BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Seminole Electric) Cooperative, Inc., TECO Power Services) Corporation and Tampa Electric Company) for a determination of need for proposed) electric power plant.

DOCKET NO. 880309-EC

ORDER NO. 22335

ISSUED: 12-22-89

The following Commissioners participated in the disposition of this matter:

MICHAEL McK. WILSON, Chairman THOMAS M. BEARD BETTY EASLEY JOHN T. HERNDON

FINAL ORDER ON NEED DETERMINATION

BY THE COMMISSION:

On February 23, 1988, the Seminole Electric Cooperative, Inc. (SEC) filed a petition to determine its need for two 220 MW class combined cycle generating units with an in-service date of January 1, 1993. As part of its evaluation of the most cost-effective means of supplying its capacity need in 1993, SEC issued a request for proposals (RFP) for capacity from qualifying facilities and independent power producers. At the hearings in this docket in December, 1988, SEC indicated that it had compiled a "short list" of two bidders who, with further negotiation of terms, might provide a more economical means of supplying SEC with its needed capacity than construction of its proposed units. Based on that representation, we bifurcated this docket and agreed that two sets of findings would be made: an initial order dealing with the need of SEC for 450 MW of capacity in 1993 and a second order, the final order in the docket, dealing with the most economic means of satisfying that need if one were found to exist. It is our intention that these two orders taken together satisfy the reporting requirements of Section 403.507(1)(b), Florida Statutes. Order No. 20930, issued on March 23, 1989, at 1-2.

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In Order No. 20930 we found that SEC had established a need for 450 MW of capacity in 1993. The central issue in the second hearing, held on September 20-21, 1989, is the most economic means of satisfying that need: the two 220 MW combined cycle units which SEC has proposed to build on its Polk/Hardee County site or the combination of purchased power and construction on the Polk/Hardee site proposed by TECO Power Services Corporation (TPS) in its response to SEC's RFP.

1989, SEC filed a supplement to On July 31, need determination petition and joint motion to add Tampa Electric Company (TECO) and TPS as co-applicants. This motion was granted in the Prehearing Order, Order No. 21903, issued on During the hearing the testimony of John September 18, 1989. Ramil (TECO), Richard E. Ludwig (TPS), Timothy S. Woodbury (SEC), David L. Beam (SEC), Richard Midulla (SEC), Alan Oak (TECO Energy), Girard Anderson (TECO), and Theresa Walsh (Staff) was heard. Post hearing briefs were timely filed by TECO, TPS and SEC on October 13, 1989.

Need

In order to reach a fair resolution of this case there are several policy/legal questions which have developed through the course of this proceeding which must be addressed. The first is what restrictions, if any, are placed upon this Commission by the bifurcation of this proceeding. As is noted in the background discussion above, this bifurcation led us to make two significant findings: that SEC had a "need" for 450 MW of capacity starting in the year 1993 and that SEC's construction of two 220 MW combined cycle units would be the "benchmark" against which the results of SEC's RFP process were measured. Order No. 20930 at 3, 4.

In considering the first finding, that of need for 450 MW, the legal question which must be addressed is: Does the Florida Electrical Power Plant Siting Act, Sections 403.501-.517, Florida Statutes, (Siting Act) definition of "need" encompass only new capacity? That is, when we say that SEC "needs" 450 MW of capacity in 1993, does that mean that there is inadequate existing capacity in the state to satisfy that need in whole or in part, or merely that SEC has proven that its own system does not have the necessary amount of capacity? This distinction is Certification of just Phase I of the TPS proposal important. would consistent with an interpretation of need as be

encompassing only new capacity. The proposed TPS project in Phase I (years 1993 through 2003) will satisfy SEC's capacity requirements by 145 MW of existing capacity from TECO's Big Bend 4 Unit and 295 MW of new combined cycle and combustion turbine capacity constructed on SEC's Hardee/Polk County site.

