#### BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for expansion of Crystal River 3 nuclear power plant, for exemption from Bid Rule 25-22.082, F.A.C., and for cost recovery through fuel clause, by Progress Energy Florida, Inc.

DOCKET NO. 060642-EI ORDER NO. PSC-07-0119-FOF-EI ISSUED: February 8, 2007

The following Commissioners participated in the disposition of this matter:

LISA POLAK EDGAR, Chairman MATTHEW M. CARTER II KATRINA J. TEW

#### APPEARANCES:

R. ALEXANDER GLENN, ESQUIRE, Progress Energy Service Company, LLC, 100 Central Avenue, Suite 1D, St. Petersburg, Florida 33701, and JAMES MICHAEL WALLS, and DIANNE M. TRIPLETT, ESQUIRES, Carlton Fields, P. A., Post Office Box 3239, Tampa, Florida 33601-3239 On behalf of Progress Energy Florida, Inc. (PEF).

JOHN W. MCWHIRTER, JR., ESQUIRE, McWhirter, Reeves & Davidson, P. A., 400 North Tampa Street, Suite 2450, Tampa, Florida 33601-3350 On behalf on the Florida Industrial Power Users Group (FIPUG).

ROBERT SCHEFFEL WRIGHT and JOHN R. LAVIA, III, ESQUIRES, Young van Assenderp, P. A., 225 South Adams Street, Suite 200, Tallahassee, Florida 32301

On behalf of the Florida Retail Federation (FRF).

PATRICIA A. CHRISTENSEN, and JOSEPH A. MCGLOTHLIN, ESQUIRES, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, Room 812, Tallahassee, Florida 32399-1400
On behalf of the Citizens of the State of Florida (OPC).

LISA C. BENNETT, and LORENA A. HOLLEY, ESQUIRES, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850

On behalf of the Florida Public Service Commission (Staff).

DOCUMENT NUMBER-DATE

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# FINAL ORDER GRANTING PETITION FOR DETERMINATION OF NEED FOR PROPOSED EXPANSION OF CRYSTAL RIVER UNIT 3 NUCLEAR POWER PLANT

#### BY THE COMMISSION PANEL:

## **Background**

On September 22, 2006, Progress Energy Florida, Inc. (PEF) filed a Petition (petition) for Determination of Need for Expansion of its Crystal River 3 Nuclear Power Plant (CR3) located in Citrus County, Florida. The proposed expansion is an uprate that when completed will increase the power output at CR3 by approximately 180 megawatts ("MWs"). The proposed uprate or expansion will be completed in two phases. The first phase will be accomplished during the planned 2009 refueling outage and the second phase will be completed during the 2011 planned refueling outage. Phase one will be completed during a scheduled steam generator replacement and will include modifications to the turbine line components to take advantage of greater steam efficiencies, with an expected additional 40 MW of power following work completed in phase one. Phase two consists of changes that will allow for use of more highly enriched uranium in the reactor core and will result in an anticipated additional 140 MW of power.

Included in PEF's petition was a request for exemption from Rule 25-22.082, Florida Administrative Code, and a request that PEF be permitted to recover the costs of the expansion through the fuel clause. On December 22, 2006, by Order No. PSC-06-1059-PCO-EI, the Prehearing Officer bifurcated the cost recovery issue from the need determination. A formal administrative hearing was held on January 18, 2007 to hear the issues related to the need determination and the requested exemption from Rule 25-22.082, Florida Administrative Code. Intervention was granted to the Office of Public Counsel (OPC), the Florida Industrial Power Users Group (FIPUG), the Florida Retail Federation (FRF), and AARP. AARP has subsequently been excused from this proceeding.

We approve the settlement between the parties and grant PEF'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(4), Florida Statutes.

Section 403.519(3), Florida Statutes, sets forth those matters that we must consider in a proceeding to determine the need for a proposed expansion of an existing nuclear 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, the need for fuel diversity and supply reliability, 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.

# Exemption from Requirements of Rule 25-22.082, Florida Administrative Code

We find that the CR3 Uprate satisfies all criteria for exemption from the Bid Rule, pursuant to Rule 25-22.082(18), Florida Administrative Code (F.A.C.). PEF has shown that the CR3 Uprate will likely result in a lower cost supply of electricity to its general body of ratepayers and will also serve the public welfare. Because the CR3 Uprate provides customers additional generation at a net savings, not a net cost, from a more environmentally beneficial source that enhances fuel diversity, no request for proposal is needed. No generation alternative can supply 180 MW of additional power at a net savings to customers comparable to the economic, environmental, and fuel diversity benefits provided by the CR3 Uprate. Other available supply-side generation alternatives will likely have higher fuel costs and, therefore, increase the net cost to customers.

