ORIGINAL

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October 4, 1999

HAND DELIVERED

Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Generic Investigation into Aggregate Electric Utility Reserve Margins Planned for Peninsular Florida; FPSC Docket No. 981890-EI

Dear Ms. Bayo:

Enclosed for filing in this docket are the original and fifteen (15) copies of Prehearing Statement of Tampa Electric Company.

Also enclosed is a diskette containing the above Prehearing Statement originally typed in Microsoft Word 97 format which has been saved in Rich Text format for use with WordPerfect.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

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Enclosures

cc: All Parties of Record (w/enc.)

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Generic investigation into the aggregate electric utility reserve margins planned for Peninsular Florida.	DOCKET NO. 981890-EU FILED: October 4, 1999

PREHEARING STATEMENT OF TAMPA ELECTRIC COMPANY

A. APPEARANCES:

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Tallahassee, Florida 32302
On behalf of Tampa Electric Company

B. WITNESSES:

	Witness	Subject Matter	Issues
(Direct)			
1.	Mark D. Ward (TECO)	Addresses Reserve Margin Issues including those attached to the July 1, 1999 Order Clarifying Scope of Proceeding	1 - 19
(Rebuttal)			
1.	Mark D. Ward (TECO)	Rebuttal Addressing Direct Testimony of Staff's Witness	

C. EXHIBITS:

Exhibit	Witness	Description
(MDW-1)	Ward	Exhibit of Mark D. Ward
(MDW-2)	Ward	Rebuttal Exhibit of Mark D. Ward

D. STATEMENT OF BASIC POSITION

Tampa Electric Company's Statement of Basic Position:

Tampa Electric adheres to the procedural concerns set forth in the company's request for expedited status conference and preliminary prehearing conference filed July 10, 1999 in this docket. Tampa Electric is not aware of any formal proposed Commission agency action or any proposed rulemaking associated with this docket. This proceeding proports to be a generic investigation. Consequently, it does not qualify as a formal proceeding pursuant to §§ 120.569 and 120.57, Fla. Stat.

Subject to the foregoing, Tampa Electric believes that it is important for the FRCC to adopt planning reserve margin criteria for the Peninsular Florida region that are evaluated on an aggregate basis. These criteria are indicators of regional reliability for generation planning purposes. The planning criteria most appropriate for aggregate Peninsular Florida are minimum seasonal firm reserve margins. Tampa Electric believes that as long as these criteria are met by the projected aggregate Peninsular Florida resources, the Florida Public Service Commission ("Commission") should find that the Peninsular Florida system is reliable for planning purposes.

On an individual utility basis, Tampa Electric believes that each utility may utilize the same or similar reserve margin methodologies for developing planning criteria as are used for the aggregate Peninsular Florida region. However, using the same or similar methodologies may result in reserve margin criteria that will vary from utility to utility. These variations can result from the fact that individual systems have unique characteristics in both resources and system demand and energy requirements. The design and operation of the individual systems can produce different reserve margin criteria even though the same methodology is used.

Tampa Electric currently plans for a 15% minimum firm reserve margin for both winter and summer and proposes minimum summer supply side reserve margin of 7%. The company believes

these levels to be adequate for Tampa Electric. The company is not aware of the need for any incremental action by the Commission at this time, over and above the Commission's traditional role of ensuring adequate and reliable service throughout Florida.

E. STATEMENT OF ISSUES AND POSITIONS

GENERIC FUEL ADJUSTMENT ISSUES

ISSUE 1: **What is the appropriate methodology, for planning purposes, for calculating reserve margins for individual utilities and for Peninsular Florida?**

TECO: The Florida Reliability Coordinating Council ("FRCC") should be responsible for aggregating capacity and load data from Peninsular Florida utilities and calculating the projected firm reserve margins for the region. The FRCC's load and capacity aggregation process should eliminate double counting of generating resources and loads. The projected firm reserve margins are calculated for ten year periods and are published annually in the FRCC Load and Resource Plan, which is filed with the Florida Public Service Commission ("FPSC" or "Commission").

