

ORIGINAL

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
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DIRECT TESTIMONY AND EXHIBITS

OF

TIMOTHY R. EVES

ON BEHALF OF

CALPINE CONSTRUCTION FINANCE
COMPANY, L.P.

DOCUMENT NUMBER-DATE

~~10102~~ DEC-4 8

FPSC-RECORDS/REPORTING

IN RE: JOINT 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.

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Q: Please state your name and business address.

2 A: My name is Timothy R. Eves, and my business address is Two
3 Urban Centre, 4890 West Kennedy Boulevard, Suite 600, Tampa,
4 Florida 33609.

5

6 Q: By whom are you employed and in what position?

7 A: I am employed by Calpine Eastern Corporation ("Calpine
8 Eastern"), as Director of Business Development for Florida.

9

10 Q: Please describe your duties with Calpine Eastern.

11 A: In my capacity as Director of Business Development for Florida,
12 I am responsible for managing all of Calpine Eastern's
13 development activities in Florida, including, among other
14 things, coordinating regulatory matters and permitting
15 activities for Calpine Eastern's Florida projects;
16 participating directly in Calpine Eastern's marketing
17 activities for the Osprey Energy Center (the "Osprey Project"
18 or the "Project") and the Blue Heron Energy Center; and
19 managing all aspects of the development of the Osprey Project.

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QUALIFICATIONS AND EXPERIENCE

1

2 **Q: Please summarize your educational background.**

3 A: I received a Bachelor of Mechanical Engineering degree from the
4 University of Detroit in 1979, a Master of Business
5 Administration degree from Widener University in 1983, and a
6 Juris Doctor degree from the University of Miami in 1988.

7

8 **Q: Please summarize your employment history and work experience.**

9 A: I have 21 years of experience in the electric power industry,
10 19 years of which I worked for Westinghouse Electric
11 Corporation, and the remaining 2 years with BBI Power
12 Corporation and Calpine Eastern. I began my career in 1979 as
13 an Assistant Sales Engineer with Westinghouse Electric
14 Corporation where I sold electrical equipment to
15 architect/engineering firms for application on utility
16 projects. From there I held marketing positions of increasing
17 responsibility before being appointed Westinghouse's Manager of
18 Customer Program Integration in July 1989. In this position,
19 I managed a marketing group responsible for the coordination
20 and sale of integrated generating plant services and
21 modernization services to electric utilities. In December
22 1991, I was appointed the Regional Marketing Manager
23 responsible for the sale of new unit power generation equipment
24 and engineering, procurement, and construction services to

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1 developers, utilities and architect/engineers in diverse
2 markets across the United States and Latin America. I was
3 appointed Director of International Marketing in January 1996,
4 in which position I was responsible for managing the department
5 responsible for selling new power generation equipment and
6 engineering, procurement, and construction services to power
7 plant developers, utilities, industrial users, and
8 architect/engineers for projects located in Eastern Europe, the
9 Middle East, and the Indian subcontinent. For most of my
10 career with Westinghouse, I worked in Florida, where I had
11 regular contact with various Florida utilities.

12 In June 1998, I began my employment with BBI Power
13 Corporation as Senior Vice President with responsibilities for
14 worldwide project development activities. My responsibilities
15 included: project development, joint partner identification and
16 negotiation of joint development agreements, determination of
17 plant configuration, and financial analyses. I also negotiated
18 purchased power and steam supply contracts, engineering-
19 procurement-construction contracts, and conducted permitting
20 and financing activities for various projects. My project
21 development activities covered the Indian subcontinent, Eastern
22 Europe, the Middle East, the Caribbean, and the United States
23 with respect to developing natural gas and oil-fired combustion
24 turbine units, coal-fired steam units, and biomass plants.

25 In October 1999, I accepted my current position with

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1 Calpine Eastern Corporation as Director of Business
2 Development. In this position, I am responsible for all of
3 Calpine Eastern's development activities in Florida, including
4 participating directly in our marketing activities for the
5 output of the Osprey Energy Center and Blue Heron Energy
6 Center, and coordinating regulatory matters and permitting
7 activities for Calpine Eastern's Florida projects.

8

9 **Q: What are your responsibilities with respect to the Osprey**
10 **Energy Center?**

11 **A:** As Director of Business Development for Florida, my
12 responsibilities with respect to the Osprey Project include
13 coordinating the regulatory and business activities relating to
14 the permitting and construction of the Project, as well as
15 participating directly in the marketing efforts for capacity
16 and energy sales from the Project.

17

18 **Q: Do you hold any professional certifications or memberships in**
19 **any professional organizations?**

20 **A:** I am a member of the Florida Bar.

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SUMMARY AND PURPOSE OF TESTIMONY

1

2 **Q: What is the purpose of your testimony?**

3 A: I am testifying on behalf of Calpine Construction Finance
4 Company, L.P. ("Calpine"), one of the joint applicants for the
5 Florida Public Service Commission's ("Commission")
6 determination of need for the Osprey Energy Center. My
7 testimony describes Calpine and the relationship between
8 Calpine, Calpine Eastern, and their parent, Calpine
9 Corporation, Inc., a Delaware corporation headquartered in San
10 Jose, California. My testimony also addresses the Osprey
11 Project, the Memorandum of Understanding ("MOU") between
12 Calpine and Seminole for the purchase of firm capacity and
13 associated energy from the Osprey Project, Calpine's need for
14 the Project to meet its obligations to Seminole, the cost-
15 effectiveness of the Project to Calpine, the economic viability
16 of the Project, potential generating and non-generating
17 alternatives to the Project considered by Calpine, and the
18 action that Calpine and Seminole asking the Commission to take
19 in this proceeding.

20

21 **Q: Please summarize your testimony.**

22 A: Calpine Construction Finance Company, L.P., is petitioning the
23 Commission for an affirmative determination of need for the
24 Osprey Energy Center, a 529 MW natural gas-fired, combined

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1 cycle power plant to be located in the City of Auburndale, in
2 Polk County, Florida.

3 The Osprey Project utilizes state-of-the-art technology,
4 with proven reliability, high efficiency, and a very benign
5 environmental profile. The Project will provide a clean and
6 cost-effective power supply resource to Seminole to meet the
7 growing demands of Seminole's member cooperative utilities and
8 those utilities' member-consumers. In contrast to rate-based
9 facilities, Calpine will bear all of the capital investment and
10 operating risks associated with the Project, while Seminole,
11 its member cooperatives, and their member-consumers bear none.

12 The Project is the most cost-effective alternative
13 available to Calpine and, because of its very high efficiency,
14 the Project is expected to be economically viable for its
15 entire useful life.

16

17 **Q: Are you sponsoring any exhibits to your testimony?**

18 **A:** Yes. I am sponsoring the following exhibits.

19 TRE-1. Calpine Construction Finance Company, L.P.,
20 Ownership Structure.

21 TRE-2. Calpine Corporation Generation Portfolio.

22 TRE-3. Order of the Federal Energy Regulatory Commission
23 ("FERC") approving Calpine's market-based rate
24 tariff.

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1 TRE-4. Osprey Energy Center, Generating Alternatives
2 Evaluated.

3 TRE-5. Osprey Energy Center, Cost-Effectiveness Analyses of
4 Alternative Generation Technologies.

5 I am also sponsoring Figures II-1 and II-2, Tables II-1,
6 II-13, II-20, II-21, and parts of Table II-2 (relating to the
7 cost, economic life, and status of the Project) in Volume II of
8 the Exhibits filed in support of Calpine's petition for
9 determination of need for the Project. I am also sponsoring
10 the text relating to the subject matter of these figures and
11 tables contained within the Executive Summary, Introduction,
12 and Sections II.A, II.C, II.D, II.E, II.F, and III.F of those
13 Exhibits. I am also sponsoring Appendix II-A to the Exhibits.

