

060220-EL

**SEMINOLE ELECTRIC COOPERATIVE, INC.**

**Petition to Determine Need for**

**Electric Power Plant**

**March 2006**

**Direct Testimony of:**

**Timothy S. Woodbury**



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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                   **SEMINOLE ELECTRIC COOPERATIVE, INC.**

3                   **DIRECT TESTIMONY OF TIMOTHY S. WOODBURY**

4                   **DOCKET NO. 060220-EC**

5                   **MARCH 10, 2006**

6  
7   **Q.     Please state your name and business address.**

8   A.     My name is Timothy S. Woodbury. My business address is 16313 North Dale Mabry  
9           Highway, Tampa Florida 33688-2000.

10  
11 **Q.     By whom are you employed and what is your position?**

12 A.     I am employed by Seminole Electric Cooperative, Inc. (Seminole) as Senior Vice  
13           President and Chief Strategic Officer.

14  
15 **Q.     Please describe your duties and responsibilities in that position.**

16 A.     My responsibilities include managerial oversight of activities related to strategic  
17           planning, rate design and development, power supply planning, power marketing,  
18           load forecasting, regulatory affairs, and purchased power acquisition and contract  
19           administration.

20  
21 **Q.     Please describe your educational background and business experience.**

22 A.     I have over twenty-eight years of experience in the electric utility industry. Prior to  
23           my employment at Seminole in August 1979, I was employed as an economist by

1 Duke Power Company working in the areas of both rates and load forecasting. I have  
2 a Bachelor of Science in Financial Management and a Master of Arts in Economics  
3 from Clemson University.  
4

5 **Q. Have you previously testified before this Commission?**

6 A. Yes. I have provided written testimony and testified on behalf of Seminole before  
7 both the Florida Public Service Commission (Commission or FPSC) and the Federal  
8 Energy Regulatory Commission (FERC) in a number of different regulatory  
9 proceedings concerning a variety of issues relating to my areas of responsibility.  
10 Most recently, I testified in FPSC Docket No. 001748 relating to the determination of  
11 need for the Osprey Energy Center.  
12

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

14 A. In my testimony, I will describe Seminole and its Members and provide an overview  
15 of the case supporting Seminole's request for a determination of need for Seminole  
16 Generating Station Unit 3 (SGS Unit 3), a proposed 750 MW supercritical pulverized  
17 coal unit. I will also introduce Seminole's witnesses and the Need Study sponsored  
18 by these witnesses. Finally, I will address the adverse consequences that will occur if  
19 SGS Unit 3 is not granted an affirmative determination of need.

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

2 A. Yes. I sponsor the following six exhibits, which are attached to my testimony:

3 Exhibit TSW-1 – Seminole's Member Distribution Cooperatives

4 Exhibit TSW-2 – Seminole's 2006 Generation Resources

5 Exhibit TSW-3 – Seminole's Power Purchase Contracts With Renewable Resources

6 Exhibit TSW-4 – Seminole's Power Purchase Contracts

7 Exhibit TSW-5 – Seminole's Interconnections

8 Exhibit TSW-6 – Seminole's Reliance Upon Natural Gas Generation

9

10 **Q. Are you sponsoring any part of the Need Study in this proceeding?**

11 A. Yes. I sponsor Sections I, II, III and X and co-sponsor Section IX. I also sponsor  
12 Appendices A and B to the Need Study.

13

14 **I. SEMINOLE REQUESTS A DETERMINATION OF NEED FOR SGS UNIT 3.**

15 **Q. Please summarize the relief Seminole requests in this proceeding.**

16 A. Seminole asks the Commission for an affirmative determination of need for SGS Unit  
17 3. SGS Unit 3 is a 750 MW supercritical pulverized coal unit. It is anticipated that  
18 SGS Unit 3 will go into commercial operation in May 2012 and will be fueled by a  
19 combination of coal and petroleum coke. SGS Unit 3 will be constructed on an  
20 existing Seminole generation site, sharing common facilities currently serving SGS  
21 Units 1 and 2, two pulverized coal units located in Putnam County, Florida. The  
22 projected cost of SGS Unit 3, which is developed in more detail in the testimony of  
23 Mr. Klover and Mr. Opalinski, will be approximately \$1.4 billion. The project will

1 be financed by loans guaranteed by the Rural Utilities Service (RUS) in conjunction  
2 with any financing available to Seminole through the issuance of pollution control  
3 bonds. As Mr. Mahaffey addresses in detail, SGS Unit 3 is, by a wide margin, the  
4 most cost-effective option available to meet the reliability and economic needs of  
5 Seminole and its Members.

6  
7 Seminole asks the Commission to find, based on the evidence submitted, that SGS  
8 Unit 3 satisfies all the legal requirements for an affirmative determination of need.  
9 Such an affirmative determination of need would then be used by Seminole in its  
10 Siting Application under the Florida Electric Power Plant Siting Act (Siting Act),  
11 which is currently pending.

