

UNITED STATES OF AMERICA  
 NUCLEAR REGULATORY COMMISSION  
 OFFICE OF NUCLEAR REACTOR REGULATION  
 HAROLD R. DENTON, DIRECTOR

In the Matter of

GEORGIA POWER COMPANY, et al.  
 (Alvin W. Vogtle Nuclear  
 Plant, Units 1&2)

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Docket Nos. 50-424  
 50-425

(10 CFR 2.206)

SUPPLEMENTAL DIRECTOR'S DECISION UNDER  
 10 CFR 2.206

On October 12, 1979, the Acting Director of Nuclear Reactor Regulation issued a decision under 10 CFR 2.206 which denied a petition of the Georgians Against Nuclear Energy (GANE). Georgia Power Company (Alvin W. Vogtle Nuclear Plant, Units 1&2), DD-79-18, 10 NRC 617 (1979). This decision denied GANE's request that an earlier denial under 10 CFR 2.206 regarding the Vogtle units, DD-79-4, 9 NRC 582 (1979), be reconsidered and that construction of the facility be suspended and the need for power from the facility be re-examined.

While the October 12th decision was pending before the Commission for its discretionary review under 10 CFR 2.206(c), counsel for the licensee informed the staff that new information had become available which might bear on the staff's consideration of GANE's petition. The staff then asked the Commission to postpone its decision whether to review the Director's denials until the staff had received the information from the licensee and had evaluated it in a supplemental decision. Accordingly, the Commission extended in an Order of October 31, 1979, the time within which it may act to review the April 13th and October 12th denials until twenty (20) days after issuance of a supplemental

decision discussing the licensee's new information.

By letter of November 27, 1979, the licensee provided the new information, which advised the staff (1) of a revised peak demand load forecast and generation expansion plan, and (2) that Georgia Power Company (GPC) and Florida Power & Light Company (FP&L) have begun discussions which could lead to a proposal that FP&L become a co-owner of the Vogtle plants. The petitioner commented on GPC's submission in letters dated January 30 and February 14, 1980. This supplemental decision provides the staff's analysis of GPC's letter of November 27, 1979, and of the petitioner's comments.

Upon review of the information submitted by the licensee and the petitioner, the staff has concluded (1) that the latest revisions in demand and capacity forecasts do not represent a major change in facts which would alter the need for power determinations, and (2) that any evaluation of a proposed change in ownership of the facility should be made in the context of an actual proposal for amendment of the Vogtle construction permits. The staff does not find a basis, therefore, for suspending construction and reopening the "need for power" issue.

#### I. GPC'S REVISED LOAD FORECAST

The first aspect of GPC's November 27th letter concerns the revised (October 30, 1979) Georgia territorial load forecast of peak electricity demand for the period 1979-1990. <sup>1/</sup> The October 1979 forecast indicates an average

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<sup>1/</sup> As a point of clarification, GPC correctly observed in the November 27th letter that the forecasts and power needs addressed in the prior Director's denials reflected the combined systems of the Vogtle owners, i.e., of GPC, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia, and the City of Dalton. The staff's analyses were made on that basis.

growth rate of 4.03% between 1979 and 1990,<sup>2/</sup> as compared to a 4.6% growth rate predicted in 1978.

The staff has been concerned with the GPC's predictions of growth in demand for electricity insofar as these predictions bear on the need for power from the Vogtle units. Whether a need exists for the generating capacity of a nuclear facility is relevant to fulfillment of the Commission's responsibilities under the National Environmental Policy Act of 1969 (NEPA). NEPA requires balancing of environmental costs against the expected benefits of major federal actions which significantly affect the environment before the action is taken. "Need for power" is a shorthand expression for the "benefit" side of the cost-benefit balance which NEPA mandates in considering the licensing of a nuclear power plant. <sup>3/</sup> "A nuclear plant's principal 'benefit' is of course the electric power it generates. Hence, absent some 'need for power', justification for building a facility is problematical." Duke Power Company (Catawba Nuclear Station, Units 1&2), ALAB-355, 4 NRC 397, 405 (1976).