14

15 CALPINE CONSTRUCTION FINANCE COMPANY, L.P.,
16 CALPINE EASTERN CORPORATION, AND CALPINE CORPORATION, INC.

17

18 Q: Please describe Calpine Construction Finance Company, L.P., and
19 its business.

20 A: Calpine is a limited partnership organized and existing under
21 the laws of the State of Delaware. Calpine is a wholly-owned
22 subsidiary of Calpine Corporation, Inc. ("Calpine
23 Corporation"), a Delaware corporation headquartered in San
24 Jose, California. Exhibit _____ (TRE-1) illustrates the
25 ownership structure relationships of Calpine, Calpine Eastern,
26 and Calpine Corporation.

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1 Calpine is in the business of developing competitive
2 wholesale power plants and acquiring electrical generating
3 facilities for operation as competitive wholesale power plants.
4 Calpine's basic business strategy is to provide clean,
5 efficient, cost-effective wholesale power to other utilities.
6 Competitive wholesale power plants are operated to sell power
7 to other utilities at wholesale at voluntarily negotiated
8 rates, with Calpine taking all financial and operating risk
9 associated with the plants. With respect to the Osprey
10 Project, Calpine, through its affiliate Calpine Energy
11 Services, L.P. ("Calpine Energy Services"), has entered into a
12 Memorandum of Understanding (the "MOU") pursuant to which
13 Calpine will sell and Seminole will buy 350 MW of firm capacity
14 from the Project for at least five years, from June 2004
15 through May 2009. Calpine will have a contractual arrangement
16 with Calpine Energy Services pursuant to which Calpine Energy
17 Services will provide fuel to the Project and will receive all
18 of the electric capacity and energy from the Project, which it
19 will then use to meet its contractual obligations to Seminole.
20 Also pursuant to the MOU, Calpine has committed to Seminole and
21 Seminole has the right to purchase the balance of the Project's
22 capacity and all of the energy output of the Project for the
23 same initial five-year term, as well as for the period from the
24 Project's commercial operation date (projected to be June 2003)
25 through May 2004. Also, the MOU provides for Calpine and

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1 Seminole to negotiate in good faith for continuation of power
2 purchase arrangements from the Osprey Project through May 31,
3 2020.

4

5 **Q: Please describe Calpine Corporation and its business.**

6 A: Calpine Corporation is a leading independent power company
7 engaged in the development, acquisition, ownership, and
8 operation of power generation facilities and the sale of
9 electricity predominantly in the United States. Calpine
10 Corporation has experienced significant growth in all aspects
11 of our business over the last five years. Calpine Corporation
12 and its subsidiaries have ownership interests in 47 operating
13 power plants with total generating capacity of 5,318.5 MW, in
14 18 power plants under construction with total generating
15 capacity of 11,428.2 MW, and in 12 power plants under
16 development with total generating capacity of 7,167 MW.

17 Calpine Corporation is financially strong and sound, with
18 market capitalization exceeding \$10 billion and an investment
19 grade bond rating.

20 Calpine Corporation's development of power generation
21 projects involves numerous elements, including evaluating and
22 selecting development opportunities, designing and engineering
23 the projects, negotiating power sales agreements, acquiring
24 necessary land rights, permits and fuel resources, obtaining

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1 financing, and managing construction.

2 In May 1999, Calpine Corporation completed the
3 acquisitions from Pacific Gas & Electric Company of 14
4 geothermal power plans at The Geysers in Northern California,
5 with a combined capacity of approximately 700 megawatts ("MW").
6 With these acquisitions Calpine Corporation now owns and
7 operates 850 MW of geothermal generating capacity and is the
8 nation's largest geothermal and green power producer.

9

10 Q: Please describe Calpine Eastern Corporation and the
11 relationship between Calpine, Calpine Eastern, and Calpine
12 Corporation.

13 A: Calpine Eastern Corporation is one of three regional Calpine
14 Corporation subsidiaries that have responsibility for
15 developing, acquiring, and operating the power plants owned by
16 Calpine Corporation and its subsidiaries and for marketing the
17 output of those plants. Calpine Eastern has responsibility
18 for: (1) developing power plants all the way through the
19 various permitting processes and construction phase and into
20 commercial operation; (2) overseeing the marketing of the power
21 plants' output; and (3) operating, maintaining, and optimizing
22 the power plants' operations over their lives. Calpine (i.e.,
23 Calpine Construction Finance Company, L.P.) provides the
24 financing for the projects and owns them upon completion, and,

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1 as such, the development of the projects is completed in the
2 name of Calpine. Calpine Corporation is the parent of both
3 Calpine and Calpine Eastern.

4

5 **Q: What existing power plants do Calpine Corporation and its**
6 **subsidiaries have ownership interests in?**

7 A: Calpine Corporation and its subsidiaries have ownership
8 interests in 47 existing power generation facilities with a
9 current aggregate capacity of approximately 5,318.5 MW,
10 consisting of 28 gas-fired generation plants with a total
11 capacity of 4,468.5 MW and 19 geothermal power generating
12 facilities with a total capacity of 850 MW. Calpine
13 Corporation's ownership interests, through various wholly-owned
14 subsidiaries, in these plants total 4,421.6 MW, including
15 3,571.6 MW of gas-fired capacity and 850 MW of geothermal
16 capacity. These existing power plants are located in
17 California, New York, Texas, Florida, Massachusetts, New
18 Jersey, Pennsylvania, Virginia, Illinois, Oklahoma and
19 Washington. Exhibit _____ (TRE-2) presents Calpine
20 Corporation's generation portfolio.

21

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1 Q: Do any subsidiaries or affiliates of Calpine Corporation
2 presently own and operate any electrical power plants in
3 Florida?

4 A: Yes. Calpine Corporation, through wholly owned subsidiaries,
5 owns the entire ownership interest in the Auburndale Power
6 Plant, a 150 MW cogeneration power plant located in Auburndale,
7 Florida adjacent to the Osprey Project site. Most of the
8 output from the Auburndale Power Plant is sold to Florida Power
9 Corporation pursuant to a long-term negotiated contract, and
10 the remainder is presently sold to Tampa Electric Company
11 pursuant to a negotiated contract.

12

13 Q: What other projects do Calpine and its subsidiaries currently
14 have under construction and development?

15 A: Calpine Corporation's subsidiaries, including Calpine
16 Construction Finance Company, currently have eighteen gas-fired
17 projects under construction with total capacity of 11,428.2 MW;
18 Calpine Corporation's ultimate ownership share in these plants
19 will be 9,891.3 MW. Upon completion of the projects under
20 construction, Calpine Corporation will have interests in 58
21 power plants located in 15 states. Approximately 90 percent of
22 these plants' generating capacity will be gas-fired and
23 approximately 10 percent will utilize geothermal technology.
24 The power plants under construction are located in Alabama,

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1 Missouri, Texas, Oklahoma, California, Louisiana, Maine,
2 Oregon, Arizona, and Pennsylvania.

3 Calpine Corporation's subsidiaries, including Calpine
4 Construction Finance Company, have also formally announced
5 plans to develop, and have commenced development of, an
6 additional twelve gas-fired power plants with a total capacity
7 of 7,167 megawatts; Calpine Corporation's ultimate ownership
8 share of these projects will be 6,645 megawatts. The power
9 plants under development are located in California, Florida,
10 Mississippi, Alabama, New York, Arizona, Ohio, Tennessee,
11 Connecticut, and Alberta, Canada.

12

13 **Q: Please describe the regulatory status of Calpine Construction**
14 **Finance Company, L.P.**

15 **A:** Calpine is owned by its investors, and Calpine will own the
16 power generation facilities, i.e., the Osprey Energy Center and
17 the Blue Heron Energy Center identified in Calpine's 2000 Ten-
18 Year Site Plan, comprising a generation system in Florida. It
19 is my understanding that Calpine is an electric utility under
20 Florida law, regulated by the Commission to the extent that the
21 Commission regulates wholesale utilities. This is based on my
22 experience in Florida and is not intended to be a legal
23 conclusion. For example, Calpine filed a ten-year site plan
24 this spring and understands that it is subject to the

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1 Commission's emergency and coordination powers.

