#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for | DOCKET NO. 080148-EI Levy Units 1 and 2 nuclear power plants, by Progress Energy Florida, Inc.

ORDER NO. PSC-08-0324-PHO-EI ISSUED: May 16, 2008

Pursuant to Notice and in accordance with Rule 28-106.209, Florida Administrative Code (F.A.C.), a Prehearing Conference was held on May 12, 2008, in Tallahassee, Florida, before Commissioner Katrina J. McMurrian, as Prehearing Officer.

#### APPEARANCES:

R. ALEXANDER GLENN, JOHN T. BURNETT, ESQUIRES, Progress Energy Service Company, LLC, Post Office Box 14042, St. Petersburg, Florida 33733-4042; J. MICHAEL WALLS and DIANNE M. TRIPPLETT, ESQUIRES, Carlton Fields, P.A., Post Office Box 3239, Tampa, Florida 33601-3239

On behalf of Progress Energy Florida, Inc. (PEF)

JAMES W. BREW and F. ALVIN TAYLOR, ESQUIRES, Brickfield, Burchette, Ritts and Stone, P.C., 1025 Thomas Jefferson St., N.W., Eighth Floor, West Tower, Washington, D.C. 20007 On behalf of White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate – White Springs (PCS PHOSPHATE or PCS)

E. LEON JACOBS, JR., ESQUIRE, Williams & Jacobs, LLC, 1720 S. Gadsden Street. MS 14, Suite 201, Tallahassee, Florida 32301 On behalf of Southern Alliance for Clean Energy (SACE)

J.R. KELLY and STEPHEN BURGESS, ESQUIRES, Office of Public Counsel, 111 W. Madison St., Room 812, Tallahassee, Florida 32399-1400 On behalf of the Citizens of the State of Florida (OPC)

KATHERINE E. FLEMING, CAROLINE KLANCKE, and KEINO YOUNG, ESQUIRES, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850 On behalf of the Florida Public Service Commission (Staff).

> COOLHEAT ALMBER-DATE 04095 MAY 16 8

> FPSC-COMMISSION CLERK

## PREHEARING ORDER

#### I. CASE BACKGROUND

On March 11, 2008, Progress Energy Florida, Inc. (PEF) filed a petition for a determination of need for proposed nuclear power plants in Levy County, pursuant to Section 403.519, Florida Statutes (F.S.), and Rule 25-22.080, Florida Administrative Code (F.A.C.). The Commission issued a Notice of Commencement of Proceedings to the appropriate agencies, local governments, and interested persons on March 12, 2008. The matter has been scheduled for a formal administrative hearing on May 21-23, 2008.

### II. CONDUCT OF PROCEEDINGS

Pursuant to Rule 28-106.211, F.A.C., this Prehearing Order is issued to prevent delay and to promote the just, speedy, and inexpensive determination of all aspects of this case.

## III. JURISDICTION

This Commission is vested with jurisdiction over the subject matter by the provisions of Chapters 120, 366, and 403, F.S. This hearing will be governed by said Chapter and Chapters 25-6, 25-22, and 28-106, F.A.C., as well as any other applicable provisions of law.

## IV. PROCEDURE FOR HANDLING CONFIDENTIAL INFORMATION

Information for which proprietary confidential business information status is requested pursuant to Section 366.093, F.S., and Rule 25-22.006, F.A.C., shall be treated by the Commission as confidential. The information shall be exempt from Section 119.07(1), F.S., pending a formal ruling on such request by the Commission or pending return of the information to the person providing the information. If no determination of confidentiality has been made and the information has not been made a part of the evidentiary record in this proceeding, it shall be returned to the person providing the information. If a determination of confidentiality has been made and the information was not entered into the record of this proceeding, it shall be returned to the person providing the information within the time period set forth in Section 366.093, F.S. The Commission may determine that continued possession of the information is necessary for the Commission to conduct its business.

It is the policy of this Commission that all Commission hearings be open to the public at all times. The Commission also recognizes its obligation pursuant to Section 366.093, F.S., to protect proprietary confidential business information from disclosure outside the proceeding. Therefore, any party wishing to use any proprietary confidential business information, as that term is defined in Section 366.093, F.S., at the hearing shall adhere to the following:

(1) When confidential information is used in the hearing, parties must have copies for the Commissioners, necessary staff, and the court reporter, in red envelopes clearly marked with the nature of the contents and with the confidential

information highlighted. Any party wishing to examine the confidential material that is not subject to an order granting confidentiality shall be provided a copy in the same fashion as provided to the Commissioners, subject to execution of any appropriate protective agreement with the owner of the material.

