

BEFORE THE
GEORGIA PUBLIC SERVICE COMMISSION
STATE OF GEORGIA

In Re:]	
]	
Verification of Expenditures Pursuant to Georgia]	Docket No. 29849
Power Company's Certificate of Public]	
Convenience and Necessity for Plant Vogtle]	
Units 3 & 4 Seventeenth Semi-annual Construction]	
Monitoring Report; Proposed Forecast Cost and]	
Schedule Revisions; and Determination of]	
Continuation or Cancellation of Project]	

POST-HEARING BRIEF OF SOUTHERN ALLIANCE FOR CLEAN ENERGY

Introduction

Southern Alliance for Clean Energy (“SACE”) respectfully submits its Post-Hearing Brief, offering the following recommendations for the Commission’s consideration in this proceeding (“the 17th VCM”). The record is replete with references as to the difficulty of the decision before the Commission. However, the Commission must reach a decision while staying within the statutory framework under which its authority is defined and the regulatory lane which offers the appropriate ratepayer protections in deciding a case with this magnitude of unknowns and risks. We have before us a project that will likely:

(1) more than double the \$6.113 billion cost originally approved for the construction of Vogtle Plants 3 and 4 (“the Project”), which should have already been in operation;

(2) result in a project that has a current economic value of a **negative** \$1.6 billion (even with the benefit of the Toshiba Parental Guarantee payment), which could degrade to a value as

low as a negative \$4.9 billion¹ with further delays and even worse because of the additional risks which the parties, including Georgia Power Company (“the Company,”) universally acknowledge²; and

(3) cause ratepayers to incur significantly higher revenue requirements (increased by \$14 billion)³.

All of this must be weighed with the troubling fact that this continued delay of at least another five years beyond the original anticipated date of operation will reward the Company and its shareholders with increased Company profits of at least \$5 billion.⁴

It seems rather clear that the Commission would not have certified Vogtle 3 and 4 in 2009 had it been able to foresee the future that has now unfolded – at least from a purely economic standpoint. While the Company has submitted testimony from various related parties as to potential externalities or non-economic/non-monetized benefits that might flow from this Project, the Commission should ask itself why the executives and associated regulatory agencies of the other twenty “nuclear renaissance” reactors cancelled in the last eight years did not find those non-economic issues sufficient to overcome the “uneconomic economics” of similar projects. The answer today should be that they do not.⁵

As shown below, an approval of the Project continuation on the terms demanded by the Company in this 17th VCM would not be consistent with the laws that guide and limit the

¹ Georgia Public Service Commission Public Interest Advocacy Staff, Pre-filed Testimony of Tom Newsome, Philip Hayet and Lane Kollen, December 1, 2017, p. 23, lines 2-5

² Georgia Power, pre-filed testimony of risks found at David L. McKinney and Jeremiah C. Haswell, pp. 35-36; Georgia Public Service Commission, Public Interest Advocacy Staff, Steven D. Roetger, William R. Jacobs, Jr., Ralph C. Smith, pre-filed testimony, pp. 24-25.

³ Newsome, Hayet, Kollen pre-filed testimony, p. 27 line 19, p. 28, line 1.

⁴ Id., p. 27 lines 9-13

⁵ See discussion of these non-economic claimed benefits at pages 46-56 of Peter Bradford’s, pre-filed testimony on behalf of SACE and further at pages 11-13 of this Brief. Available at: http://www.cleanenergy.org/wp-content/uploads/PeterBradfordFinalTestimony_SACE17VCM_stamped_120117.pdf.

Commission's decisions, nor would it be in the best interest of the Company's ratepayers. The recommendations made by SACE herein include reasonable ways in which to assess whether the Project should go forward, and even offer some suggestions for ratepayer protections that might make a "go-forward" decision "economic enough". However, if we accept the Company's position in its 17th VCM filing and its testimony as true, all of the recommendations by SACE would result in the Company or its Co-Owners cancelling the Project.

RECOMMENDATIONS

SACE presents the following recommendations for the Commission to follow in its rulings. These recommendations are consistent with existing statutory authority and the Stipulations that already govern these proceedings, in addition to the Commission's obligation to look out for the best interests of the Company's ratepayers, rather than the shareholders of the Company or the Co-Owners of the Project.