We find that need as used in the Siting Act encompasses only new capacity and cite as support for this position the definitions found in Chapter 403, Florida Statutes. In Section 403.503, "site" is defined as "any proposed location wherein an electrical power plant, or an electrical power plant alteration or addition resulting in an increase in generating capacity, will be located." (Emphasis added.) This is in accord with Section 403.506(1), Florida Statutes, which states in part: "No construction of any new electrical power plant or expansion in steam generating capacity of any existing electrical power plant may be undertaken after October 1, 1973, without first obtaining certification in the manner as herein provided. . . " (Emphasis added.) Section 403.506(2), Florida Statutes, goes on to list the events which will not be deemed to be an "alteration or addition to generating capacity which requires certification pursuant act": "modification to the of non-nuclear fuels, related hardware, or internal operating conditions not in conflict with certification which increase the electrical output of a unit to no greater capacity than the maximum operating capacity of the existing generator." (Emphasis added.)

This understanding of need is echoed in Section 403.507, Florida Statutes, the provision which details the report which this body must file with the Department of Environmental Regulation (DER). Section 403.507 states that the PSC "shall prepare a report as to the present and future need for the proposed electrical generating capacity to be supplied by the proposed electrical power plant." (Emphasis added.) This understanding is the cornerstone for the requirement in Rule 25-22.081, Florida Administrative Code, that evidence be produced by the applicant of the major available generating alternatives which were evaluated, including "purchases where appropriate." The thread that runs throughout these statutes and rules is the premise that the "need" to be certified is connected with capacity which has yet to be built.

That being the case, we clarify our previous finding that SEC has a "need" for 450 MW of capacity in 1993. Consistent

with the fact that 145 MW of capacity provided to SEC under the TPS agreement is provided by an existing facility, we find that in the time period 1993-2003, the need for new capacity additions in the state proven by SEC is 295 MW. In the time period 2003-2013, the evidence in the record developed in this proceeding indicates at this time that SEC has proven that the state has a need for new capacity of 145 MW.

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This clarification will forestall a double-counting of the state's need for capacity. The contract entered into between SEC and TPS allows SEC to refuse to purchase the output of TPS's Phase II construction of one 75 MW combustion turbine unit and one 70 MW heat recovery unit. The addition of these units to the existing Phase I construction, one 220 MW combined cycle unit and one 75 MW combustion turbine unit, will bring the capacity of the Hardee/Polk County site up to 440 MW. The companion contract negotiated between TPS and TECO and also allows either of these entities to use the output of this Phase II capacity if SEC declines to do so. The end result of these options is potentially to allow either TECO or TPS to build that additional 145 MW of capacity in 2003 on the Polk/Hardee site when SEC has determined that the construction of that capacity is not in its own best economic interests, that is, when SEC could either construct or purchase the 145 MW of capacity at a price less than that connected with TPS's deal.

In addition, SEC could then come before this body and request that it be allowed to construct 145 MW of its own capacity since the record indicates that SEC would have that need on its own system in 2003. Finally, we note that had there been one hearing in which the TPS proposal was considered in conjunction with the other alternatives to the construction by SEC of 440 MW of combined cycle capacity, our decision would have been to certify a need of 295 MW starting in 1993. This finding is consistent with the facts presented, the controlling statute and our past decisions. For these reasons, we find that "need" in the Siting Act applies only to new capacity.

This interpretation of the law having been made, we also find that SEC has a need for an additional 145 MW of capacity in 2003. Thus, SEC has a total need over the next ten years of approximately 450 MW of capacity: 295 MW in 1993 and an additional 145 MW in 2003.

Adequate electricity at a reasonable cost; Most cost-effective alternative

Turning to the second question: the use of the SEC construction of two 220 MW combined cycle units as the "benchmark" against which the TPS proposal should be measured. At issue here is whether we are precluded by this finding from evaluating any alternative other than the TPS proposal and SEC's construction of two 220 combined cycle units at this That is, whether we can or should time. look at the possibility of either SEC or TECO constructing the proposed 295 MW of capacity in 1993 and entering into capacity sharing arrangements similar to those found in the TPS/SEC and TPS/TECO contracts.

