

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for Determination of )  
Need for the Osprey Energy Center in )  
Polk County by Seminole Electric )  
Cooperative, Inc. and Calpine )  
Construction Finance Company, L.P. )  
\_\_\_\_\_ )

DOCKET NO. 001748-EC

FILED: December 4, 2000

DIRECT TESTIMONY AND EXHIBITS  
OF  
TIMOTHY S. WOODBURY  
ON BEHALF OF  
SEMINOLE ELECTRIC COOPERATIVE, INC.

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FPSC-RECORDS/REPORTING

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2           **DIRECT TESTIMONY AND EXHIBITS OF TIMOTHY S. WOODBURY**  
3           **ON BEHALF OF SEMINOLE ELECTRIC COOPERATIVE, INC.**

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5                           **DECEMBER 4, 2000**

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- Q. Please state your name and business address.**
- A. My name is Timothy S. Woodbury; my business address is 16313 North Dale Mabry Highway, Tampa, Florida 33618.
- I. QUALIFICATIONS**
- Q. What is your current position?**
- A. I am Vice President of Strategic Services at Seminole Electric Cooperative, Inc. ("Seminole"). I have held the title of Vice President at Seminole since December 14, 1995. My responsibilities include, among other things, managerial oversight for activities related to rate design and development, strategic planning, power marketing, and the acquisition and administration of purchased power and transmission service contracts. I was the principal negotiator for Seminole in the development of the Memorandum of Understanding, or MOU, between Calpine Energy Services, L.P. ("Calpine") and Seminole regarding the purchase and sale of capacity and energy from Calpine's Osprey Energy Center ("Osprey Project").
- Q. Please briefly describe your professional and academic background.**
- A. I have over twenty-three years of experience in the electric utility business. Prior to my employment at Seminole in August 1979, I was employed as an economist by Duke Power Company, and I worked in areas of rates and load forecasting. I have

1 a Bachelor of Science in Financial Management and a Master of Arts in Economics  
2 from Clemson University.

3 **Q. Have you previously testified on behalf of Seminole before regulatory agencies?**

4 A. Yes. I have provided written testimony and testified on behalf of Seminole before  
5 the Federal Energy Regulatory Commission ("FERC") and the Florida Public Service  
6 Commission ("FPSC") in a number of different regulatory proceedings concerning  
7 a variety of issues relating to my areas of responsibility at Seminole.

8 **II. PURPOSE OF TESTIMONY**

9 **Q. What is the purpose of your testimony?**

10 A. My testimony has several purposes. First, I will describe Seminole. Second, I will  
11 provide an overview of the planning analyses that Seminole employed to identify its  
12 need for capacity in the 2004 time frame and the competitive process it used to  
13 determine that Calpine's proposal is the best alternative available to satisfy that need.  
14 I will introduce the witnesses for Seminole who conducted those analyses and who  
15 will support Seminole's conclusions. I will explain how the purchase of firm  
16 capacity and energy from Calpine will fit into Seminole's overall system. Finally,  
17 I will generally describe the advantages and benefits to Seminole of the terms and  
18 conditions contained in the MOU (soon to be incorporated in a definitive Power  
19 Purchase Agreement or PPA) between Calpine and Seminole.

20 **Q. Are you sponsoring any exhibits in this case?**

21 A. Yes. I have attached to my testimony Exhibits Nos. \_\_\_\_ (TSW-1)-(TSW-2). I am  
22 also sponsoring Sections A, B, and C (6) of Volume I of the Exhibits to the Joint  
23 Petition as well as Appendix I-C, the Memorandum of Understanding.

24 **III. BACKGROUND**

25 **Q. Please provide a brief overview of Seminole and its Members.**

1 A. Seminole is a non-profit Generation and Transmission Cooperative organized under  
2 Chapter 425 of the Florida Statutes. Each of Seminole's Members is a distribution  
3 cooperative serving end users in Florida. Seminole was incorporated in 1948 to  
4 provide unified representation for its Members in wholesale purchased power  
5 negotiations.