12  
13 **II. SEMINOLE'S WITNESSES**

14 **Q. Please summarize Seminole's direct case.**

15 A. In support of its request for an affirmative determination of need for SGS Unit 3,  
16 Seminole has filed a detailed Petition setting forth its need for SGS Unit 3 and  
17 addressing how SGS Unit 3 satisfies the statutory criteria for a determination of need.  
18 Seminole has also filed a detailed Need Study, with supporting appendices, setting  
19 forth Seminole's need for SGS Unit 3. Seminole is also filing extensive direct  
20 testimony supporting the need for SGS Unit 3 and showing that SGS Unit 3 meets the  
21 criteria to be considered in assessing a determination of need.

1 Q. Please introduce Seminole's witnesses and the areas they address in their  
2 testimony.

3 A. Seminole is sponsoring the direct testimony and exhibits of seven witnesses. The  
4 names and areas of responsibility for each of the other six witnesses are as follows:

5

6 Michael Opalinski, Seminole's Vice President of Technical Services, describes SGS  
7 Unit 3, including its site, technology, related facilities, operating assumptions and  
8 estimated total cost. He also addresses Seminole's experience in the construction and  
9 operation of pulverized coal units.

10

11 Richard Klover, the Burns & McDonnell Project Manager for SGS Unit 3, provides a  
12 detailed description of SGS Unit 3, the technologies incorporated in its design and its  
13 estimated design cost. Mr. Klover also presents the feasibility studies and technology  
14 assessment prepared by Burns & McDonnell for Seminole, including its assessment  
15 of other generation technologies, and addresses the experience of Burns &  
16 McDonnell.

17

18 Wm. Jack Reid, Seminole's Director of Fuel Supply, presents the fuel supply and  
19 transportation plans for SGS Unit 3 as well as the fuel forecasts used in the analyses  
20 that examined the various options for meeting Seminole's base load capacity need in  
21 2012.

22

1 William (Bill) Lawton, Seminole's Staff Economist, presents the Member load  
2 forecast used in the identification of SGS Unit 3 as the most cost-effective alternative  
3 available to meet the reliability and economic needs of Seminole and its Members.  
4 He also addresses why there is not sufficient conservation and DSM available to  
5 avoid SGS Unit 3.

6  
7 Trudy Novak, Seminole's Director of Pricing & Bulk Power Contracts, addresses  
8 Seminole's experience in conducting capacity solicitations to meet forecasted needs,  
9 the April 2004 Request for Proposals (RFP) Seminole conducted to address its  
10 2009/2012 need for base load capacity, the bids Seminole received in response to its  
11 RFP, the technical and commercial screening of such bids in conformance with the  
12 requirements of the RFP, and other purchased power options considered by Seminole.

13  
14 Lane Mahaffey, Seminole's Director of Corporate Planning, addresses Seminole's  
15 power supply planning process, the reliability and need assessment Seminole  
16 performed to identify its 2012 need for base load capacity, Seminole's economic  
17 evaluation of self-built and purchased power options, the risk assessment performed  
18 for Seminole comparing the relative risk of coal-fired and gas-fired options, why SGS  
19 Unit 3 is the best, most cost-effective option to meet the reliability and economic  
20 needs of Seminole and its Members, and the adverse consequences if SGS Unit 3 is  
21 not granted an affirmative determination of need.

1 Each of Seminole's witnesses sponsors portions of the Need Study and Need Study  
2 Appendices. The portions they sponsor are addressed in each witness' testimony.

3  
4 **III. SEMINOLE AND ITS MEMBERS**

5 **Q. Please describe Seminole and its Members.**

6 A. Seminole is a not-for-profit rural electric cooperative organized under Chapter 425,  
7 Florida Statutes. Seminole is a generation and transmission cooperative that only  
8 makes wholesale sales; it does not make retail sales.

9  
10 Seminole's ten Members are also rural electric cooperatives organized under Chapter  
11 425, Florida Statutes, and each serves retail end use consumers in Florida. The  
12 Members of Seminole are: Central Florida Electric Cooperative, Inc., Clay Electric  
13 Cooperative, Inc., Glades Electric Cooperative, Inc., Lee County Electric  
14 Cooperative, Inc., Peace River Electric Cooperative, Inc., Sumter Electric  
15 Cooperative, Inc., Suwannee Valley Electric Cooperative, Inc., Talquin Electric  
16 Cooperative, Inc., Tri-County Electric Cooperative, Inc., and Withlacoochee River  
17 Electric Cooperative, Inc. The areas in which Seminole's Members serve are shown  
18 in Exhibit TSW-1.

19  
20 **Q. Please describe the governance of Seminole.**

21 A. Seminole is owned and governed by its Members. Each of its ten Members has two  
22 voting representatives and one alternate representative on Seminole's Board of



1 Trustees (Board). The General Manager of Seminole serves at the pleasure of the  
2 Board.

3  
4 Seminole employs a comprehensive strategic planning process with Board  
5 involvement. All major strategic policy decisions, such as building new generation  
6 and entering into purchased power contracts, are made by the Seminole Board.  
7 Seminole is not involved in the management of its Member systems.