There are several reasons to consider these alternatives. The first is price: if SEC were to build the 295 MW in 1993 under terms identical to that of the TPS contract, it would save \$80 million in 1987 dollars compared to \$57 million in 1987 dollars for the TPS project. TECO could sell its 145 MW of Big Bend 4 and realize its \$90 million savings, most of which is associated with the payments for the Big Bend 4 capacity. SEC would be in a posture to offer levelized payments to TECO, if that were required, since the record indicates SEC intends to seek 100-75% financing for its own That is consistent with construction. the same highly leveraged position that TPS will assume as outlined in its proposal.

The second is that construction of the capacity by SEC (or TECO) avoids the construction of capacity by TPS, an entity which all parties admit is in a jurisdictional limbo with apparently no direct regulatory oversight by anyone. The contracts between SEC/TPS and TPS/TECO are wholesale contracts ultimately approved or rejected by FERC. As with any regulatory body, although FERC does not have the ability to directly modify these agreements, they do exercise considerable persuasion regarding the terms and conditions contained therein. Since the economics of these contracts form the basis for our approval of the TPS proposal, modifications made by FERC after this decision which affect those economics have the potential for distorting the whole approval process.

Third, if the TPS proposal is approved, solely at SEC's option, TECO will be contractually obligated to be a 40%

contributor for the construction costs associated with Phase II. What may be a great deal for SEC may be a terrible deal for TECO in 1998 when the decision to go forward with the next phase needs to be made. Having given our approval of the contracts on the front end, it may be difficult for us to take any meaningful steps to subsequently disallow the payments made by TECO for energy and capacity purchased from the Phase II unit if such payments are made according to the original terms and conditions of the present agreements. Whatever action FERC takes may "trump" any subsequent state action on prudency.

Fourth, the contracts leave open the possibility that the capacity constructed originally by TPS may at some latter date be transferred to either TECO or some other affiliate of TPS. Thus capacity which starts out off-system may end up as part of TECO's ratebase anyway if such a transfer is needed to satisfy Security & Exchange Commission exemption requirements or for tax purposes. That is not to say that that decision will be an imprudent one or a decision detrimental to TECO's ratepayers, merely to point out that TPS's affiliation with TECO makes all aspects of the analysis of these admittedly complicated contracts even more difficult.

There are also good arguments to be made to limit our consideration at this time only to SEC's construction options and the TPS proposal. The most compelling is that neither SEC nor TECO have offered to build 295 MW in 1993 and enter into capacity sharing arrangements. Should we determine that a SEC or TECO should do so, we are essentially requiring a course of action instead of merely approving or rejecting a proposal. Sending SEC back to the negotiating table now may compel them to build their original, higher-priced project just to be done with it. And that result clearly is the least desirable. SEC also argues that if we require it to bid a project and then insist on rewriting the bid, the whole bidding process is undermined. In sum, SEC argues that having agreed to let SEC bid, it is only fair that we should be bound by the results of the bidding process.

We find these arguments to be compelling and thus find that the only two options before us are the construction of two 220 MW combined cycle units by SEC or the TPS proposal to build one 220 MW combined cycle unit and one 75 MW combustion turbine unit in 1993 and one 75 MW combustion turbine unit and a 70 MW heat recovery unit in 2003. However, in limiting our

consideration of SEC's options to just the TPS bid and SEC's own construction, we are not implying that bids will serve to completely relieve electric utilities of pursuing other alternatives, e.g., joint utility projects, non-traditional project financing, etc.

SEC's Having limited our comparison to proposed construction of two 220 MW combined cycle units with an in-service date of 1993 or the TPS proposal to construct one 220 MW combined cycle unit and one 75 MW combustion turbine unit in 1993 and one 75 MW combustion turbine unit and one 70 MW heat recovery unit in 2003, we find that the TPS proposal meet SEC's need in this time frame in the most does cost-effective manner and does provide adequate electricity at a reasonable cost.

We base this finding on the economics inherent in the three wholesale contracts and the ground lease introduced as evidence in this proceeding: the ground lease between Acuera Corporation (a subsidiary of SEC) and TPS; the agreement for sale and purchase of capacity and energy from Big Bend Unit No. 4 between TECO and TPS; the agreement for sale and purchase of capacity and energy between TPS and SEC; and the agreement for sale and purchase of capacity and energy from the Hardee Power Station between TPS and TECO, all dated July 27, 1989. As these contracts are written, Phases I and II of the TPS proposal will result in projected present worth of revenue requirements (PWRR) savings to SEC of approximately \$57 million (1987 \$) compared to SEC's proposed construction and projected PWRR savings of \$90 million (1989 \$) to TECO, most of which is associated with the payments for 145 MW of Big Bend 4 capacity during Phase I (1993-2003).

