

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for proposed Stanton Energy Center Combined Cycle Unit B electrical power plant in Orange County, by Orlando Utilities Commission. | DOCKET NO. 060155-EM
ORDER NO. PSC-06-0457-FOF-EM
ISSUED: May 24, 2006

The following Commissioners participated in the disposition of this matter:

LISA POLAK EDGAR, Chairman
J. TERRY DEASON
ISILIO ARRIAGA
MATTHEW M. CARTER II
KATRINA J. TEW

APPEARANCES:

ROY C. YOUNG, ESQUIRE, Young VanAssenderp, PA, Post Office Box 1833, Tallahassee, Florida 32302-1833, and THOMAS B. TART, ESQUIRE, Orlando Utilities Commission, 500 S. Orange Avenue, Orlando, Florida 32801
On behalf of Orlando Utilities Commission.

MARTHA CARTER BROWN, ESQUIRE, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850
On behalf of the Florida Public Service Commission.

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

BY THE COMMISSION:

Background

On February 22, 2006, the Orlando Utilities Commission (OUC) filed a petition for determination of need for a proposed electrical power plant in Orange County pursuant to section 403.519, Florida Statutes, and Rule 25-22.080, Florida Administrative Code. The proposed Stanton B electrical power plant is a 283 megawatt (MW) integrated gasification combined cycle unit to be located in Orange County at OUC's existing Curtis H. Stanton Energy Center site. Stanton B will operate primarily on coal-derived synthetic gas, but will also have the capability to burn natural gas. The project will consist of a combined cycle unit wholly owned by OUC,

DOCUMENT NUMBER-DATE

04522 MAY 24 06

FPSC-COMMISSION CLERK

and a gasification unit that will be owned 65 percent by Southern Power Company – Orlando Gasification LLC (SPC-OG) and 35 percent by OUC. OUC and SPC-OG have entered into a 20-year gasification agreement that gives OUC the right to utilize all of the output associated with SPC-OG's ownership interest in the project for a fixed monthly fee. The unit is expected to be placed in service by June 1, 2010.

We held a formal administrative hearing on this matter May 22, 2006. At the hearing, after taking all evidence, we considered the agreement between our staff and OUC regarding the appropriate resolution of all issues identified for the case. We approved the agreed positions by a bench decision, thereby resolving all issues and granting OUC's petition for determination of need. This Order reflects that decision and serves as our report under the Power Plant Siting Act, 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 a proposed 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 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 the proposed Stanton B Unit, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519, Florida Statutes. OUC needs Stanton B to satisfy forecast capacity requirements to maintain its 15 percent reserve margin criteria beginning in the summer of 2010. Without the Stanton B addition, OUC's reserve margin will decrease to approximately 13.2 percent by summer 2010, a 25 megawatt deficit of the required minimum. Without adding capacity, by the summer of 2014, OUC will need 240 MW to meet its reserve margin requirements. OUC's need is driven primarily by population growth. OUC's forecasted compound average annual growth rate of 2.8 percent for net energy for load appears to be reasonable. OUC's analysis is based on the conservative assumptions that during the 25 year evaluation period: (1) no existing generating units will be retired, other than the St. Cloud diesel units scheduled to retire in 2006, and (2) OUC will exercise its option to extend its existing purchase power agreement for Stanton A capacity with Southern Company. Stanton B is the most cost-effective alternative available to OUC to satisfy forecast capacity requirements in a reliable, environmentally responsible manner. OUC and its partners will receive federal cost-sharing through the United States Department of

Energy's Clean Coal Power Initiative for the project. Stanton B will be capable of operating on either coal derived syngas or natural gas.

Need for Adequate Electricity at a Reasonable Cost

We find that there is a need for the Stanton B Unit, 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, the unit is needed to maintain OUC's reserve margin criteria. OUC conducted an extensive analysis of available supply-side and demand-side options. OUC's analysis of supply-side options included conventional natural gas and coal-fired options, renewable generating technologies, distributed generation technologies, energy storage options, and advanced generation options such as nuclear, fuel cells and advanced coal technologies. OUC's load forecast and financial assumptions appear to be reasonable. OUC's need study identified Stanton B as the most cost-effective option available with a \$12.9 million cumulative present worth cost savings over the lowest cost alternative generation plan. A key factor in the cost-effectiveness of the unit is the \$235 million in United States Department of Energy (DOE) cost-sharing under the President's Clean Coal Power Initiative. Stanton B will also increase OUC's fuel diversity through gasification of subbituminous Powder River Basin coal, an abundant source of coal in the United States. OUC provided adequate assurances that sufficient rail capacity is available to transport the coal. To increase reliability, Stanton B will be capable of operating on either coal-derived syngas or natural gas. OUC has mitigated ratepayer risk associated with the gasification technology by obtaining contractual reliability guarantees with substantial penalties from the Southern Power Company – Orlando Gasification LLC.

