### ORIGINAL

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In Re: Petition for Determination of Need for an Electrical Power Plant in ) DOCKET NO. 000442-EI Polk County by Calpine Construction ) Finance Company, L.P.

### DIRECT TESTIMONY

OF

### GERARD J. KORDECKI

ON BEHALF OF

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

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FPSC-RECORDS/REPORTING

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: PETITION OF CALPINE CONSTRUCTION FINANCE COMPANY, L.P. FOR DETERMINATION OF NEED FOR THE OSPREY ENERGY CENTER, PSC DOCKET NO. 000442-EI

DIRECT TESTIMONY OF GERARD J. KORDECKI

- 1 Q: Please state your name, address and occupation.
- A: My name is Gerard J. Kordecki. My business address is 10301
  Orange Grove Drive, Tampa, Florida 33618. I am self employed
  as an energy and regulatory consultant.

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### 6 Q: Please summarize your educational background and work 7 experience.

- 8 A: I received a Bachelor of Science degree in Advertising in 9 1963, and a Master of Arts degree in Marketing in 1965, both 10 from the University of Florida. I also pursued graduate 11 study in Economics at the University of Florida. I worked for Tampa Electric Company for 33 years in various capacities 12 13 involving marketing, conservation, resource planning and 14 rates and regulation. I have participated in the development 15 of and supervised the preparation of numerous studies and 16 plans involving conservation goals and programs, cost 17 allocation, rates, load research and resource plans.
- 18
- Q: Mr. Kordecki, have you previously testified before the
   Florida Public Service Commission ("FPSC" or "Commission")?

A: Yes, I have testified regarding the subjects identified in my
 preceding answer on more than 36 occasions which included
 rate cases, determination of need hearings and various
 conservation dockets. I have also participated in a number
 of rule hearings, agenda conferences, and Commission
 workshops.

7

### Q: In which power plant need determination proceedings have you testified?

10 I testified on behalf of Tampa Electric Company ("TECO") in A: 11 support of TECO's Polk County coal gasification-combined 12 cycle power plant in Commission Docket No. 910883-EI, 13 Determination of Need for Proposed Electrical Power Plant and 14 Related Facilities in Polk County by Tampa Electric Company. I also filed direct and rebuttal testimony in support of the 15 16 petition for determination of need for the Okeechobee 17 Generating Project in Commission Docket Number 991462-EU.

18

#### 19 Q: Mr. Kordecki, what is the purpose of your testimony?

20 A: My testimony describes alternative power supply resource 21 options available to load-serving utilities and the revenue 22 collection methods associated with these options. I will 23 contrast the revenue allocation effects of new resources 24 either purchased from a contract wholesale plant such as the

1 Osprey Project proposed by Calpine Construction Finance 2 Company, L.P. ("Calpine") or constructed by a load-serving 3 utility. I use the term "load-serving utility" to mean a 4 retail-serving investor-owned, municipal, or cooperative 5 utility, or a generation and transmission organization (which 6 only provides wholesale power), that has the responsibility 7 for serving the loads of its retail customers or members. My 8 comments on revenue collection and allocation are limited to 9 investor-owned utilities. The public power entities (municipal and cooperative utility systems) treat their 10 resources and operating costs associated with production 11 12 facilities in similar manners to investor-owned utilities but 13 their oversight activities concerning resource additions and 14 vary significantly from costs may organization to 15 organization such that comparisons are difficult. In 16 contrast, in my experience, the investor-owned utilities are uniformly regulated by the FPSC. I do not believe that the 17 least-cost planning principles which underlie resource 18 additions are any different for investor-owned utilities or 19 20 municipal and cooperative systems. The goal is to add the 21 least-cost resource(s) to meet the capacity and/or energy 22 needs of the load-serving utilities.

23 My testimony also addresses the risk allocation effects 24 and strategic aspects of the different resource procurement

options -- i.e., power purchases vs. self-built generating
 plants -- available to retail-serving utilities.