6 **Q. Which distribution cooperatives in Florida are Members of Seminole?**

7 A. Seminole's Members are Central Florida Electric Cooperative ("Central"), Clay  
8 Electric Cooperative ("Clay"), Glades Electric Cooperative ("Glades"), Lee County  
9 Electric Cooperative ("LCEC"), Peace River Electric Cooperative ("Peace River"),  
10 Sumter Electric Cooperative ("Sumter"), Suwannee Valley Electric Cooperative  
11 ("Suwannee"), Talquin Electric Cooperative ("Talquin"), Tri-County Electric  
12 Cooperative ("Tri-County"), and Withlacoochee River Electric Cooperative  
13 ("Withlacoochee"). The Members serve over 680,000 end use consumers in 45  
14 counties throughout the state. The map attached as Exhibit No. \_\_\_ (TSW-1) shows  
15 the location in the state of the areas served by Seminole's Members.

16 **Q. Please describe Seminole's activities on behalf of its Members.**

17 A. Seminole's activities were limited until 1974 when, following the 1973 oil embargo,  
18 its Board of Trustees determined that it should develop independent power supplies  
19 for the Members. In 1975, each Member entered into a long term contract with  
20 Seminole for the purchase of wholesale power ("Wholesale Power Contract" or  
21 "Contract"). The Wholesale Power Contracts require each Member to purchase from  
22 Seminole all of its power requirements for distribution within the State of Florida not  
23 otherwise supplied under pre-existing contracts.

24 **Q. Are there currently any applicable pre-existing contracts?**

1 A. Yes. Four of Seminole's Members have pre-existing contracts with the Southeastern  
2 Power Administration ("SEPA") for a combined 26 MW of capacity. The capacity  
3 supplied from SEPA to these Members represents less than 1% of Seminole's  
4 Members' total capacity requirements.

5 **Q. What is the term of the Wholesale Power Contracts between Seminole and its**  
6 **Members?**

7 A. The Wholesale Power Contracts have an initial term of forty-five (45) years (i.e.,  
8 through May 22, 2020). Thereafter, each Contract may be terminated upon three  
9 years' written notice by the party desiring termination.

10 **Q. Please describe Seminole's current portfolio of power supply resources.**

11 A. Seminole constructed and operates two nominally rated 650 MW coal-fired  
12 generating units ("Seminole Plant") in Putnam County, Florida. These units supply  
13 nearly 75% of the Members' energy requirements. The first of the two units began  
14 commercial operation on January 31, 1984; Unit No. 2 began commercial operation  
15 on December 31, 1984. Seminole also owns a 1.6994% (approximately 15 MW)  
16 undivided interest in Crystal River Unit No. 3 ("CR3"), an 890 MW nuclear power  
17 plant operated by Florida Power Corporation ("FPC"). The Seminole Plant is  
18 connected to the Florida bulk power grid at three locations through five 230 kilovolt  
19 ("kV") circuits and associated facilities. From these interconnections, Seminole  
20 transmits the output of the Seminole Plant to the Member delivery points and to other  
21 purchasers through the transmission systems of FPC and Florida Power & Light  
22 Company ("FPL"). The Seminole Plant is also tied directly to approximately 300  
23 MW of Member load through Seminole's own 230 kV transmission facilities.

24 Seminole also has a contract with Siemens-Westinghouse and Overland  
25 Contracting to construct a new combined cycle facility ("Payne Creek") to be located

1 in Hardee County. Payne Creek, a 500 MW nominally rated facility, has an expected  
2 in-service date of January 2002.

3 In addition, Seminole has numerous short and intermediate term purchased  
4 power contracts with other entities in the state which provide for intermediate and  
5 peaking needs as well as reserves. Exhibit No. \_\_\_\_\_ (TSW-2) provides a summary  
6 of these purchased power resources.

7 **Q. Please describe Seminole's electrical interconnections and transmission**  
8 **facilities.**

9 A. Seminole owns 52 miles of 230 kV double circuit transmission line from the  
10 Seminole Plant to the Silver Springs North Switching Station, eight miles of 230 kV  
11 double circuit line from the Seminole Plant to FPL's Rice Substation, and nine miles  
12 of 230 kV double circuit line from the Hardee Power Station ("HPS") to FPC's  
13 Vandolah Substation. Seminole also owns 78 miles of 230 kV single circuit  
14 transmission line from the HPS to Lee County Electric Cooperative's Lee Substation  
15 (which is also an interconnection with FPL), and 63 miles of 230 kV single circuit  
16 line from the Seminole Plant to an interconnection with Jacksonville Electric  
17 Authority at the Clay-Duval County line. Seminole jointly owns, with FPC, two tie  
18 lines from Silver Springs North to FPC's Silver Springs Substation. Seminole also  
19 owns fourteen 69 kV transmission lines, which total 143.2 miles in length.