The firm reserve margin should be calculated using the accepted industry formula for projected winter and summer firm non-coincident peak demands. The formula calculates the firm reserve margin as the total firm supply-side resources minus the non-coincident seasonal firm peak demand divided by the projected non-coincident seasonal firm peak demand. (Witness: Ward)

ISSUE 2: **What is the appropriate methodology, for planning purposes, for evaluating reserve margins for individual utilities and for Peninsular Florida?**

TECO: This evaluation should be conducted by the FRCC on an annual basis using the results of the FRCC reliability assessment and the FRCC Load and Resource Plan. The FRCC Load and Resource Plan should be assessed to ensure that projected aggregate Peninsular Florida seasonal firm reserve margins meet or exceed the regional generation adequacy standard. Reserve margins that meet or exceed the reserve margin criterion would indicate that, for planning purposes, the FRCC aggregate system resource plan provides adequate reliability for the region. If the regional criterion is violated in any peak period, the FRCC Reliability Assessment Group ("RAG") would assess the data and provide an explanation to the FRCC Executive Board and the Commission. Assessment of individual operating entities within the region should be conducted by the Commission. (Witness: Ward)

ISSUE 3: **How should the individual components of an individual or Peninsular Florida percent reserve margin planning criteria be defined:**

A. **Capacity available at time of peak (Ex. QF capacity, firm and non-firm purchases and non-committed capacity). Should equipment delays be taken into account?**

B. **Seasonal firm peak demand. Over what period should the seasonal firm peak demand be determined? What is the proper method for accounting for diversity of the individual utilities' seasonal firm peak demands and load uncertainty? Is sufficient load uncertainty load data available and being used? How are interruptible, curtailable, load management and wholesale loads treated at the end of their tariff or contract period? How should demand and/or energy use reduction options be evaluated and included in planning and setting reserve margins?**

C. **Should percent reserve margin planning criterion be determined on an annual, seasonal, monthly, daily, or hourly basis?**

TECO: A. The components of the firm reserve margin calculation may be classified as firm supply-side resources available at time of firm peak and seasonal firm peak demand.

Firm supply-side resources include all FRCC firm installed generating capacity less the capacity of planned unit outages during the projected seasonal peak less firm contracted exports plus firm contracted capacity from non-utility generating and qualifying facilities plus firm contracted imported capacity from outside the Peninsular Florida.

The aggregate non-coincident firm peak demand includes all customers within Peninsular Florida region except to the extent those participating in Commission-approved demand-side management programs. The non-coincident firm peak is the aggregate firm peak of all load serving utilities in Peninsular Florida.

The projected in-service date of planned capacity should be adjusted to reflect equipment delays as they occur. These adjustments should be included in the reserve margin calculation when they become known.

B. For Peninsular Florida planning purposes, the seasonal firm peaks should include December through February for the winter season and June through August for the summer season. Tampa Electric ("Tampa Electric" or "Company") supports the FRCC's approach to calculating load diversity and developing load forecast certainty factors.

The FRCC aggregation process includes all projected firm loads regardless of contractual commitments. Included in the FRCC aggregation process is the accounting of non-firm loads in Peninsular Florida. This data is provided in the FRCC Load and Resource Plan.

The actual and projected demand and energy reductions from conservation programs are captured in the FRCC methodology for testing its 15 percent minimum firm reserve margin standard for the seasonal non-coincidental peaks.

C. The firm reserve margin should be calculated on a seasonal basis that includes the non-coincident winter and summer firm peaks. The winter period should include December through February while the summer months should be defined as June through August. Tampa Electric calculates its supply-side reserve margin for the summer firm peak. This is during the period that generating units experience the highest capacity factors. (Witness: Ward)

ISSUE 4: **How should generating units be rated (MW) for inclusion in a percent reserve margin planning criteria calculation?**

TECO: If the unit is not scheduled for an outage at the time of the projected peak demand, then the generating resource's maximum net capability should be used to calculate both the firm reserve margin and supply-side reserve margin. (Witness: Ward)

ISSUE 5: **How should individual utility reserve margins be integrated into the aggregated reserve margin for Peninsular Florida?**

TECO: On an aggregate basis individual utility reserve margins are not additive since individual systems vary in demand and energy requirements. Planning reserves should be based on each individual utility's resources and system demand and energy.