3 My testimony describes the wholesale market in Florida and evolving changes in wholesale markets, including the 4 types of wholesale transactions that are taking place both 5 6 within Peninsular Florida and into and through the 7 Southeastern Electric Reliability Council ("SERC"). This 8 wholesale market description includes comments on resource 9 ownership concentration levels in Peninsular Florida.

10 My testimony also discusses the reliability effects of 11 Calpine's Osprey Energy Center ("Osprey Project" or 12 "Project"), both as a wholesale contract plant as Calpine 13 presently proposes to develop the Project and as a 14 hypothetical merchant plant.

At the present time, Calpine's Osprey Project is not 15 being developed as a merchant plant. However, since it is 16 17 possible that circumstances could change to allow the Osprey Project to be operated as merchant capacity in the future, my 18 19 testimony also describes merchant power plants, addresses the 20 implications and impacts if the Project were to be operated 21 as merchant capacity at some future time, and addresses a 22 number of assertions raised by opponents of merchant plants 23 in their arguments against such plants locating in Peninsular 24 Florida.

1 Finally, my testimony discusses certain policy aspects 2 of Calpine's request that, in the event that Calpine does not 3 have contracts for most of the output of the Project by the time of the hearings in this proceeding, the Commission 4 5 should grant an affirmative determination of need subject to 6 a condition that before construction of the Project can 7 begin, Calpine must make the required demonstrations that the 8 Project's output is committed to Florida retail-serving 9 utilities and that the terms and conditions of such commitments are cost-effective to the purchasing utilities 10 and their ratepayers. 11

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#### THE OSPREY ENERGY CENTER

What is your understanding of the Osprey Energy Center that 14 Q: is the subject of this need determination proceeding? 15 It is my understanding that the Osprey Energy Center is a 500 16 A: 17 megawatt-class natural gas-fired, combined cycle generating I understand that the Project will consist of two 18 unit. combustion turbine generators, two heat recovery steam 19 generators, and one steam turbine generator, and that the 20 21 Project has been designed to have a net annual average full load heat rate of approximately 6,800 British thermal units 22 ("Btu") per kilowatt-hour. It is my further understanding 23 24 that the Project is to be developed and constructed by

1 Calpine Construction Finance Company, L.P., using funds 2 provided by its investors, and that the Project will not be 3 in the rate base of any load-serving utility system.

I understand that the Project will be located in 4 5 Auburndale, Florida, on a site next to an existing and interconnected 6 cogeneration power plant, to the 7 Peninsular Florida transmission grid at the Recker Substation of Tampa Electric Company, which is adjacent to the Osprey 8 Project site. I also understand that gas to fuel the Project 9 will be supplied through the proposed interstate natural gas 10 pipeline being developed by Gulfstream Natural Gas System, 11 L.L.C. ("Gulfstream"). 12

13

What is your understanding regarding the types of power sales 14 Q: that Calpine intends to make from the Osprey Project? 15 It is my understanding that, at this time, Calpine intends to 16 A: commit the capacity and energy output of the Osprey Project 17 18 to Florida retail-serving utilities pursuant to what I would characterize as long-term firm power purchase agreements or 19 I understand that Calpine is actively pursuing 20 contracts. 21 this particular development and sales strategy in order to achieve its fundamental business purpose for the Project 22 while attempting to comply with the Florida Supreme Court's 23 24 opinion in the Duke Energy-New Smyrna Beach merchant plant

1 need determination case. It is my understanding that in that 2 opinion, known as Tampa Electric Co. v. Garcia, the Court 3 held that in order to be permitted under the Power Plant Siting Act, a proposed power plant's output must be committed 4 to meeting the needs of specific Florida utilities that serve 5 6 retail customers. It is my understanding that Calpine had 7 always planned to enter into such contracts to sell the Project's output to Florida utilities, and that the Court's 8 9 opinion simply caused Calpine to re-order its development strategy by obtaining contracts before proceeding with 10 permitting, rather than obtaining permits and approvals first 11 and then negotiating contracts during the construction phase 12 as Calpine had originally planned. 13

I also understand that if applicable Florida law should 14 allow the permitting of merchant power plants under the Power 15 Plant Siting Act, Calpine would consider developing the 16 17 project as a merchant plant, i.e., it would consider returning to its original development and power sales 18 strategy of obtaining permits and approvals first and then, 19 20 during construction of the Project, negotiating contracts to 21 sell the Project's output to Florida retail-serving 22 utilities.