- (1) The Commission should not determine the reasonableness of the new cost forecast presented by the Company at this time.
 - a. The statutory authority under which the Company seeks such approval, O.C.G.A. § 46-3A-7(b), and the Stipulation in the 8th VCM in this Docket, would support a ruling in this 17th VCM in which the Commission does not allow for a determination of "reasonableness" of costs at this time.⁶

⁶ Georgia Public Service Commission, Public Interest Advocacy Staff, Steven D. Roetger, William R. Jacobs, Jr., Ralph C. Smith, pre-filed testimony, pp. 85-89; See also Brief in Support of Petition for Declaratory Ruling filed by GIPL and PSE in this proceeding on November 6, 2017.

- b. Determinations of reasonableness, along with determinations of prudence, for amounts which have not either been certified or recognized in earlier Stipulations must be made upon completion of the Project.
 - c. The significant evidence in this proceeding as to the current uneconomic status of the Project, which will only deteriorate as this complicated project proceeds without the prior protections in place for ratepayers, combined with the universally agreed upon, continuing and significant risks which remain for this Project, offer further reasons for this Commission to avoid a “reasonableness” decision which could hamper later Commissions from applying a full “reasonable and prudent standard” at the end of the Project.
 - d. The attempt by the Company to obtain “approval of reasonableness” for amounts in excess of certified costs, under the high-risk conditions that all parties acknowledge currently exist, without the protections and requirements of a fully developed certification proceeding, should not be allowed in this proceeding.
- (2) The Commission should determine that the Company has not presented adequate evidence to support approval of the new cost and schedule forecast as “a reasonable basis to go forward”.
- a. The Commission should require the Company to prove that the proposal to complete the Project is the least expensive way to meet its customers’ future electricity needs. The Company’s limited evidence as to the cost of building a stand-alone gas-fired alternative plant does not meet this burden. The Commission’s Public Advocacy Staff (“Commission Staff”) and other

intervenors have found that the Project is uneconomic, and likely to get worse if the Project continues beyond the now anticipated completion dates of somewhere between 2021 and 2023⁷.

- b. Evidence as to the comparative costs of a mix of alternative technologies which have been used to replace all of the other cancelled, closed or delayed nuclear reactors in this country, which mix would include gas, expanded energy efficiency and load management, grid enhancements and renewable resources, must be proffered for this Commission to make such a decision.
- c. The Commission could require the Company to perform a market test to determine the market value of the project. This could be done through a short Request for Proposal process, or by seeking buyers for some of the ownership in the project.⁸
- d. The non-economic/non-monetized “benefits” offered by the Company and Company-supported witnesses in this case are not sufficient to offset the economic deficiencies of the Project,⁹ and the notion that existing Vogtle Plants

⁷ McKinney and Haswell pre-filed testimony, p. 10.

⁸ Peter Bradford offered testimony in his summary (available at: http://www.cleanenergy.org/wp-content/uploads/F_PeterBradfordSummary17VCMhearing_121317.pdf) that the Commission might consider the recent news of Jacksonville Electric Authority’s interest in trying to back out of its take-or-pay agreement with co-owner MEAG as evidence that other participants in this market do not consider Vogtle 3 and 4 worth the currently proposed increased costs. For more on this, see Nuclear Intelligence Weekly, December 15, 2017, p. 1, “‘JEA has expressed a view that Vogtle 3&4 should be canceled rather than completed,’ Moody’s Investors Service reported on Dec. 13.”; Moody’s Investor Services, Global Credit Research, December 8, 2017 at https://www.moody.com/research/Moodys-assigns-Aa2-and-Aa3-to-JEA-FL-sr-and--PR_904363490; Florida Times Union, “Amid privatization talk, JEA gets knocked for nuclear power investment,” December 11, 2017, at <http://jacksonville.com/news/metro/2017-12-11/amid-privatization-talk-jea-gets-knocked-nuclear-power-investment>; and Moody’s Investor Services, Issuer Comment, “MEAG Power Litigation Risk Emerges for MEAG Power Project J bonds; a credit negative,” December 13, 2017.

⁹ Peter Bradford, summary testimony, “The relative position of new reactors compared to other alternatives continues to worsen. Even nonmonetary factors like climate, fuel diversity, national security, energy security and the overall state economy cannot override the dismal economics of new reactors, in part because some of these costs are already borne by federal taxpayers and in part because other resources provide for them equally well and at lower cost. For all of the many cancellations and closings of nuclear plants in the U.S., the replacement power has

1 and 2 have become the “crown jewels” of Georgia Power’s generation fleet is no longer true in today’s energy industry.¹⁰

(3) The Commission should accept that the Project is uneconomic, and, considering the history of the mismanagement and delays of the Project, along with the known significant risks ahead, should decide that if the Project is to continue, it should only do so with the imposition of stringent protection of the ratepayers comparable to the protections being offered to the Company’s shareholders.

