#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for Polk Unit 6 electrical power plant, by Tampa Electric Company.

DOCKET NO. 070467-EI ORDER NO. PSC-07-0792-PHO-EI ISSUED: September 28, 2007

Pursuant to Notice and in accordance with Rule 28-106.209, Florida Administrative Code (F.A.C.), a Prehearing Conference was held on September 24, 2007, in Tallahassee, Florida, before Commissioner Nathan A. Skop, as Prehearing Officer.

#### APPEARANCES:

LEE L. WILLIS and JAMES D. BEASLEY, ESQUIRES, AUSLEY LAW FIRM, P.O. Box 391, Tallahassee, Florida 32302 On behalf of Tampa Electric Company (TECO).

GEORGE CAVROS, ESQUIRE, 120 E. Oakland Park Blvd., Suite 105, Fort Lauderdale, Florida 33334 and GARY A. DAVIS, ESQUIRE, P.O. Box 649, Hot Springs, NC 28743

On behalf of Southern Alliance for Clean Energy (SACE).

JENNIFER BRUBAKER and MARTHA CARTER BROWN, ESQUIRES, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850

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

#### PREHEARING ORDER

#### I. CASE BACKGROUND

On July 20, 2007, Tampa Electric Company (TECO) filed a petition for a determination of need for a proposed electrical power plant in Polk County pursuant to Section 403.519, Florida Statutes (F.S.), and Rule 25-22.080, Florida Administrative Code (F.A.C.). The matter has been scheduled for a formal administrative hearing on October 10-11, 2007. The Southern Alliance for Clean Energy (SACE) intervened in this docket.

## 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.

DOCUMENT NUMBER-DATE

<sup>&</sup>lt;sup>1</sup> Order No. PSC-07-0639-PCO-EI, issued August 6, 2007.

<sup>&</sup>lt;sup>2</sup> Order No. PSC-07-0695-PCO-EI, issued August 24, 2007.

## III. JURISDICTION

This Commission is vested with jurisdiction over the subject matter by the provisions of Chapter 366, 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 followed by an asterisk (\*) may be excused from this hearing if no Commissioner assigned to this case seeks to cross-examine the particular witness. Parties shall be notified as to whether any such witness shall be required to be present at hearing. The testimony of excused witnesses will be inserted into the record as though read, and all exhibits submitted with those witnesses' testimony, as shown in Section IX of this Prehearing Order, shall be identified and admitted into the record.

Witness	Proffered By	Issues #	
Direct			
Charles R. Black	TECO	1,2,3,4,6,7	
William A. Smotherman	TECO	1,2,3,4,5,6,7	
Mark J. Hornick	TECO	1,2,3,5,6,7	
Michael R. Rivers	TECO	1,2,3,5,6,7	

Witness	Proffered By	<u>Issues #</u>
Lorraine L. Cifuentes	TECO	1,2,4,6,7
Howard T. Bryant	TECO	1,2,4,6,7
Joann T. Wehle	TECO	1,2,3,6,7
Alan S. Taylor*	TECO	1,2,3,6,7
Paul L. Carpinone	TECO	1,2,3,5,6,7
Thomas J. Szelistowski*	TECO	1,2,6,7
Chrys A. Remmers	TECO	1,2,6,7
David Nichols	SACE	1, 2, 3, 4, 6, 7
Stephen A. Smith	SACE	1, 2, 3, 4, 5, 6, 7
<u>Rebuttal</u>		
Howard T. Bryant	TECO	1, 2, 4, 6, 7

## VII. BASIC POSITIONS

#### **TECO**:

The Commission should approve the need for Tampa Electric's proposed Polk Unit 6, an IGCC unit with 610 MW and 647 MW summer and winter net capacity, respectively, to meet the projected need for additional generating capacity on Tampa Electric's system in 2013. Polk Unit 6 is the most cost-effective means of meeting Tampa Electric's future capacity needs. Polk Unit 6 will also provide improvements in fuel diversity and reliability along with the environmental benefits of the proven IGCC technology, including the compatibility of the plant design layout for potential CO<sub>2</sub> control requirements if required by future legislation. The Commission should also find that Tampa Electric has undertaken all conservation measures reasonably available to Tampa Electric which might mitigate the need for the new plant. Even after Tampa Electric's ambitious DSM and renewable energy efforts and achievements are factored into the analysis, Tampa Electric, nevertheless, will need the planned output of Polk Unit 6 in order to meet its customers' demand and energy requirements by 2013.