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1 RATEPAYER IMPACTS OF ALTERNATIVE POWER SUPPLY RESOURCES 2 Mr. Kordecki, what are the power supply resource options that **Q**: 3 are available to an electric load-serving utility? Normally, resource additions will be obtained through a firm 4 A: power purchase or by the load-serving utility constructing a 5 6 generating unit. The selection from these two alternatives 7 is normally done on a least-cost basis, but strategic factors such as fuel diversity, environmental considerations, 8 9 financing issues, and risk considerations may affect the 10 decision.

11

12 Q: Could Calpine's Osprey Energy Center be considered as a
 13 potential alternative for a load-serving utility's resource
 14 selection process?

15 A: Yes. Calpine has indicated that its primary business plan is to market the output of the Osprey Project on a firm basis, 16 i.e., to sell firm capacity and energy to Florida retail-17 18 serving utilities. This is an entirely viable and industry-19 recognized means of supplying a load-serving utility's power supply resource needs. In this way, the Osprey Project would 20 simply add to the number of potential resource options 21 22 available to Florida load-serving entities.

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Q: How are the costs of different resource supply options, i.e.,
 a power purchase or a utility-built generating unit,
 collected by a load-serving utility?

A: Assuming that the additional resource acquisition, regardless
whether it was a power purchase or a utility-built power
plant, was prudent, the source of the revenues to pay for the
resource is the same -- rates paid by the load-serving
utility's customers -- but the collection method is
different.

In the case of a purchased resource, the purchasing 10 utility would collect the costs through the Fuel and 11 12 Purchased Power Cost Recovery Charge (the "Fuel Charge"). The request to collect the purchase costs is subject to 13 approval in the Commission's periodic hearings regarding fuel 14 and purchased power cost recovery, conservation cost 15 16 recovery, and environmental cost recovery. Purchases may be made up of two components: (1) a fixed cost charge per 17 kilowatt of capacity per month, generally referred to as a 18 "capacity charge," which is collected in the capacity charge 19 component of the Fuel Charge, and (2) a variable cost 20 component, usually including both fuel costs and non-fuel 21 variable operating and maintenance ("O&M") costs and usually 22 referred to as an "energy charge," which would be collected 23 in the energy charge component of the Fuel Charge. These 24

purchases can be either firm or non-firm and may have varying lengths, escalation factors, and other conditions which may be subject to change. The important points are that customers are obligated to pay only the reasonable and prudent costs of the power purchased, and that the collection of these costs is under the scrutiny of the Florida Public Service Commission.

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## 9 Q: What happens when a load-serving utility decides to build a 10 generating unit?

11 The size and steam capacity of the proposed unit determine A: whether a utility is required to seek site certification 12 13 under the Florida Electrical Power Plant Siting Act (the "Siting Act"), including a determination of need from this 14 15 Commission. Assuming the unit is approved, when it achieves 16 commercial in-service status, the utility will add the unit's 17 costs to its rate base and regulatory operating accounts. 18 The costs are of two types: (1) a capitalized cost, which 19 represents the outlays to build the unit and which becomes part of the utility's rate base, and (2) the costs to operate 20 21 and maintain the unit, which are included in the utility's 22 operating costs. The latter have two major components -- a variable O&M cost and a fuel cost. The O&M costs become part 23 24 of the annual operating expenses, but fuel costs are