(2) Counsel and witnesses are cautioned to avoid verbalizing confidential information in such a way that would compromise confidentiality. Therefore, confidential information should be presented by written exhibit when reasonably possible.

At the conclusion of that portion of the hearing that involves confidential information, all copies of confidential exhibits shall be returned to the proffering party. If a confidential exhibit has been admitted into evidence, the copy provided to the court reporter shall be retained in the Office of Commission Clerk's confidential files. If such material is admitted into the evidentiary record at hearing and is not otherwise subject to a request for confidential classification filed with the Commission, the source of the information must file a request for confidential classification of the information within 21 days of the conclusion of the hearing, as set forth in Rule 25-22.006(8)(b), F.A.C., if continued confidentiality of the information is to be maintained.

## V. PREFILED TESTIMONY AND EXHIBITS; WITNESSES

Testimony of all witnesses to be sponsored by the parties has been prefiled and will be inserted into the record as though read after the witness has taken the stand and affirmed the correctness of the testimony and associated exhibits. All testimony remains subject to timely and appropriate objections. Upon insertion of a witness' testimony, exhibits appended thereto may be marked for identification. Each witness will have the opportunity to orally summarize his or her testimony at the time he or she takes the stand. Summaries of testimony shall be limited to five minutes.

Witnesses are reminded that, on cross-examination, responses to questions calling for a simple yes or no answer shall be so answered first, after which the witness may explain his or her answer. After all parties and Staff have had the opportunity to cross-examine the witness, the exhibit may be moved into the record. All other exhibits may be similarly identified and entered into the record at the appropriate time during the hearing.

The Commission frequently administers the testimonial oath to more than one witness at a time. Therefore, when a witness takes the stand to testify, the attorney calling the witness is directed to ask the witness to affirm whether he or she has been sworn.

## VI. ORDER OF WITNESSES

As a result of discussions at the prehearing conference, each witness whose name is preceded by an asterisk (\*) will be excused from this hearing if no Commissioner assigned to this case seeks to cross-examine the particular witness. Parties shall be notified as soon as possible as to whether any such witness shall be required to be present at the hearing. The testimony of excused witnesses will be inserted into the record as though read, and all exhibits submitted with those witnesses' testimony shall be identified as shown in Section IX of this Prehearing Order and be admitted into the record.

Witness	Proffered By	Issues #
<u>Direct</u>		
Jeffrey J. Lyash	PEF	1-4, 6-7
Daniel L. Roderick	PEF	4, 6-7
Dale Oliver	PEF	6, 7
John A. Masiello	PEF	5
Robert D. Niekum	PEF	5
*Sasha Weintraub	PEF	2, 4, 6
*John Siphers	PEF	2, 4, 6
J. Michael Kennedy	PEF	6
John Benjamin Crisp	PEF	1-7
Javier Portuondo	PEF	6-7
Peter A. Bradford	PCS Phosphate	1, 4, 6-7
Rebuttal		
Daniel L. Roderick	PEF	

## VII. BASIC POSITIONS

PEF:

Pursuant to Section 403.519(4), Florida Statutes, and Rule 25-22.081, F.A.C., PEF filed a petition on March 11, 2008, for determination of need for two proposed nuclear power plants, called Levy Units 1 and 2, located in Levy County, Florida. PEF evaluated Levy Units 1 and 2 under the amended need determination provisions of the 2006 Florida Renewable Energy Technologies and Energy Efficiency Act, as directed by the Florida Legislature, emphasizing the factors the Florida Legislature directed the Commission to consider in a Need determination proceeding to encourage the development of nuclear generation in Florida. PEF concluded that those considerations warranted the choice of a future generation supply paradigm that includes nuclear base load generation. Levy Units 1 and 2 are the right choice for PEF's customers and the State and at this time PEF has resolved and committed the resources necessary to make a generation supply paradigm that includes future nuclear power generation possible.

Through PEF's planning process, the Company identified Levy Units 1 and 2 as its next-planned generating additions. The Company needs Levy Units 1 and 2 to meet its 20 percent Reserve Margin planning criterion for the period 2016 to 2019 and beyond. Without the addition of Levy Unit 1, PEF's Reserve Margin will decrease to 15.4 percent in the summer of 2016 and 13.4 percent by 2017. If Levy Units 1 and 2 are brought into commercial operation by June 2016 and June 2017 as planned, PEF's reserve margin will exceed the 20% Reserve Margin for several years. Both units are still needed, however, to meet the Company's reliability needs in the 2016 to 2019 time period and beyond. They are currently planned for commercial operation on these dates to meet the Company's base load reliability needs in this timeframe and beyond and to achieve the substantial economic, fuel diversity, fuel supply reliability, fuel independence, and environmental benefits they offer customers if they are brought on line as currently planned.