8  
9 Q. **Please describe Seminole's purpose.**

10 A. Seminole exists to provide reliable electric service at competitive rates to its  
11 Members. Seminole was organized in 1948, but remained relatively inactive until  
12 shortly after the 1973 oil embargo. In 1974, Seminole's Board determined that  
13 Seminole should develop independent power supplies for its Members. In 1975, each  
14 Member entered into a long term "All Requirements" contract with Seminole for the  
15 purchase of wholesale power (Wholesale Power Contract). These Wholesale Power  
16 Contracts require each Member to purchase from Seminole all of its power  
17 requirements for distribution within the State of Florida not otherwise supplied under  
18 pre-existing contracts. Four of Seminole's Members then had, and continue to have,  
19 pre-existing contracts with the Southeastern Power Administration (SEPA) for a  
20 combined 26 MW of capacity.

1 **Q. Do the terms of the Wholesale Power Contracts affect Seminole's need for**  
2 **capacity?**

3 A. Yes. The Wholesale Power Contracts establish Seminole's obligations regarding  
4 electric service to its Members. The Wholesale Power Contracts, as originally  
5 executed, had an initial term of forty-five years (i.e., until July 30, 2020), and  
6 provided that any party could terminate the agreement effective any time after the  
7 initial term with a three year written notice. In 2004, amendments to the Wholesale  
8 Power Contracts were executed between Seminole and seven of Seminole's ten  
9 Members, representing approximately 55% of Seminole's current load, extending the  
10 term of those Wholesale Power Contracts by an additional 25 years, through 2045.  
11 The amended Wholesale Power Contracts may not be terminated prior to the end of  
12 the extended term (i.e., December 31, 2045). These amended Wholesale Power  
13 Contracts have been approved by the RUS.

14  
15 **Q. What is the status of discussions with the remaining three Members regarding**  
16 **Wholesale Power Contract extensions?**

17 A. Discussions continue between Seminole and its three remaining Members. These  
18 discussions could result in similar contract term extensions for some or all of these  
19 Members. Indeed, two of those three Members have committed to extend their  
20 respective Wholesale Power Contracts through the year 2045 in exchange for  
21 Seminole agreeing to provide an option for Members to purchase a portion of their  
22 capacity and energy requirements after the year 2020 from power suppliers other than  
23 Seminole. A Member exercising such an option would still be obligated to pay its

1 allocated share of the fixed costs associated with any power supply resource that  
2 would otherwise be left stranded by the Member's having executed the option. The  
3 parties are currently working on an amendment to effectuate such a result. The  
4 amendment will be subject to RUS approval.

5  
6 **Q. Does this uncertainty regarding whether the three remaining Members will**  
7 **participate in Seminole after the year 2020 affect Seminole's need for SGS Unit 3**  
8 **beginning in 2012?**

9 A. No. Even in the most conservative post-2020 Member load scenario (i.e., none of the  
10 three remaining Members extending the Wholesale Power Contract), SGS Unit 3 is  
11 the most cost-effective alternative for meeting Seminole's base load requirements  
12 beginning in 2012. This result will be demonstrated by Mr. Mahaffey, who will  
13 describe how Seminole's economic studies were based on the most conservative load  
14 scenario wherein only seven Members remain under contract after 2020.

15  
16 **Q. Please summarize Seminole's recent and projected growth.**

17 A. As is addressed in detail in Mr. Lawton's testimony, the Seminole system has  
18 experienced, and is forecast to continue to experience, some of the fastest growth in  
19 the State of Florida. In 2004, Seminole's Members had 805,085 member/consumers  
20 who used 15,348 GWh of energy and who placed a coincident system peak demand  
21 on the Seminole system of 3,364 MW. Seminole's highest peak demand on record  
22 occurred on February 14, 2006 at 4,113 MW (estimated). Over the past five years,  
23 the collective member/consumers of Seminole's Members have grown by 3.1% per

1 year and are projected to grow by 2.8% per year over the next ten years. The energy  
2 consumption for these member/consumers grew by 5.2% per year over the last five  
3 years and is projected to grow by 4.1% per year over the next ten years. The  
4 coincident winter peak demand on Seminole's system has grown by 3.8% per year  
5 over the last five years and is projected to grow by 4.1% per year over the next ten  
6 years. These historic and forecasted energy and peak demand values reflect the  
7 impact of conservation and DSM programs offered by Seminole's Members.  
8

9 **Q. How does Seminole meet the power supply needs of its Members and their  
10 member/consumers?**

11 A. Seminole meets the power supply needs of its Members and their member/consumers  
12 with Seminole-owned generation in combination with purchased power contracts  
13 with independent power producers, investor-owned and municipal utilities, and  
14 renewable energy providers. Over half of Seminole's Members' capacity  
15 requirements are currently supplied through purchased power agreements, as is  
16 shown graphically on Exhibit TSW-2.  
17

18 **Q. Please describe the generating units Seminole owns to meet the requirements of  
19 its Members and their member/consumers.**

20 A. Seminole's existing owned generating resources are located at three generating sites.  
21 Seminole Generating Station Units 1 & 2 are 650 MW class pulverized coal units  
22 located in Putnam County near Palatka, Florida. SGS Unit 1 began commercial  
23 operation on February 1, 1984. SGS Unit 2 began commercial operation on

1 December 31, 1984. Payne Creek Generating Station is a 500 MW class gas  
2 combined cycle unit located in Hardee County, Florida. It began commercial  
3 operation on January 1, 2002. The Payne Creek Generating Station is also the site for  
4 a scheduled addition of approximately 300 MW of peaking capacity (five gas turbines  
5 scheduled for commercial operation in December 2006). Seminole also owns a 15  
6 MW share of Progress Energy Florida's (PEF) Crystal River 3 nuclear generating  
7 unit, which is operated by PEF. More detailed information regarding Seminole's  
8 existing owned generating resources is presented in Appendix A of the Need Study.

