

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for Hines 4 power plant in Polk County by Progress Energy Florida, Inc. | DOCKET NO. 040817-EI
ORDER NO. PSC-04-1168-FOF-EI
ISSUED: November 23, 2004

The following Commissioners participated in the disposition of this matter:

BRAULIO L. BAEZ, Chairman
J. TERRY DEASON
LILA A. JABER
RUDOLPH "RUDY" BRADLEY
CHARLES M. DAVIDSON

ORDER GRANTING PETITION FOR DETERMINATION OF NEED
FOR PROPOSED ELECTRICAL POWER PLANT

BY THE COMMISSION:

Background

On August 5, 2004, Progress Energy Florida (Progress) filed a petition for determination of need for a proposed electrical power plant pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, Florida Administrative Code. The proposed plant is a winter-rated 517 megawatt (MW) natural gas-fired, combined cycle unit to be located at the Hines Energy Complex (Hines Unit 4) in Polk County, Florida. Progress proposes to place the unit in commercial service by December 2007.

This matter was set for a formal administrative hearing held November 3, 2004. No persons intervened in this docket. At hearing, after taking all evidence, we were presented with agreement among our staff and Progress concerning the appropriate resolution of all issues identified for this proceeding. At that time, we approved the agreed positions by bench vote, resolving all issues in this docket and granting Progress' petition for determination of need. This Order reflects our decision on Progress' petition and serves as our report on this matter as required by Section 403.507(2)(a)2., Florida Statutes.

Standard of Review

Section 403.519, Florida Statutes, sets forth those matters that we must consider in a proceeding to determine the need for an electrical power plant:

In making its determination, the commission shall take into account the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, and whether the proposed plant is the most cost-effective

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alternative available. The commission shall also expressly consider the conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant and other matters within its jurisdiction which it deems relevant.

Findings

Need for Electric System Reliability and Integrity

We find that there is a need for Progress' proposed Hines Unit 4, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519, Florida Statutes. Through its planning process, Progress identified Hines Unit 4 as its next planned generating addition. Progress needs Hines Unit 4 to meet its 20 percent reserve margin planning criterion for winter 2007/2008 and beyond. In reaching this conclusion, Progress developed a ten-year load forecast. We find that Progress' forecast assumptions, regression models, and the projected system peak demands are appropriate for use in this docket. Progress' forecasted 2.3 percent and 2.2 percent annual growth rates of winter peak demand and net energy for load, respectively, appear to be a reasonable extension of historical trends.

Without the Hines Unit 4 capacity addition, Progress' reserve margin will decrease to approximately 19 percent in 2007/2008 and 16 percent by 2008/2009. The Hines Unit 4 addition allows Progress to satisfy its commitment to maintain a minimum 20 percent reserve margin, and it will do so by improving not just the quantity, but also preserving the quality, of its total reserves, maintaining an appropriate portion of physical generating assets in Progress' overall resource mix. The addition of Hines Unit 4 will increase Progress' share of physical reserves to approximately one half of total reserve capacity, which includes dispatchable demand-side management (DSM) programs. In the winter of 2007/2008, this level of reserve capacity is sufficient to maintain coverage of an unplanned outage of Progress' largest generating unit. Hines Unit 4 will also add diversity to Progress' fleet of generating assets, in terms of fuel, technology, age, and functionality of the unit. The dual-fuel capability of the unit provides operational flexibility.

Need for Adequate Electricity at a Reasonable Cost

We find that there is a need for the proposed Hines Unit 4, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519, Florida Statutes. As stated above, Progress needs Hines Unit 4 to meet its 20 percent reserve margin planning criterion for winter 2007/2008 and beyond. Moreover, Progress determined to seek approval to build Hines Unit 4 only after conducting an internal review of supply-side and demand-side options and after soliciting and evaluating competing proposals submitted by interested third-party suppliers. The fuel price forecasts used in Progress' planning analysis appear to be reasonable for planning purposes. Based on responses to discovery conducted by our staff, Progress has provided assurance that natural gas transportation and natural gas supply will adequately be provided at reasonable costs to Hines Unit 4. The results of Progress' resource planning analysis show that the economics favor combined cycle units over combustion

turbines or coal-fueled technology when a generator is needed to run more than approximately 20 percent of the time. Hines Unit 4 is projected to operate as an intermediate unit, with capacity factors ranging from 50 to 70 percent over the life of the unit. The unit also has the flexibility to serve as an economical base load unit, if needed.

After a thorough analysis of the bids it received in response to its request for proposals (RFP), Progress concluded that Hines Unit 4 was the most cost-effective supply-side alternative available to Progress to meet its need for power. No protests were filed with this Commission regarding Progress' RFP. Hines Unit 4 is a state-of-the-art, highly efficient, and reliable combined cycle unit producing low-cost electricity for Progress' customers. It is the lowest cost option available to meet the needs of Progress' customers for the winter of 2007/2008 and beyond.