An aggregate reserve margin should be calculated for Peninsular Florida using the region's firm existing and planned installed capacity, and firm contracted capacity to serve Peninsular Florida's projected aggregate non-coincident firm seasonal peaks. This integration should be conducted by the FRCC and is explained in Tampa Electric's position on Issue 2. (Witness: Ward)

ISSUE 6: **Should there be a limit on the ratio of non-firm load to MW reserves? If so, what should that ratio be?**

TECO: No. (Witness: Ward)

ISSUE 7: **Should there be a minimum of supply-side resource when determining reserve margins? If so, what is the appropriate minimum level?**

TECO: Yes. A minimum supply-side reserve margin is necessary to ensure a balance of resources for reserve purposes. The minimum supply-side reserve margin establishes a minimum level of supply-side reserves while not limiting the contributions of the Commission-approved, demand-side management programs. Maintaining this balances a primary concern during summer months when supply-side resources are required to operate at high capacity factors while also experiencing derations due to high seasonal temperatures.

Considering its supply-side resources and demand and energy requirements, Tampa Electric believes that a 7 percent minimum summer supply-side reserve margin criterion along with a 15 percent minimum seasonal firm reserve margin criteria provides adequate system reliability. (Witness: Ward)

ISSUE 8: **What if any planning criteria should be used to assess the generation adequacy of individual utilities.**

TECO: It would be inappropriate to establish the same planning criteria for each Peninsular Florida utility because "one size does not fit all." System reliability should be assessed on a "utility by utility" basis because each system has unique characteristics in both resources and system demand, and energy requirements. Individual utilities should establish appropriate reserve margin criteria that will ensure its customers are reliably served but those criteria should be developed to meet the utility's unique characteristics. (Witness: Ward)

ISSUE 9: **Should the import capability of Peninsular Florida be accounted for in measuring and evaluating reserve margins and other reliability criteria, both for individual utilities and for peninsular Florida.**

TECO: Only firm contracted import and export capacity should be accounted for in measuring and evaluating reserve margins. All import and export capability that is not tied to firm contracted capacity should not be considered in these calculations and evaluations. (Witness: Ward)

ISSUE 10: **Do the following utilities appropriately account for historical winter and summer temperatures when forecasting seasonal peak loads for purposes of establishing reserve margin planning criteria.**

TECO: Yes. Tampa Electric uses historical National Oceanic and Atmospheric Administration temperature profiles to forecast seasonal peak loads. The temperature profiles are based on 30 years of historical data along with an examination of the temperatures on peak days during the period of 1970 - 1998. The forecasted seasonal firm peak demands are used in testing the Company's minimum firm reserve margin criteria. (Witness: Ward)

ISSUE 11: **Has the FRCC's 15 percent reserve margin planning criteria, or any other proposed reserve margin criterion, been adequately tested to warrant using it as planning criterion for the review of generation adequacy on a peninsular Florida basis? If the answer is no, what planning criteria should be used.**

TECO: Yes. The FRCC 15 percent minimum firm reserve margin criterion for Peninsular Florida has been based on the collective planning and operating experience of the FRCC utilities and is consistent with reliability standards adopted by other regional reliability coordinating councils. It has also been tested using the FRCC methodology and found to provide adequate planning reserves for Peninsular Florida. (Witness: Ward)

ISSUE 12: **What percent reserve margin is currently planned for Tampa Electric and is it sufficient to provide an adequate and reliable source of energy for operational and emergency purposes?**