9  
10 **Q. Please summarize the purchased power contracts Seminole has with renewable**  
11 **resources.**

12 A. Seminole has contracts to purchase firm capacity and energy from three renewable  
13 resource facilities: Lee County's Resource Recovery Facility, DG Telogia Power,  
14 LLC., and Bio-Energy Partners. These purchases currently total approximately 54  
15 MW. Seminole has focused upon procurement of renewable resources that are cost-  
16 competitive and that provide a reliable source of supply of capacity and energy. A  
17 summary of these firm capacity and energy agreements with renewable resource  
18 facilities is presented in Exhibit TSW-3.

19  
20 **Q. What other purchased power contracts does Seminole have?**

21 A. In addition to the three contracts for purchases from renewable resources, Seminole  
22 has contracts for the purchase of firm capacity from PEF, Oleander Power Project,  
23 Limited Partnership, Reliant Energy Florida, LLC., Calpine Construction Finance

1 Company, L.P., Hardee Power Partners Limited, and the City of Gainesville.  
2 Seminole also has agreements in place to purchase excess capacity from load  
3 management generation of its Members. A summary of Seminole's long-term firm  
4 capacity purchases is shown on Exhibit TSW-4.

5  
6 **Q. Please describe the transmission facilities and transmission service agreements  
7 Seminole employs to serve its Members and their member/consumers.**

8 A. Seminole owns approximately 278 circuit miles of 230 kV transmission lines and  
9 fourteen 69 kV lines totaling 140 miles in length. In addition, Seminole receives firm  
10 transmission service from Florida Power & Light Company (FPL) and PEF. These  
11 transmission service agreements give Seminole the contractual right to deliver  
12 capacity and energy from Seminole's power supply resources over the FPL and PEF  
13 transmission systems for the purpose of serving Member load requirements.

14  
15 **Q. Please describe the interconnections that Seminole has with other operating  
16 systems within Florida.**

17 A. Seminole has fifteen 230 kV transmission interconnections with the following  
18 utilities: FPL, PEF, Tampa Electric Company (TECO), Hardee Power Partners  
19 Limited, JEA, Lee County Electric Cooperative, and The City of Ocala. Each of  
20 those interconnection points is identified on Exhibit TSW-5.

1 **Q Please summarize Seminole's unmet capacity need for 2012.**

2 A. As explained in detail by Mr. Mahaffey, Seminole determined, based upon its  
3 forecasted load, reliability criteria and committed resources, that it needed over 1200  
4 MW of additional capacity resources by 2012. Of this amount, Seminole determined  
5 that 750 MW should be base load capacity, and that such capacity should be coal  
6 generation. This additional base load capacity is necessary by 2012 not only to meet  
7 system reliability criteria, but also for Members to be able to provide adequate  
8 electricity at a reasonable cost to their member/consumers. In addition, Seminole  
9 and its Members need SGS Unit 3 to avoid an undue reliance upon gas-fired  
10 generation in 2012 and beyond.

11  
12 **Q. Which utilities in Florida would be primarily affected by the addition of SGS  
13 Unit 3?**

14 A. It is the collective need of Seminole's Members for which Seminole plans and which  
15 justifies the need for SGS Unit 3. While there may be times when energy or capacity  
16 from SGS Unit 3 is sold to other electric utilities, it is envisioned that the unit will be  
17 used almost exclusively to provide energy and capacity to serve Seminole's Members'  
18 needs. Consequently, the utilities primarily affected by SGS Unit 3 are Seminole and  
19 its Members.

1 IV. SEMINOLE'S CONSIDERATION OF ALTERNATIVES TO SGS UNIT 3

2 Q. What process did Seminole follow in assessing alternatives that could meet its  
3 base load capacity needs in 2012?

4 A. As is addressed in detail in the testimony and exhibits of Mr. Mahaffey and Ms.  
5 Novak, Seminole used an extensive and vigorous process to identify and assess  
6 alternatives, both outside purchases and self-build options, that might be used to meet  
7 Seminole's need for base load capacity. Seminole's need for base load capacity  
8 exists after consideration of conservation and DSM captured in the load forecasts of  
9 Seminole and its Members.

10  
11 Once Seminole's need for base load capacity in 2012 was established, Seminole first  
12 assessed the best means of meeting that need with self-build alternatives. As  
13 discussed by Mr. Opalinski and Mr. Mahaffey, those analyses showed that the best  
14 self-build option was a coal unit.

15  
16 As discussed in detail by Ms. Novak, Seminole then issued an RFP seeking  
17 alternatives from wholesale providers of power – independent power producers, co-  
18 generators and other electric utilities. Seminole's use of an RFP was consistent with  
19 its well-established practice of using this approach for soliciting cost-effective and  
20 reliable capacity alternatives to self-build generation. Seminole has issued a number  
21 of such RFPs going as far back as 1988. Several of these RFPs have resulted in  
22 definitive purchased power agreements being awarded. At the present time, over



1 half of Seminole's resources are represented by purchased power contracts. This is  
2 shown graphically on Exhibit TSW-2.