In making our decision whether to grant a determination of need, we have necessarily relied on the representations of the proposed power plant's cost effectiveness made by PEF. This reliance is especially critical where, as in PEF's petition before us in this case, there are no request for proposal results or other market-based checks on the utility's representations. Accordingly, while we grant PEF's requested exemption, PEF is on notice that we will closely scrutinize the reasonableness and prudence of any capital cost greater than those represented by PEF through its testimony and exhibits.

# Need for Electric System Reliability and Integrity

In determining the need for the CR3 Uprate, we have taken into account the need for electric system reliability and integrity. The need for the CR3 Uprate is an economic need, not reliability need. The CR3 Uprate will displace higher cost fossil fuel and purchased power generation with low cost nuclear generation, resulting in substantial fuel savings that provide a net benefit to customers. The CR3 Uprate's substantial economic benefits satisfy the statutory need requirements under our prior precedent and Rule 25-22.081(3), F.A.C., recognizing an economic or socio-economic need for new generation.

## Need for Adequate Electricity at a Reasonable Cost

We find that the CR3 Uprate will displace higher cost fossil fuel and purchased power generation with low cost nuclear generation, resulting in substantial fuel savings that provide a net benefit to customers. Nuclear energy is the lowest cost energy available on PEF's system. Producing additional nuclear energy from the CR3 Uprate, therefore, will produce energy at the lowest possible generation fuel cost.

#### Need for Fuel Diversity and Supply Reliability

We find that the proposed CR3 Uprate will displace fossil fuel and purchased power generation with nuclear generation, resulting in increased fuel diversity and supply reliability. The CR3 Uprate provides a stable source of additional base load power. Nuclear generation is

not subject to the same supply interruptions or changes in price volatility that can affect generation with fossil fuels. Rather, the supply of nuclear fuel is relatively plentiful and stable in price. PEF's customers, and the State, thus, will benefit from increased price stability, enhanced fuel diversity, and decreased reliance on foreign fuel sources resulting from the addition of nuclear capacity to PEF's system.

## No Mitigating Conservation Measures

We find that expanding conservation programs cannot displace the CR3 Uprate. PEF is currently exceeding its Commission-approved numeric conservation goals. Further, PEF has recently expanded its demand side management program offerings, resulting in a projected additional 388 MW of summer demand savings. The CR3 Uprate will produce more incremental energy into the system than an equivalent amount of conservation can save. If the comparison were to be done on equivalent energy alone, it would take more MWs of conservation to save an amount of energy equivalent to the energy produced by the CR3 upgrade, which would result in higher costs to customers.

## Most Cost-Effective Alternative Available

We find that the CR3 Uprate displaces higher cost generation on PEF's system, yielding substantial fuel savings to the net benefit of PEF's customers. PEF's customers will receive additional generation at a net savings of approximately \$327 million on a cumulative net present value basis. This means that no entity offering a supply-side generation alternative can likely propose a lower cost alternative for the same amount of power, and certainly not from relatively clean nuclear power. The CR3 Uprate, because of the net fuel savings benefits driving the project, is the lowest cost supply of electricity for PEF's customers.

## Conclusion

Based on the foregoing, we grant PEF's petition for a determination of need for the proposed expansion of the Crystal River Unit 3 Nuclear Power Plant because it fills an economic need. It will provide adequate electricity at a reasonable cost to customers. CR3 will displace higher cost fossil fuel and purchased power generation with low cost nuclear generation, resulting in substantial fuel savings that provide a net benefit to customers. Although it is not needed for reliability it does meet the need for fuel diversity and supply reliability. The proposed CR3 Uprate will displace fossil fuel and purchased power generation with nuclear generation, resulting in increased fuel diversity and supply reliability. PEF's customers, and the State, thus, will benefit from increased price stability, enhanced fuel diversity, and decreased reliance on foreign fuel sources resulting from the addition of nuclear capacity to PEF's system. There are no cost-effective demand-side management measures available to offset the need. Because the CR3 uprate displaces higher cost generation on PEF's system, yielding fuel savings to the net benefit of PEF's customer, there can be no less costly supply-side generation alternative available.

Upon further consideration, we exempt PEF from the requirements of Rule 25-22.082, (F.A.C.), as it applies to CR3 uprate. In granting the exemption, we do so upon the considerations listed above.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Progress Energy Florida's petition for determination of need for its proposed expansion of Crystal River Unit 3 nuclear power plant is granted. It is further

ORDERED that Progress Energy Florida is exempted from the requirements of Rule 25-22.082, Florida Administrative Code. It is further

ORDERED that this docket shall be closed.

By ORDER of the Florida Public Service Commission this 8th day of February, 2007.

BLANCA S. BAYÓ, Director

Division of the Commission Clerk and Administrative Services

(SEAL)

**LCB** 

#### 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 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.