2 As a wholesale utility that sells electricity in
3 interstate commerce, it is my understanding that Calpine is
4 subject to the FERC's regulation under the Federal Power Act.
5 Accordingly, Calpine has filed and obtained approval from the
6 Federal Energy Regulatory Commission ("FERC") of its tariff
7 authorizing Calpine to sell electricity at wholesale, at
8 negotiated or market-based rates.

9 Calpine will own the Project and will market the Project's
10 capacity and associated energy to other utilities and power
11 marketers under negotiated arrangements entered into pursuant
12 to Calpine's Rate Schedule No. 1 approved by the FERC. The
13 FERC's order approving this market-based rate tariff is
14 included as Exhibit _____ (TRE-3) to my testimony. That rate
15 schedule, which applies to all sales by Calpine, provides that
16 Calpine may enter into agreements with willing purchasers of
17 energy and capacity provided by the Project.

18

19 **Q: What experience do Calpine Corporation and its subsidiaries**
20 **have in operating electrical power plants?**

21 **A:** Calpine Corporation and its subsidiaries presently operate the
22 vast majority of the 47 existing power plants in which Calpine
23 Corporation holds ownership interests, including the 150 MW
24 Auburndale Power Plant. By the end of 2002, Calpine

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1 Corporation's subsidiaries are projected to be operating more
2 than 13,000 MW of generating capacity in which Calpine
3 Corporation will have an ownership interest. Such services
4 include the operation of power plants, geothermal steam fields,
5 wells and well pumps, gas fields, gathering systems, and gas
6 pipelines. Calpine Corporation's subsidiaries also supervise
7 maintenance, materials purchasing, and inventory control;
8 manage cash flow; train staff; and prepare operating and
9 maintenance manuals for each power generation facility that
10 they operate. As a facility develops an operating history,
11 Calpine Corporation's operation and management subsidiaries
12 analyze the facility's operation and may modify or upgrade
13 equipment or adjust operating procedures or maintenance
14 measures to enhance the facility's reliability or
15 profitability. These services are performed under the terms of
16 operating and maintenance agreements pursuant to which Calpine
17 Corporation's operation and maintenance subsidiaries are
18 generally reimbursed for certain costs and paid an annual
19 operating fee. Pursuant to the O&M agreements, these
20 subsidiaries may also be paid an incentive fee based on the
21 performance of each facility.

22

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1 Q: Why is Calpine interested in building and operating the Osprey
2 Energy Center in Florida?

3 A: Calpine views the construction and operation of the Osprey
4 Energy Center as a mutually beneficial business opportunity for
5 Calpine and Seminole, Seminole's member cooperatives and those
6 systems' member-consumers, and for Florida as a whole. The
7 Osprey Project is consistent with and meets Peninsular
8 Florida's needs for generating capacity to maintain system
9 reliability and integrity and for adequate electricity at a
10 reasonable cost.

11 According to the 2000 Regional Load & Resource Plan
12 prepared by the Florida Reliability Coordinating Council and
13 dated July 2000 ("FRCC 2000 Resource Plan"), Peninsular Florida
14 needs more than 11,000 MW of new installed capacity in order to
15 maintain winter reserve margins generally between 7% and 13%
16 without exercising load management and interruptible resources
17 from the winter of 2000-2001 through the winter of 2009-2010.
18 Even with the exercise of load management and interruptible
19 resources, Peninsular Florida needs more than 11,000 MW of new
20 capacity, as forecast in the FRCC 2000 Resource Plan, to
21 maintain planned reserve margins through the same period. The
22 Project will increase both summer and winter reserve margins
23 for Peninsular Florida and will enhance Peninsular Florida's
24 reliability. Assuming an average coincident peak demand of 3.5

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1 to 5.0 kW per residential customer, the Project's capacity
2 would be sufficient to maintain electric service to between
3 99,000 homes (at 5.0 kW per household, summer peak conditions)
4 and 165,000 homes (at 3.5 kW per household, winter peak
5 conditions) during an extreme weather event.

6

7 **Q: Does Calpine expect to be represented on the Florida**
8 **Reliability Coordinating Council?**

9 **A:** Yes, Calpine expects to be represented on the FRCC with respect
10 to our Osprey Project and Blue Heron Energy Center, another
11 gas-fired combined cycle power plant that we described in our
12 2000 Ten-Year Site Plan.

13

14 **THE OSPREY ENERGY CENTER**

15 **Q: Please describe the Osprey Energy Center.**

16 **A:** The Osprey Energy Center is a natural gas-fired power plant
17 utilizing advanced combustion turbine technology in combined
18 cycle configuration with a heat recovery steam generator and an
19 electric steam turbine generator. The Project's rated capacity
20 at average ambient site conditions is 529 MW, based on expected
21 manufacturers' guarantees. The Project's rated winter capacity
22 is 578 MW and its rated summer capacity is 496 MW.
23 Construction of the Project will be managed by Calpine Eastern
24 Corporation or its affiliates or subsidiaries. The Project is

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1 scheduled to achieve commercial in-service status during the
2 second quarter of 2003, and is projected to have a technical
3 and economic life in excess of 30 years. Firm delivered gas
4 supply will be provided for the Project's operations pursuant
5 to a contract between Gulfstream Natural Gas System and Calpine
6 having an initial term of twenty years.

7 The Project will satisfy all applicable environmental
8 permitting requirements. Gas-fired combined cycle technology
9 is the most efficient and most environmentally benign electric
10 generation technology currently available and feasible on a
11 commercial basis. Analyses prepared by Slater Consulting and
12 reported in detail in the testimony and exhibits of Kenneth J.
13 Slater show that the Project's operations will have a
14 substantial net beneficial effect on total emissions from power
15 generation in Florida, reducing total combined emissions of
16 sulfur dioxide and nitrogen oxides by between 8,000 and 23,000
17 tons per year.

18
19 **Q: What is the approximate direct construction cost of the Osprey**
20 **Project?**

21 **A:** The estimated direct construction cost of the Project is \$194.8
22 million. This equates to \$357 per kW of capacity, calculated
23 on the basis of the Project's rated capacity of 545 MW at ISO
24 temperature and relative humidity conditions.

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1 Q: Please give an overview of the financing plan for the Osprey
2 Energy Center.

3 A: The Project will be constructed and brought into commercial
4 service solely with funds provided by Calpine Corporation and
5 its subsidiaries. Calpine Corporation will provide the equity.
6 The debt will be provided by Calpine through a form of
7 revolving credit, provided by several investment banks, used to
8 simultaneously fund the debt of the construction and
9 development costs of multiple Calpine projects.

10

11 Q: Please summarize the transmission arrangements that Calpine
12 anticipates will be made for connecting the Osprey Project to
13 the Peninsular Florida transmission grid and for delivering the
14 Project's output to other Peninsular Florida utilities?

15 A: The Project will be interconnected to the Peninsular Florida
16 transmission system at Tampa Electric Company's ("TECO") Recker
17 Substation. Pursuant to TECO's transmission tariff, Calpine
18 will obtain sufficient transmission capacity to permit the
19 delivery of the Project's full output to other Peninsular
20 Florida utilities on a firm basis. The actual transmission
21 upgrades required have been determined in accordance with
22 TECO's open access transmission tariff. Pursuant to Calpine's
23 request and TECO's tariff, TECO issued the Transmission Service
24 Request Facilities Study report on August 31, 2000. The report

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1 estimated the cost to interconnect the Osprey Project to TECO's
2 Recker Substation at \$2.4 million. In addition, the cost of
3 the network upgrades required to provide firm transmission
4 service was estimated at \$11.5 million.