20 **Q. Is Seminole represented on the Florida Reliability Coordinating Council?**

21 A. Yes, Seminole participates actively within the Florida Reliability Coordinating  
22 Council.

23 **Q. Please elaborate on the relationship between Seminole and its Members.**

24 A. Seminole serves the electric service needs of its Members, all of which are engaged  
25 in the sale of electricity to end use customers who are, in turn, the Members'

1           respective owners/members. Therefore, like Seminole, each Member that Seminole  
2           serves is owned by and is answerable to its owners/customers. Seminole's governing  
3           Board of Trustees consists of representatives from the boards of the Members as well  
4           as each Member's general manager. Seminole's Board of Trustees consists of two  
5           voting trustees and one alternate from each of the ten Members. In short, the  
6           cooperative form of business is very different from that of an investor-owned utility.  
7           Investor-owned utilities must balance the often competing interests of shareholder  
8           and customer. In the case of cooperatives such as Seminole, customers' and owners'  
9           interests are one and the same.

10       **Q.    Please elaborate on the areas served by Seminole's Members.**

11       A.    Seminole's Members provide service to approximately half of peninsular Florida's  
12           land area. As a result, Seminole's overall service area experiences a variety of  
13           geographic and weather conditions that provide for a diverse mix of economic  
14           activity and demographic characteristics. All end use consumer classes have shown  
15           strong growth. Seminole's overall growth rate has consistently exceeded the growth  
16           experienced by most, if not all, of the other utilities in Florida. Over 90% of the  
17           combined end use consumers served by Seminole's Members are residential. This  
18           class of consumers accounts for over 70% of the Members' total energy  
19           requirements.

20       **IV.   SEMINOLE'S PLANNING PROCESS**

21       **Q.    Generally describe Seminole's planning process.**

22       A.    Our planning process involves an examination of current data and of assumptions  
23           about future conditions, coupled with an analysis of how potential additions would  
24           mesh with the existing system under those future conditions. Two important inputs  
25           to the process are the assumptions about system load growth and future fuel prices.

1 In this proceeding, Bob Woodall will testify concerning the fuel price forecast that  
2 was employed in the analysis that led Seminole to identify a need for capacity in  
3 2004. Bill Lawton will address the methodology that Seminole and its Members  
4 used to project future peak demand and energy requirements, and will report the  
5 results of the load growth study.

6 Given assumptions about load growth, energy consumption, fuel prices, and  
7 the known capabilities of current resources, it is possible to model or simulate the  
8 system over time, and to measure both the reliability of the system and the cost of  
9 providing service associated with alternative power supply options. In this way,  
10 Seminole determines when load growth, the expiration of contracts, plant  
11 retirements, and/or other changes will overcome the ability of the system to meet  
12 Members' needs with an acceptable level of reliability, and Seminole identifies the  
13 appropriate type, size, and timing of the next capacity addition. Garl Zimmerman  
14 will describe in his testimony the analysis that Seminole made of the capabilities of  
15 existing resources to meet future requirements. He will quantify the need that the  
16 analysis identified. Finally, he will describe in detail the Request for Proposals  
17 ("RFP") that Seminole issued, the responses obtained, and the evaluation of  
18 responses that led Seminole to conclude that the Calpine Osprey Project best meets  
19 Seminole's needs.

20 **Q. Earlier you identified the power purchase agreements that comprise a portion**  
21 **of Seminole's existing supply portfolio. When Seminole gauges the capabilities**  
22 **of existing resources during its planning exercises, do any of these contracts**  
23 **present special considerations?**

24 A. Yes. Unlike the more typical unit power or system power transactions, which  
25 provide the purchaser with blocks of available power, the partial requirements service



1 that Seminole receives from FPC and our contractual arrangement with TECO Power  
2 Services for the purchase of capacity from the Hardee Power Station both have some  
3 unique features. Those features were designed to, and do, serve valuable purposes  
4 specific to the needs of Seminole's system. However, because they are different from  
5 the typical power supply arrangement, they also add a degree of complexity to our  
6 planning efforts.