The Commission must also determine that a need for the plant coincides reasonably with the operational date of the plant. This determination is relevant to the Commission's NEPA responsibilities, because (1) extremely long-

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<sup>2/</sup> GPC's November 27th letter contains a typographical error in item (1) on the first page. In describing predictions of annual growth rates, GPC erroneously referred to the period for which predictions had been made as 1979-1980, rather than 1979-1990. Attachment 1 to the letter clearly shows that these predictions are for the 1979-1990 period, and counsel to GPC informed the staff of the error by telephone. GANE's January 30th comment regarding the need for a load growth of 7% in 1980 to meet the 4.03% projection is therefore in error.

<sup>3/</sup> Public Service Co. of New Hampshire (Seabrook Station, Units 1&2), ALAB-422, 6 NRC 33, 90 (1977).

range predictions of need for power are so uncertain as to be essentially meaningless, and (2) a federal agency should not permit the environmental costs of a proposed action to be incurred far in advance of the time when they may be necessary.

The Commission has recognized, however, that uncertainty is inherent in any prediction of the need for or demand for the electricity to be generated by a nuclear plant.

"[E]very prediction has an associated uncertainty and ...long range forecasts of this type are especially uncertain in that they are affected by trends in usage, increasing rates, demographic changes, industrial growth or decline, the general state of the economy, etc. These factors exist even beyond the uncertainty that inheres in demand forecasts: assumptions on continued use from historical data, range of years considered, the area considered, extrapolations from usage in residential, commercial, and industrial sectors, etc." Carolina Power & Light Company (Shearon Harris Nuclear Power Plant, Units 1, 2, 3 & 4), CLI-79-5, 9 NRC 609, 610 (1979).

As the Atomic Safety and Licensing Appeal Board has stated, "[g]iven the legal responsibility imposed upon a public utility to provide at all times adequate, reliable service - and the severe consequences which may attend upon a failure to discharge that responsibility - the most that can be required is that the forecast be a reasonable one in the light of what is ascertainable at the time made." Kansas Gas & Electric Company (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 328 (1978) (citation omitted).

The Atomic Safety and Licensing Board found in its Initial Decision that there was a need for the Vogtle units. Georgia Power Company (Alvin W. Vogtle Nuclear Plant, Units 1-4), LBP-74-39, 7 AEC 895 (1974). In its Supplemental Initial Decision, the Board found that the environmental determinations made in its 1974 decision were still valid. LBP-77-2, 5 NRC 261 (1977). The Atomic Safety and Licensing Appeal Board affirmed the Licensing Board's decisions in these matters.

ALAB-375, 5 NRC 423 (1977). The Commission made, therefore, a good faith assessment of the need for the Vogtle units based on the information available to it at the time. Licensing of the Vogtle units' construction was based on that assessment.

In the staff's consideration of GANE's petitions, the reasonableness of the original forecast of the need for the Vogtle units has not been the critical concern. <sup>4/</sup> Rather, the focus of the staff's inquiry has been the need to reopen the original proceedings to reassess need for power in light of the information submitted by GANE and GPC. GANE's original petition alleged that GPC's proposed sale of portions of its Scherer plant, a coal-fired facility, and the cost of solar photovoltaic systems raised sufficient questions concerning the need for the Vogtle units such that the hearings on the need-for-power should be instituted. GANE's petition was denied in the decision of April 13, 1979 (DD-79-4, 9 NRC 582). GANE then sought reconsideration of this denial in its petition of May 1, 1979, (including supplemental filings of July 17 and August 2, 1979) on the basis of other matters which GANE averred mandated revocation of the Vogtle construction permits. This petition was denied on October 12, 1979 (DD-79-18).