3  
4 Ultimately, after extensive efforts to identify purchased power options and further  
5 assess the relative risks of adding either coal-fired or gas-fired units to its system,  
6 Seminole concluded that the best, most cost-effective option available to Seminole to  
7 meet the needs of its Members and their member/consumers was for Seminole to  
8 build SGS Unit 3. This is addressed in detail in Mr. Mahaffey's testimony.

9  
10 **Q. Was the process Seminole followed to identify alternative resources and**  
11 **ultimately to choose SGS Unit 3 a fair process?**

12 **A.** Yes. The process was fair both to potential suppliers and to Seminole's Members.  
13 From the perspective of potential suppliers, Seminole's RFP was not overly  
14 prescriptive in its terms. Therefore, the bidders were provided the opportunity to  
15 propose creative solutions to addressing Seminole's needs. Seminole broadly  
16 published its RFP. Seminole addressed bidder inquiries. The economic analyses  
17 performed were fair, with bidders being given an opportunity to improve their bids.

18  
19 Seminole's evaluation of alternatives was also fair to Seminole's Members and their  
20 member/consumers. The best evidence of the fairness to Members and their  
21 member/consumers is that the process captured the alternative which is most cost-  
22 effective. While strategic considerations, such as dependence on natural gas, were  
23 not determinative (by themselves) in reaching a decision in this case due to the

1 significant economic disparity between SGS Unit 3 and Seminole's other options, the  
2 process was also fair to the Members and their member/consumers because it  
3 accommodated consideration of such factors.  
4

5 **V. SGS UNIT 3 MEETS THE STATUTORY NEED CRITERIA**

6 **Q. Mr. Woodbury, are you familiar with the criteria set forth in Section 403.519,**  
7 **Florida Statutes, that the Commission is to consider in a determination of need**  
8 **proceeding?**

9 A. Yes. As a non-lawyer who has prior experience with the need determination process,  
10 I am familiar with the determination of need criteria.  
11

12 **Q. Is SGS Unit 3 needed by Seminole, its Members and their members/consumers**  
13 **for purposes of system reliability?**

14 A. Yes. As developed in detail in Mr. Mahaffey's testimony, there is clearly a need for  
15 additional capacity on Seminole's system in 2012. Seminole's total need for  
16 additional capacity by 2012 is approximately 1200 MW, 750 MW of which is best  
17 served by base load generation. Seminole's need for base load generating capacity by  
18 2012 is driven primarily by the expiration of existing purchased power contracts and  
19 load growth on Seminole's system. Absent the addition of SGS Unit 3 by the  
20 summer season of 2012, Seminole will not meet its minimum reliability criteria. If  
21 Seminole does not meet its minimum reliability criteria, its Members and their  
22 member/consumers will not receive the level of service reliability they require. In  
23 practical terms, this means an unacceptable level of service interruptions.

1 Q. **Is SGS Unit 3 needed by Seminole, its Members and their member/consumers**  
2 **for reasons other than reliability?**

3 A. Yes. As addressed in greater detail by Mr. Mahaffey, Seminole and its Members  
4 need SGS Unit 3 in 2012 for at least two reasons other than maintaining system  
5 reliability. First, SGS Unit 3 is needed for its economic value to Seminole, its  
6 Members and their member/consumers as a base load resource. Seminole and its  
7 Members need it to be able to provide adequate electricity at a reasonable cost. SGS  
8 Unit 3 is by far the most cost-effective alternative available to meet Seminole's and  
9 its Members' base load capacity requirements. It is anticipated to save Seminole and  
10 its Members approximately \$500 million on a cumulative present worth revenue  
11 requirements (PWRR) basis compared to the next least costly alternative available to  
12 Seminole. This means that as a result of the addition of SGS Unit 3, Seminole and its  
13 Members will be able to charge lower rates than they otherwise would have to charge  
14 if any other identified alternative were selected. Second, SGS Unit 3 will help to  
15 mitigate fuel price volatility in member/consumer rates by reducing Seminole's  
16 reliance on gas-fired generation.

17

18 Q **Is SGS Unit 3 the most cost-effective alternative to meet Seminole's need for**  
19 **base load generation in 2012?**

20 A. Yes. As I noted above, this option is, by a wide margin, the most economical  
21 alternative available to Seminole and its Members.

1 Q. **Is there reasonably achievable, cost-effective conservation and DSM available to**  
2 **mitigate the need for SGS Unit 3?**

3 A. No. This question is addressed in detail in the Need Study and by Mr. Lawton in his  
4 testimony. As the Commission has previously found, Seminole provides price signals  
5 to its Members that are properly designed to provide incentives to lower on-peak  
6 demand, and Seminole's Members offer their end use customers a variety of  
7 conservation and DSM measures (Order No. PSC-01-0421-FOF-EC). Seminole's  
8 need for additional capacity captures the impact of conservation and DSM  
9 implemented by Seminole's Members by reflecting the impact of such measures in  
10 the load forecast. Seminole is not subject to Commission conservation and DSM  
11 goal setting and plan approval. However, even if it were, there is no reasonable  
12 scenario in which sufficient conservation and DSM could be added to the Seminole  
13 system to avoid the need for SGS Unit 3. Moreover, the 750 MW represented by  
14 SGS Unit 3 does not satisfy all of the incremental need by Seminole and its Members  
15 by 2012, and DSM is not well suited to avoiding the base load capacity that SGS Unit  
16 3 would provide.