Levy Units 1 and 2 will be state-of-the-art, advanced passive light water nuclear power plants. After a detailed and thorough technical analysis, PEF has initially selected and is currently evaluating the Westinghouse Advanced Passive ("AP") 1000 light water nuclear reactor design for Levy Units 1 and 2. The preferred site selected for Levy Units 1 and 2 consists of approximately 3,100 acres located in Levy County, Florida, about ten miles north of the Company's Crystal River Energy Complex.

PEF has determined that Levy Units 1 and 2 are the most cost-effective alternative sources of power to meet the Company's need in 2016 to 2019 and beyond when fuel diversity and fuel supply reliability, the reduced reliance on foreign fossil fuels, existing and future emission compliance costs, and long-term electric grid reliability factors are considered as the Florida Legislature directed.

Using the Company's current, non-binding cost estimate, and the additional legislative factors that must be considered when evaluating the cost-effectiveness of nuclear generation to the extent they could be quantified, including the advent of greenhouse gas ("GHG") emission costs, the generation resource plan including Levy Units 1 and 2 was more cost-effective on a cumulative present value revenue requirements ("CPVRR") basis than an all natural gas generation reference plan in the majority of the CPVRR scenarios, even without accounting for the additional ten (10) years of commercial operation of the two nuclear units in the model.

Nuclear power is a clean source of electric power generation. Electric power generation from nuclear fuel produces no SO<sub>2</sub>, NOx, GHG, mercury, or other emissions. In light of the current environmental requirements, including among others the Environmental Protection Agency ("EPA") and DEP Clean Air Interstate Rule ("CAIR"), for example, affecting fossil fuel generation, and potential new legislative and regulatory limitations on GHG emissions, nuclear energy is a more economically viable future generation alternative to fossil fuel (oil, gas, or coal) electric power generation. Indeed, when the financial impacts of potential future carbon abatement legislation and regulation currently being considered are accounted for in the computer optimization model, Levy Units 1 and 2 are projected to be a more cost-effective alternative to natural gas-fired generation on a CPVRR basis in the majority of the potential CPVRR scenarios evaluated, and in some scenarios, significantly more so.

The Company has attempted to avoid or defer constructing the units by considering and pursuing demand-side options reasonably available to it, but the Company has nonetheless concluded that it cannot avoid or defer its need to build the units. PEF seeks an affirmative determination of need for Levy Units 1 and 2 to enable the Company to meet its obligation to maintain electric system reliability and integrity and to continue to provide and increase adequate electrical generation from nuclear fuel for customers at a reasonable fuel cost.

For all these reasons, as more fully developed in PEF's Need Study (and the Confidential Section of that Study) and supporting appendices and tables, and its pre-filed testimony and exhibits, PEF respectfully requests that the Florida Public Service Commission ("FPSC" or "Commission") grant a favorable determination of need for Levy Units 1 and 2.

PCS:

Assessing whether the Levy County nuclear power plants are expected to be the most effective source of power is by far the single most difficult issue affecting a determination of need for the proposed units. A decision as to this fundamental question must reflect the relative confidence that can be placed in both the capital cost estimates for the project and the very long range estimates of benefits. In this case, confidence in the current project costs estimates is low. Progress Energy Florida's ("PEF") estimates of project capital costs already have nearly tripled

from estimates in the initial announcement of the project. PEF also has been fairly candid that the current estimate, which is stunningly expensive as it stands now, almost certainly will see further revisions that are going to be higher.

The reason why Florida has not seen a new nuclear unit built since 1983, and the rest of the country similarly abandoned new nuclear as a capacity resource for several decades, is that the cost of building these power plants had become unacceptably high for utilities, consumers and regulators alike. Massive construction cost overruns at a substantial number of plants led to plant cancellations and retail rate shocks as completed units entered commercial service. A series of prudence audits of project construction costs that resulted in significant cost disallowances for project mis-management proved to be the final nail convincing utilities and investors that nuclear power could not be considered a viable resource until project costs and regulatory risks could be effectively managed.