#### **SACE:**

TECO has failed to identify and implement all cost-effective Demand Side Management (DSM) program potential in its service area for the years 2007 – 2014. An analysis of TECO's pending Docket 070375-EG, a modified TECO Demand Side Management Plan, and information obtained through discovery in

this docket does not bear out TECO's conclusion that it has identified all of the cost-effective DSM program potential in its service area.

The customer financial incentives employed in the Company's modified DSM proposal are low, as low as two percent of the customer's cost for an efficiency measure. Increased incentives would increase customer participation levels and the energy and demand impacts of the TECO's DSM.

Under the Rate Impact Measure (RIM) test constraint on DSM cost effectiveness, there is room for the Company to both increase incentives and offer a financing program to realize additional energy efficiency. Since DSM impacts can be increased through these means, the Company has not succeeded in identifying all the cost-effective DSM program potential in its service area for the years 2007 through 2014.

If the Total Resource Cost (TRC) test for DSM cost-effectiveness is used instead of the RIM test, there is even more room for the Company to increase incentives, and additional measures can be added to its DSM program, while at the same time a financing program can be added to realize additional energy efficiency.

Both the level of DSM potential realized by the Company in the past, and that planned for the future, necessarily affect the magnitude and timing of projected future capacity needs, such as those asserted in the present docket. While it is difficult to determine the quantity of additional DSM available at this time without further information from TECO, it is clear that additional DSM beyond that in the modified DSM Plan is reasonably available, and that further load reductions can be achieved that might further mitigate the need for the proposed plant.

Additionally, TECO's determination of need analysis does not address Governor Crist's Executive Orders 07-127 and 07-128 that include a mandated reduction in Greenhouse Gas Emission from the utility sector that will absolutely affect the cost of operating the TECO Polk 6 Unit in its lifetime. These include rules being developed by the Department of Environmental Protection ("FDEP") that would require the electric utility sector to reduce greenhouse gas emissions to year 2000 levels by 2017, to 1990 levels by 2025 and to 20% of 1990 levels by 2050. With TECO proposing to add a 632 MW coal plant, in addition to other generation capacity for peaking needs, it doesn't seem likely that TECO could meet the greenhouse gas emission reduction targets without carbon capture and sequestration or environmental compliance costs — all reducing the cost-effectiveness in meeting demand.

Executive Order 07-127 also directs the PSC to develop new regulations requiring electric utilities to produce at least 20% of their electricity from renewable sources with a strong focus on solar and wind energy. Compliance with this

Renewable Portfolio Standard would greatly reduce or eliminate the need for the proposed new coal unit. At the very least, TECO should be required to reevaluate the use of renewable sources as a result of the Executive Order, because its need study dismisses solar and wind as providing any significant portion of TECO's electricity generation.

Finally, there are other reasons to question the need for the proposed TECO unit, including the lack of need for a 20% reserve margin for TECO, and including the failure by TECO to adequately evaluate DSM and renewable energy technologies in its integrated resource plan used to justify the proposed new unit.

**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 staff's preliminary positions.

#### VIII. ISSUES AND POSITIONS

ISSUE 1: Is there a need for the proposed generating unit, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519, Florida Statutes?

#### **POSITIONS**

TECO:

Yes. Polk Unit 6 is needed to maintain electric system reliability and integrity as this criterion is used in Section 403.519, Florida Statutes. After taking into account existing power plant unit capacity, firm purchased power agreements, and an updated load forecast that considers demand side management (DSM) and renewable energy alternatives, Tampa Electric still requires an addition of approximately 576 and 482 MW for winter and summer, respectively, to maintain Tampa Electric's system reliability requirements by 2013. (All TECO witnesses)

**SACE**:

No. End user energy efficiency provide for electric system reliability and integrity. In addition, the assumed reserve margin of 20% is excessive. (Nichols, Smith)

**STAFF:** No position at this time.

**ISSUE 2:** 

Is there a need for the proposed generating unit, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519, Florida Statute?

# **POSITIONS**

TECO:

Yes. Polk Unit 6 is needed to ensure an adequate supply of electricity at a reasonable cost, as this criterion is used in Section 403.519, Florida Statutes. Polk Unit 6 will enable Tampa Electric to meet the projected demand and energy requirements of its customers at a cost less than any available alternative. The

savings will be made primarily due to the lower fuel cost of Polk Unit 6 compared to natural gas or conventional coal-fired generation. (All TECO witnesses)

SACE:

No. TECO's proposal to build a new coal-fired power plant unit without a commitment for carbon sequestration and without pursuing all reasonably available conservation and renewable measures that are more cost effective than new generation presents an unacceptable risk to ratepayers. Properly planned and executed energy efficiency is the least cost option both economically and environmentally. A planned renewable portfolio requirement will also offset the need for the plant. (Nichols, Smith)

**STAFF:** No position at this time.

ISSUE 3: Is there a need for the proposed generating unit, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519, Florida Statutes?