5

6 **Q: What is the status of the Osprey Project in the development**
7 **process?**

8 **A:** Preliminary engineering for the Osprey Project is complete,
9 detailed design engineering will begin in March 2001. Calpine
10 has filed the site certification application for the Osprey
11 Project, which was deemed complete; Calpine has responded to
12 the sufficiency concerns raised by the Southwest Florida Water
13 Management District, and we are confident that the site
14 certification application will be deemed sufficient in the near
15 future. The draft air permit is complete, the Project site has
16 been annexed into the City of Auburndale, and all work relative
17 to land use approvals is complete.

18 Calpine has secured, by the payment of substantial
19 deposits, the rights to a significant number of combustion
20 turbine generators for delivery between the present and 2004.
21 As permitting of the Osprey Project goes forward and the
22 Project's construction timetable becomes firmly established,
23 two of these already-secured CTGs will be designated for use in
24 the Osprey Project.

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1 Our affiliate, Calpine East Fuels, L.L.C., has entered
2 into a Precedent Agreement with Gulfstream Natural Gas System,
3 L.L.C., for firm gas transportation service for the Project.
4 With regard to transmission, TECO has completed the
5 transmission interconnection study, and we have commissioned
6 the requisite transmission system impact studies. We have
7 formally requested the reservation of sufficient capacity on
8 TECO's transmission, and have submitted the requisite deposit,
9 system to accommodate power deliveries from the Project to
10 other Peninsular Florida utilities, including Seminole, on a
11 firm basis.

12

13 **Q: When is the Osprey Project expected to achieve commercial in-**
14 **service status?**

15 **A:** Based on the present schedule, Calpine expects to bring the
16 Osprey Project into commercial operation by June 1, 2003.

17

18 **Q: Please introduce Calpine's other witnesses and the subject**
19 **matter of their testimony and exhibits.**

20 **A:** Detailed technical information regarding the Osprey Energy
21 Center is presented in the testimony and exhibits of Ted S.
22 Baldwin, whose testimony describes the engineering aspects of
23 the Project; Richard A. Zwolak, AICP, whose testimony addresses
24 environmental and permitting issues; Michael D. Petit, who

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1 addresses fuel transportation and fuel supply issues; Kenneth
2 J. Slater, who addresses the potential impacts of the Osprey
3 Project's operations on Peninsular Florida power supply costs,
4 fuel use for power generation, and environmental emissions
5 associated with power generation; Michel P. Armand, P.E., who
6 addresses transmission issues; and Gerard J. Kordecki, who
7 addresses the ratepayer impacts and policy aspects of the
8 Project and of Calpine's contractual relationship with
9 Seminole.

10

11 **Q: What other companies and entities are assisting in developing**
12 **and permitting the Osprey Project?**

13 A: Golder Associates is providing environmental analysis and
14 permitting support for the Project. Navigant Consulting has
15 provided certain transmission load flow studies in support of
16 Calpine's site certification application for the Project. TECO
17 is providing interconnection studies and transmission system
18 impact studies and will, pursuant to its FERC-approved
19 transmission tariff, provide transmission service to
20 accommodate delivery of the Project's output to the Peninsular
21 Florida utilities that purchase power from the Project.
22 Gulfstream Natural Gas System will provide gas transportation
23 service to the Project. Slater Consulting and R.W. Beck and
24 Associates have provided assistance with respect to economic

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1 evaluations of the Project in support of the Joint Petition.

2

3 GENERATING AND NON-GENERATING ALTERNATIVES CONSIDERED

4 Q: What generating alternatives did Calpine consider to the
5 particular configuration that was actually selected for the
6 Osprey Project?

7 A: The major available generating alternatives that were examined
8 and evaluated in arriving at the decision to use the selected
9 generating technology for the Osprey Energy Center were gas-
10 fired and oil-fired combustion turbines, gas-fired and oil-
11 fired combined cycle units, gas-fired steam generation units,
12 conventional pulverized coal steam units, nuclear steam units,
13 renewable energy technology, and integrated coal gasification
14 combined cycle units. Exhibit _____ (TRE-4) lists the
15 generating alternatives evaluated, and Exhibit _____ (TRE-5)
16 summarizes our cost-effectiveness evaluation of the alternative
17 technologies.

18

19 Q: Why did Calpine select natural gas-fired combined cycle
20 technology for the Osprey Energy Center?

21 A: Exhibit _____ (TRE-5) shows that gas-fired combined cycle
22 technology is expected to have the lowest levelized life-cycle
23 cost in either intermediate load operation or base load
24 operation. Projections prepared for Calpine indicate that the

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1 Osprey Project will operate as a base load unit, with annual
2 capacity factors in the range of 86 to 93 percent, dependent on
3 the routine maintenance planned for each respective year.
4 These evaluations clearly indicate that the best choice for
5 Calpine, considering economics and cost-effectiveness, is gas-
6 fired combined cycle capacity.

7 The selected gas-fired combined cycle technology also
8 exhibits favorable reliability, long-term flexibility,
9 environmental, and strategic characteristics. This technology
10 is proven and extremely reliable, with a forced outage rate of
11 approximately 2 percent. The technology also has great
12 flexibility for both intermediate and base load operation; our
13 design choice allowing for duct-firing and power augmentation
14 also allows for additional flexibility of operation to meet
15 extreme demand conditions in Peninsular Florida. As stated
16 above and in Mr. Slater's testimony, the Project will have a
17 net beneficial impact on emissions from power generation for
18 Peninsular Florida, reducing total sulfur dioxide and nitrogen
19 oxides emissions by approximately 8,000 to 23,000 tons per
20 year. Additionally, the chosen technology is favorable
21 considering strategic factors, not only from Calpine's and
22 Seminole's perspectives, but also from the perspective of the
23 State as a whole. The Project will be fueled by domestically
24 produced natural gas rather than by imported fuel that may be
25 subject to interruption due to political or other events. The

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Project has a low installed cost and a highly efficient heat
2 rate, assuring its long-term economic viability. The Project's
3 gas-fired combined cycle technology is exceptionally clean and
4 minimizes airborne emissions. Since the Project will use clean
5 natural gas as its fuel, there is substantially less risk (than
6 with older, less efficient, and more polluting power plants)
7 that the Project will be adversely affected by future changes
8 in environmental regulations.

9 The Project will also conserve primary energy consumed for
10 electricity production in Florida by displacing generation from
11 less efficient, and less cost-effective, oil-fired, natural
12 gas-fired, and coal-fired units. In so doing, the Project will
13 enhance both the overall efficiency of electricity production
14 and the overall efficiency of natural gas use, as well as
15 reduce the consumption of petroleum fuels for electricity
16 generation in Florida, thereby reducing environmental
17 emissions.

18 The desirability of Calpine's technology choice is further
19 supported by the fact that other Florida utilities are planning
20 to add capacity of similar technology and design, and by the
21 fact that the type of power plant proposed by Calpine is the
22 technology of choice for the large majority of new power plant
23 capacity planned in the United States.

24

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Q: What, if any, non-generating alternatives did Calpine consider
2 in the processes that led it to proceed with the Osprey
3 Project?

4 A: There are no viable non-generating alternatives to the Osprey
5 Project. Calpine is in the business of providing efficient,
6 cost-effective wholesale power to other utilities. Based on my
7 experience, as a wholesale-only utility, Calpine does not
8 engage in end-use conservation programs and is not required to
9 have conservation goals pursuant to the Florida Energy
10 Efficiency and Conservation Act. Accordingly, Calpine did not
11 consider non-generating alternatives to constructing and
12 operating the Osprey Project.

13

14 Q: Notwithstanding your position that Calpine does not engage in
15 direct end-use energy conservation programs, will the Osprey
16 Energy Center have any energy conservation effects?