This historic experience in the commercial nuclear industry; current circumstances in terms of the limits on nuclear qualified materials, equipment and personnel; and PEF's selection of a new advanced reactor design for which there is neither construction or operating experience all indicate a high risk of significant schedule delays and cost overruns. Some of the recognized risk factors (e.g., the cost of steel) may be beyond the control of PEF, but the utility has direct control over a multitude of daily project management decisions that affect overall project cost and schedule. On the other hand, Florida consumers have absolutely no control over any element of the project cost and schedule.

The Florida statutory changes that encourage new nuclear power development do so in large measure by transferring utility / investor regulatory risk to consumers (i.e., once a need determination has been granted, certain issues can only be reviewed or challenged on a limited basis (or not at all)). This means that the Commission's need determination assumes critical importance in terms of safeguarding the interests of current and future ratepayers.

In making a determination of need pursuant to Section 403.519, Florida Statutes, the Commission is required to take into account any matters within its jurisdiction that are relevant to the proposed project into addition to the specific considerations listed in the statute (i.e., the need for base load capacity, improve the balance of fuel diversity, reduce Florida's dependence on fuel oil and natural gas, reduce air emissions compliance costs, and contribute to the long-term stability and reliability of the electric grid). Given the statutory implications of a finding of need, the Commission must necessarily address the serious risk of dramatic cost overruns and PEF's incentives to effectively manage the project. These issues can only be address in this docket given the requirements of the statute and the limited nature of cost and prudence reviews under the Nuclear Cost Recovery Clause.

To safeguard consumer interests, PCS Phosphate urges the Commission to consider separately the need for Levy County Units 1 and 2. The Need Study shows that adding Levy Unit 2 in 2017 will produce a generating reserve margin of 33%, which clearly is excessive. More broadly, the Commission should not issue a determination of need that amounts to a blank check for project costs. The Commission should require, as a condition of any finding of need, that Progress Energy Florida implement aggressive contract and project management strategies to control project cost and schedule. In the alternative, the Commission should limit its determination based on PEF's current project cost estimate and require PEF to justify both the project cost increases and continuation of construction of either or both units.

## SACE:

PEF has not submitted adequate data upon which the Florida Public Service Commission ("Commission") can base its decision as to whether the proposed addition of the nuclear power plant in Levy County is the most cost effective alternative available to PEF to meet projected demand. The glaring absence of finality in the projected costs, the uncertainty in the comparison analyses, and ancillary issues such as transmission reliability, represent fatal flaws in the Commission's ability to make findings of fact to support a decision under section 403.519, Florida Statutes. Most specifically, the Commission is unable to ascertain whether there is a "need for adequate electricity at reasonable cost, and whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available." § 403.519(4), F.S.

When coupled with uncertainty in core issues resulting from the use of a new reactor technology, PEF's analysis cannot offer the Commission any assurance that this proposal is the most cost effective manner by which to supply the demand projected in the application.

For these reasons, the Commission should deny this petition. The Commission can only consider this petition with the benefit of a true and accurate definition of the design, and the requisite costs that this facility will impose, and a true and accurate analysis of cost effective alternatives.

### OPC:

After hearing and evaluating all of the evidence presented, the Commission must apply the standards established in Section 403.519, Florida Statutes, in determining the need for proposed Levy Units 1 and 2.

#### **STAFF:**

Staff's positions are preliminary and based on materials filed by the parties and on discovery. The preliminary positions are offered to assist the parties in preparing for the hearing. Staff's final positions will be based upon all the evidence in the record and may differ from the preliminary positions.

VIII. ISSUES AND POSITIONS

ISSUE 1: Is there a need for the proposed generating units, taking into account the need for electric system reliability and integrity, as this criterion is used in

Section 403.519(4), Florida Statutes?

**POSITIONS** 

<u>PEF:</u> Yes, there is a need for the proposed Levy Units 1 and 2, taking into account the need for electric system reliability and integrity, as this criterion is used in Section

403.519(4), Florida Statutes. Through PEF's planning process, the Company identified Levy Units 1 and 2 as its next-planned generating additions. The Company needs Levy Units 1 and 2 to meet its 20 percent Reserve Margin planning criterion for the period 2016 to 2019 and beyond. Without the addition of Levy Unit 1, PEF's Reserve Margin will decrease to 15.4 percent in the summer of 2016 and 13.4 percent by 2017. If Levy Units 1 and 2 are brought into commercial operation by June 2016 and June 2017 as planned, PEF's reserve margin will exceed the 20 percent Reserve Margin. Both units are still needed, however, to meet the Company's reliability needs in the 2016 to 2019 time period and beyond given the need for flexibility to meet future uncertainties. In addition, there is an economic need for Levy Unit 2, based on the substantial engineering and construction efficiencies from building two nuclear units in this time frame, and the fact that both Levy Units 1 and 2 provide economic, fuel diversity, fuel

independence, and environmental benefits to PEF and its customers.