1 **VI. ADVERSE CONSEQUENCES IF SGS UNIT 3 IS NOT APPROVED**

2 **Q. Please address the adverse consequences Seminole, its Members and their**  
3 **member/consumers would face if the Commission did not grant an affirmative**  
4 **determination of need for SGS Unit 3.**

5 A. There are at least three significant adverse consequences which would flow to  
6 Seminole, its Members and their member/consumers from the Commission failing to  
7 grant a determination of need for SGS Unit 3.

8  
9 First, Seminole, its Members and their member/consumers would face a less reliable  
10 system if SGS Unit 3 were not added. The capacity represented by SGS Unit 3 is  
11 essential to Seminole's ability to meet its reliability criteria in 2012. As a practical  
12 matter, given the timing of the Commission's decision on a determination of need for  
13 SGS Unit 3, there is not another coal-based option available that could feasibly meet  
14 Seminole's 2012 base load capacity need. Therefore, any alternative would have to  
15 be gas-fired, and Seminole believes that any new gas-fired alternative, whether self-  
16 build or supplying power through a purchased power agreement, would be not only  
17 more costly, but also less reliable than SGS Unit 3, given the greater potential for  
18 weather-related fuel supply and transportation constraints on gas deliveries into  
19 Florida.

20  
21 Second, denial of a determination of need for SGS Unit 3 would result in significant  
22 additional costs for Seminole, its Members and their member/consumers. SGS Unit 3  
23 is by far the most cost-effective alternative available to meet Seminole's 2012 base

1 load capacity need, providing savings of approximately \$500 million. If SGS Unit 3  
2 does not go into service, Seminole will be forced to find more expensive alternatives.  
3 This would have the effect of increasing the rates of both Seminole and its Members  
4 from what they would be if SGS Unit 3 been built.

5  
6 Third, if SGS Unit 3 is not added to Seminole's system, then the Seminole system  
7 will face an undue reliance upon natural gas-fired generation. As shown on Exhibit  
8 TSW-6, at present 37% of the energy provided by Seminole is generated by natural  
9 gas. With the addition of SGS Unit 3 in 2012, that percentage will become 29% by  
10 2013. If SGS Unit 3 were replaced by gas-fired alternatives, the only alternatives  
11 feasible at this point, Seminole's percentage of generation from natural gas in 2013  
12 would rise to 52%. Seminole believes this would be an unwarranted reliance upon  
13 natural gas to meet its total system energy requirements.

14  
15 Natural gas has experienced a significant and sustained rise in cost in the past few  
16 years. This cost increase has been passed on to end users, increasing the overall cost  
17 of energy. In addition to this adverse cost impact, natural gas supply, which was once  
18 seemingly assured in Florida, has become less certain, as is evidenced by the natural  
19 gas supply interruptions experienced during this last hurricane season. Because of  
20 natural gas' sustained cost increases and its less certain availability and reliability,  
21 Seminole believes that it should not construct additional gas-fired generation to meet  
22 this base load capacity need beginning in 2012. While there are no hard and fast rules  
23 governing what constitutes an optimal fuel mix, Seminole believes that additional

1 gas-fired generation to meet this base load need in 2012 would put the Seminole  
2 system in a position of having an undue reliance upon natural gas and thereby expose  
3 it to undue risks that would be counter to the interests of its Members and their  
4 member/consumers.