7 **Q. Please provide an overview of the partial requirements service that Seminole**  
8 **receives from FPC and explain how it affects the planning of Seminole's system.**

9 A. In 1983, Seminole executed a long term contract covering partial requirements  
10 ("PR") and transmission service with FPC ("Agreement"). The Agreement has an  
11 initial term through 2013. The Agreement obligates Seminole to supply the  
12 Members' aggregate load in FPC's control area, up to a specified MW commitment  
13 level ("Capacity Commitment"), using resources it owns or otherwise acquires. FPC,  
14 in turn, is obligated to supply Seminole's load requirements in excess of this  
15 commitment level from its system resources under PR rates contained in the  
16 Agreement. Said differently, in contrast to the more typical "block of power"  
17 arrangement, under the PR contract FPC provides a *load following* service.  
18 Consequently, when planning the system, Seminole does not plan to meet the peak  
19 load requirements of Members located in FPC's control area. Under the Agreement,  
20 Seminole has the ability, with three years' notice, to increase the Capacity  
21 Commitment by 150 MW; by giving five years' notice, increase the commitment  
22 level by 470 MW; and, by giving seven years' notice, increase the Capacity  
23 Commitment in any future calendar year without limitation. Accordingly, in its  
24 planning, Seminole must analyze the most cost-effective manner to serve its Capacity  
25 Commitment in FPC's control area. It must also consider the most cost-effective

1 Capacity Commitment level by comparing the differences between the cost of  
2 continuing PR purchases and the cost of other alternative power supply resources,  
3 either owned or purchased.

4 **Q. Please describe the principal features of Seminole's contractual arrangement**  
5 **with TECO Power Services.**

6 A. Under this contract Seminole has "first call" on 295 MW of capacity from the Hardee  
7 Power Station when Seminole experiences an outage (partial or full) of one of its  
8 coal-fired base load units, Seminole 1 and Seminole 2, or of its Crystal River 3  
9 resource.

10 **Q. Why is this feature novel for planning purposes?**

11 A. Under a typical purchase of system or unit power, the availability of the purchased  
12 capacity is limited only by the extent to which the source of the power is affected by  
13 outages on the seller's applicable resource(s). In the case of the Hardee Power  
14 Station purchase, the limitation is different. With regard to serving its Members'  
15 needs, the Hardee Power Station capacity is available to Seminole as a matter of  
16 contractual right, on a first call basis, when *Seminole* experiences a planned or forced  
17 outage or derating of its Seminole Plant or Crystal River 3. In other words, the  
18 contract with TECO Power Services fulfills a specific need, but there are limitations  
19 on the use of the resource. The constraint is, of course, well understood, but it is not  
20 as easily expressed or quantified in certain steps of the planning analysis. In his  
21 testimony, Garl Zimmerman will elaborate on how Seminole considers these more  
22 unusual contractual features in the planning process.

23 **V. SELECTION PROCESS**

24 **Q. Does Seminole typically employ a competitive procurement process?**

1 A. Yes. Although Seminole is not subject to this Commission's RFP rule, for years  
2 Seminole has solicited and evaluated proposals from others prior to selecting a  
3 specific capacity addition. Seminole views such a competitive process as the best  
4 way to secure the most economical source of power and also to reduce risk. In fact,  
5 to my knowledge, the RFP that Seminole issued in 1988, prior to entering a contract  
6 with TECO Power Services, was the first of its kind in Florida. Seminole has been  
7 committed to a competitive power supply procurement process since that time, and  
8 it has served Seminole's Members' interests well.

9 **VI. OVERVIEW OF THE MEMORANDUM OF UNDERSTANDING**

10 **Q. What were Seminole's objectives in negotiating the MOU with Calpine?**

11 A. Very simply, our objective was to find a reliable source of capacity and energy that  
12 provided economic and strategic advantages relative to other available options.

13 **Q. Please describe the MOU.**

14 A. The MOU is an interim document that serves to memorialize the fundamental  
15 commercial terms to which Calpine and Seminole have agreed. Within the MOU,  
16 the parties have agreed to negotiate in good faith the terms of a definitive agreement.  
17 That definitive agreement will incorporate the items in the MOU.

18 Both parties to the MOU regard the commercial details as confidential and  
19 proprietary. (The complete MOU has been submitted to the Commission under a  
20 claim of confidentiality.) However, a general description will convey the manner in  
21 which Seminole achieved its objectives. The MOU contains specific pricing  
22 provisions. The terms require Calpine to furnish the firm capacity to Seminole at  
23 very high levels of availability. Energy will be delivered to Seminole when called  
24 upon by Seminole subject to specific scheduling provisions. The MOU provides for

1 the purchase and sale of 350 MW of firm capacity and associated energy during the  
2 period 2004-2020, subject to periodic contractual "reopeners."