1 collected in the Fuel Charge in a similar manner as the energy costs from a purchased resource. If the unit's 2 capitalized costs are not significant enough to cause 3 financial hardship on the utility's earned rate of return, 4 5 then no further action can be expected from the utility. If 6 the capital addition is significant, some type of revenue 7 relief will usually be requested by the utility. This 8 request will begin a process where the utility's total expenditures and rate base will be examined. 9

10 If there is a unit addition but no revenue relief is 11 requested, the Commission uses a surveillance report to 12 monitor the load-serving utility's financial condition. 13 Again, the important points are that the ultimate 14 (predominantly retail) customers are responsible for paying 15 all prudent costs associated with the construction of the new 16 unit over the life of the unit and that the Florida Public 17 Service Commission maintains oversight of the costs of the 18 unit.

19

Q: Describe what happens with respect to cost recovery from
 ratepayers when a competitive wholesale power plant, like the
 Osprey Project, is built.

A: After the Commission grants its need determination and the
Siting Board grants the required site certification, the unit

is constructed and becomes commercially operational. 1 If there are firm power sales agreements, then those contracts 2 are performed by the wholesale supplier delivering the 3 required power and the retail-serving utility paying for it 4 5 as a firm purchased resource as described previously. If 6 there are no firm contracts for part or all of the unit's 7 output, then the supplier will generally operate the plant and sell its power at a market or negotiated price applicable 8 9 to the particular purchase, which may vary according to the 10 duration of the purchase and the firm or non-firm character 11 of the transaction. These sales may be hourly, daily or "day 12 ahead," weekly, monthly, or seasonal.

13

14 Q: Under what circumstances will a load-serving utility purchase
 15 power (capacity, energy, or both) from a wholesale plant like
 16 the Osprey Project?

17 A: Generally, a load-serving (or retail-serving) utility will 18 purchase from a plant like the Osprey Project when the 19 purchase represents a favorable transaction compared to the 20 utility's other power supply options. If the utility were in 21 the market for a long-term power supply resource, then it 22 would purchase from a wholesale plant like the Osprey Project 23 when that purchase offered either better pricing, better or 24 more flexible terms and conditions, or both.

#### 1 Q: What about purchases from merchant capacity?

2 A retail-serving utility will generally make purchases from A: 3 merchant capacity just as it will make purchases from other utilities, when the merchant capacity's pricing is less than 4 5 the incremental production cost of the load-serving utility 6 (either the utility's incremental production cost or its 7 incremental cost of alternate purchases). Since purchases 8 from the merchant capacity are more economical, the utility's 9 customers will be better off financially. During these 10 situations, it would be imprudent for the utility not to make purchases from merchant capacity. 11 The costs of these 12 purchases would be included by the load-serving utility to 13 the Commission in its fuel and purchased power cost recovery filing for approval as wholesale economy purchases. Subject 14 15 to the Commission's review for prudence and reasonableness, these purchased power costs would be recovered through the 16 17 Fuel Charge. The treatment would be the same as purchases 18 made from load-serving utilities.

19

20 Q: Is there any way to ensure that Florida's electric customers 21 receive the benefit of the lowest cost per kilowatt-hour from 22 wholesale sales transactions?

A: It is not possible to guarantee, absolutely and under all
 conceivable circumstances, the realization of the full

benefits of the lowest power supply costs for ratepayers. However, the encouragement of new entries into the wholesale generation market will promote increased sales competition. This competition will put downward pressure on wholesale prices, which will lead directly to lower retail rates to the purchasing utility's customers under all realistic scenarios.

7 Coupled with the Commission's general authority to 8 review fuel and purchased power costs for cost recovery 9 (based on prudence and reasonableness), the entry of 10 additional wholesale suppliers, including both contract 11 plants like the Osprey Project and "pure" merchant plants 12 (plants without any contracts at all, if such plants were 13 allowed) can be expected to result in lower power supply 14 costs for Florida electric customers than if entry is denied. 15 Encouraging wholesale competition would, in no way, change the requirements for adequate installed and operating 16 reserves (either contracted or self-built) for the load-17 serving utilities. Their retail service obligations remain 18 19 the same.