As noted above, the three contracts for the sale of energy and capacity are all wholesale contracts subject to FERC's Should FERC change any of the terms and conditions approval. "deal" longer of these contracts, the may no be as cost-effective as SEC's own construction proposal. For that reason, we find that this need certification is contingent upon the following conditions. First, that SEC's need for 295 MW of capacity in 1993 be satisfied by the construction by TPS of one 220 combined cycle unit and one 75 MW combustion turbine unit on the Polk/Hardee site with an in-service date of 1993 and the purchase from TPS of 145 MW of capacity from TECO's Big Bend 4 unit from 1993 until 2003 (Phase I). Second, that SEC's need

for an additional 145 MW of capacity in 2003 be satisfied by the construction by TPS of one 70 MW heat recovery unit and one 75 MW combustion turbine unit at the Polk/Hardee site (Phase Third, that the terms and conditions of the wholesale II). contracts are approved by FERC as stated in the July 27, 1989 contracts contained in the record in this proceeding. Fourth, that TECO constructs a transmission line from the Hardee Power Station to its Pebbledale Substation and that SEC constructs transmission lines: one to Florida Power Corporation's two Vandolah Substation and one to Lee County Electric Cooperative's Lee Substation at a cost equal to or less than that found in the record of this proceeding. Fifth, that TPS constructs the natural gas lateral required to tie the plant site into the Florida Gas Transmission (FGT) system at a cost less than that found in the record of this equal to or proceeding. Sixth, that TPS construct a liquid fuels pipeline from Port Manatee to the Hardee Power Station should such construction prove an economic alternative to natural gas or truck and rail deliveries of other fuels.

Because of the potential impact of any changes made by FERC, we will also require that all petitioners in this docket, SEC, TECO and TPS, notify us of any changes to the contracts discussed above so that appropriate action can be taken by this body if warranted. These contingencies are intended to bring this matter back before this body for further consideration if the terms and conditions of the agreements in the record of docket are followed, the this not whatever reason. For example, if TPS does not construct the Phase II units at SEC's request, but at the request of TECO or on its own initiative, TPS will have to file its own need determination request for that capacity. Our decision in this docket does not serve as a certification for the Phase II construction if built to serve anyone other than SEC's 2003 needs.

Therefore, we find, contingent upon the conditions outlined above, that the Phase I and Phase II units proposed by TPS will provide adequate electricity to SEC and Peninsular Florida at a reasonable cost and are the most cost-effective alternative to satisfy SEC's and Peninsular Florida's needs in 1993 and 2003.

System reliability and integrity

The Peninsular Florida generation expansion plans submitted by the Florida Electric Power Coordinating Group (FCG) for the

1989 Planning Hearing (APH) show a need for approximately 1250 MW of combined cycle and combustion turbine capacity to be added in the year 1993. The proposed TPS project consists of one 220 MW combined cycle unit and one 75 MW combustion turbine unit to be constructed by 1993. This is entirely consistent with the SEC plan with respect to both the type and timing of the facility. This compatibility indicates that these units will provide system reliability and integrity to SEC and will be a component in providing system reliability and integrity to Peninsular Florida.

Transmission facilities

The transmission configuration for the TPS project is the same as that for SEC's proposed combined cycle units. Three transmission lines extending from the Hardee Power Station to (i) FPC's Vandolah Substation; (ii) TECO's Pebbledale Substation; and (iii) Lee County Electric Cooperative's Lee Substation will be required to tie the proposed plant into the state's electric grid. Testimony at the December hearings indicated that these transmission interconnections will reduce the state's transmission losses and will provide additional reliability in several areas of Florida. There was no contrary evidence developed in the September hearings, and we find that their construction is reasonable and approve it.