- a. The Commission owes its greatest responsibility to the Company’s ratepayers, not the shareholders of Georgia Power or the Co-Owners of this Project.
- b. The evidence of the history of this Project raises significant concerns as to the Company’s ability to manage to meet its latest projected costs and schedule.
- c. If the Commission believes this clearly uneconomic Project should continue, it must protect its ratepayers against continuing cost overruns and the inevitable additional delays. The protection offered to ratepayers by the Westinghouse EPC is gone. These protections need to be replaced.
- d. The imposition of some type of cap on the exposure of the ratepayers is one solution. This cap should be based on the types of market indicators explained by Peter Bradford in his testimony on behalf of SACE.¹¹
- e. For an interim cap, the Commission could use the cost of the gas facility presented by the Company and as further reviewed by the Commission Staff.

not come from a single plant built for replacement purposes but from diverse combinations of alternatives and from revised deployment of the existing system.”

¹⁰ Peter Bradford, pre-filed testimony on behalf of SACE, pp. 24-26.

¹¹ Id., pp. 23-24.

- f. A pre-determined sharing of risks between ratepayers and shareholders suggested by the Commission Staff is another way to address this responsibility.
- g. However, any such protection of ratepayers utilized in this proceeding at a time when the Project faces so much uncertainty, should only be adjusted upwards in the future if the Company then successfully submits a complete analysis of the costs of a fully developed alternative mix of resources to prove that the Project continues to make sense economically.

(4) The Commission should follow the recommendation of the Commission Staff and order that \$498 million of Georgia Power's request for verification and approval of total expenditures of \$542 million made on the Project from January 1, 2017 through June 30, 2017 are deemed unreasonable and therefore not verified or approved.

- a. These expenditures represent amounts paid by the Company for liens and contractors of Westinghouse, paid as a result of Westinghouse's bankruptcy. Prefiled Testimony of Roetger, Jacobs and Smith, p. 90.¹²
- b. The Commission Staff's analysis shows that certain actions or failures on the part of the Company or its contractors were the reasons these payments had to be made. The citation of the Commission Staff to the "reasonableness" standards from the Georgia Supreme Court review of costs in the Vogtle 1 and 2 case should be applied here, and supports the denial of this portion of the 17th VCM request.¹³

¹² And the Commission should determine whether the Company actually will be submitting even further costs in the future that fall within the categories being denied in this 17th VCM. The Company's responses to the Staff's DR STF-127-9 and the responses of Company witnesses Cook and Jones raised those concerns about additional Interim Payment and Lien amounts expected in the 18th VCM, Transcript pp. 2220-2221.

¹³ Newsome, Hayet, Kollen pre-filed testimony page 34, citing Ga. Power Co. v. Ga. Public Service Com., 196 Ga. 572, 578 (1990).

ARGUMENT

I. The Commission should not determine the reasonableness of the new cost forecast presented by the Company at this time.

The statutory authority under which this Commission should review the Company's filing in this 17th VCM, along with the prior orders and stipulations in this docket, support SACE's recommendation that a ruling of "reasonableness" should not be made at this time.

First and foremost, the Commission should view this 17th VCM under the gravity of the changes to the Project that are only now being presented. The filings and the testimony present a clear picture of the uncertainty and risks that lie ahead. It cannot be denied that if Vogtle 3 and 4 go forward, it will be

(1) with a new manager of the Project, Southern Nuclear, that is a related entity to the Company that has no prior nuclear reactor construction experience;¹⁴

(2) with previous protections of ratepayers no longer available; and

(3) with significant continuing risks.

To compensate for the highly risky conditions that now exist, the Commission should choose the regulatory lane that produces the least risk of harm to ratepayers.¹⁵ SACE submits that this requires a ruling consistent with the Stipulation and Order in the 8th VCM, along with a reading of O.C.G.A. §§ 46-3A-7(a) and (b) which leads to a decision that does not allow for a determination of "reasonableness" of costs at this time. Determinations of both reasonableness and prudence, for amounts that have not either been certified or recognized in earlier Stipulations, must

¹⁴ Newsome, Hayet, Kollen pre-filed testimony, pp. 25-26.

