

**BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION
STATE OF GEORGIA**

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

**NUCLEAR WATCH SOUTH POST-HEARING BRIEF AND PROPOSED ORDER ON
VOGTLE CONSTRUCTION MONITORING REVIEW #8**

Nuclear Watch South respectfully submits this post-hearing brief and proposed order to the Georgia Public Service Commission (PSC or Commission) in the Eighth Vogtle Construction Monitoring Review in accordance with standard practice as described in Procedural and Scheduling Order (Amended).

BACKGROUND

On February 28, 2013, Georgia Power Company filed its 8th Semi-Annual Vogtle Construction Monitoring Report. Nuclear Watch South, Georgia Watch, Resources Supply Management and others petitioned to intervene. On June 28, 2013 Georgia Power in accordance with Docket 27800 Stipulation adopted by the Commission filed expert testimony justifying actual expenditures through the end of 2012.

On July 18, 2013 a public hearing was held in which public witness testimony was heard and experts representing Georgia Power testified and submitted to cross examination on \$209 million in expenditures related to Vogtle in addition to Georgia Power’s request for \$381 million certified capital cost increase to the Vogtle reactor expansion.

On July 31, 2013, PSC staff and Georgia Power Company filed a stipulation agreement and the Commission subsequently issued an order extending the deadline for submission of direct

testimony by PSC Staff and intervenors from August 2, 2013, to August 8, 2013. On August 13, a second public hearing was held in which public witnesses gave testimony and PSC staff witnesses and an expert witness for Nuclear Watch South's presented direct testimony and submitted to cross-examination with respect to the Eighth Semi-Annual Vogtle Construction Monitoring Review.

On August 29, 2013, Georgia Power Company submitted a letter referencing an oral exchange at the meeting of the PSC Energy Committee the same day and requested the Commission to reject its staff's advice to adhere to the published docket schedule and to give its immediate approval to the July 31, 2013 stipulation at a PSC committee meeting to be held on September 3.

On August 30, 2013, Georgia Power Company filed its intent to decline submission of rebuttal testimony and on September 9, 2013, the PSC issued an order canceling the public hearing provided for Georgia Power's rebuttal testimony and scheduled for September 12, 2013.

According to an AP report in the Macon Telegraph on September 4, 2013, the Commission unanimously approved the stipulation agreement as requested by Georgia Power at the PSC's September 3, 2013 Administrative Session.

GENERAL OVERVIEW

In this post-hearing brief and proposed order, Nuclear Watch South submits its findings that:

- 1) Vogtle Construction Monitoring Review process provides for investigation into whether a project should be cancelled and empowers the Commission to issue an order canceling a project;
- 2) Vogtle expansion project is not needed and should be cancelled;
- 3) \$209 million should be subject to further prudency review;
- 4) \$381 million certified capital cost increase should be denied;
- 5) Stipulation process is unfair to intervening parties and harmful of public participation.

I. VOGTLE CONSTRUCTION MONITORING REVIEW PROCESS INCLUDES REEXAMINATION OF CERTIFICATE

In its June 28, 2013, filing, Georgia Power characterizes the question before the Commission in the Eighth Semi-Annual Construction Monitoring Review as follows: "to provide the basis upon which the Commission may verify and approve expenditures made pursuant to the Certificate in accordance with O.C.G.A. § 42-3A-7(B). In addition, the Semi-Annual Report filing is intended to allow the Commission to approve, disapprove or modify any proposed revisions in the project schedule and budget."

Georgia Power's characterization of the question does not limit the Commission's review or powers, however. O.C.G.A. § 46-3A-6 states:

Upon application of a utility or *upon its own motion*, the commission may *reexamine any certificate granted under this chapter* to determine whether new forecasts of future requirements require the modification of the construction, purchase, sale, or expenditure for a certificated capacity resource. If upon such reexamination the commission finds that the certificated capacity resource is *no longer needed* or that any additional certificated capacity resource is needed to assure a reliable supply of electric power and energy for the utility's Georgia retail customers, the commission may *modify or revoke* the certificate. [O.C.G.A. § 46-3A-6, excerpt, emphasis added]

It is not only allowed by the code governing the Commission's Vogtle review process, but is important, in light of the volatile and controversial history of nuclear energy, and particularly in light of Georgia's and Georgia Power's experience with building nuclear reactors in the 1970s and 1980s that were completed many years behind schedule and experienced 1200% cost overruns, that the Commission continuously review the need for Georgia Power to add electrical generating capacity in today's rapidly changing energy markets.

