nuclear island, the setting of the

Shield Building transition panels to elevation 100 feet and the placement of the concrete in CA20 Module walls all have further slipped in time by at least six months. [STF-68-5, November 7, 2014]

The chart in the Roetger and Jacobs testimony at page 28 of their pre-filed testimony provides updated information which shows the setting of the CA01 Module has been delayed 369 days and the setting of the Shield Building transition panels to elevation 100 feet has been delayed 401 days. According to testimony from the Staff Advocacy Panel, the setting of the CA03 Module has been delayed 501 days. [Tr. 349](Emphasis supplied)

When construction schedule delays run over 300 or 400 days the ability to recover or mitigate lost time is dramatically reduced. The possibility of schedule compression for nuclear island activities is even more difficult. [Tr. 353] At the December 16<sup>th</sup> hearing Mr. Roetger noted,

“Now I think at some point it becomes – the probability of a mitigation being successful decreases as the number of days you need to compress increases. I think that’s just the reality of construction. And when you start looking at over 400 days of compression, that’s more than a year. I mean, that’s a lot of days that you have to make up and there just aren’t that many days left before the end of 2017.”

[Tr. 351] While the Company has not officially acknowledged that the current commercial operation dates are unrealistic and unsupportable, the evidence from the December 16<sup>th</sup> hearing supports a reasonable assumption that the current

commercial operation dates for Units 3 and 4 will have to be pushed back at least one more year, to late 2018 and 2019 respectively.

1. Further Construction Delays Continue to Erode the Benefits of the Project Because of Increased Costs

It is inevitable and unavoidable that the alleged benefits of the Project will steadily erode as construction schedule delays continue over time. The Advocacy Staff witness Hayet reaffirmed his calculation that, “. . .the estimate of the impact of a delay remains about \$2.0 million per day at this time.” [Pre-filed Testimony of Philip Hayet, p. 31] The likelihood that the construction schedule is going to be pushed back another 12 months will add another \$730 million in costs to the Project, which will be borne either by ratepayers or the Consortium, but not by the Company. The \$730 million in costs would be in addition to the \$645 million in cost overruns reported by the Company. [Docket 29849; December 2014 Monthly Status Report, p. 2] (Emphasis supplied) These costs also do not include any portion of the over \$900 million in costs being litigated by the Consortium and Owners in federal court.

In the Vogtle certification docket the Public Interest Advocacy Staff acknowledged that, “[t]he Company would not bare [sic] any exposure to the cost of schedule delays or cost overruns.” [Docket 27800, Brief of the Georgia Public Service Commission Public Interest Advocacy Staff, p. 10, March 6, 2009] The

Commission's refusal to implement any kind of risk sharing mechanism means that the Company has no direct financial skin in the game. The adoption of a risk sharing mechanism would have properly aligned the interests of the Company with its ratepayers. [Id. at 15]

It was recently reported in the Wall Street Journal that the first Chinese AP1000 nuclear reactor's operation has been further pushed back to 2016. [Wall Street Journal, "China's First Advanced Nuclear Reactor Faces More Delays," January 15, 2015] While there is no direct linkage between the construction schedules of the American and Chinese nuclear projects, the development problems with the Chinese projects is an early warning that similar problems will occur on the American projects unless the technical issues are resolved, and it is worth noting that when asked by a Commissioner, "[w]ho do you think is better, us or them (the Chinese)," Advocacy Staff witness Jacobs answered, "[a]t this point I would say them." [Tr. 322]

**B. The Lack of a Final and Complete Integrated Project Schedule Six Years Into the Vogtle Project is Unreasonable and Imprudent and Should be of Great Concern to the Commission**

The Advocacy Staff's declaration that the lack of an effective IPS to manage this complex Project for the estimated remaining 24 months, "[i]n fact runs counter to any prudent project management, nuclear or otherwise, the Engineering,

Procurement, and Construction Agreement requirements, and the nuclear industry's own self-funded INPO Principles for Excellence in Nuclear Project Construction," is not an impulsive criticism, but a restrained warning that has been developing for over six years. [Roetger and Jacobs Pre-filed Direct Testimony, p. 24] The Advocacy Staff has been very reserved in its actions and is not asking for the disallowance of any of the Company's proposed expenses, but is calling upon the Company to live up to the promises it made to this Commission during the certification docket not to be a passive manager. [Tr. 404]

Yes, this is one of the first new nuclear construction projects in almost 30 years. Yes, this is a new nuclear reactor design. And yes, the Company and Commission were made aware of the significant risks such a project poses before and during the certification docket. But no, the Company is not excused from ignoring its obligations to ratepayers and the Commission to comply with the terms of the EPC agreement and produce an IPS "that is realistic, understood and agreed upon by all parties." [Tr. 290] And likewise, the Commission cannot ignore its obligations as well to ratepayers.