In this supplemental decision, the critical inquiry is not so much the impact of GPC's revised forecast on the prior Director's denials as it is the need to reopen the "need-for-power" determination on the basis of this information itself. In the staff's view, the April and October Director's denials were reasonable in light of the circumstances known or predicted at that time. The

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<sup>4/</sup> GANE alleged in its May 1, 1979, petition that the earlier determinations of need for the Vogtle units were defective in that (1) the consideration of conservation as an alternative was procedurally defective, and (2) GPC made "material false statements" to the NRC regarding the need for power. As discussed in the October 12, 1979, Director's denial (DD-79-18), these allegations are without merit.

issue for resolution at this juncture is whether the new forecast represents a significant new environmental impact or information which would clearly mandate a change in the result obtained in the Commission's original determination of the need for the Vogtle units. <sup>5/</sup>

The Georgia Territorial Generation Expansion Plan of August, 1978, projected an average annual growth rate of 4.65%, based on predicted loads of 10,213 MW in 1978 and 17,614 MW in 1990. (The 1978 actual load was 10,113 MW.) In the most recent GPC system expansion plan, (October 30, 1979, Attachment 1 to the licensee's November 27th letter), the load forecasts for 1980-1990 have been revised downward, and now reflect a 4.00% annual average growth rate from the 1978 'actual' of 10,113 MW to the projected 1990 load of 16,183 MW. GPC projected a 4.03% annual average growth rate from 1979 to 1990. Net system capacity forecasts have been revised, so that forecasted system capacity in 1990 has been reduced from 20,369 MW (the August 1978 forecast) to 19,719 MW. GPC has also revised the ratings of some of the scheduled additions and their in-service dates. The following table compares the 1978 and 1979 forecasts for the years 1985-1990. This is the time period that includes startup of the Vogtle

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<sup>5/</sup> The staff has applied this standard in the prior denials of GANE's petitions as well as in other Director's denials under 10 CFR 2.206. See, e.g., Public Service Company of Indiana (Marble Hill Nuclear Generating Station, Units 1&2), DD-79-10, 10 NRC 129 (1979). The staff believes that this standard is consistent with NEPA and is appropriate in considering under 10 CFR 2.206 petitions to reopen the record in a proceeding in light of the well-recognized need for finality in the administrative process. See Greene County Planning Board v. FPC, 559 F.2d 1227, 1233 (2d Cir. 1976), cert. denied, 434 U.S. 1086 (1978); Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1&2), ALAB-443, 6 NRC 741, 750-51 (1977).

plants and the sale of Scherer capacity. 6/

<u>YEAR</u>	<u>AUGUST 1978 FORECAST</u>			<u>OCTOBER 1979 FORECAST</u>		
	<u>LOAD</u>	<u>CAPACITY</u>	<u>%RESERVE</u>	<u>LOAD</u>	<u>CAPACITY</u>	<u>%RESERVE</u>
1985	14432	18527	28.37	13408	17074	27.34
1986	15045	18627	23.81	13950	17166	23.05
1987	15689	18902	20.48	14649	18295	24.89
1988	16238	20017	23.27	15215	19402	27.52
1989	16902	19949	18.03	15616	19745	26.44
1990	17614	20369	15.64	16183	19719	21.85

The reserve margins are comparable for 1985 and 1986, but are higher in 1988 through 1990 for the 1979 forecast. The staff has analyzed these reserves in the same manner as was done for the 1978 forecast (Appendix A, p. 3, of the Director's Denial

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6/ Sale of the coal-fired Scherer plants was discussed in greater detail in Appendix A to the April 13th Director's Denial. In its January 30, 1980, comments, GANE alleged that GPC intended to sell 1200 MW capacity of the Scherer plants, rather than the approximately 800 MW capacity earlier estimated. Based on a discussion with GPC, GANE retracted the allegation in its February 14, 1980, letter. GANE believes, however, that "this incident illustrates the need for a hearing" to consider the need for the Vogtle units. A hearing on GANE's petition is not required, of course, by law. Illinois v. NRC, 591 F.2d 12, 14 (7th Cir. 1979). The Commission is not required to institute full-blown proceedings because there may be some confusion as to the facts underlying the petitioner's claim. The Commission may "properly undertake preliminary inquiries in order to determine whether the claim is substantial enough...to warrant full proceedings," and, on that basis "has substantial discretion to decline to initiate proceedings based on this review..." Porter County Chapter of the Izaak Walton League v. NRC, No. 78-1556, Slip Op. at 11 (D.C. Cir., Sept. 6, 1979). As discussed in this decision, the staff does not believe that institution of proceedings is appropriate in this instance.

of April 13, 1979), using the following assumptions:

- 1985: Decrease capacity by 1150 MW (Vogtle Unit 1 capacity)
- 1986: Same as 1985
- 1987: Increase capacity by 404 MW (50% of Scherer Unit #3) and decrease capacity by 1150 MW (Vogtle Unit 1 capacity)
- 1988: Increase capacity by 404 MW (50% of Scherer Unit #3) and decrease capacity by 2300 MW (Vogtle Units 1&2 capacity)
- 1989: Increase capacity by 808 MW (50% of Scherer Units 3&4) and decrease capacity by 2300 MW (Vogtle Units 1&2 capacity)
- 1990: Same as 1989.