#### **POSITIONS**

TECO:

Yes. Polk Unit 6 is not only the most cost-effective alternative, but will also establish a more diversified fuel portfolio that, in turn, will enhance the reliability of Tampa Electric's power supply and help reduce volatility in customers' bills. Given Tampa Electric's current generation mix, IGCC technology will lessen the impact of any future shutdown of natural gas production facilities like those that occurred in 2005. (Black, Smotherman, Hornick, Rivers, Wehle, Taylor, Carpinone)

SACE:

No. End user energy efficiency provide for electric system reliability and integrity. In addition, a planned renewable portfolio requirement will also offset the need for the plant and provide diversity and reliability. (Nichols, Smith)

**STAFF:** No position at this time.

ISSUE 4:

Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Tampa Electric Company which might mitigate the need for the proposed generating unit?

#### **POSITIONS**

TECO:

No. Tampa Electric has long been a leader in the field of DSM going back to 1981 and continues to promote new and modified programs to maximize cost-effective conservation and load management to reduce load requirements and encourage conservation. Tampa Electric has also promoted the development of renewable energy resources. However, even factoring in these efforts and the results they have achieved into the analysis, Polk Unit 6 is needed to serve the needs of Tampa Electric customers beginning in 2013. The conservation programs suggested by SACE are not reasonably available because: (1) they fail the Commission's cost-effectiveness tests, and (2) will not provide the reduced

demand for energy and capacity assumed in SACE's calculations. Conservation should be promoted but not at any price. Tampa Electric's conservation programs incorporate all measures reasonably available. (Witnesses: Black, Smotherman, Cifuentes, Bryant)

**SACE:** 

Yes. There are several conservation measures reasonably available to TECO which would reduce forecasted electricity demand and thus contribute to further mitigating the need for the proposed unit. These include increasing the customer incentives to participate in existing and proposed DSM programs, adding a financing program whereby customers participating in DSM programs could finance their portion of DSM costs through the utility bill, and adding additional conservation measures to the suite of DSM programs offered to customers. There is evidence suggesting that by pursuing such measures TECO could increase its DSM impacts substantially by 2013, to a level several times what is currently proposed by the Company. (Nichols)

**STAFF:** No position at this time.

<u>ISSUE 5</u>: Has TECO appropriately evaluated the cost of CO2 emission mitigation costs in its economic analysis?

#### **POSITIONS**

TECO:

Yes. Tampa Electric has appropriately evaluated CO<sub>2</sub> emission mitigation costs. The company evaluated the effects of the cost of potential CO<sub>2</sub> emission restrictions using three price bands for CO<sub>2</sub> reductions. The results of that analysis and other sensitivities Tampa Electric reviewed reinforced the prudence of the company's selection of IGCC technology over other alternatives available to the company.

Although there are not current requirements to capture or sequester CO<sub>2</sub>, IGCC technology remains the lowest cost option for carbon control equipment. An IGCC unit is more cost efficient than other fossil fuel technology in the event of future carbon control requirements. IGCC's advantage over other fossil fuel fired technologies arises from the fact that CO<sub>2</sub> is captured prior to combustion, which means CO<sub>2</sub> is captured from a much smaller volume of gases than would be the case with carbon capture in a post combustion mode. As a result the cost of CO<sub>2</sub> removal equipment is much smaller and less costly. Tampa Electric's layout for Polk Unit 6 includes space for carbon capture equipment to be installed in the event carbon capture becomes an environmental requirement. (Carpinone, Hornick, Smotherman, Rivers)

**SACE:** 

No. TECO's determination of need analysis does not address Governor Crist's Executive Orders 07-127 and 07-128 that include a mandated reduction in Greenhouse Gas Emissions from the utility sector that will absolutely affect the cost of operating the TECO Polk 6 Unit in its lifetime. These include rules being developed by the Department of Environmental Protection ("FDEP") that would

require utilities, such as TECO, to reduce greenhouse gas emissions to year 2000 levels by 2017, to 1990 levels by 2025 and to 20% of 1990 levels by 2050. Due to the growth of greenhouse gas emissions from Florida electric utilities since 2000, in order to meet these targets the utilities in aggregate would need to reduce emissions by 6% by 2017, 30% by 2025, and 86% by 2050, as compared to 2004 levels. (Smith)

**STAFF:** No position at this time.

<u>ISSUE 6</u>: Is the proposed generating unit the most cost-effective alternative available, as this criterion is used in Section 403.519, Florida Statutes?