17 A: Yes. The Project, like other gas-fired combined cycle units,
18 provides energy efficiency benefits to Florida by using less
19 primary fuel to produce a given quantity of electricity and
20 provides environmental benefits in the form of reduced
21 emissions that would otherwise occur if oil-fired or gas-fired
22 steam turbine plants, or other fossil fuel baseload or peaking
23 units, were dispatched instead of the Project. Accordingly,
24 the Project promotes and is specifically consistent with the

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Florida Legislature's declared goals of enhancing the overall
2 efficiency and cost-effectiveness of electricity production and
3 natural gas use, and of conserving expensive resources,
4 particularly petroleum fuels. The Project also provides
5 environmental benefits in the form of reduced sulfur dioxide
6 and nitrogen oxides emissions that would otherwise occur if
7 oil-fired or gas-fired steam turbine plants, or other fossil
8 fuel-fired baseload or peaking units, were dispatched instead
9 of the Project.

10

THE SEMINOLE-CALPINE POWER PURCHASE AGREEMENT

11

12 Q: What is the status of Calpine's and Seminole's efforts to reach
13 final contractual arrangements for the purchase and sale of the
14 Osprey Project's output?

15 A: Calpine Energy Services, an affiliate of Calpine, and Seminole
16 executed the MOU on October 16, 2000. The MOU sets forth the
17 fundamental commercial principles -- e.g., pricing, duration,
18 and other key terms and conditions -- to which Calpine and
19 Seminole have agreed for their power purchase and sale
20 arrangement. In addition to setting forth Calpine's and
21 Seminole's basic agreement on the fundamental commercial
22 principles of their arrangement, the MOU obligates Calpine and
23 Seminole to negotiate in good faith a definitive power purchase
24 agreement (the "PPA") embodying those principles. Pursuant to

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 the MOU, Calpine and Seminole have been continuing their
2 negotiations and are nearing completion of the PPA. We expect
3 the definitive PPA to be executed following the respective
4 meetings of Calpine's Board of Directors on December 7, 2000
5 and of Seminole's Board of Directors on December 14 and 15,
6 2000.

7

8 **Q: Please describe the basic terms of the MOU and the anticipated**
9 **PPA.**

10 **A:** Pursuant to the MOU and the PPA, Calpine is obligated to sell
11 to Seminole, and Seminole is obligated to purchase, 350 MW of
12 firm capacity from the Osprey Project from June 2004 through
13 May 2009. Pursuant to notice and pricing provisions set forth
14 in the documents, Seminole has the right to buy all of the
15 energy (i.e., up to 350 megawatt-hours per hour) associated
16 with that committed firm capacity. Under the MOU and the PPA,
17 Seminole also has the option to purchase the entire remaining
18 capacity of the Osprey Project from the Project's commercial
19 in-service date (expected June 2003) through May 2009, and all
20 of the energy associated with that capacity, to the extent that
21 this additional capacity (i.e., the Project's capacity above
22 the 350 MW already committed to Seminole on a firm basis) has
23 not been firmly committed to other Florida utilities at the
24 time that Seminole wishes to exercise this option. Finally,

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 the MOU requires Calpine and Seminole to negotiate in good
2 faith toward continuation of the power purchase arrangements
3 from June 2009 through May 22, 2020.

4

5

NEED FOR THE OSPREY ENERGY CENTER

6 Q: Does Calpine need the Osprey Energy Center?

7 A: Yes. Calpine needs the Osprey Project to fulfill its
8 contractual obligations to Seminole.

9

10 Q: Please give an overview of the projected operations of the
11 Osprey Energy Center.

12 A: Mr. Kenneth J. Slater's analyses of the Florida bulk power
13 supply market and of the Project's operating economics yield
14 projections that the Project, with an availability factor of
15 greater than 94 percent, would be expected to operate between
16 7,500 and 8,500 hours per year, when operated on an economic
17 dispatch basis within the Peninsular Florida power supply
18 system. We anticipate that the Project will provide
19 approximately 578 MW (winter) and 496 MW (summer) of capacity,
20 and between 4,000,000 MWH and 4,400,000 MWH per year of cost-
21 effective, environmentally beneficial electrical energy to
22 Seminole, and perhaps to other Peninsular Florida utilities, on
23 a wholesale basis.

24

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Q: How likely is it that the Project would make sales of capacity
2 or energy or both to utilities outside Florida, under any
3 scenario?

4 A: It is unlikely that any significant amount of the Project's
5 output would be sold outside Peninsular Florida under any
6 scenario. This is a function of several factors, including
7 relatively low generation costs in the Southeastern Electric
8 Reliability Council ("SERC") region as compared to those within
9 Peninsular Florida, recent power shortages and projected tight
10 reserves in Peninsular Florida, and limited transmission export
11 capacity from Florida into the SERC region. Analyses prepared
12 for Calpine indicate that the market for the Project's output
13 is the wholesale power market within Peninsular Florida. Of
14 course, this is why we are seeking the Commission's
15 determination of need that will enable us to build the Osprey
16 Energy Center in Peninsular Florida, and why the transmission
17 interconnection facilities are being designed to accommodate
18 deliveries of power from the Project to utilities located
19 within the State of Florida. This is also why Calpine asked
20 Navigant Consulting and TECO to perform transmission studies
21 for power deliveries exclusively to load-serving utilities in
22 Peninsular Florida. No out-of-state export studies were even
23 contemplated.

24

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Q: Does Calpine either plan to sell electricity at retail in
2 Florida or anticipate making retail power sales in Florida?

3 A: No. Selling at retail is not a part of Calpine's development
4 or marketing plans.

5

6 Q: What, if any, additional benefits would the Osprey Energy
7 Center provide to Florida, its citizens, and its electric
8 ratepayers?

9 A: In addition to fairly dramatic power supply cost savings, the
10 Project can be expected to provide enhanced reliability of
11 electric supply, both through additional generation capacity
12 and through fuel diversity. This results in reduced losses to
13 the people and businesses of Florida from service
14 interruptions. The Project will also enhance environmental
15 quality; stimulate economic development through lower overall
16 electricity costs, increased employment, and increased local
17 government tax revenues; and transfer the financial risks
18 associated with owning and operating an electrical generation
19 facility away from electric ratepayers to Calpine.

20

21 Q: What, if any, adverse effects would occur if the Osprey Project
22 were not brought into service, or was delayed in being brought
23 into service, as proposed by Calpine?

24 A: Seminole and Florida would lose all of the benefits that the

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Project would otherwise provide. Specifically, Seminole,
2 Seminole's member cooperative utilities, those utilities'
3 member-consumers, and potentially the State's other electric
4 utilities and those utilities' retail customers would lose the
5 following:

- 6 1. More than 4,000,000 MWH per year of clean, efficient,
7 cost-effective generation;
- 8 2. The substantial cost savings that will result as the
9 Project's operation displaces generation from more costly
10 power plants, on the order of \$150 million per year;
- 11 3. The additional economic value provided by the Project
12 through (a) lower costs of ancillary services, (b) reduced
13 losses of economic productivity due to service
14 interruptions, and (c) enhanced economic development;
- 15 4. The environmental emissions reductions that will result as
16 the Project displaces generation from less efficient
17 generation resources;
- 18 5. The risk transference benefits of having Calpine own and
19 operate the Project outside any retail-serving utility's
20 rate base; and
- 21 6. The economic development stimulation benefits of the
22 Project, including lower overall electricity costs,
23 increased employment, and enhanced local government tax
24 revenues.

25

DIRECT TESTIMONY OF TIMOTHY R. EVES

COST-EFFECTIVENESS AND ECONOMIC VIABILITY

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Q: Is the Osprey Project the most cost-effective alternative available to Calpine to meet its projected needs for serving its anticipated wholesale customers?

A: Yes. As shown in Exhibit _____ (TRE-5), gas-fired combined cycle generation capacity has the lowest expected total cost of all technologies evaluated for both intermediate and base load duty. Given the projections that the Osprey Project will operate as a base load unit, the gas-fired combined cycle technology that Calpine has chosen is the most cost-effective alternative available.