Associated fuel delivery facilities

A natural gas lateral of approximately 47 miles in length will be required to tie the plant site into the FGT gas transmission system. The route of this gas transmission line has been shown in the site certification application. Other delivery facilities include a possible fuel liquid fuels pipeline from Port Manatee to the Polk/Hardee plant site. If constructed, this line could be used for liquid gas products such as butane and/or propane. It is expected that distillate oil will be delivered to the site by truck, although either rail transport or a liquid fuels pipeline could also be employed. In the event coal gasification becomes competitive with other fuels and a coal gasifier were installed at the site, coal could be delivered by rail. Based on the evidence discussed above, we find that these associated fuel delivery facilities are reasonable and we approve them.

Fuel availability

Pursuant to the capacity purchase and sales agreement between SEC and TPS, TPS is required to provide the fuel for both Phase I and Phase II units. While TPS currently does not have a contract for fuel, the record indicates that TPS has been assured by FGT that sufficient supplies of natural gas will be available in order to run the plant. TPS has also included in its site certification the provision for a liquid fuels pipeline from Port Manatee to the Hardee site. This pipeline can carry No. 2 oil, which is a backup fuel for the units, as well as other alternative fuels. Further, it is the intention of TPS to certify the site for coal gasification should that option become economic. Based on this information, it appears that TPS has provided adequate assurances with regard to the availability of fuel for the proposed units.

Determination of need

Based upon the resolution of the above issues, we find that the joint petition of need for Phase I and Phase II of the proposed project should be granted contingent upon the conditions discussed in the body of this order.

Therefore, it is

ORDERED by the Florida Public Service Commission that the petition of Seminole Electric Cooperative, Inc., Tampa Electric Company, and TECO Power Services Corporation for determination of need for Phase I and Phase II of the Hardee Power Station Project is hereby granted subject to the following conditions:

- (1) that SEC's need for 295 MW of capacity in 1993 be satisfied by the construction by TPS of one 220 combined cycle unit and one 75 MW combustion turbine unit on the Polk/Hardee site with an in-service date of 1993 and the purchase from TPS of 145 MW of capacity from TECO's Big Bend 4 unit from 1993 until 2003 (Phase I);
- (2) that SEC's need for an additional 145 MW of capacity in 2003 be satisfied by the construction by TPS of one 70 MW

heat recovery unit and one 75 MW combustion turbine unit at the Polk/Hardee site (Phase II);

- (3) that the terms and conditions of the wholesale contracts are approved by FERC as stated in the July 27, 1989 contracts contained in the record in this proceeding;
- (4) that TECO constructs a transmission line from the Hardee Power Station to its Pebbledale Substation and that SEC constructs two transmission lines: one to Florida Power Corporation's Vandolah Substation and one to Lee County Electric Cooperative's Lee Substation at a cost equal to or less than that found in the record of this proceeding;
- (5) that TPS constructs the natural gas lateral required to tie the plant site into the Florida Gas Transmission system at a cost equal to or less than that found in the record of this proceeding; and
- (6) that TPS construct a liquid fuels pipeline from Port Manatee to the Hardee Power Station should such construction prove an economic alternative to natural gas or truck and rail deliveries of alternative fuels.

It is further

ORDERED that all petitioners in this docket, SEC, TECO and TPS, promptly notify us of any changes to the contracts discussed above so that appropriate action can be taken by this body if warranted. It is further

ORDERED that this order in conjunction with Order No. 20930, issued on March 23, 1989, constitutes the final report required by Section 403.507(1)(b), Florida Statutes, the report concluding that a need exists, within the meaning of Section

403.519, Florida Statutes, for the construction by TECO Power Services Corporation of Phase I and Phase II units at the Polk/Hardee site as conditioned above. It is further

ORDERED that a copy of this order be furnished to the Department of Environmental Regulation, as required by Section 403.507(1)(b), Florida Statutes.

BY ORDER of the Florida Public Service Commission this 22nd day of December , 1989

> STEVE TRIBBLE, Director Division of Records and Reporting

(SEAL)

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by: Kay flipm Chief, Bureau of Records

NOTICE OF JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), 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 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 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 sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting 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.