No Mitigating Conservation Measures

We find that there are no conservation measures taken by or reasonably available to OUC which might mitigate the need for the proposed Stanton B Unit. OUC evaluated the cost-effectiveness of over 180 demand-side management (DSM) measures in its Need for Power Application. OUC used the Florida Integrated Resource Evaluator (FIRE) model, which the Commission has found to be appropriate for evaluating conservation and DSM measures. None of the potential measures were found to be cost-effective, as none of the measures passed the rate impact test. On August 9, 2004, the Commission issued Order No. PSC-04-0767-PAA-EG, in Docket No. 040035-EG, which set OUC's DSM goals at zero because no DSM programs were found to be cost-effective. OUC does offer a wide variety of DSM measures under its existing seven residential and seven commercial/industrial DSM programs, and OUC also offers two pilot DSM programs, a green pricing program and a photovoltaic generation program. Those programs, however, do not provide OUC a cost-effective way to mitigate the need for the Stanton B Unit.

Most Cost-Effective Alternative Available

We find that the proposed Stanton B Unit is the most cost-effective alternative available, as this criterion is used in Section 403.519, Florida Statutes. Stanton B provides the most cost-effective alternative to satisfy OUC's forecast capacity requirements beginning in summer 2010.

As noted above, the project results in a projected \$12.9 million cumulative present worth savings over the lowest cost alternative generation plan, primarily due to the \$235 million in DOE cost-sharing. The projected savings for Stanton B appear relatively small; however, OUC's least-cost alternative expansion plan contains a pulverized coal unit in 2013. If Stanton B is compared to a natural gas-only alternative expansion plan, Stanton B is projected to have a \$120.7 million cumulative present worth savings. While OUC did not issue a request for proposals (RFP), OUC conducted an extensive analysis of available supply-side and demand-side options, and compared Stanton B to the evaluation of the bids received by the Florida Municipal Power Agency in its recent Treasure Coast need proceeding. OUC was not required to issue an RFP by Commission rules. OUC stated that if OUC had issued an RFP, the delay could have precluded OUC from participating in the one-time opportunity to participate in the Stanton B project and in the DOE's \$235 million cost-sharing award. OUC performed numerous sensitivity analyses in its need study, in which OUC varied the assumed fuel prices, peak demand and energy growth, capital cost and emission allowance prices. In all but two cases, Stanton B was the least-cost alternative. As a whole, the results of OUC's sensitivity analysis support the conclusion that Stanton B is the least-cost alternative.

Conclusion

Based on the foregoing, we grant OUC's petition for a determination of need for the proposed Stanton Energy Center Combined Cycle Unit B electrical power plant, because it is the most cost-effective option available to meet OUC's need for additional capacity and achieve its reserve margin criteria beginning in summer 2010. There are no cost-effective demand-side management measures available to offset the need. Stanton B will provide OUC with adequate electricity at a reasonable cost and it will contribute to the reliability and integrity of OUC's system as well as to Florida's reliability. Stanton B will contribute to OUC's and Florida's fuel diversity by using Powder River Basin coal. Stanton B will also demonstrate new coal gasification technology with the support of the United States DOE.

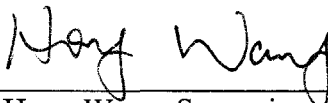
Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the Orlando Utilities Commission's petition for determination of need for its proposed Stanton Energy Center Integrated Coal Gasification Combined Cycle Unit B electrical power plant is granted. It is further

ORDERED that this docket shall be closed.

By ORDER of the Florida Public Service Commission this 24th day of May, 2006.

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

By: 

Hong Wang, Supervisor
Case Management Review Section

(S E A L)

MCB

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 electrical power plant siting proceeding 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 five (5) 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.