

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Petition of Gulf Power Company
to determine need for proposed
electrical power plant in Bay
County.

DOCKET NO. 990325-EI
ORDER NO. PSC-99-1478-FOF-EI
ISSUED: August 2, 1999

The following Commissioners participated in the disposition
of this matter:

JOE GARCIA, Chairman
J. TERRY DEASON
SUSAN F. CLARK
JULIA L. JOHNSON
E. LEON JACOBS, JR.

APPEARANCES:

RICHARD D. MELSON, ESQUIRE, Hopping Green Sams & Smith, P.A.,
Post Office Box 6526, Tallahassee, Florida 32314; and JEFFREY
A. STONE, ESQUIRE, and RUSSELL A. BADDERS, ESQUIRE, Beggs &
Lane, Post Office Box 12950, Pensacola, Florida 32576
On behalf of Gulf Power Company.

DEB SWIM, ESQUIRE, and GAIL KAMARAS, ESQUIRE, 1114 Thomasville
Road, Suite E, Tallahassee, Florida 32303
On behalf of Legal Environmental Assistance Foundation.

GRACE A. JAYE, ESQUIRE, Florida Public Service Commission,
2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850
On behalf of the Commission Staff.

BY THE COMMISSION:

ORDER GRANTING PETITION BY GULF POWER COMPANY TO DETERMINE NEED
FOR A PROPOSED ELECTRICAL POWER PLANT IN BAY COUNTY, FLORIDA

Pursuant to Section 403.519, Florida Statutes, and Rule 25-
22.081, Florida Administrative Code, on March 15, 1999, Gulf Power
Company (Gulf) petitioned this Commission for a determination of
need for an electrical power plant, Smith Unit 3, to be located at
Gulf's Lansing Smith facility in Bay County, Florida. The proposed
power plant is a combined cycle gas unit with a net capacity of 519
megawatts (MW). In an augmented power mode, the proposed power

DOCUMENT NUMBER-DATE

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plant can produce 574 MW. Gulf has proposed the unit to fulfill a 427 MW need beginning in the summer of 2002.

We held a hearing in this matter on June 7, 1999. At the close of the hearing, the Legal Environmental Assistance Foundation (LEAF), stated that "[w]hen we entered into this case we had a number of questions concerning the need." However, LEAF further stated that its questions "were answered by Gulf" and that it "basically has no objection to your [the Commission's] approving the plant at this time." After consideration of the evidence, the arguments of the parties, and our staff's recommendation, we voted to grant Gulf's petition for a determination of need. This Order constitutes our final agency action and report as required by Section 403.507(a)(2), Florida Statutes, and as provided for in Section 403.519, Florida Statutes.

I. Need for Electric System Reliability and Integrity

We find that Smith Unit 3 is necessary for the reliability and integrity of Gulf's electrical system as contemplated by Section 403.519, Florida Statutes. A large part of Gulf's existing generating capacity comes from its part ownership of units outside its service territory. Much of the remaining capacity comes from the Crist units located in the western part of Gulf's service territory. Due to load growth on Gulf's system, particularly in the Panama City region, a generation/load imbalance exists in the Panama City region.

Witness Moore testified that Gulf currently has a power purchase agreement which expires at the end of 2001. Witness Moore stated that "The Company's load and energy forecast identifies that Gulf has a capacity need of 427 MW beginning in the summer of 2002 in order to achieve an adequate level of reserves." Witness Marler described Gulf's most recent load and energy forecast for summer peak demand, which is the primary factor that drives Gulf's capacity planning process. Witness Pope testified that Gulf participated in a Southern Company RFP for short-term capacity and energy in March 1997. Witness Pope stated that the results of this RFP process "confirmed that not only were the amounts of firm capacity getting scarce, but expensive as well." Witness Pope further stated that "[b]ecause of the response to this solicitation, Gulf knew that it needed to look seriously at its capacity resource alternatives to meet the Company's needs for 2002 and beyond."

Gulf's load forecast, presented in the need study admitted as exhibit one and described by Witnesses Marler and Neyman in detail, appears to be reasonable. In modeling its load forecast in the study, Gulf used the latest computer software to predict load and energy consumption. Gulf presented its load forecast as net of demand savings from conservation programs. The average forecast error in Gulf's load forecast over the last five years has been a relatively low 1.19%. Based on Gulf's load forecast and its planning criterion of 13.5% summer reserve margin, Gulf has identified a need for at least 427 MW of additional capacity in the year 2002. The proposed Smith Unit 3 will meet Gulf's need for additional capacity.