Q: How were these alternatives evaluated?

A: These alternatives were evaluated by comparing the estimated levelized life-cycle operating costs of the different technologies in different modes of operation, i.e., operated in peak, intermediate, and base load modes of operation. The analyses, which are summarized in Exhibit _____ (TRE-5), show that the lowest levelized costs for any technology for intermediate and base load applications are for the gas-fired combined cycle technology that Calpine has selected for the Osprey Energy Center.

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 Q: Do you believe that the Osprey Project will be economically
2 viable? Why or why not?

3 A: Yes, I believe that the Osprey Project will be economically and
4 financially viable over its entire useful life. Calpine, not
5 Florida electric ratepayers, bears the investment risk
6 associated with the Project, and as such, Calpine will have
7 very strong incentives to maintain and operate the Project as
8 efficiently and economically as possible. As noted above,
9 Slater Consulting's projections for Peninsular Florida indicate
10 that the Project is expected to operate, on an economic
11 dispatch basis, between 7,500 and 8,500 hours per year, with a
12 very high availability factor.

13 Also, the gas-fired combined cycle technology that Calpine
14 has selected for the Project is the most efficient and the most
15 economical generation technology currently available on a
16 commercial basis. Indeed, it is the technology of choice
17 throughout the U.S. electric industry today.

18

19 Q: What, if anything, could happen that would render the Osprey
20 Project no longer economically viable?

21 A: Power plant technology, as all technology, is constantly
22 advancing and being introduced to the market. At some point in
23 time, new technology will be implemented on a scale of
24 sufficient magnitude to render today's current best technology

DIRECT TESTIMONY OF TIMOTHY R. EVES

1 obsolete. This natural obsolescence in generation technology
2 is traditionally thirty years in the U.S. power market.
3 Calpine expects that the economic life of the Osprey Project
4 would be in line with this natural obsolescence cycle.

5 A significant portion of the generating plants currently
6 operating in Florida have already reached this point of
7 obsolescence. However, due to the significant demand growth in
8 Florida and the very limited number of new plants under
9 construction, the existing fleet of "obsolete" plants is
10 allowed -- actually required -- to continue operation to meet
11 demand, to the detriment of Florida and the State's electric
12 customers.

13 From a more short-term perspective, it is difficult to
14 envision a circumstance or situation that would render the
15 Project not economically viable. However, the Commission
16 should keep in mind that in the event that such an unforeseen
17 event may occur, Calpine will bear the capital and investment
18 risk of the Project and that Florida electric customers will
19 not be exposed to any stranded cost risk or other risks
20 associated with the Project, as they would be if the same
21 amount of capacity had been built and included in a traditional
22 regulated utility's rate base.

23

24

DIRECT TESTIMONY OF TIMOTHY R. EVES

REQUESTED COMMISSION ACTION

1

2 Q: What action are Seminole and Calpine asking the Commission to
3 take in this proceeding?

4 A: Seminole and Calpine are petitioning the Commission to issue
5 its order granting an affirmative determination of need for the
6 Osprey Energy Center. The Osprey Project is needed to meet
7 Seminole's needs for system reliability and integrity and for
8 adequate, cost-effective electricity, and the Project is
9 likewise consistent with Peninsular Florida's needs for clean,
10 reliable, cost-effective power supplies. The Osprey Project
11 will provide significant and substantial economic, efficiency,
12 environmental, and strategic benefits to Seminole, Seminole's
13 member cooperatives, those utilities' member-consumers, and the
14 State as a whole, and accordingly, the Commission should grant
15 the requested determination of need.

16

17 Q: Does this conclude your direct testimony?

18 A: Yes, it does.

19

20

21

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for Determination of)
Need for the Osprey Energy Center in) DOCKET NO. _____ -EC
Polk County by Seminole Electric)
Cooperative, Inc. and Calpine) FILED: December 4, 2000
Construction Finance Company, L.P.)
_____)

EXHIBITS

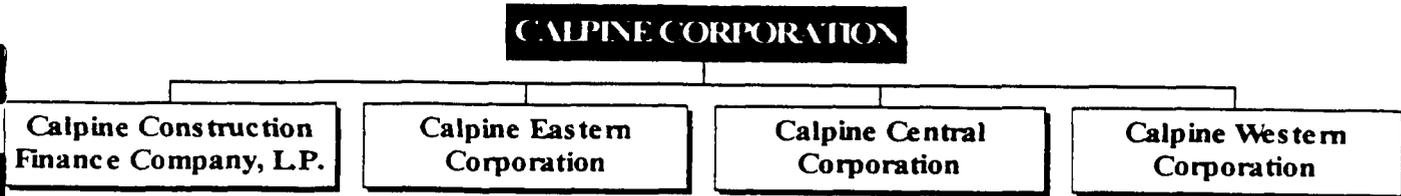
OF

TIMOTHY R. EVES

ON BEHALF OF

**CALPINE CONSTRUCTION
FINANCE COMPANY, L.P.**

CALPINE CONSTRUCTION FINANCE COMPANY, L.P. OWNERSHIP STRUCTURE





**Calpine Corporation Portfolio
of Generating Assets**

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Operating Gas Fired Power Plants	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
<u>Agnews</u> San Jose, CA	26.5	100%	26.5
<u>Auburndale</u> Auburndale, FL	143.0	100%	143.0
<u>Bayonne</u> Bayonne, NJ	158.0	7.5%	11.9
<u>Bethpage</u> Hicksville, NY	52.0	100%	52.0
<u>Clear Lake</u> Pasadena, TX	335.0	100%	335.0
<u>Dighton</u> Dighton, MA	162.0	50%	81.0
<u>Gilroy</u> Gilroy, CA	112.0	100%	112.0
<u>Gordonsville</u> Gordonsville, VA	233.0	50%	116.5
<u>Grays Ferry</u> Philadelphia, PA	143.0	40%	57.2
<u>Greenleaf 1</u> Yuba City, CA	50.0	100%	50.0
<u>Greenleaf 2</u> Yuba City, CA	50.0	100%	50.0
<u>Hidalgo</u> Edinburg, TX	502.0	78.5%	394.1
<u>Kennedy</u> Jamaica, NY	95.0	100%	95.0
<u>King City</u> King City, CA	103.0	100%	103.0
<u>Lockport</u> Lockport, NY	177.0	11.36%	20.1
<u>Morris</u> Morris, IL	155.0	86.45%	134.0
<u>Newark</u> Newark, NJ	47.0	80%	37.6
<u>Parlin</u> Parlin, NJ	89.0	80%	71.2
<u>Pasadena</u> Pasadena, TX	231.0	100%	231.0
<u>Pasadena Expansion</u> Pasadena, TX	520.0	100%	520.0
<u>Philadelphia</u>			

<u>Philadelphia</u> Philadelphia, PA	22.0	66.4%	14.6
<u>Pittsburg</u> Pittsburg, CA	64.0	100%	64.0
<u>Pryor</u> Pryor, OK	109.0	80%	87.2
<u>Stony Brook</u> Stony Brook, NY	36.0	100%	36.0
<u>Sumas</u> Sumas, WA	120.0	70%	84.0
<u>Texas City</u> Texas City, TX	465.0	100%	465.0
<u>Tiverton</u> Tiverton, RI	240.0	62.8%	150.7
<u>Watsonville</u> Watsonville, CA	29.0	100%	29.0

Operating Geothermal Power Plants	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
--	--------------------------------------	------------------------------------	---

<u>Aidlin</u> Middletown, CA	20.0	100%	20.0
<u>Bear Canyon</u> Middletown, CA	20.0	100%	20.0
<u>Calistoga</u> Middletown, CA	73.0	100%	73.0
<u>Lake County (2 power plants)</u> Middletown, CA	145.0	100%	145.0
<u>Sonoma</u> Middletown, CA	53.0	100%	53.0
<u>Sonoma County (12 power plants)</u> Middletown, CA	512.0	100%	512.0
<u>West Ford Flat</u> Middletown, CA	27.0	100%	27.0