**PCS:** No. Taking into account the criteria used in Section 403.519 (4), F.S., Levy unit 2

would add unnecessary excess capacity to the PEF system and thus a

determination of need cannot be supported with respect to the second unit.

SACE: No.

**OPC:** No position.

**STAFF:** No position pending evidence adduced at hearing.

ISSUE 2: Is there a need for the proposed generating units, taking into account the

need for fuel diversity, as this criterion is used in Section 403.519(4), Florida

Statutes?

**POSITIONS** 

Yes, there is a need for the proposed Levy Units 1 and 2, taking into account the need for fuel diversity, as this criterion is used in Section 403.519, Florida

Statutes. The two nuclear units will meet the Florida legislative and executive

goal of (1) increasing fuel diversity and fuel supply security for electrical capacity and energy production for PEF and the State of Florida, and (2) reducing PEF's and the State's dependence on volatile fossil fuel supplies that are further subject to supply interruptions. With the addition of Levy Units 1 and 2, by 2018, nuclear generation will represent 38 percent of the total energy generation on PEF's system. Without these nuclear units, however, fossil fuel generation will account for 85 percent of the electrical energy generation on PEF's system by 2018. Levy Units 1 and 2, therefore, are necessary to maintain and enhance PEF's current position as the most fuel diverse utility in Florida.

PCS:

No position.

**SACE:** 

No.

OPC:

No position.

**STAFF:** 

No position pending evidence adduced at hearing.

ISSUE 3:

Is there a need for the proposed generating units, taking into account the need for base-load generating capacity, as this criterion is used in Section 403.519(4), Florida Statutes?

## **POSITIONS**

PEF:

Yes, there is a need for the proposed Levy Units 1 and 2, taking into account the need for base-load generating capacity, as this criterion is used in Section 403.519, Florida Statutes. There is a need for new base load generation based on the current and expected load growth in PEF's service territory. Further, there is a need for new base load generation technology on PEF's system. PEF's current base load nuclear generation plant, Crystal River Unit 3 ("CR3"), has served and will continue to serve customers well for years to come, providing low fuel cost electrical power generation to PEF customers nearly year-round. But CR3 represents a nuclear generation technology that is now over thirty years old. PEF's other existing base load generation plants, its four Crystal River coal units, have also served customers well, but two of them are nearly 50 years old and the other base load generation units are two decades old. Levy Units 1 and 2 will provide customers with state-of-the-art, nuclear generation technology. Levy Units 1 and 2 will also add the first new base load generation to PEF's system in over twenty years (thirty years by the time Levy Unit 1 and 2 come on line), providing newer vintage generation to complement the older vintage base load units on PEF's system. These new nuclear generation units will therefore contribute to the long-term stability and reliability of the electrical power grid.

PCS:

No. Taking into account the criteria used in Section 403.519 (4), F.S., Levy unit 2 would add unnecessary excess baseload capacity to the PEF system and thus a determination of need cannot be supported with respect to the second unit.

**SACE**:

No.

OPC:

No position.

STAFF:

No position pending evidence adduced at hearing.

ISSUE 4:

Is there a need for the proposed generating units, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(4), Florida Statutes?

## **POSITIONS**

PEF:

Yes, there is a need for the proposed Levy Units 1 and 2, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519, Florida Statutes. Levy Units 1 and 2 will enable PEF to meet its reliability need, and the reliability needs thereafter, and they will allow PEF to continue to provide and increase adequate electrical generation from nuclear fuel for customers at a reasonable fuel cost. Nuclear power uses the lowest cost fuel source (uranium used in processed nuclear fuel) currently available to the Company. Processed uranium fuel is an abundant, low cost fuel source relative to other fuels. As a result, adding more nuclear generation to PEF's generation system is expected to result in more stable, lower energy prices relative to other (fossil fuel) generation resources.