3 **Q. Given these reopener provisions, what is the minimum term over which the**  
4 **agreement might remain in effect?**

5 A. The minimum term is five years from the later of the commercial operation date of  
6 the Osprey unit, and June 1, 2004.

7 **Q. Does Seminole have options to acquire greater amounts of capacity than the**  
8 **initially specified 350 MW amount?**

9 A. Yes. In addition to the 350 MW of firm capacity, Seminole has the right to acquire  
10 optional firm capacity in any amount, up to the full remaining generating capability  
11 of Calpine's Osprey unit, to the extent Calpine has not sold such capacity on a firm  
12 basis to another party at the time Seminole exercises its option. Seminole must give  
13 notice of its decision to exercise its option to purchase such additional capacity 6  
14 months ahead of time. The optional firm capacity designated in this notice by  
15 Seminole would then be secured for Seminole in twelve month increments.

16 **VII. STRATEGIC CONSIDERATIONS**

17 **Q. Please identify the strategic advantages to which you referred earlier.**

18 A. First, by contracting with Calpine, Seminole is able to secure 350 MW of needed  
19 firm capacity and associated energy at a cost that reflects the economies of scale  
20 associated with a new 500 MW class, efficient combined cycle facility. Second, the  
21 "reopener" provision enables Seminole to renegotiate, and if such negotiations are,  
22 in Seminole's view, unsuccessful, terminate the Agreement after any 60-month  
23 period--a valuable advantage over any self-build option. By acquiring 350 MW,  
24 Seminole will gain the flexibility of either terminating (with advance notice of three  
25 years) a more expensive purchase from FPC, or of maintaining (perhaps at a reduced

1 level) the purchase from FPC as an additional contribution to reliability and a hedge  
2 against unforeseen contingencies. The ability to acquire "optional firm capacity"  
3 further enhances Seminole's flexibility to meet changes in circumstances over time.  
4 Taking into account the committed capacity and the reserved firm capacity option  
5 provision, Seminole has negotiated the ability to avail itself of the full capacity of the  
6 Osprey Project, subject only to the possibility of firm commitments to others made  
7 prior to Seminole's exercise of its option. Under the terms to which Calpine and  
8 Seminole have agreed, Seminole may elect to purchase energy from the Osprey  
9 project and resell it in the wholesale market. This ability provides Seminole with a  
10 potential opportunity to reduce its Members' revenue requirements by realizing  
11 margins on off-system sales during periods when more economical energy is  
12 available to Seminole or when its Members' requirements do not support the full  
13 utilization of its rights to the Osprey unit. Finally, unlike some of the other options--  
14 including Seminole's self-build option--Calpine intends to bring the Osprey unit on  
15 line in advance of the time when Seminole will require the capacity to maintain  
16 standards of reliability. For that reason, the arrangements with Calpine reduce the  
17 risk that the selected capacity may not be in place in the time frame required by  
18 Seminole.