¹⁵ Peter Bradford, pre-filed testimony, p. 39, lines 13-15.

be made upon completion of the Project.¹⁶ Those standards cannot be applied now to the yet-to-be-incurred projections offered by the Company – many of which are highly questionable as evidenced by the testimony of the Commission Staff and all the non-Company sponsored intervenors in this case.

The Company instead asks the Commission to interpret O.C.G.A. § 46-3A-7(b) similarly to the ruling in the SIR Stipulation and Order. In that proceeding the Commission did find a limited reason to allow the Company to obtain a reasonableness presumption as to yet-to-be-incurred expenses. However, the specific language in O.C.G.A. § 46-3A-7(b) does not support such a request in this case, and the current circumstances of the Project do not support an alternative interpretation. O.C.G.A. § 46-3A-7(b) does not include the term “reasonableness”, nor does it provide for the “verification” of costs beyond those already certified. Since the Company did not elect to amend the certified costs in this proceeding, the only consideration for the Commission to make under that statute alone would be to “approve, disapprove or modify” any proposed revisions to Project, as certified, requested by the Company. This does not include any findings of reasonableness, or any shifting of burdens of proof as to the showing of reasonableness and prudence required of the Company under O.C.G.A. § 46-3A-7(a). The current situation does not permit the Commission to follow the path it took in the SIR proceedings, and it should not. The Commission should not make any determination of “reasonableness” as to the projections of cost¹⁷ presented by the Company in the 17th VCM.

¹⁶ Brief in Support of Petition for Declaratory Ruling filed by GIPL and PSE in this proceeding on November 6, 2017.

¹⁷ SACE has only addressed the Company’s proposed additional **costs** in the first section of this Brief, since the statutes discuss cost determinations. However, the changes to the schedule and management structure proposed by the Company will impact the total cost going forward, and in that way those proposed changes also are addressed in this section.

II. The Commission should determine that the Company has not presented adequate evidence to support approval of the new cost and schedule forecast as “a reasonable basis to go forward”.

All parties that offered testimony of economic analysis in this proceeding, other than the Company, declared the Project “uneconomic”.¹⁸ Even the Company offered an economic current value so small that it could easily be erased by the occurrence of even a single event addressed in the many risks acknowledged and outlined by the Company.¹⁹

The Company has not performed the analysis necessary to make a convincing showing that completion of the Vogtle units is justified, and certainly has not established, as it should, that the future cost of the Project is likely to be the best and the lowest way of meeting the future energy needs of its customers.²⁰ As explained by Peter Bradford, the former NRC Commissioner and regulatory commission chair of both the Maine Public Utility Commission and the New York Public Service Commission who testified on behalf of SACE in this proceeding²¹:

“The true measure of excess cost is the difference between the cost of completing Vogtle and the cost of meeting the customers’ electricity needs in other ways. Of course, in making this judgment, one must take into account the uncertainty of the different cost estimates as well as the flexibility of different resource procurement plans to adjust when, as inevitably will happen, events overrule forecasts. At a time when fully completed and operational nuclear plants in other parts of the country are having to seek special rate increases to protect them from their inability to compete with the output of new natural gas plants, energy efficiency and the constantly falling costs of renewable energy, the dilemma with which Georgia Power Company and the Westinghouse bankruptcy have confronted the PSC requires a far more thorough analysis of the available alternatives than Georgia Power has chosen to offer in this proceeding.”

¹⁸ Newsome, Hayet, Kollen pre-filed testimony, p. 4; William M. “Matt” Cox, pre-filed testimony, p. 15.

¹⁹ Peter Bradford, pre-filed testimony, p. 8, lines 8-12.

²⁰ Peter Bradford, pre-filed testimony, p. 10, lines 5-7; William M. “Matt” Cox, pre-filed testimony, p. 24, lines 3-7.

²¹ Id., at p. 9, lines 10-20.

Mr. Bradford and Dr. William M. “Matt” Cox, who testified on behalf of Georgia Interfaith Power & Light (“GIPL”) and Partnership for Southern Equity (“PSE”), testified that the Company’s single comparison between the Vogtle additional costs and the cost of a single stand-alone 1000MW gas-fired alternative was not sufficient to show that the additional Project costs could be determined as “reasonable to go forward”.²² Of particular concern is the lack of evidence as to the alternative cost of the resource mixes of “reduced demand, gas-fired generation, load management programs and ... diverse sources of renewable energy” that Mr. Bradford identified as the energy sources which have actually been used by all of the recently cancelled reactors – without causing a single power outage, anywhere or at any time.²³ Without these comparisons, the Company has not established that the continuation of the Vogtle reactors is in the best interest of its ratepayers and that it should be continued.