PCS:

No. PEF's filing does not demonstrate that adequate safeguards have been established to effectively manage the risks to consumers of significant project construction delays and cost overruns. Moreover, PEF's long-term cost and economic benefits estimates are, by their nature, speculative. Considering these factors, in combination with the history of nuclear construction cost overruns and the unproven history of the Westinghouse AP1000 reactor design, the Commission lacks an adequate basis to conclude that the proposed \$17 billion generating units will provide electricity at a reasonable cost.

**SACE**:

No.

OPC:

No position.

**STAFF**:

No position pending evidence adduced at hearing.

ISSUE 5:

Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Progress Energy Florida, Inc. which might mitigate the need for the proposed generating units?

## **POSITIONS**

PEF:

No, there are no additional conservation measures taken by or reasonably available to PEF which might mitigate the need for the proposed Levy Units 1 and 2. PEF will continue to evaluate potential, emerging DSM technologies, but PEF's detailed analysis represented by its current, expanded DSM program has captured all cost-effective demand-side potential available. With expected customer and demand growth, PEF cannot provide DSM options in quantities needed to offset the need for additional generation. Likewise, PEF will continue to evaluate potential renewable energy sources, as it has done in the past and is currently undertaking, but there simply are insufficient renewable energy resources available to PEF over the next decade to meet customer capacity and energy needs without the addition of other generation resources to PEF's system. PEF will still need additional generation resources to serve customer needs. Therefore PEF cannot avoid or defer its need to build Levy Units 1 and 2.

**PCS**: No position.

**SACE:** Yes.

**OPC:** No position.

**STAFF:** No position pending evidence adduced at hearing.

<u>ISSUE 6</u>: Will the proposed generating units provide the most cost-effective source of power, as this criterion is used in Section 403.519(4), Florida Statutes?

#### **POSITIONS**

PEF:

Yes, the proposed Levy Units 1 and 2 are the most cost-effective sources of power, as this criterion is used in Section 403.519(4), Florida Statutes. PEF has determined that Levy Units 1 and 2 are the most cost-effective alternative sources of power to meet the Company's need in 2016 to 2019 and beyond when fuel diversity and fuel supply reliability, the reduced reliance on fossil fuels, existing and future emission compliance costs, and long-term electric grid reliability factors are considered as the Florida Legislature directed. Using the Company's current, non-binding cost estimate, and the additional legislative factors that must be considered when evaluating the cost-effectiveness of nuclear generation to the extent they could be quantified, including the advent of greenhouse gas ("GHG") emission costs, the generation resource plan including Levy Units 1 and 2 was

more cost-effective on a cumulative present value revenue requirements ("CPVRR") basis than an all natural gas generation reference plan in the majority of the CPVRR scenarios, even without accounting for the additional ten (10) years of commercial operation of the two nuclear units in the model.

PCS:

No. PEF's filing does not demonstrate that adequate safeguards have been established to effectively manage the risks to consumers of significant project construction delays and cost overruns. Moreover, PEF's long-term cost and economic benefits estimates are, by their nature, speculative. Considering these factors, in combination with the history of nuclear construction cost overruns and the unproven history of the Westinghouse AP1000 reactor design, the Commission lacks an adequate basis to conclude that the proposed \$17 billion generating units will be the most cost-effective source of power as defined in Section 403.519, F.S.

SACE:

No.

OPC:

No position.

**STAFF:** 

No position pending evidence adduced at hearing.

ISSUE 7:

Based on the resolution of the foregoing issues, should the Commission grant Progress Energy Florida, Inc.'s petition to determine the need for the proposed generating units?

### **POSITIONS**

PEF:

Yes, the Commission should grant PEF's petition to determine the need for the proposed Levy Units 1 and 2. The opportunity to move away from a predominant, fossil-fuel, generation supply paradigm is now, and granting a determination of need for Levy Units 1 and 2, as PEF requests, will provide PEF and Florida the opportunity to move towards a generation supply portfolio that is essential for the future energy needs and economic and environmental well-being of the State.

PCS:

No.

**SACE**:

No.

OPC:

No position.

**STAFF**:

No position pending evidence adduced at hearing.