The existence of the complete IPS was confirmed by both Advocacy Staff witnesses and the Company's attorney. [Roetger and Jacobs Pre-filed Direct Testimony, p. 22; Tr. 398-399] While the Owners and Consortium may be in commercial negotiations regarding who is responsible for paying additional costs

to allow the Project to be completed on or close to the current commercial operation dates, and how much those costs will be, there has got to be a deadline when those negotiations must end and the current IPS is presented. [Tr. 399]

1. A Complete Integrated Project Schedule Should be Presented to the Commission No Later than the Filing of the 12<sup>th</sup> VCM

A complete IPS should be made publicly available for review by the Commission as soon as possible or no later than the filing of the 12<sup>th</sup> VCM in February. In this late stage of the construction schedule no one has the luxury of further delaying the production of a complete IPS. Concealing the IPS beyond the 12<sup>th</sup> VCM filing will materially impact the Project construction schedule and add more unnecessary costs due to delays.

We know the Consortium has a complete IPS but it has not been released because of the negotiations with the Owners. [Pre-filed Testimony of Roetger and Jacobs, p. 22; Tr. 398-399] The negotiations between the Consortium and the Owners over who is responsible for paying the additional costs necessary to compress the construction schedule to complete the Project within 12 to 18 months of the current proposed commercial operation dates cannot be allowed to drag on indefinitely. [Tr. 399] This Commission cannot passively sit on the regulatory sidelines and let these negotiations further drag on.



The Commission should put in their 11<sup>th</sup> VCM Order a requirement that the complete IPS be made publicly available by the filing of the 12<sup>th</sup> VCM. Failure to provide a completed IPS in the 12<sup>th</sup> VCM should be treated as a clearly imprudent act by the Company.

2. No Additional Nuclear Reactor Units Should be Considered Before a Complete IPS is Presented to the Commission for Review

It is only reasonable and prudent that before any new nuclear reactor units are considered to be built at the Vogtle site or elsewhere, a complete and proven integrated project schedule for the current reactors under construction must be presented to the Commission for review. To do otherwise would be to put the nuclear cart before the horse. The need for an IPS was emphasized by Advocacy Staff Witness Jacobs in his response to future nuclear projects. He said, “[i]t would definitely be important to have a schedule. I mean, I think the results of these projects will certainly have an impact on whether new projects are considered.” [Tr. 346]

A complete IPS will provide a more realistic assessment of the time necessary to build an AP1000 nuclear unit which in turn will more accurately reflect the true cost of construction rather than the current certified cost which has been exceeded by over \$1 billion just for the Company’s share of the Project.

Once the complete IPS is presented the Commission will know whether the current construction schedule will be exceeded by one or two more years.

C. The Company Should Not Be Allowed to Over Collect Financing Costs Through the NCCR Tariff Above the Current Certified Cost of the Project

The current certified cost of the Vogtle Units 3 and 4 is \$6.113 billion. In the 8<sup>th</sup> VCM the Company withdrew its request to revise upward the certified cost of the Project and the Commission “reserved for future review and consideration” the prudence of any project expenses. [Order on the Eighth Semi-Annual Construction Monitoring Report, Dockets 29849 and 27800, Oct. 28, 2013] No prudence review is scheduled until the completion of Unit 3, which is likely going to be some time in 2018 or later. Until a prudence review is conducted and an adjustment is made to the current Project certified cost of \$6.113 billion, the NCCR tariff collections should not over collect any financing costs above those necessary for the current certified cost of the Project.

Georgia ratepayers have already paid over \$1 billion since 2011 when the Company began collecting the NCCR tariff for financing costs and taxes that would normally be recovered over the normal life of the facility. [11<sup>th</sup> VCM Hearing Request No. 1-1] To allow the Company to over collect any financing costs above the current approved certified cost of the units places an unnecessary

financial burden on ratepayers. The Commission Staff should actively monitor the NCCR collections and report to the Commission.