Several Company-sponsored witnesses have encouraged the Commission to look beyond the uneconomic status of the Vogtle Project, and instead to approve the Company’s request to continue on the basis of certain “non-economic” or “non-monetized” benefits. However, those externalities have not been sufficient for executives of at least twenty other nuclear reactor projects to shift the risks of uneconomic projects onto their ratepayers moving forward. Georgia Power and this Commission should not either.

The claim that Georgia ratepayers should bear an otherwise unreasonable and uneconomic burden for the Vogtle costs to protect national interests is not valid. As federal taxpayers, Georgia Power ratepayers are already paying their fair share of taxes to support the national nuclear energy industry. U.S. taxpayers pay to support the production tax credits, federal loan guarantees, and the

²² Peter Bradford, pre-filed testimony, p. 10, lines 14-18; William M. “Matt” Cox, pre-filed testimony, p. 11, lines 13-21.

²³ Transcript pp. 2494-2495, Peter Bradford summary testimony available at: http://www.cleanenergy.org/wp-content/uploads/F_PeterBradfordSummary17VCMhearing_121317.pdf.

federal government's commitment to take responsibility for long term disposal or storage of spent fuel.²⁴ Federal taxpayers pay the cost of the Price-Anderson Act's implicit commitment to pay for nuclear accident damages above approximately \$14 billion.²⁵ There is no valid connection between the completion of Vogtle 3 and 4 and any major U.S. foreign policy concern. U.S. leverage in nonproliferation discussions is going to come from new designs under development in the Department of Energy – not construction of these current reactors.²⁶ And, completion of a non-cost competitive nuclear project such as Vogtle 3 and 4 does not enhance U.S. energy diversity and reliability. That would require development of cost competitive projects.²⁷

Attachment 2 to the testimony of Peter Bradford shows that nuclear reactors are not even “the answer” to global climate change.²⁸ Even the now dated data on this attachment show that new nuclear power is clearly not an economical solution in addressing climate change. Other resources reduce carbon emission more efficiently than new nuclear at a lower cost.

This Project is not needed for adequate fuel diversity. Even without Vogtle Units 3 and 4, Georgia already has one of the more diverse electric portfolios in the U.S. Nineteen states have no nuclear power, and only fourteen states have a higher percentage of nuclear power in their generation mix than Georgia (without Units 3 and 4). Nuclear power plants, due to their inflexibility in operation and the vulnerabilities they do face, are not the answer to many of the types of crises that fuel diversity is often expected to address.²⁹

And, the Company's concern about “baseload” is less a concern in today's electric systems as it was when Vogtle Units 3 and 4 were being planned. It will diminish even more by the new

²⁴ Peter Bradford, pre-filed testimony, p. 46.

²⁵ Id.

²⁶ Id., at pp. 50-51.

²⁷ Id., at p. 51, lines 21-23.

²⁸ Id., at pp. 54-55.

²⁹ Id., at p. 49.

projected in-service dates. Combinations of gas fueled units with various renewables, with energy efficiency, with load management, with enhanced grid capabilities and with energy storage are fully capable of providing highly reliable, 24 hour-per-day electricity at lower costs than completing Vogtle.³⁰

As to the job creation issue, this Commission has the responsibility to look beyond a short-term solution for Burke County. As so well put by Mr. Bradford: “No state ever improved its overall economic well-being by paying higher electricity bills than necessary.”³¹ While one of the Company-sponsored witnesses testified of a positive employment situation in the county where Vogtle is being built, those limited gains must be weighed against the job losses across the State that result from unnecessary electricity price increases.

Claims have also been made that because Vogtle 1 and 2 have become the “crown jewels” of the Georgia Power generation fleet, one should expect the same from Vogtle 3 and 4. However, Mr. Bradford addresses the fallacy of this opinion as follows:

- (1) The true assessment of whether a power plant’s lifetime rate impact is beneficial to customers must consider both construction costs and operating costs. When the time value of money is taken into account, it is almost impossible for low operating costs in later years to make up for excessively high construction costs in the early years.
- (2) Considering the debates now raging in several states where power is sold through power markets, nuclear plant operating costs at existing plants are not low enough relative to other sources to merit “crown jewel” status. The fact is that many such plants are now insisting (with the recent support of the U.S. Department of Energy) that they

³⁰ Peter Bradford, pre-filed testimony, p. 27, lines 13-19.