According to Witness Pope, currently there are no plans for a backup fuel source for Smith Unit 3. Parties to Gulf's natural gas contracts guarantee firm natural gas capacity sufficient to avoid the need for backup fuel. Further, if natural gas supply to the plant is interrupted, Gulf's reliance on the Southern Company System should not be materially affected because Southern's system is primarily coal-fired. Witness Pope testified that:

it would cost . . . roughly six to eight million dollars in capital cost up front. And it would cost . . . an additional million to a million and a half, maybe two million dollars a year just in O & M costs without ever having to burn the dual fuel. . . . And for a natural gas, or for a fuel supply interruption, considering just a million or so dollars a year in capital cost, I can't see . . . the cost of replacement [power] being greater than that.

However, Witness Pope testified that he had not performed an economic analysis to "show whether dual fuel capability is cost-effective." Because Gulf has not performed a cost/benefit analysis of not installing backup fuel, Gulf should be made aware that any future purchased power costs associated with a natural gas fuel interruption will be reviewed for prudence at subsequent fuel adjustment proceedings.

II. Conservation Measures Which Might Mitigate the Need for the Proposed Plant

According to Witness Neyman, there are no additional cost-effective conservation measures that can be undertaken which would mitigate the need for the proposed unit. Gulf's load forecast incorporates the demand savings from its existing and proposed conservation measures. Thus, Gulf needs at least 427 MW in 2002, even after accounting for conservation program savings. Based on the record, there do not appear to be additional conservation measures taken or reasonably available to Gulf Power Company which might mitigate the need for the proposed plant.

III. Need for Adequate Electricity at a Reasonable Cost

The testimony of Witnesses Moore, Neyman, Marler, Pope, Burke, and Howell demonstrates that Smith Unit 3 is necessary to provide adequate electricity at a reasonable cost to Gulf's ratepayers as that criterion is expressed in Section 403.519, Florida Statutes. Gulf has incorporated Southern Company's 13.5% system reserve margin as its planning criterion. This reserve margin criterion resulted from a study which compared the tradeoff between the customers' cost of outages and Southern's cost to add peaking capacity to practically eliminate outages. Gulf's summer reserve margin in 2001, prior to adding Smith Unit 3, is forecasted to be 1.4%. After the addition of Smith Unit 3, the 2002 summer reserve margin is forecasted to be 17.6%. In recognizing Gulf and Southern's use of a 13.5% reserve margin for planning purposes, we are in no way endorsing or adopting this reserve margin criterion. We are merely recognizing that even under the reserve margin criterion employed by the Southern System, Gulf still has a need for the proposed Smith Unit 3.

According to Witness Moore, Gulf's proposed unit is an advanced combined cycle unit with a rated summer capacity of 574 MW in augmented mode. Its installed capital cost is approximately \$197,000,000 or \$343/KW. We believe that this cost is reasonable, and is comparable to the cost of combined cycle units recently approved by this Commission for other utilities. In determining that Smith Unit 3 is the most cost-effective option available to Gulf, Gulf's Witness Burke testified that she performed cost-effectiveness studies on all projects supplied by bidders to Gulf's Request for Proposals (RFP) process and all self-build options, including Smith Unit 3.

The projects were ranked by Southern Company using net present value dollars per KW (NPV \$/KW) rather than cumulative present worth revenue requirements (CPWRR).

Witness Burke stated Southern's belief that:

We found through the different RFPs that Southern Company has been through that putting it on a dollar-per-kilowatt basis really values that project kind of on a stand-alone basis. A project may be very small. You don't want to overlook the value that that small project has or that a large project has. If you put in on a per kW, what are you getting for your dollars, we found it to be a better analysis.

However, Gulf also provided a cost-effectiveness analysis using CPWRR so that we could evaluate the rankings presented in a manner more typical to this Commission. This analysis using CPWRR was admitted at the hearing as exhibit seven. This analysis shows that Smith Unit 3 has a cumulative present worth total cost of \$49,538,320,000 and the next best alternative's total cost is \$116,392,000 more than Smith Unit 3.

We find that the evidence shows that Smith Unit 3 will provide adequate electricity at reasonable cost to serve the need demonstrated by Gulf in Section I above.

IV. Gulf's Request for Proposals and Related Analyses in Choosing the Most Cost Effective Alternative Available

Pursuant to Rule 25-22.082, Florida Administrative Code, Gulf issued a RFP for capacity alternatives to the proposed Smith Unit 3. Witness Burke testified as to how the various respondents' proposals were evaluated. We believe that Southern Company's analysis of the RFP responses as well as Gulf's self-build option was performed on a consistent basis. This analysis included an evaluation of the cost of connecting each self-build option and RFP project to Gulf's transmission system. We believe that Gulf adequately evaluated and incorporated the cost of such interconnections for each project.

According to Witness Burke, the RFP respondents' proposals included "a particular pricing or particular index for the fuel supply." However, according to exhibit one, in order to evaluate the options on a uniform basis, Gulf based evaluations of RFP

responses and the final self-build option "on the gas commodity prices contained in the Fuel Panel's 1998 forecast."