19 **Q. Please summarize your direct testimony.**

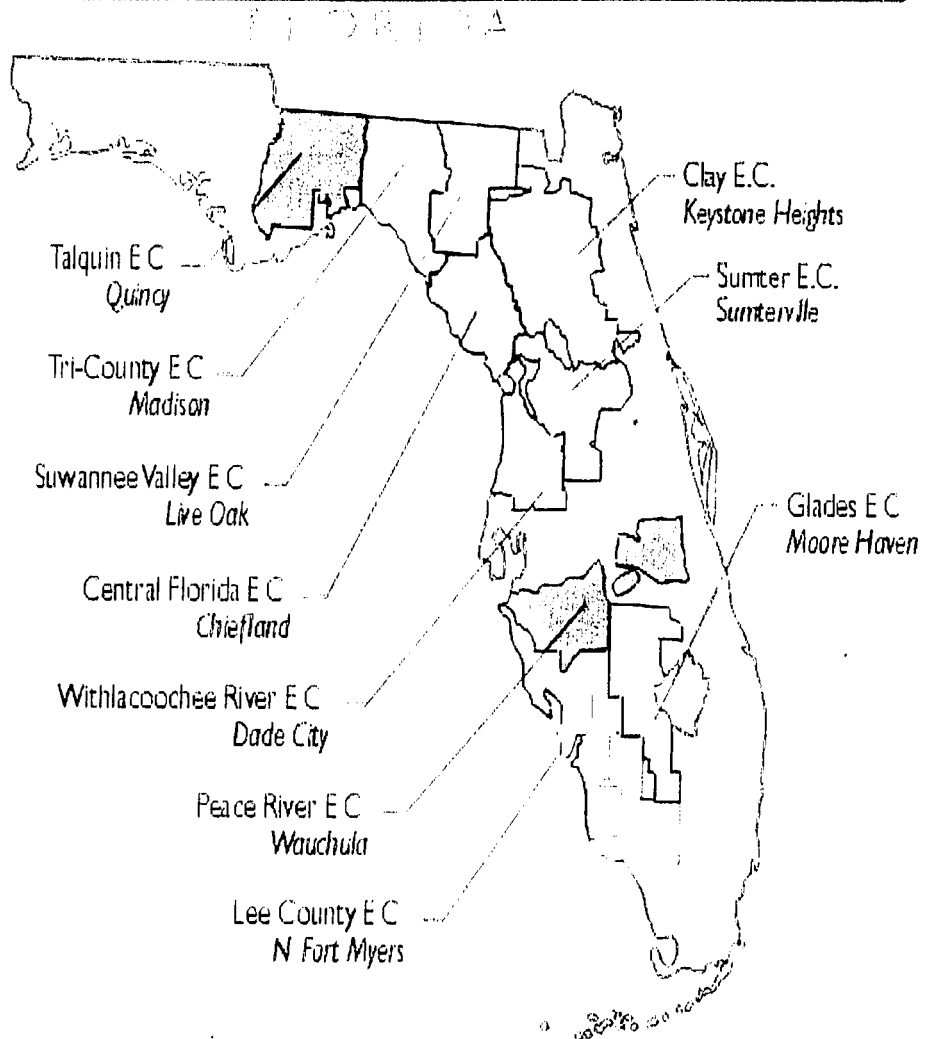
20 A. Seminole's system is unique in Florida. The arrangements between Calpine and  
21 Seminole are designed to meet the needs of that system well. In addition to being the  
22 lowest cost alternative available to Seminole, Calpine and Seminole have agreed to  
23 non-price terms and conditions that provide valuable strategic advantages to  
24 Seminole.

25 **Q. Does this conclude your direct testimony?**

26 A. Yes.

Docket No. \_\_\_\_\_  
Witness: Timothy S. Woodbury  
Exhibit No. \_\_\_\_\_ (TSW-1)

# Seminole's Member Distribution Cooperatives



SEMINOLE'S PURCHASED POWER RESOURCES <sup>1</sup>		
Resource	MW	Term
FPC Partial Requirements (FPC supplies Seminole's load requirements in the FPC control area that are above an annually defined commitment level (1,327 MW for 2001) that is supplied by Seminole resources.)		Initial term through 2013 <sup>2</sup>
1995 FPC Agreement - Structured System Capacity	300	Through December 31, 2001
System Peaking Capacity (305 MW in 2000, 455 MW in 2001 & 300 MW in 2002)	up to 455	Through December 31, 2002
System Intermediate Capacity	150	Through December 31, 2013 <sup>3</sup>
TECO Power Service Agreement (Entitlement to 145 MW (with annual MWh limitations) of capacity from Tampa Electric's Big Bend Unit No. 4 facility.)	145	Through December 31, 2002
Orlando Utilities Commission Capacity	75	Through May 31, 2004
JEA Capacity Purchase	63	Through May 21, 2004
Lee County Resource Recovery Facility	35	Initial term through 11/30/04 <sup>4</sup>
Reliant Energy Power Generation Capacity	364	12/01/01 through 12/31/06
Constellation Power Development Capacity (364 MW for 12/01/02 through 5/01/03 period)	546	12/01/02 through 12/31/09

<sup>1</sup> Excludes seasonal capacity purchases.

<sup>2</sup> The partial requirements service from FPC may be terminated by either party giving notice in any calendar year after calendar year 2007 that it wishes to terminate the agreement at end of the fifth future calendar year (i.e., notice in 2008 to terminate at end of 2013).

<sup>3</sup> FPC System Intermediate Capacity may be terminated or reduced before 12/31/13 by Seminole upon three years notice to FPC.

<sup>4</sup> The Lee County Resource Recovery Agreement's obligations will continue through 12/31/15 with provisions to alter the arrangement after the initial period.

TECO Power Service Agreement (Provides backup power for Seminole's Units 1 & 2 and Seminole's Crystal River 3 entitlement)	362	Through December 31, 2012
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