³¹ Id., at p. 55.

must have their operating costs subsidized to the tune of billions of dollars in rate increases if they are to compete successfully with power from other sources.³²

- (3) “Lastly, as to operational reliability, it is true that the U.S. operating nuclear fleet maintains capacity factors above 90% for reactors after their initial years of operation. However, these numbers do not include the 20 or more reactors that have been shut down long before the end of their licensed lives. Nor do they include the years lost by the 52 reactors that have been closed for more than a year by operational mishaps or by weather related events such as the flooding that led to a three-year shut down at Fort Calhoun in Nebraska. There is no reason to doubt that most of these units too were regarded as “crown jewels” until the events that shut them down.”³³

III. The Commission should accept that the Project is uneconomic, and should consider the long history of the mismanagement and delays of the Project, along with the known significant risks ahead, so that if the Project is to continue, it requires the imposition of stringent protection of the ratepayers that is comparable to the protections offered to the Company’s shareholders.

The witnesses for the Commission Staff have agreed that this Project, as proposed to be continued by the Company, is uneconomic.³⁴ The Commission Staff further pointed out a number of calculation and methodology changes made for the first time by the Company in its analyses in the 17th VCM, which were different from methodologies used in all prior VCM proceedings, and which the Staff did not agree with or identified as flawed.³⁵ Without those changes, the Company’s calculations likely also would have shown an uneconomic Project.

³² In Georgia and other non-competitive market states, the subsidies do not come from the federal government – they would need to come through the ratepayers. So, for example, in this case, if the Project results in rates which are higher than we would have paid for the most economic energy resource, those additional rates are in affect our subsidy of the industry. But, in this case, they are not spread across all federal taxpayers; they are all covered by just the Company ratepayers. This is not a fair way to cover the excess costs of holding up a whole industry. Peter Bradford, pre-filed testimony, p. 25 line 23, p. 26, lines 1-3.

³³ Peter Bradford, pre-filed testimony, p. 26, lines 9-16.

³⁴ Newsome, Hayet, Kollen pre-filed testimony, p. 4, lines 4-5.

³⁵ Newsome, Hayet, Kollen pre-filed testimony, p. 12, lines 8-20, p. 10, lines 8-16. Additionally Roetgers, Jacobs, Smith pre-filed testimony, p. 15, lines 19-22 also commented on a change and mentioned that, “However, not all of

The testimony in this 17th VCM proceeding raised many concerns as to how the Company managed this Project throughout its history, and whether that management was consistent with the commitment the Company made to this Commission at the beginning of the Project – a commitment upon which the original certification of the Project was based.³⁶ Some of the testimony as to the Company’s management deficiencies that should be of particular concern to the Commission in considering whether the Project moves forward are:

- (1) Southern Nuclear’s lack of experience in actually building a nuclear plant;³⁷
- (2) The continuing absence of a resource loaded Level 3 fully integrated project schedule (“IPS”) until almost the last day of hearings in this case – and the failure of the Company to properly react when the Staff and intervenors advised them of the potential pitfalls from the absence of such an IPS in prior VCM hearings; and
- (3) The Company’s failure to timely respond to the “continuing degradation” of the Project for several years prior to the Westinghouse bankruptcy, and to report its knowledge and concerns of such to this Commission.

Witnesses on behalf of Georgia Power testified that Westinghouse’s attempt to be the contractor for the Vogtle Project was something “outside of their wheelhouse” – indicating that Westinghouse simply did not have the experience and knowledge to run the Vogtle construction project.³⁸ Although Westinghouse had experienced contractors working under them, their inexperience in actually building one of their designs dramatically affected the efficiency of the construction. Unfortunately, Southern Nuclear, the entity now responsible for the construction

the increased productivity reflected in the Project metrics is due to these factors. Some of the improved productivity shown in the metrics is due to re-setting the unit rates and productivity factors in the ETC.”

³⁶ Roetger, Jacobs, Smith pre-filed testimony, pp. 34-35.