Therefore, we find that the Commission is charged by O.C.G.A. § 46-3A-6 to consider whether or not to cancel or continue the Vogtle reactor expansion project and empowered to cancel any certificate for an unneeded project.

II. VOGTLE EXPANSION IS NOT NEEDED AND SHOULD BE CANCELLED

In direct testimony filed August 8, 2013, and in the August 13, 2103 public hearing, Nuclear Watch South presented the findings of expert witness Steven C. Prenovitz. Mr. Prenovitz is trained economist and long-time participant at the PSC, having testified in Vogtle I and II prudency hearings and rate cases.

Mr. Prenovitz introduced into the hearing record Georgia Power data from 2002-2012¹ which he compiled and analyzed as a unique data set. The compiled data produces a clear picture of documented, historic trends which provide useful contrast and comparison to the forecasts typically used by Georgia Power and the Commission to establish the need for additional certificated capacity. This unique, new Georgia Power data chart was submitted in direct testimony and entered into the record in the August 13, 2013 public hearing. *GA Power-- Key Financial & Operating Data 2002 – 2012* (Prenovitz, NWS Exhibit #4) is attached here for reference.

The key finding of the Georgia Power data chart is “the volume sales (in Kwh) which are flat over the 10-year period [line 4] and capacity utilization which has declined steadily from 71% to 54% [line 5] during this period.” Prenovitz testimony, p. 9, line 18. The lack of sales and under-utilization of existing capacity show that Georgia Power does not need additional capacity and does not need to continue to build expensive, risky, experimental nuclear reactors at Vogtle.

The actual experience of the past 10 years shown by Georgia Power’s annual report figures contrasts sharply with the forecasts on which Vogtle reactor expansion was approved. “Georgia Power forecasts were for 4.1% growth in capacity, but in the key five-year period that coincides with the Vogtle expansion, capacity growth was 2.4%. Because Georgia Power’s capacity utilization factor declined from 73% to 54% in the same period, it is clear that expanding

¹ The source of Georgia Power data is Georgia Power’s annual reports and is data required by Securities & Exchange Commission (SEC) standards and practices which differ from the PSC’s reporting requirements. The data is useful to the Commission’s mission to balance Georgia Power’s business plan with Georgia’s public interest.

Vogtle's capacity was not, and is not now needed." Prenovitz testimony, p. 12, line 5.

Mr. Prenovitz also compiled known cost data for the Vogtle expansion project into a unique chart which shows sunk costs and estimated costs to complete for both Georgia Power and its Vogtle partners. *Plant Vogtle Budget- 8th VCMR ending Dec 31, 2012* (Prenovitz, NWS, Exhibit 6), also attached for reference. In a useful comparison, Mr. Prenovitz also documents the latest SEC-filed figures on the total worth of Georgia Power's net assets which includes generation, transmission, distribution and general assets, after depreciation. The comparison is compelling:

Georgia Power's net plant assets in service comprise almost \$19 billion [*source: Georgia Power 2012 annual report, p.34*]. Vogtle's Break Even figure of \$20 billion, exceeds all of Georgia Power net plant assets in service. Georgia Power, in effect, argues that the Vogtle project has a greater value to its customers, and the company, than all of the company's existing net plant assets, which include: generation, transmission, distribution, and other.

Georgia Power's "gross generation plant," which is the actual cost of the generating assets, without depreciation, is \$14.6 billion [*source: Georgia Power Annual Report, p. 41*]. If we apply a 33% depreciation factor, the net generating assets are worth about \$10 billion. This means Vogtle, according to Georgia Power's own numbers, is worth twice as much as all of Georgia Power's total net generating assets (after depreciation).

The total Vogtle expansion contributes 2,200 MW of capacity, of which 1,000 Mw is Georgia Power's share. Georgia Power's existing asset base (2012) is 17,894 Mw capacity, almost 1700% more than Vogtle's contribution.