TECO: Tampa Electric currently plans for a 15 percent minimum firm reserve margin for both winter and summer and proposes minimum summer supply-side reserve margin of 7 percent. Tampa Electric's historical availability of supply-side resources and absolute average load forecast variances at the time of the firm peak demand indicate that the 15 percent minimum firm reserve margin and 7 percent minimum supply-side reserve margin will provide adequate and reliable energy for operational and emergency purposes. (Witness: Ward)

ISSUE 13: **How does the reliability criteria adopted by the FRCC compare to the reliability criteria adopted by other reliability councils?**

TECO: Tampa Electric supports the conclusions drawn from the FRCC research provided in its FRCC prefiled testimony. (Witness: Ward)

ISSUE 14: **Should the Commission adopt a reserve margin standard for individual utilities in Florida? If so, what should be the appropriate reserve margin criteria for individual utilities in Florida. Should there be a transition period for utilities to meet that standard?**

TECO: No. See response to issue 8. (Witness: Ward)

ISSUE 15: **Should the commission adopt a reserve margin standard for Peninsular Florida? If so, what should be the appropriate reserve margin criteria for Peninsular Florida?**

TECO: No. The Commission should recognize the FRCC 15 percent minimum from reserve margin criteria for both summer and winter non-coincident firm peak demands. The FRCC should review its planning criteria on an annual basis and incorporate adjustment on an annual basis as needed. (Witness: Ward)

ISSUE 16: **Should the Commission adopt a maximum reserve margin criterion or other reliability criterion for planning purposes: e.g., level of reserves necessary to avoid interrupting firm load during weather conditions like those experienced on the following dates: 01/08/70, 01/17/77, 01/13/81, 12/19/81, 12/25/83, 01/21/86, 12/23/89?**

TECO: No. The Commission should adopt minimum reserve margin criteria that will ensure capacity reserve levels adequate for reasonably anticipated winter and summer temperature extremes, unplanned unit outages and variations in load growth. (Witness: Ward)

ISSUE 17: **What percent reserve margin is currently planned for Peninsular Florida and is it sufficient to provide an adequate and reliable source of energy for operational and emergency purposes in Peninsular Florida?**

TECO: The FRCC currently plans for a minimum firm reserve margin of 15 percent for both summer and winter non-coincident firm peak demands. Historical availability of supply-side resources and accuracy of firm peak load forecasts indicate that a 15 percent minimum firm reserve margin will provide adequate and reliable energy for operational and emergency purposes. (Witness: Ward)

ISSUE 18: **Can out-of-Peninsular Florida power sales interfere with the availability of Peninsular Florida reserve capacity to serve Peninsular Florida customers during a capacity shortage? If so, how should sales be accounted for in establishing a reserve margin standard?**

TECO: No. Peninsular Florida utilities plan a minimum winter and summer firm reserve margin level of 15 percent on an aggregate Peninsular Florida basis. This minimum firm reserve margin of 15 percent is made available to Peninsular Florida utilities on a first call basis to serve firm customers during emergency conditions. (Witness: Ward)

ISSUE 19: **Based on the resolution of issues 1 through 18, what follow-up action, if any, should the commission pursue?**

TECO: Tampa Electric is not aware of the need for any incremental action by the Commission at this time, over and above the Commission's traditional role of insuring adequate and reliable electric service throughout Florida. (Witness: Ward)

F. LEGAL ISSUE:

ISSUE 20: **Has the Commission lawfully commenced a formal proceeding in this docket to determine the substantial interests of any person or to adopt any rule?**

TECO: No. (Witness: Ward)

G. STIPULATED ISSUES

TECO: None at this time.

H. MOTIONS

TECO: There exist certain pending motions relative to discovery.

I. OTHER MATTERS

TECO: None at this time.

DATED this 4th day of October 1999.

Respectfully submitted,

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ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing Prehearing Statement, filed on behalf of Tampa Electric Company, has been served by U. S. Mail or hand delivery(*) on this 4th date of October 1999 to the following:

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