³⁷ Commission Staff also raised concerns due to struggles experienced by Georgia Power and Mississippi Power with managing other large power plant construction projects at Plant McDonough and the Kemper plant in MS. Newsome, Hayet, Kollen pre-filed testimony, p. 26.

³⁸ Georgia Power, Panel of McKinney, Haswell, hearing transcript, pp. 289-290.

project, also lacks that experience.³⁹ And while Southern Nuclear has experienced contractors working under them on the Project – that was not enough to save Westinghouse. The evidence that the Company submitted to show how well Southern Nuclear was managing the Project only covered from July 1, 2017 through October 2017 – only three to four months.⁴⁰ This is not enough evidence to quell the concerns about Southern Nuclear’s experience. After all, the original project had not shown delays and problems until after the first few VCMs. The record is not yet sufficient to erase the concerns about the experience – or lack thereof – on the part of Southern Nuclear.

As to the Resource Loaded Level 3 Fully Integrated Project Schedule (“IPS”), Commission Staff and intervenors, including SACE, warned Georgia Power about the imprudence of proceeding with construction of the Project without having a reasonable, fully integrated, resource loaded, Level 3 IPS (hereinafter “high quality IPS”). Commission Staff began its warnings as early as the 6th VCM in 2012.⁴¹ During the hearings on the 16th VCM, Commission Staff testified that the failure on the part of the Company to require Westinghouse to complete the high quality IPS from the beginning constitutes imprudence on the part of the Company. So, even though the Company finally purportedly filed a high quality IPS on one of the last days of the December hearings in this 17th VCM, the Company’s lack of prudence as to this issue throughout the Project should raise red flags as to their understanding of reasonable requirements for a proper and efficient construction process, along with their ability to control and manage the contractors working under them.⁴²

³⁹ Newsome, Hayet, Kollen pre-filed testimony, p. 26 and footnote 24.

⁴⁰ Rauckhorst, Klecha, Troutman pre-filed testimony, p. 8.

⁴¹ See SACE final brief on February 13, 2017 in the 15th VCM, including at p. 15 in which excerpts of Staff/consultant testimony back to the 6th VCM was highlighted on the continued challenges facing the Project. Available at http://www.cleanenergy.org/wp-content/uploads/SACE_FinalBrief_15VCM_021317.pdf.

⁴² Roetger, Jacobs, Smith Testimony, transcript pp. 1747-1748.

As to the Company's recognition of construction project problems and delays, and its failure to report those to this Commission, Company witness Rauckhorst has testified that he was well aware of the "continuing degradation" of the Project by the 15th VCM.⁴³ In spite of this, the Company failed to raise real concerns with this Commission until the Project had degraded to the point of Westinghouse filing for bankruptcy. In addition to the failure to raise alarms, the Commission Staff has faulted the Company for not taking all of the precautions and actions it could have taken as to Westinghouse⁴⁴ – actions that may have even avoided the Westinghouse bankruptcy. These types of failures by the Company could continue to affect the successful completion of the Project in a cost-effective and efficient manner.

The possibility of these future concerns, along with the continuing risks detailed by the parties, create the absolute requirement that new protections for ratepayers be put in place if the Project is to continue. Prior to the Westinghouse bankruptcy, those ratepayer protections existed in the EPC. The EPC was an important aspect of the Commission's approval of this Project, and the limits of ratepayer exposure in the EPC were crucial to that approval.⁴⁵ Those protections are gone with the EPC, and we must look elsewhere for that same degree or greater protection for ratepayers if this project is to continue.

Twenty of the 26 nuclear reactors licensed around the same time as the Vogtle reactors have been cancelled, and four others have been indefinitely deferred. All were on economic grounds.⁴⁶ The owners of all of those projects concluded that building nuclear units would not be a reasonable use of their ratepayers' funds, and they decided "to cease exposing customers to more risk".⁴⁷

⁴³ Georgia Power, Panel of Rauckhorst, Klecha, Troutman, Nov 6-9, 2017 hearing transcript, pp. 641-642.

⁴⁴ Rauckhorst, Klecha, Troutman prefiled testimony, pp. 15,19, 21.

⁴⁵ Docket No.27800 Order on Remand, dated June 23, 2010.

⁴⁶ Peter Bradford, pre-filed testimony on behalf of SACE, p. 29.

⁴⁷ Id., at p. 29.

Georgia Power Company, in contrast, seeks approval of the continuation of its uneconomic nuclear reactors and asks that its customers bear the full risk while demanding protection of both its shareholders and its Co-Owners.