Prenovitz testimony, p. 14, line 17

A comparison remains to be made between the cost to complete unneeded reactor expansion at Plant Vogtle and the cost to cancel the project. Georgia Power's portion of the cost to complete Vogtle is between \$4.28 billion and \$6.78 billion (Georgia Power testimony July 18, 2013). Although Georgia Power has not yet proffered estimated costs to cancel the Vogtle reactor expansion, it would surely be far less than the \$4.28-6.78 billion that remains to be spent to finish the unneeded additional electrical capacity. In accordance with O.C.G.A. § 46-3A-6, we find that the Vogtle expansion is not needed and its certification should be revoked.

III. \$209 MILLION INCURRED VOGTLE COSTS NEED MORE REVIEW

Georgia Power, before entering into a stipulation with the PSC staff, sought to recover \$209 million in costs incurred on Vogtle reactor expansion in the last half of 2012.

In cross-examination, Georgia Watch brought out several details, informed by comprehensive state agency reports on the similar Summer AP 1000 reactor project in South Carolina, about problems with Vogtle construction.² Significant component modules are being manufactured off-site and delivered to the reactor site for construction. Problems with the Louisiana-based contractor have persisted for two years and are still unresolved. A new contractor in Newport News, Virginia, has been arranged but has not yet begun production.

Delivery of the CA-20 submodule for the shield building is behind schedule and those submodules that are being delivered are defective and require repair. This problem obtaining parts is predictable, as the “Nuclear Renaissance” has become reduced to four first-time reactors being built in Georgia and South Carolina, and reactors parts is not materializing as a lucrative manufacturing sector. The problems with parts delivery are intrinsic to the lawsuit and the costs incurred in the last half of 2012.

A significant amount of rebar was installed incorrectly and had to be replaced (Nuclear Regulatory Commission, Notice of Violation, 11-14-12, NWS, exhibit 3). This is a cost that should be borne by Georgia Power and its contractors.

Nuclear Watch South cross-examined PSC expert witness Dr. William Jacobs whether Shaw’s performance at the MOX plutonium fuel factory being constructed at the Savannah River Site is

² A large indicator of Vogtle construction problems is the ongoing litigation between Georgia Power and its contractors, Westinghouse and Shaw, now Chicago Bridge & Iron (CB&I). This \$925 million litigation, indeed, underlies Georgia Power’s purported need for the stipulation to hold cost review for Vogtle 3 & 4 in abeyance until Vogtle 3 is completed, maybe not until 2018. The effect and merit of the stipulation will be discussed in Section V.

informative with respect to Vogtle problems.³ The witness said he was not following MOX and the Commission questioned the line of questioning. Georgia Power frequently excuses its failings as inherent in first-of-its-kind projects, implying that future projects will benefit from the Vogtle experience. That is a cross-cutting concept, however, if Georgia Power expects other utilities to benefit from its experience, it should be actively attempting to benefit from other utilities' experiences also.

The insertion of the stipulation into the process curtailed and distracted the discussion about the details of the \$209 million costs incurred, so, more information needs to be gathered about the \$209 million before the Commission should make a decision on what portion of it should be allowed to be recovered by Georgia Power through rates passed to its electric customers.

IV. \$381 MILLION INCREASE IN CERTIFIED CAPITAL COSTS FOR VOGTLE REACTOR EXPANSION SHOULD BE DENIED

Prior to entering into the stipulation Georgia Power sought to increase the official certified cost of Vogtle by \$381 million. In a public hearing, several public witnesses spoke against the increase in certification and made reference to a bill introduced in the Georgia General Assembly to limit Georgia Power's Return of Equity on any Vogtle cost overruns.

After a negative response to the request in the first public hearing, including a line of questioning from the Commission about the recent decision by the Mississippi PSC forcing Mississippi Power to absorb cost overruns on its first-of-a-kind project, the stipulation was introduced into the proceeding to hold the certified capital cost increase in abeyance until Vogtle 3 is completed (in 2017 or 2018). The stipulation appears to showcase Georgia Power concerns that it would not receive a favorable decision on the \$381 million capital costs increase if it presses the issue now, in light of its many construction problems, delays and previous cost overruns.