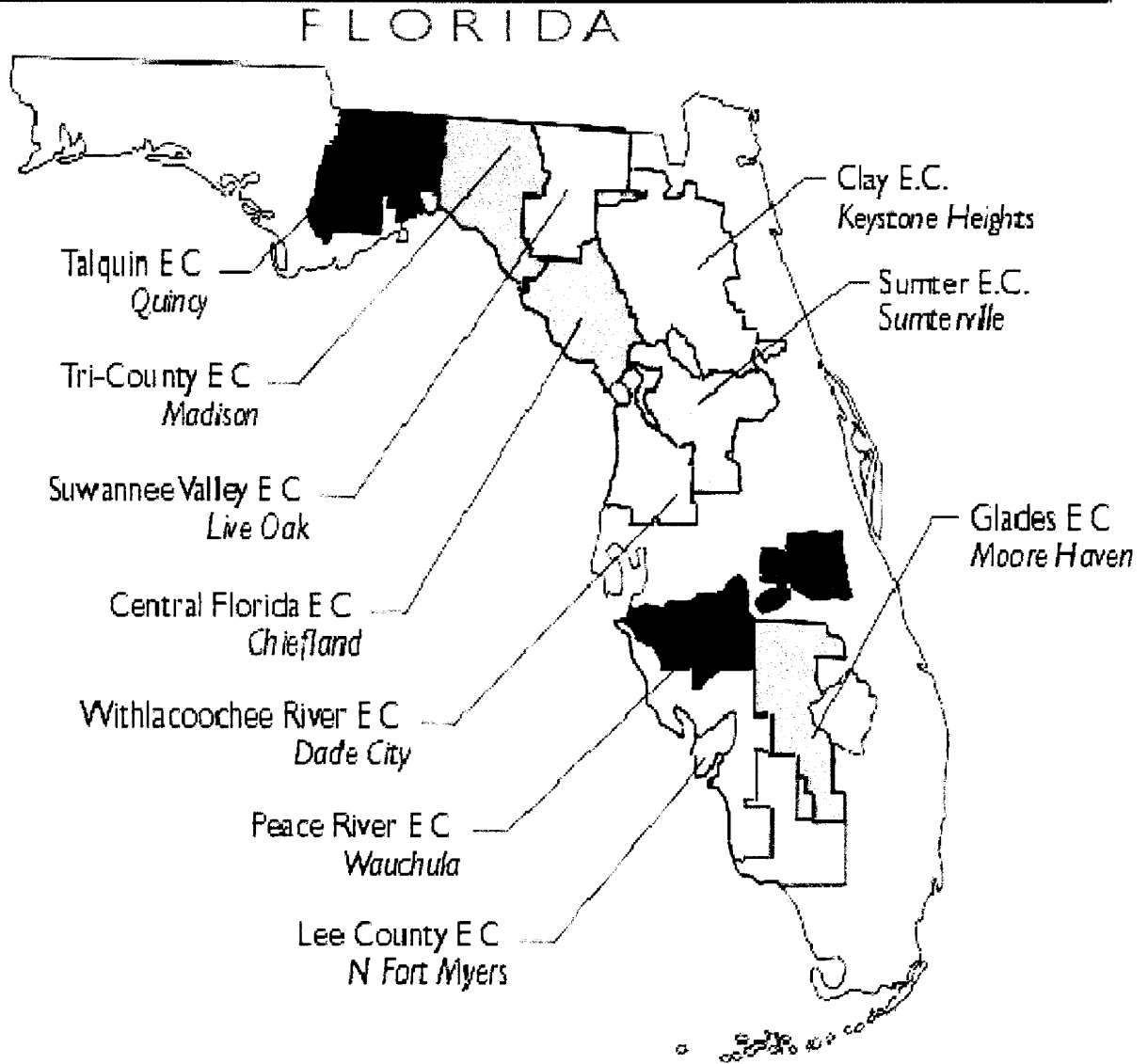
5  
6 **Q. Are there any other adverse consequences associated with a potential denial of a**  
7 **determination of need for SGS Unit 3?**

8 Yes. The failure to add SGS Unit 3 would have adverse consequences upon Putnam  
9 County, Florida. As Mr. Opalinski discusses, the construction of SGS Unit 3 will add  
10 some 1,500 construction positions through 2012 and approximately 50 permanent  
11 positions in Putnam County, Florida. Of course, there will be secondary and tertiary  
12 economic benefits in and around Putnam County with the addition of these positions.  
13 Also, the tax base for the County and local governments will increase by a substantial  
14 margin. All of these significant economic benefits to Putnam County would be lost if  
15 Seminole were not granted a determination of need for SGS Unit 3.

16  
17 **Q. Does this conclude your direct testimony?**

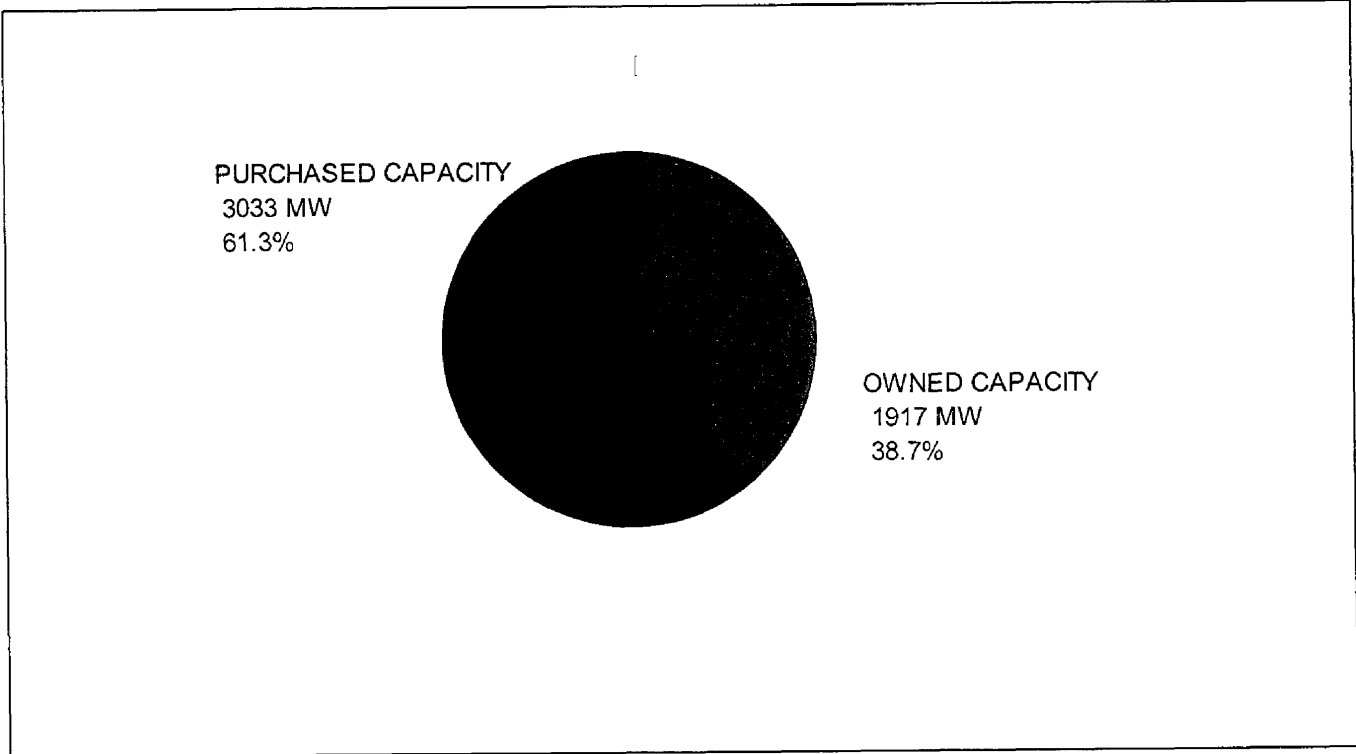
18 **A.** Yes, it does.