Mr. Bradford, based on his long-term experience in this industry, explains that “Sound business and risk management principles require that risks should flow to the entities best able to manage them and most likely to reap the rewards of good management.”⁴⁸ Here, there is no question that the Company is in the position to manage the risks – not the ratepayers. And the only rewards to be had are the ever-increasing profits that flow to the Company’s shareholders. In the summary of his testimony, Mr. Bradford explained the importance of a ratepayer protection such as a cap on ratepayer exposure as follows: “By making [an upper limit cost number] a cap on completion cost to be paid by customers so that they have the same level of certainty as to future cost exposure that Georgia Power seeks for itself and its shareholders, the Georgia PSC would be defending the interests of Georgia Power’s customers with the same rigor and aversion to uncertainty that the Company urge on behalf of its investors.”⁴⁹ Mr. Bradford further explains in his testimony: “Essentially, the goal should be a project cost cap that assures a positive net present value for customers.”

Unfortunately, the Company has not presented an analysis of the real alternatives that should be considered for comparison to the Vogtle Project. While submitting that such an analysis needs to be done, SACE recognizes that an interim cap could be based upon the Commission Staff’s calculation of the cost of a combined cycle gas facility. Based on the testimony of the Staff witnesses, that would result in a current cap of ratepayer exposure of \$9 billion.⁵⁰ However, if this

⁴⁸ Peter Bradford, pre-filed testimony on behalf of SACE, p. 33.

⁴⁹ Peter Bradford, summary testimony, p. 3.

⁵⁰ Newsome, Hayet, Kollen pre-filed testimony, pp.45-48; Peter Bradford, pre-filed testimony on behalf of SACE, p. 40.

interim cap is used, it should not be subject to increase in future VCM proceedings without a full analysis of the alternative resource mix encouraged by Mr. Bradford – so as to truly justify the imposition of additional costs on Georgia Power ratepayers.⁵¹

IV. The Commission should follow the recommendation of the Commission Staff and order that \$498 million of Georgia Power’s request for verification and approval of total expenditures of \$542 million made on the Project from January 1, 2017 through June 30, 2017 are deemed unreasonable and are therefore not verified or approved.

At page 90 of their pre-filed testimony, Commission Staff recommends that \$498 million of the Company’s 17th VCM claim be disallowed. In testimony, the Commission Staff explained that these payments were more in the control of utility management and its contractors, than in the control of ratepayers, and, therefore under the rulings in the Vogtle 1 and 2 appeals, those types of expenses should not be verified or approved.⁵² For the reasons given by the Staff, SACE supports the disallowance of this portion of the Company’s 17th VCM claim.

CONCLUSION AND RECOMMENDATIONS

Based on the foregoing arguments, SACE respectfully requests that the Commission take the following actions in its 17th VCM Order:

- 1) The Commission should not determine the reasonableness of the new cost forecast presented by the Company at this time.

⁵¹ Peter Bradford, pre-filed testimony on behalf of SACE, p. 40.

⁵² Those rulings are set forth at Newsome, Hayet, Kollen pre-filed testimony, pp. 34-35 and Roetger, Jacobs, Smith pre-filed testimony pp. 31-33.

2) The Commission should determine that the Company has not presented adequate evidence to support approval of the new cost and schedule forecast as “a reasonable basis to go forward”. If the Commission wishes to consider a basis on which the Project goes forward, it should require one of the economic methodologies proposed herein before reaching such a decision. For the reasons stated, the non-economic factors discussed in the proceedings do not outweigh the uneconomic status of this Project.

3) The Commission should accept that the Project is uneconomic, and, considering the history of the mismanagement and delays of the Project, along with the known significant risks ahead, should decide that if the Project is to continue, it should only do so with the imposition of stringent protection of the ratepayers comparable to the protections being offered to the Company’s shareholders. The ratepayer protection previously available from the EPC must be replaced with one of the options offered by SACE.

4) The Commission should follow the recommendation of the Commission Staff and order that \$498 million of Georgia Power’s request for verification and approval of total expenditures of \$542 million made on the Project from January 1, 2017 through June 30, 2017 are deemed unreasonable and therefore not verified or approved.

5) As these recommendations are not consistent with the demands made by Georgia Power Company, the Commission should proceed with these recommendations and require the Company and the Co-Owners to decide whether to cancel the Project.

Respectfully submitted this 19th day of December, 2017.

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