# **POSITIONS**

**TECO:** Yes. Polk Unit 6 is the most cost-effective alternative available as this criterion is used in Section 403.519, Florida Statutes. (All TECO witnesses)

No. The most cost-effective resource is energy efficiency. Measures that pass both the RIM test and TRC test have not been maximized by TECO. The construction of a new coal-fired power plant without incorporating carbon capture sequestration creates an unacceptable financial risk to taxpayers. Properly planned and executed energy efficiency and renewable sources are the least cost options both economically and environmentally. (Nichols, Smith)

**STAFF:** No position at this time.

**ISSUE 7:** Based on the resolution of the foregoing issues, should the Commission grant TECO's petition to determine the need for the proposed generating unit?

## **POSITIONS**

**TECO:** Yes. Based on Tampa Electric's analysis of the facts bearing on a resolution of the foregoing issues, the Commission should grant Tampa Electric's petition to determine the need for Polk Unit 6. (All TECO witnesses)

**SACE:** No. TECO's petition should be denied for the reasons stated above. (Smith)

**STAFF:** No position at this time.

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

#### **POSITIONS**

**TECO:** Yes. Once a final order is issued and any appeal thereof is waived or resolved, this docket should be closed.

**SACE**:

This docket should be closed or held in abeyance while TECO develops reasonably available energy efficiency measures that are more cost-effective than new coal-fired generation and report back on those measures as they relate to the need for a new coal-fired generation unit.

**STAFF:** No position at this time.

# IX. <u>EXHIBIT LIST</u>

Witness	Proffered By	<u>I.D. No.</u>	Description
<u>Direct</u>			
William A. Smotherman	TECO	WAS-1	Energy mix by fuel types; reliability analyses resource plans; economic analysis results; scenario analysis results
Mark J. Hornick	TECO	МЈН-1	Water loss comparison; Polk Unit 1 availability; CO <sub>2</sub> mitigation costs; potential CO <sub>2</sub> removal levels; water use comparisons
Michael R. Rivers	TECO	MRR-1	Polk Unit 6 process diagram; project schedule; cost estimate; plot plan
Lorraine L. Cifuentes	TECO	LLC-1	Data supporting Tampa Electric's load forecasting process, methodologies and assumptions and load forecast
Howard T. Bryant	TECO	HTB-1	Current and proposed DSM programs and goals; 2005-2014 DSM goals accomplishments
Joann T. Wehle	TECO	JTW-1	Information describing fuel resources, suppliers and pricing
Alan S. Taylor	TECO	AST-1	Resumè of Alan S. Taylor
Paul L. Carpinone	TECO	PLC-1	IGCC and pulverized coal air emission comparisons; emissions of recently proposed projects in Florida

Witness	Proffered By	I.D. No.	<u>Description</u>
Thomas J. Szelistowski	TECO	TJS-1	Data supporting proposed interconnection and integration of Polk Unit 6
Thomas J. Szelistowski	TECO	TJS-2	FRCC Review letter and Updated Summary of Required Facilities, Ratings and Costs
David Nichols	SACE	DN-1	Nichols Resume
David Nichols	SACE	DN-2	DSM Incentives
David Nichols	SACE	DN-3	ACEEE Study
David Nichols	SACE	DN-4	DSM Leaders
Stephen A. Smith	SACE	SS-1	Smith Resume
Stephen A. Smith	SACE	SS-2	Executive Order 07-127
Stephen A. Smith	SACE	SS-3	Executive Order 07-128
Stephen A. Smith	SACE	SS-4	DEP Notice
Stephen A. Smith	SACE	SS-5	DEP Workshop
Stephen A. Smith	SACE	SS-6	CO2 Impacts
Stephen A. Smith	SACE	SS-7	CO2 Hurricane Study
Stephen A. Smith	SACE	SS-8	CO2 Cyclone Study
Stephen A. Smith	SACE	SS-9	NOAA Damage Data

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. TECO's request for confidential classification and motion for temporary protective order of Document Number 06181-07, filed July 20, 2007.
- 2. TECO's request for confidential classification of Document Number 07847-07, filed August 30, 2007.
- 3. TECO's request for confidential classification of Document Number 08240-07, filed September 11, 2007.
- 4. TECO's request for confidential classification of Document Number 08625-07, filed September 21, 2007.

## 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 40 pages and shall be filed at the same time.

#### XIV. RULINGS

1. Opening statements shall not exceed ten minutes per side.

It is therefore,

ORDERED by Commissioner Nathan A. Skop, 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 Nathan A. Skop, as Prehearing Officer, this <u>28th</u> day of <u>September</u>, <u>2007</u>.

NATHAN A. SKOP

Commissioner and Prehearing Officer

(SEAL)

JSB

## 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.