We find that the fuel price forecasts used by Gulf in its cost-effectiveness evaluation are reasonable. These forecasts were admitted as hearing exhibit eight. Gulf made reasonable site-specific adjustments to the forecast to account for the different location of each RFP project. We find that the financial assumptions used by Gulf in its cost-effectiveness evaluation are reasonable. These financial assumptions were uniformly applied by Gulf in its evaluation of self-build options and RFP projects.

V. Cost of Gas Transmission System Interconnection for Self-Build Options and the Respondents to Gulf's Request for Proposals

The testimony of Witnesses Pope and Howell demonstrates that Gulf included and adequately evaluated the cost of gas transmission system interconnection for each of the self-build options as well as for the respondents to Gulf's RFP.

Gulf's cost-effectiveness analysis included an evaluation of the cost to connect each self-build and RFP project to a natural gas transmission system. Gulf currently does not have a signed contract for natural gas commodity for Smith Unit 3, although a signed contract is imminent. However, Gulf received RFP responses to supply natural gas to the proposed unit. We believe that Gulf or Southern, on behalf of Gulf, was conservative in using the most costly of the four gas transportation RFP respondents in its cost-effectiveness evaluation for Smith Unit 3.

VI. Cost of Electric Transmission System Interconnection for Self-Build Options and the Respondents to Gulf's Request for Proposals

The record demonstrates that Gulf included and adequately evaluated the cost of electric transmission system interconnection for each of the self-build options as well as for the respondents to Gulf's RFP. According to Witness Pope, the output of Smith Unit 3 can be integrated into the Northwest Florida grid with the upgrade to some existing lines.

As explained by Witnesses Pope and Burke, all of the responses to Gulf's RFP contained projects requiring substantial transmission system additions and upgrades to supply their capacity to the

Panama City region. Because Smith Unit 3 will be located at an existing facility in this region, the need for transmission upgrades and new lines is much less than what is needed for the RFP respondents or the other self-build options. According to Witness Pope, the cost of interconnection for the RFP respondents was a factor. We believe that the cost of transmission line installation and upgrades associated with the other self-build and RFP alternatives.

VII. Smith Unit 3 as the Most Cost Effective Alternative Available

Upon consideration of the evidence, we find that Smith Unit 3 is the most cost effective alternative available to Gulf to meet its need for adequate electricity at a reasonable price. As discussed in Section III above, we historically have used total dollar cumulative present worth revenue requirements basis for determining the cost-effectiveness of a proposed power plant. Using this basis, Smith Unit 3 is expected to offer net present value savings of \$116,392,000 over the next best alternative. We believe, therefore, that Gulf's analysis of self-build and RFP projects resulted in Gulf selecting the most cost-effective alternative available in Smith Unit 3.

VIII. Conclusion

We grant Gulf Power Company's petition for a determination of need for the proposed Smith Unit 3. The record, as discussed above, clearly demonstrates that Gulf has met the statutory criteria for a determination of need.

It is therefore

ORDERED by the Florida Public Service Commission that the Petition of Gulf Power Company to determine need for a proposed electrical power plant in Bay County is hereby granted. It is further

ORDERED that this Docket shall be closed.

ORDER NO. PSC-99-1478-FOF-EI
DOCKET NO. 990325-EI
PAGE 8

By ORDER of the Florida Public Service Commission this 2nd day
of August, 1999.

BLANCA S. BAYÓ, Director
Division of Records and Reporting

By: Kay Flynn
Kay Flynn, Chief
Bureau of Records

(S E A L)

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Director, Division of Records and reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

M E M O R A N D U M

AUGUST 2, 1999

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RE: DOCKET NO. 990325-EI - PETITION OF GULF POWER COMPANY TO
DETERMINE NEED FOR PROPOSED ELECTRICAL POWER PLANT IN BAY
COUNTY.

99-1478-FOF

Attached is an ORDER GRANTING PETITION BY GULF POWER COMPANY
TO DETERMINE NEED FOR A PROPOSED ELECTRICAL POWER PLANT IN BAY
COUNTY, FLORIDA to be issued in the above-referenced docket.
(Number of pages in order - *18*)

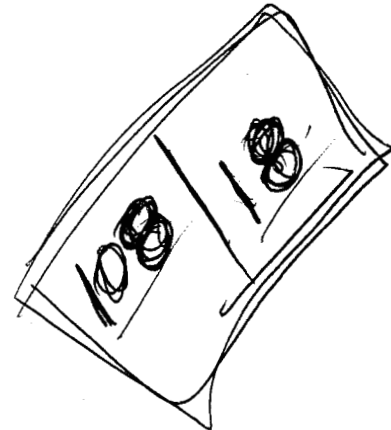
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Attachment

cc: Division of Electric and Gas (Haff, Colson, Makin, Bohrmann)
Division of Auditing and Financial Analysis (Dickens, Samaan,
Maurey)

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