# Seminole's Member Distribution Cooperatives





**SEMINOLE'S 2006 CAPACITY RESOURCES**



<b>SEMINOLE'S POWER PURCHASE CONTRACTS WITH RENEWABLE RESOURCES</b>					
<i>Supplier</i>	<i>County</i>	<i>Fuel</i>	<i>MW Capacity</i>	<i>Begin Date</i>	<i>End Date</i>
Bio-Energy Partners	Broward	Landfill Gas	7	01/01/05	12/31/09
DG Telogia Power, LLC	Liberty	Biomass	12	06/01/04	12/31/19
Lee County, Florida	Lee	Solid Waste	35 - 55	12/01/99	07/30/20

## SEMINOLE'S POWER PURCHASE CONTRACTS

Supplier	Service	Fuel	MW Capacity	Begin Date	End Date
Progress Energy Florida	Partial Requirements	System	1,105*	02/01/84	12/31/13***
Progress Energy Florida	Intermediate	System	150	01/01/99	12/31/13
Progress Energy Florida	Intermediate	System	150	06/01/06	12/31/13
Progress Energy Florida	Intermediate	System	150	12/01/06	12/31/13
Progress Energy Florida	Full Requirements	System	150+**	01/01/10	07/30/20
Hardee Power Partners Limited <sup>(a)</sup>	Firm Capacity & Energy	Gas/Oil	356	01/01/93	12/31/12
Calpine Construction Finance Company, L.P. <sup>(b)</sup>	Firm Capacity & Energy	Gas/Oil	360	06/01/04	05/31/12
Oleander Power Project, Limited Partnership <sup>(c)</sup>	Firm Capacity & Energy	Gas/Oil	546	12/01/02	12/31/09
Oleander Power Project, Limited Partnership <sup>(d)</sup>	Firm Capacity & Energy	Gas/Oil	364 with option for total of 546	01/01/10	12/31/15
Reliant Energy Florida, LLC <sup>(e)</sup>	Firm Capacity & Energy	Gas/Oil	364	12/01/01	12/31/06
Reliant Energy Florida, LLC <sup>(e)</sup>	Firm Capacity and Energy	Gas/Oil	364	12/01/08	05/31/14
The City of Gainesville	Full Requirements	System	17*	10/22/73	12/31/12***

\* Capacity is variable over time. Amount shown represent estimated 2006 maximum monthly peak demand purchase.

\*\* Capacity is variable over time. Amount shown represents estimated 2010 maximum monthly peak demand purchase.

\*\*\* End Date for this contract represents end of initial term. Contract continues unless terminated by either party with certain notice.

<sup>(a)</sup> Subsidiary of Invenergy, LLC.

<sup>(b)</sup> Subsidiary of Calpine Corporation.

<sup>(c)</sup> Subsidiary of Southern Power Company.

<sup>(d)</sup> Executed February 17, 2006

<sup>(e)</sup> Subsidiary of Reliant Energy, Inc.

### SEMINOLE INTERCONNECTIONS

<b>Utility Interconnection</b>	<b>Voltage (kV)</b>	<b>Location</b>
FPL	230	Rice
FPL	230	Rice
FPL	230	SGS
FPL	230	SGS
FPL/Lee	230	Lee #2 Sub
FPL	230	Charlotte
TECO	230	Hardee Sub
Hardee Power Partners Limited	230	Hardee Sub
PEF	230	Vandolah
JEA	230	Firestone Tie Point
City of Ocala	230	Ocala #2 Tie Point
PEF	230	Martin West Tie Point
PEF	230	Silver Springs Tie Point
PEF	230	Silver Springs
PEF	230	Dearmin Tie Point

**SEMINOLE'S RELIANCE UPON NATURAL GAS GENERATION**