Under Construction	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
---------------------------	--------------------------------------	------------------------------------	---

<u>Acadia</u> Eunice, LA	1,080.0	50%	540.0
<u>Aries</u> Pleasant Hill, MO	516.0	50%	258.0
<u>Baytown</u> Baytown, TX	704.0	100%	704.0
<u>Channel</u> Houston, TX	519.0	100%	519.0
<u>Decatur</u> Decatur, AL	659.0	100%	659.0

<u>Delta</u> Pittsburg, CA	798.0	50%	399.0
<u>Freestone</u> Freestone County, TX	1,002.8	100%	1,002.8
<u>Hermiston</u> Hermiston, OR	530.0	100%	530.0
<u>Los Medanos</u> Pittsburg, CA	493.0	100%	493.0
<u>Lost Pines I</u> Austin, TX	522.0	50%	261.0
<u>Magic Valley</u> Edinburg, TX	687.0	100%	687.0
<u>Morgan</u> Decatur, AL	660.0	100%	660.0
<u>Oneta</u> Coweta, OK	960.3	100%	960.3
<u>Ontelaunee</u> Ontelaunee, PA	511.0	100%	511.0
<u>Rumford</u> Rumford, ME	237.0	66.7%	158.1
<u>South Point</u> Bullhead City, AZ	526.0	100%	526.0
<u>Sutter</u> Yuba City, CA	516.0	100%	516.0
<u>Westbrook</u> Westbrook, ME	487.0	100%	487.0
Under Development	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
<u>Blue Heron</u> Indian River County, FL	1,080.0	100%	1,080.0
<u>Calgary Energy Centre</u> Calgary, Alberta	198.0	100%	198.0
<u>Fremont</u> Fremont, Ohio	500.0	100%	500.0
<u>Haywood</u> Haywood County, TN	763.0	100%	763.0
<u>Hillabee</u> Tallapoosa County, AL	700.0	100%	700.0
<u>Lone Oak</u> Lowndes County, MS	763.0	100%	763.0
<u>Metcalf</u> San Jose, CA	533.0	50%	266.5
<u>Osprey</u> Auburndale, FL	540.0	100%	540.0

Auburndale, FL				
<u>Teayawa</u> Thermal, CA	530.0	100%	530.0	
<u>Towantic</u> Oxford, CT	508.0	100%	508.0	
<u>Wawayanda</u> Middletown, NY	530.0	100%	530.0	
<u>West Phoenix</u> Phoenix, AZ	511.0	50%	255.5	

Last updated: 10/20/00 11:40:17 AM

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USE OF THIS SITE CONSTITUTES AGREEMENT
TO THE FOLLOWING TERMS AND CONDITIONS

90 FERC ¶ 61,164

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

February 23, 2000

Docket Nos. ER00-939-000
ER00-1049-000
ER00-1115-000

Skadden, Arps, Slate, Meagher & Flom LLP
ATTN: Victor A. Contract, Esq.
Attorney for Lake Worth Generation L.L.C.
1440 New York Avenue, N.W.
Washington, D.C. 20005

Dynegy Inc.
ATTN: Daniel A. King, Esq
Attorney for Calcasieu Power, LLC
Suite 510-A
805 15th Street, N.W.
Washington, D.C. 20005-2207

Davis Wright Tremaine LLP
ATTN: Steven F. Greenwald, Esq.
Attorney for Calpine Construction Finance Company, L.P.
Suite 600
One Embarcadero Center
San Francisco, California 94111-3834

Dear Sirs:

You submitted for filing with the Commission rate schedules under which applicants will engage in wholesale electric power and energy transactions at market-based rates. Your submittals, as modified below, comply with the Commission's requirements for market-based rates and are accepted for filing. They are designated and made effective as indicated in Appendix A to this order.

Calpine Construction Finance Company, L.P. (Calpine) requests authority to engage in the sale of certain ancillary services (listed in its proposed rate schedule) at market-based rates into the markets administered by the California ISO, the New England Power Pool markets administered by ISO New England, Inc., the New York Power Pool markets administered by the New York Independent System Operator, and into the

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Docket No. ER00-939-000, et al.

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Pennsylvania-New Jersey-Maryland Interchange Energy Market.¹ We will grant this request.²

Any waivers or authorizations requested by the applicants are granted to the extent specified in Appendix B to this order. Waiver of the prior or advance notice requirements, if requested, is granted to the extent specified in Appendix A. The applicants must comply with the reporting requirements and other requirements specified in Appendix B to this order.³

The codes of conduct submitted by the applicants are accepted if consistent with Appendix C, which reflects requirements adopted in previous Commission orders. Any code of conduct inconsistent with Appendix C is rejected and in such case Appendix C has been designated as the applicant's code of conduct. The codes of conduct submitted by the applicants covered by this order are consistent with Appendix C.

Calcasieu Power, L.L.C.'s (Calcasieu) proposed rate schedule fails to include a prohibition on power sales to affiliates, absent prior Commission approval under section

¹Calpine also proposes to provide Replacement Reserve service at market-based rates. The Commission has determined that Replacement Reserve service is not an ancillary service, and the granting of market-based rate authority for sales of energy and capacity includes the granting of market-based rate authority for Replacement Reserve service. See, e.g., AES Redondo Beach, L.L.C., et al., 85 FERC ¶ 61,123 at 61,452, 61,464 (1998), order on reh'g, 87 FERC ¶ 61,208 (1999) (AES).

²See AES; New England Power Pool, 85 FERC ¶ 61,379 (1998), reh'g pending; Central Hudson Gas & Electric Corporation, et al., 86 FERC ¶ 61,062, order on reh'g, 88 FERC ¶ 61,138 (1999); Atlantic City Electric Company, et al., 86 FERC ¶ 61,248, clarified, 86 FERC ¶ 61,310 (1999).

³On May 27, 1999, the Commission issued an order in which it modified the reporting requirements for long-term transactions applicable to public utilities without ownership or control over generation or transmission facilities that are authorized to sell power at market-based rates (power marketers). Southern Company Services, et al., 87 FERC ¶ 61,214 (1999), reh'g pending (Southern). Specifically, with respect to any long-term transaction agreed to by a power marketer after 30 days from the date of issuance of a final order in the Southern case, the power marketer must file a service agreement with the Commission within 30 days after service commences, rather than reporting transactions thereunder in its quarterly transaction summaries.

Docket No. ER00-939-000, *et al.*

-3-

205 of the Federal Power Act (FPA), 16 U.S.C. § 824d (1994). Calcasieu is directed, within 30 days of the date of this order, to revise its rate schedule accordingly.

Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (1999), an entity's filing of a timely notice of intervention or a timely, unopposed motion to intervene in a proceeding makes it a party to that proceeding.

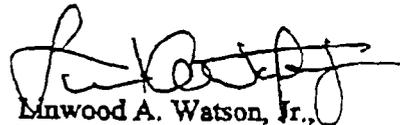
Should an applicant or any of its affiliates deny, delay, or require unreasonable terms, conditions, or rates for natural gas fuel or services to a potential electric competitor in bulk power markets, then that electric competitor may file a complaint with the Commission that could result in the applicant's or its affiliate's authority to sell power at market-based rates being suspended.⁴

Sales of accounts receivable are not dispositions of jurisdictional facilities and are not within the scope of section 203 of the FPA. To the extent an applicant seeks a case-specific finding on this or any related point, it may file a petition for a declaratory order with the Commission.

Calcasieu and Lake Worth Generation L.L.C. (Lake Worth) seek Commission approval to reassign transmission capacity. We find their requests to be consistent with our requirements.