³ The MOX factory is 15 years behind schedule and 750% over budget. Congress is considering canceling the unneeded project. Shaw, now CB&I, has been the contractor for MOX which has experienced similar problems: substandard parts, bad rebar and concrete.

Nuclear Watch South opposes the \$381 certified capital costs increase as Vogtle expansion is simply not needed and should be stopped. Additionally, we recognize Georgia Power's gambit to redefine cost overruns and render moot Representative Jeff Chapman's (R, Brunswick) bill to remedy a current glitch in Vogtle financing where the "cost-plus" construction arrangement encourages Georgia Power to be late and over-budget with Vogtle as a means to higher profits.

Nuclear Watch South submitted several documents into the hearing record which showcase Georgia Power officials saying that Vogtle 3 & 4 will not be a repeat of Vogtle 1 & 2 and that they can control costs. Indeed, Georgia Power's witness David McKinney testified in cross-examination by Nuclear Watch South on July 18, 2013, quoted in many news articles throughout the state, "Absolutely we can control costs. These are good forecasts."

Georgia Power exerted itself greatly within several national and state agencies to extract support for its vision of nuclear expansion at Vogtle. Nuclear is considered a high-risk form of energy in financial sectors. Georgia Power and its investors should share in the risk of building [unnneeded] nuclear capacity and denying \$381 million capital cost increase is an appropriate place to start.

V. STIPULATION PROCESS IS UNFAIR TO INTERVENING PARTIES AND HARMS PUBLIC PARTICIPATION

Nuclear Watch South was formed in 1977 and serves more than 1,000 Georgia members. In its 35 years it has participated on numerous occasions as public witness before the PSC and tracked Vogtle issues before the agency. The group has intervened before the U.S. Nuclear Regulatory Commission multiple times, both *pro se* and represented by an attorney. The Eighth Vogtle Construction Monitoring Review is the first time that Nuclear Watch South has intervened before the PSC.

Nuclear Watch South was quite surprised by the insertion of a stipulation into the process. The Procedural and Scheduling Order (Amended) is silent on the rules governing stipulation. It had an adverse effect on the procedural schedule as it greatly shortened the time between intervener filings and the attendant public hearing. In addition, it added an argumentative point for which

there was inadequate process, that is, the entire PSC staff was implied to have entered into the stipulation, and yet only one of the four PSC witnesses was available for comment, a point which emerged after that particular witness (Roetger) had left the witness stand. It was not clear why none of the other PSC/PIA witnesses would not or could not testify to this far-reaching stipulation agreement.

Following the second public hearing, it was apparent to Nuclear Watch South that the diversion created by the stipulation had effectively constrained discussion of the more important points before the Commission and intervening parties, namely, the prudence of \$209 million in Vogtle costs incurred the last half of 2012 and whether or not to allow \$381 million increase in certified capital costs for Vogtle.

However, it was very concerning when the Commission (apparently, according to news reports, nothing is noted in the 29849 docket file) unanimously voted for the stipulation outside of the published schedule, and against the (again, reported) advice of the PSC staff.

Nuclear Watch South was preparing to file its post-hearing brief and proposed order on the stipulation, in addition to the issues we have raised and the issues Georgia Power has raised. To have the stipulation proposed, on a Thursday before a holiday weekend, for an early vote and then to be voted on (without public notice) the Tuesday following the holiday weekend, at a regular Administrative Session, has the effect of being a blatant affront to basic public participation. The stipulation process did not include all parties, is not described in the published rules, and in this instance, was not even noted on the schedule or in the hearing docket on-line.

Nuclear Watch South finds the current stipulation to be a grave disservice to Georgia Power customers as it defers meaningful review and decisions about ongoing Vogtle costs and problems into the indefinite future.

In light of the finding that Vogtle is unneeded, and it would be far cheaper to cancel the project than to finished expensive, unneeded capacity, the stipulation, evidence of Georgia Power's distinct unwillingness to endure scrutiny of its unneeded, expensive, cost-plus reactor project,

becomes an ironic starting point for entering the process of Vogtle cancellation.

CONCLUSION

The Commission should order the cancellation of Vogtle construction certification as additional Vogtle capacity is not needed and it would be cheaper to cancel Vogtle than to continue spending billions of dollars to complete its unneeded capacity.

Respectfully submitted,


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