**ISSUE 8**: Should this docket be closed?

# **POSITIONS**

**PEF:** Yes, this docket should be closed.

**PCS:** No position.

**SACE:** Yes.

**OPC**: No position.

**STAFF:** No position pending evidence adduced at hearing.

## IX. EXHIBIT LIST

Witness	Proffered By		Description
<u>Direct</u>			
Daniel L. Roderick	PEF	DLR-1	Map showing the State of Florida and the Levy County site location
Daniel L. Roderick	PEF	DLR-2	Aerial map showing the Levy site
Daniel L. Roderick	PEF	DLR-3	Aerial map showing the site and the proposed location of the two nuclear units
Daniel L. Roderick	PEF	DLR-4	Composite of graphics of the AP-1000 advance reactor plant
Daniel L. Roderick	PEF	DLR-5	Cost breakdown summary for Levy Units 1 and 2
Daniel L. Roderick	PEF	DLR-6	CONFIDENTIAL detailed project Schedule
John A. Masiello	PEF	JAM-1	PEF Current Florida Public Service Commission DSM Goals
John A. Masiello	PEF	JAM-2	PEF DSM Programs and Measures

Witness	Proffered By		Description
John A. Masiello	PEF	JAM-3	PEF DSM Implementation Graphs for residential heat pump installations, duct repairs and insulation retrofits
Robert D. Niekum	PEF	RDN-1	A list of PEF's renewable contracts
Robert D. Niekum	PEF	RDN-2	National Renewable Energy Laboratory's resource maps for wind and solar
Robert D. Niekum	PEF	RDN-3	Copy of the FPSC and DEP's  An Assessment of Renewable  Electric Generating  Technologies for Florida
Robert D. Niekum	PEF	RDN-4	A list of potential renewable suppliers who responded to PEF's recent Request for Renewables
Sasha Weintraub	PEF	SAW-1	Analysis of PEF's Energy Mix
Sasha Weintraub	PEF	SAW-2	Comparison of fuel variability and weighted average fuel costs
Sasha Weintraub	PEF	SAW-3	PEF's forecast of all primary fuel sources (nuclear fuel, natural gas, fuel oil, and coal)
Sasha Weintraub	PEF	SAW-4	PEF's mid-level, low, and high natural gas fuel forecasts
Sasha Weintraub	PEF	SAW-5	PEF's historic natural gas prices from January 1998 to November 2007
Sasha Weintraub	PEF	SAW-6	PEF's and Florida Power & Light Company's historic natural gas prices from 1998 to 2007 and 1990 to July 2007, respectively

Witness	Proffered By		<u>Description</u>
Sasha Weintraub	PEF	SAW-7	United States Natural Gas Rig Count Versus Natural Gas Well Production since 2002 from the U.S. Energy Information Agency ("EIA")
Sasha Weintraub	PEF	SAW-8	U.S. Natural Gas Supply Challenge, 2005 to 2030, chart from Department of Energy ("DOE") 2007 Annual Energy Outlook Information
Sasha Weintraub	PEF	SAW-9	Chart of world natural gas reserves by geographic region as of January 1, 2007 from the "Worldwide Look at Reserves and Production" in the Oil & gas Journal
John Siphers	PEF	JS-1	2007 nuclear fuel burn cost Components
John Siphers	PEF	JS-2	Chart of the historical and current Uranium market in \$/lb of U308
John Siphers	PEF	JS-3	Average market burn cost fuel comparison on a \$/mmBtu cost basis from 2002 to 2010 for nuclear fuel, coal, natural gas, and oil
John Siphers	PEF	JS-4	PEF's nuclear fuel forecast through 2036 in terms of the burn cost in mills/kWhe
J. Michael Kennedy	PEF	JMK-1	Emission Comparison Chart
J. Michael Kennedy	PEF	JMK-2	Lifecycle CO <sub>2</sub> Emission Summary
J. Michael Kennedy	PEF	JMK-3	Estimated CO <sub>2</sub> Emission Cost Graph

Witness	Proffered By		Description
J. Michael Kennedy	PEF	JMK-4	Annual CO <sub>2</sub> Emissions Avoided by Proposed Levy Nuclear Units Chart
John Benjamin Crisp	PEF	JBC-1	PEF's Need Study for Levy Units 1 and 2
John Benjamin Crisp	PEF	JBC-2	PEF's Resource Plan with Levy Units 1 and 2
John Benjamin Crisp	PEF	JBC-3	Forecasts of summer and winter demand and reserves with and without Levy Unit 1
John Benjamin Crisp	PEF	JBC-4	Forecasts of summer and winter demand and reserves with and without Levy Unit 2
John Benjamin Crisp	PEF	JBC-5	PEF's fuel forecasts for nuclear, natural gas, and oil
John Benjamin Crisp	PEF	JBC-6	PEF's 2018 daily system load forecast with and without Levy Units 1 and 2
John Benjamin Crisp	PEF	JBC-7	PEF's current system energy mix
John Benjamin Crisp	PEF	JBC-8	PEF's 2018 system energy mix with and without Levy Units 1 and 2
John Benjamin Crisp	PEF	JBC-9	Table of the Cumulative Present Value Revenue Requirements (CPVRR) of the Resource Plan with Levy Units 1 and 2, including changes in natural gas prices and potential impacts from greenhouse gas (GHG) regulation, compared to an all gas generation resource plan alternative