No Mitigating Conservation Measures

We find that there are no conservation measures taken by or reasonably available to Progress which could avoid or defer the need for the proposed Hines Unit 4. This Commission approved Progress' demand-side management (DSM) Goals and DSM Plan in Docket Nos. 971005-EG and 991789-EG, respectively. These dockets established the cost-effective level of demand and energy savings reasonably achievable by Progress through DSM programs. Progress' DSM Plan consists of five residential programs, eight commercial and industrial programs, and one research and development program. Through its efforts in these programs, Progress has successfully met its approved DSM goals. Progress anticipates that it will meet its approved goals in the future.

The anticipated demand and energy savings from Progress' DSM goals and programs, as established in Docket Nos. 971005-EG and 991789-EG, were appropriately included in Progress' resource planning process. However, Progress' analysis showed that the savings from these programs will not avoid or defer the need for Hines Unit 4.

Subsequent to Progress' resource planning process for Hines Unit 4, we approved new numeric DSM goals for Progress for the period 2005 through 2014, in Docket No. 040031-EG, as well as a DSM Plan designed to meet these goals. Progress' new goals are generally lower than those established in Docket No. 971005-EG. This would tend to increase Progress' forecasted winter and summer peak demand, further establishing a need for Hines Unit 4.

Most Cost-Effective Alternative Available

We find that the proposed Hines Unit 4 is the most cost-effective alternative available, as the criterion is used in Section 403.519, Florida Statutes. Progress conducted a careful screening of various other supply-side alternatives as part of its Resource Planning process before identifying Hines Unit 4 as its next-planned generating alternative. Progress screened out less cost-effective supply-side alternatives, identifying Hines Unit 4 as the most cost-effective alternative available.

Progress engaged in an extensive capacity solicitation process through its RFP. Progress received five proposals from four bidders. In addition, one of the bidders provided two alternatives to its proposal. One proposal did not pass the threshold requirements and was eliminated, but one proposal from each of the four bidders was put on the short list and compared to the self-build alternative, Hines Unit 4. Progress performed a significant amount of analysis, evaluating the price and non-price attributes of the alternatives. The final evaluation of the non-price attributes demonstrated Hines Unit 4 to be one of the top two ranked alternatives in nearly all of the categories. The detailed economic analysis found Hines Unit 4 to be approximately \$55 million (in 2004 dollars) less expensive than the least cost alternative proposal, a combination existing and new unit proposal. The least cost New Unit Proposal (another combined cycle plant) was found to be more than \$95 million (in 2004 dollars) more expensive than Hines Unit 4. Progress demonstrated that the self-build option had reduced costs due to the economies of scale associated with siting Hines Unit 4 at the existing Hines site with three similar units and due to the favorable equipment pricing that Progress was able to negotiate. Sensitivity analyses were run, which either gave advantages to the third-party proposals by assuming decreases in their costs or assuming increases in the costs associated with Hines Unit 4. In all cases, Hines Unit 4 was the least cost alternative.

As a result of Progress' detailed evaluation of the supply-side alternatives available to it in the RFP evaluation process, Hines Unit 4 was selected because it is the most cost-effective alternative for meeting the needs of Progress' customers for the winter of 2007/2008 and beyond.

Conclusion and Additional Requirements

Based on the foregoing, we grant Progress' petition for determination of need for its proposed Hines Unit 4. Progress shall continue to monitor the cost-effectiveness of Hines Unit 4 prior to committing substantial capital dollars.

In addition, Progress shall annually report the budgeted and actual cost compared to the \$286.1 million estimated total in-service cost of Hines Unit 4. Progress shall provide such information on an annual basis with the understanding that some costs may be higher than estimated and other costs may be lower. Providing this information on an annual basis will allow us to monitor Progress' progress toward achieving its estimated cost of \$286.1 million. The categories to be reported are: Major Equipment/EPC, Permitting, Transmission Interconnection and Integration, Natural Gas Infrastructure Upgrades, Operations and Start-Up, Project Management, Owners Cost, and AFUDC. Pursuant to Rule 25-22.082, Florida Administrative Code, Progress would need to demonstrate that costs in addition to the \$286.1 million were prudently incurred and were due to extraordinary circumstances in order for such additional costs to be recoverable. Alternatively, if the actual cost is less than \$286.1 million, customers will receive the benefit of such cost under-runs.

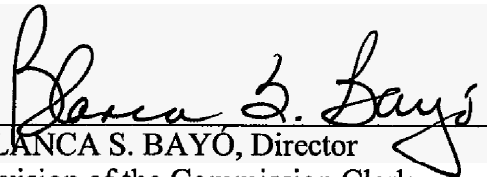
It is therefore

ORDERED by the Florida Public Service Commission that Progress Energy Florida, Inc.'s petition for determination of need for its proposed Hines Unit 4 is granted. It is further

ORDERED that Progress Energy Florida, Inc. shall annually report the budgeted and actual cost compared to the \$286.1 million estimated total in-service cost of Hines Unit 4. It is further

ORDERED that this docket shall be closed if no appeal is filed within the time permitted for filing an appeal of this Order.

By ORDER of the Florida Public Service Commission this 23rd day of November, 2004.


BLANCA S. BAYÓ, Director
Division of the Commission Clerk
and Administrative Services

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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 the Commission Clerk and Administrative Services, 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 the Commission Clerk and Administrative Services 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.