D. The Company is Collecting Its Return on Equity (ROE) in the NCCR Rider That is Unjustified, Unnecessary and Unearned

The Company should not be collecting any return on equity on the pre-collected portion of the financing costs. [9<sup>th</sup> and 10<sup>th</sup> VCM Hearing, Tr. 472] The fact that the Commission allows the Company to collect all of its financing costs before one kilowatt of power is even generated from the new reactors is exceptionally generous, but to also recover a return on equity is excessive, representing nothing but a huge financial windfall at the expense of ratepayers that is unjustified, unnecessary and unearned.

By allowing the Company to collect its return on equity (“ROE”) of 10.95% on prepaid financing costs ratepayers are paying the Company a bonus that increases the NCCR rider with no benefit to ratepayers. Pre-collection of financing costs that normally would be collected over the 40 to 60 year life of Units 3 and 4 dramatically reduces the Company’s risk exposure and creates an intergenerational subsidy that harms current ratepayers while subsidizing future ratepayers who will not have to pay any of the Project’s financing costs.

The Public Service Commission Advocacy Staff clearly and decisively argued against the recovery of financing costs through construction work in

progress (“CWIP”). “There can be no serious question that CWIP is harmful to ratepayers.” [Docket 27800, Brief of the Georgia PSC Public Interest Advocacy Staff, p. 5] (Emphasis supplied) This Commission has the opportunity and authority to moderate the disproportionate rate impact of CWIP on today’s ratepayers.

The Commission should adjust any cost overruns by reducing costs greater than the current certified amount of \$6.113 billion less the amount collected through the NCCR allocated to the Company’s return on equity. A regulated utility’s ROE is provided to cover the cost of financing and to provide investors with an adequate incentive to offset the risk of investment. There is no risk to a utility that pre-collects its financing costs before the generation plant is operational and thus no ROE needs to be paid.

E. The Cost of Environmental Mitigation Measures Associated with the Construction of Units 3 and 4 Should Be Included in the 12<sup>th</sup> VCM Report to the Commission

The Commission should require the Company to report in the 12<sup>th</sup> VCM on the estimated costs of installation and the long-term operating, maintenance and monitoring costs associated with the mitigation measure of installing an oxygenation system (such as a “Speece Cone”) near the Savannah Harbor as directed by the Georgia Environmental Protection Division’s (“EPD”) final surface

water withdrawal permit (#017-0191-11) from the Savannah River for Units 3 and 4, which was issued on December 5, 2014. This should include a description of the mitigation measure including an overview of what is required to comply with the EPD permit, estimate of when the installation will occur and whether these costs will be passed on to ratepayers.

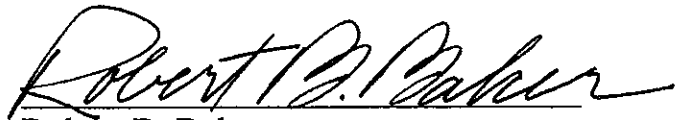
#### F. Conclusion

After six years into the construction of Units 3 and 4 completion and disclosure of the IPS is critical and should not be delayed because of contract negotiations between the Consortium and Owners. A complete IPS should be provided to the Commission with the filing of the Company's 12<sup>th</sup> VCM, and failure to do so should be treated as a clearly imprudent act by the Company.

Collection of the NCCR tariff should be based on the Project's current certified cost of \$6.113 billion, and the Commission Staff should monitor and report on the amount collected through the NCCR tariff. Additionally, the Company should not be allowed to collect its return on equity in the pre-collected portion of the financing costs.

The cost of environmental mitigation measures associated with the construction of Units 3 and 4 should be included in the 12<sup>th</sup> VCM report to the Commission.

Respectfully submitted this 30<sup>th</sup> day of January, 2015.

A handwritten signature in black ink, appearing to read "Robert B. Baker", with a stylized, cursive script.

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## CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Brief of the Southern Alliance for Clean Energy** was filed in Docket 29849 with the Georgia Public Service Commission's Executive Secretary by hand delivery. An electronic copy of same was served upon all parties listed below by electronic mail, unless otherwise indicated, and addressed as follows:

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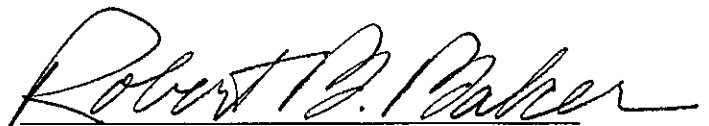
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This 30<sup>th</sup> day of January, 2015.



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