Under these revised conditions, the percent reserves for the Georgia Territorial System (GPC, OPC, MEAG and Dalton) would be as follows:

<u>BASED ON AUGUST 1978 FORECAST</u>		<u>BASED ON OCTOBER 1979 FORECAST</u>	
1985	23.75%	1985	18.77%
1986	19.36%	1986	14.81%
1987	18.98%	1987	19.80%
1988	14.85%	1988	15.06%
1989	9.93%	1989	16.89%
1990	8.06%	1990	12.63%

The 1979 data are not dissimilar to those based on the 1978 forecast. What is suggested by the data, particularly if future forecasts predicted even slower growth in the Georgia territorial system, is that, though the generating capacity of the Vogtle units would eventually be needed in this system, the dates when initial operation of the units is actually needed may shift to the future if future demand for electricity decreases. Although there may be some slippage in the

dates at which the units are "firmly" needed, this slippage does not represent itself a major change in facts which would alter the staff's "need-for-power" determinations to date. <sup>7/</sup> As discussed previously in this decision, every demand forecast has inherently uncertain aspects. The timing of need for a plant need only to reasonably coincide with commencement of operation of the facility. The staff cannot say at this time that the timing of need for the Vogtle units does not reasonably coincide with the projected 1985 and 1988 operation dates for the respective units. Therefore, GPC's revised October 1979 forecast does not warrant suspension of further construction pending redetermination of the need-for-power issue.

## II. NEGOTIATIONS REGARDING SALE TO FLORIDA POWER AND LIGHT COMPANY

GPC's November 27th letter also refers to its preliminary negotiations to sell a portion of the Vogtle units to Florida Power and Light Company. As noted in the October 12, 1979, Director's denial, a change in ownership of the Vogtle units would require amendment of the construction permits. GPC (representing the current owners of the Vogtle units) has not applied for such an amendment, and, absent any formal request for further changes in ownership arrangements, the staff is not in a position to evaluate any such proposed change in ownership. At such time as the Vogtle owners might apply for an amendment to the construction permits, the staff would prepare an environmental impact appraisal (EIA) as provided in 10 CFR Part 51 for the purpose of determining whether preparation of

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<sup>7/</sup> Cf. Carolina Power & Light Company (Shearon Harris Nuclear Power Plant, Units 1-4), CLI-79-5, 9 NRC 607 (1979); Niagara Mohawk Power Corporation (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347 (1975).

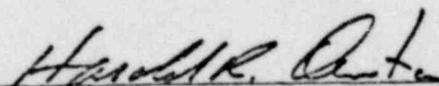
an environmental impact statement (EIS) is required by the proposed action. The staff's decision, based on this EIA, would result either in a notice of intent to prepare an EIS or a negative declaration to the effect that an EIS is not required for the proposed action. The staff's determination would be published in the Federal Register as required under 10 CFR Part 51. Issuance of any amendment would conform to section 189 a. of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Part 2.

### III. CONCLUSION

The staff does not believe that the information provided by GPC in its November 27th letter represents a major new environmental impact or change in facts which would significantly alter the determination of the need for power from the Vogtle units. Accordingly, I do not intend to order suspension of the Vogtle construction permits pending reexamination of the need for power from the Vogtle units.

A copy of this decision will be placed in the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C. 20555, and the local public document room for the Alvin W. Vogtle Nuclear Plant, Unit Nos. 1 and 2, at the Burke County Library, 4th Street, Waynesboro, Georgia. A copy of this decision will also be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c) of the Commission's regulations.

FOR THE NUCLEAR REGULATORY COMMISSION

  
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Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 26<sup>th</sup> day of March, 1980.