Witness	Proffered By		Description
Javier Portuondo	PEF	JP-1	A summary of the estimated first 12 months base rate bill impact for Levy Unit 1, Levy Unit 2, and associated transmission facilities as they go in-service
Javier Portuondo	PEF	JP-2	A summary of the estimated revenue requirements to be recovered through the CCRC for the period 2009-2017 per Rule 25-6.0423, F.A.C.
Javier Portuondo	PEF	JP-3	An estimate of the expected costs associated with Site Selection & Preconstruction, Construction, and Carrying Costs for Levy Unit 1, Levy Unit 2 and the associated transmission facilities
Peter A. Bradford	PCS Phosphate	PAB-1	Resume of Peter A. Bradford
<u>Rebuttal</u>			
Daniel L. Roderick	PEF	DLR - 7	Charts graphically depicting differences between the current NRC Construction and Operating License Application ("COLA") regulatory process and the prior NRC regulatory process
Daniel L. Roderick	PEF	DLR - 8	Graphics of the Westinghouse AP-1000 advanced reactor plant showing the reduction in cable, pumps, and other material in the Westinghouse AP-1000 compared to those commercially operational nuclear power plants today

Witness	Proffered By		<u>Description</u>
Daniel L. Roderick	PEF	DLR - 9	Chart of the capacity factors of the nation's commercially operational nuclear power plants over the last decade
Daniel L. Roderick	PEF	DLR - 10	Chart of the capacity factors of the most recent nuclear power plants

Parties and Staff reserve the right to identify additional exhibits for the purpose of cross-examination.

## X. PROPOSED STIPULATIONS

There are no proposed stipulations at this time.

## XI. PENDING MOTIONS

There are no pending motions at this time.

# XII. PENDING CONFIDENTIALITY MATTERS

The following requests for confidential classification are pending:

- 1. PEF's First Request for Confidential Classification, Document No. 01806-08, filed March 11, 2008.
- 2. PEF's Second Request for Confidential Classification, Document No. 03039-08, filed April 17, 2008.
- 3. PEF's Third Request for Confidential Classification, Document No. 03303-08, filed April 23, 2008.
- 4. PEF's Fourth Request for Confidential Classification, Document No. 03575-08, filed May 1, 2008.

# XIII. POST-HEARING PROCEDURES

If no bench decision is made, each party shall file a post-hearing statement of issues and positions. A summary of each position of no more than 50 words, set off with asterisks, shall be included in that statement. If a party's position has not changed since the issuance of this Prehearing Order, the post-hearing statement may simply restate the prehearing position; however, if the prehearing position is longer than 50 words, it must be reduced to no more than

50 words. If a party fails to file a post-hearing statement, that party shall have waived all issues and may be dismissed from the proceeding.

Pursuant to Rule 28-106.215, F.A.C., a party's proposed findings of fact and conclusions of law, if any, statement of issues and positions, and brief, shall together total no more than 75 pages and shall be filed at the same time.

### XIV. RULINGS

Opening statements, if any, shall not exceed ten minutes per party.

It is therefore,

ORDERED by Commissioner Katrina J. McMurrian, as Prehearing Officer, that this Prehearing Order shall govern the conduct of these proceedings as set forth above unless modified by the Commission.

By ORDER of Commissioner Katrina J. McMurrian, as Prehearing Officer, this <u>16th</u> day of May, 2008.

KÄTRINA J. MÆMURRIAN

Commissioner and Prehearing Officer

(SEAL)

KEF

### 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.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

Any party adversely affected by this order, which is preliminary, procedural or intermediate in nature, may request: (1) reconsideration within 10 days pursuant to Rule 25-22.0376, 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 or wastewater utility. A motion for reconsideration shall be filed with the Office of Commission Clerk, in the form prescribed by Rule 25-22.060, Florida Administrative Code. Judicial review of a preliminary, procedural or intermediate ruling or order is available if review of the final action will not provide an adequate remedy. Such review may be requested from the appropriate court, as described above, pursuant to Rule 9.100, Florida Rules of Appellate Procedure.