Lake Worth and Calcasieu must inform the Commission of the dates service commences.

By direction of the Commission.



Minwood A. Watson, Jr.,
Acting Secretary.

⁴See, e.g., *Louisville Gas & Electric Co.*, 62 FERC ¶ 61,016 at 61,148 (1993).

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APPENDIX A

Applicants are hereby informed of the following rate schedule designations:

Lake Worth Generation L.L.C.

Docket No. ER00-939-000

Rate Schedule Designation

Effective Date: Date Service Commences

<u>Designation</u>	<u>Description</u>
--------------------	--------------------

FERC Electric Tariff,
Original Volume No. 1,
Original Sheet No. 1

Market-Based Rate Tariff

Calcasieu Power, LLC

Docket No. ER00-1049-000

Rate Schedule Designations

Effective Date: Date Service Commences

<u>Designation</u>	<u>Description</u>
--------------------	--------------------

FERC Electric Tariff,
Original Volume No. 1
Original Sheet Nos. 1-2

Market-Based Rate Tariff
and Code of Conduct

Calpine Construction Finance Company, L.P.

Docket No. ER00-1115-000

Rate Schedule Designation

Effective Date: March 14, 2000

<u>Designation</u>	<u>Description</u>
--------------------	--------------------

FERC Electric Tariff,
Original Volume No. 1
Original Sheet Nos. 1-2

Market-Based Rate Tariff

Docket No. ER00-939-000, et al.

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APPENDIX B

(1) If requested, waiver of Parts 41, 101, and 141 of the Commission's regulations, with the exception of 18 C.F.R. §§ 141.14, .15 (1999), is granted. Licensees remain obligated to file the Form No. 80 and the Annual Conveyance Report.

(2) Within 30 days of the date of this order, any person desiring to be heard or to protest the Commission's blanket approval of issuances of securities or assumptions of liabilities by those applicants who have sought such approval should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

(3) Absent a request to be heard within the period set forth in Paragraph (2) above, if the applicants have requested such authorization, the applicants are hereby authorized to issue securities and assume obligations or liabilities as guarantor, indorser, surety, or otherwise in respect of any security of another person; provided that such issue or assumption is for some lawful object within the corporate purposes of the applicants, compatible with the public interest, and reasonably necessary or appropriate for such purposes.

(4) If requested, until further order of this Commission, the full requirements of Part 45 of the Commission's regulations, except as noted below, are hereby waived with respect to any person now holding or who may hold an otherwise proscribed interlocking directorate involving the applicants. Any such person instead shall file a sworn application providing the following information:

- (a) full name and business address; and
- (b) all jurisdictional interlocks, identifying the affected companies and the positions held by that person.

(5) The Commission reserves the right to modify this order to require a further showing that neither the public nor private interests will be adversely affected by continued Commission approval of the applicants' issuances of securities or assumptions of liabilities, or by the continued holding of any affected interlocks.

(6) If requested, waiver of the provisions of Subparts B and C of Part 35 of the Commission's regulations, with the exception of sections 35.12(a), 35.13(b), 35.15 and 35.16, is granted for transactions under the rate schedules at issue here.

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(7) (a) Applicants who own generating facilities may file umbrella service agreements for short-term power sales (one year or less) within 30 days of the date of commencement of short-term service, to be followed by quarterly transaction summaries of specific sales (including risk management transactions if they result in actual delivery of electricity). For long-term transactions (longer than one year), applicants must submit the actual individual service agreement for each transaction within 30 days of the date of commencement of service. To ensure the clear identification of filings, and in order to facilitate the orderly maintenance of the Commission's files and public access to documents, long-term transaction service agreements should not be filed together with short-term transaction summaries. For applicants who own, control or operate facilities used for the transmission of electric energy in interstate commerce, prices for generation, transmission and ancillary services must be stated separately in the quarterly reports and long-term service agreements.

(b) Applicants who do not own generating facilities must file quarterly reports detailing the purchase and sale transactions undertaken in the prior quarter (including risk management transactions if they result in actual delivery of electricity). Applicants who are power marketers should include in their quarterly reports only those risk management transactions that result in the actual delivery of electricity.

(8) The first quarterly report filed by an applicant in response to Paragraph (7) above will be due within 30 days of the end of the quarter in which the rate schedule is made effective.

(9) Each applicant must file an updated market analysis within three years of the date of this order, and every three years thereafter. The Commission reserves the right to require such an analysis at any time. The applicants must also inform the Commission promptly of any change in status that would reflect a departure from the characteristics the Commission has relied upon in approving market-based pricing. These include, but are not limited to: (a) ownership of generation or transmission supplies; or (b) affiliation with any entity not disclosed in the applicants' filing that owns generation or transmission facilities or inputs to electric power production, or affiliation with any entity that has a franchised service area. Alternatively, the applicants may elect to report such changes in conjunction with the updated market analysis required above. Each applicant must notify the Commission of which option it elects in the first quarterly report filed pursuant to Paragraph (7) above.

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APPENDIX C

[APPLICANT]
SUPPLEMENT NO. _ TO RATE SCHEDULE NO. _

**STATEMENT OF POLICY
AND CODE OF CONDUCT
WITH RESPECT TO THE RELATIONSHIP BETWEEN
[POWER MARKETER] AND [PUBLIC UTILITY]**

Marketing of Power

1. To the maximum extent practical, the employees of [Power Marketer] will operate separately from the employees of [Public Utility].
2. All market information shared between [Public Utility] and [Power Marketer] will be disclosed simultaneously to the public. This includes all market information, including but not limited to, any communication concerning power or transmission business, present or future, positive or negative, concrete or potential. Shared employees in a support role are not bound by this provision, but they may not serve as an improper conduit of information to non-support personnel.
3. Sales of any non-power goods or services by [Public Utility], including sales made through its affiliated EWG's or QF's, to [Power Marketer] will be at the higher of cost or market price.
4. Sales of any non-power goods or services by the [Power Marketer] to [Public Utility] will not be at a price above market.

Brokering of Power

To the extent [Power Marketer] seeks to broker power for [Public Utility]:

5. [Power Marketer] will offer [Public Utility's] power first.
6. The arrangement between [Power Marketer] and [Public Utility] is non-exclusive.
7. [Power Marketer] will not accept any fees in conjunction with any Brokering services it performs for [Public Utility].

OSPREY ENERGY CENTER GENERATING ALTERNATIVES EVALUATED

GENERATING TECHNOLOGIES CONSIDERED

COMBUSTION TURBINE-OIL

COMBUSTION TURBINE-GAS

COMBINED CYCLE-GAS

COMBINED CYCLE-OIL

PULVERIZED COAL STEAM

CONVENTIONAL GAS STEAM

COAL GASIFICATION-COMBINED CYCLE

NUCLEAR STEAM

RENEWABLE ENERGY

OSPREY ENERGY CENTER COST-EFFECTIVENESS ANALYSES OF ALTERNATIVE GENERATION TECHNOLOGIES

Comparison of Generation Alternatives

Technology Type	Levelized Life-Cycle Cost at Assumed Capacity Factor (2000 \$/MWh)		
	Peaking Operation (10% CF)	Intermediate Oper. (50% CF)	Base Load Oper. (90% CF)
Combined Cycle - Gas Fired	\$ 98 - 118	\$ 37 - 45	\$ 30 - 37
Combined Cycle - Oil Fired	111 - 134	50 - 61	43 - 53
Simple Cycle - Gas Fired	85 - 116	52 - 73	45 - 68
Simple Cycle - Oil Fired	110 - 144	71 - 101	64 - 97
Steam - Coal	200 - 220	52 - 59	35 - 42
Steam - Gas	124	53	45
Steam - Nuclear	283	61	36
IGCC Technology	196 - 245	49 - 61	32 - 40
Renewable Energy	121 - 1072	67 - 240	47 - 147

Source: R. W. Beck and Associates.