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#### WHOLESALE POWER MARKETS AND WHOLESALE COMPETITION

22 Q: Mr. Kordecki, what is meant by wholesale sales?

A: Wholesale sales are sales made for resale purposes only. No
 retail customers purchase wholesale power. Wholesale power in

Florida can only be purchased by a load-serving utility with an obligation to serve retail customers (load-serving utilities may or may not have their own generation) or purchases may be made by a utility or marketing entity which will resell the power at the wholesale level. The same "block" of power may be re-sold at wholesale more than once before it is used and sold at the retail level.

8

#### 9 Q: What agency regulates these wholesale sales?

10 A: In my experience with Tampa Electric Company, I developed a 11 working understanding that the Federal Energy Regulatory Commission (FERC) has jurisdiction over the rates, terms and 12 conditions of the sales made by jurisdictional utilities and 13 14 marketing entities. In Florida these jurisdictional entities 15 include investor-owned utilities, marketers, exempt wholesale 16 generators, independent power producers, and some 17 cogenerators. Based on my experience, the FERC normally does 18 not have authority over the wholesale sales made by any of 19 the municipal or cooperative utilities or by generation and 20 transmission ("G&T") organizations.

21

#### 22 Q: How will wholesale-only plants be designated?

A: Based on my experience and understanding, I believe that in
 general, wholesale plants like Calpine's Osprey Project (and

1 pure merchant plants) will be subject to FERC's regulatory 2 authority as "public utilities" under the Federal Power Act. 3 Many of these entities may also have "Exempt Wholesale 4 Generator" status with respect to the Public Utility Holding 5 Company Act of 1935. I am not an attorney, and this 6 statement is intended only to convey my understanding of such 7 entities in the federal and state regulatory framework; it is 8 not intended to represent a legal conclusion.

9

### 10 Q: What role does the Florida Public Service Commission have in 11 wholesale transactions?

12 For wholesale sales made by investor-owned utilities, the A: 13 Commission will determine the treatment of the revenues and 14 the costs of the sales. In the case of firm sales, the 15 Commission must decide whether to jurisdictionally separate the sales or flow back some or all of the proceeds as credits 16 17 against retail customers' cost responsibilities. In the case 18 of flowing back the revenues, the methodology for crediting 19 the revenues must be determined (e.g., credited against costs 20 in calculating the Fuel Charge). In the case of non-firm 21 sales and short-term firm sales, how the costs will be 22 determined and proceeds credited must be decided.

For purchases made by jurisdictional utilities, the expenditures for the purchases will be examined for prudence

in the Fuel and Purchased Power Cost Recovery hearings.
 2

3 Q: Mr. Kordecki, what do you mean by wholesale competition? 4 A: Wholesale competition in electric markets generally refers to 5 the presence of competitive, unrestricted, uncommitted 6 sellers of power in markets such as Peninsular Florida. The 7 more sellers and buyers of power in a given market, the 8 greater the potential for robust competition in that market. 9 Wholesale transactions can be long-term or short-term; firm 10 or non-firm; and at market-based or cost-based rates. 11 However, these sales can only be made for resale purposes.

12

## Q: Mr. Kordecki, please describe the typical types of wholesale transactions which take place in the Florida market.

Historically, the most common firm power sales transactions 15 A: 16 were requirements (full and partial) sales which typically 17 were made by an investor-owned utility supplying firm power 18 to a city or cooperative. In turn, the city or cooperative 19 sold the power to its retail customers. There are a number 20 of cities in Florida that have their own generation resources 21 and entirely supply their customers. More recently, G&T 22 organizations, such as the Florida Municipal Power Agency and Seminole Electric Cooperative, Inc., have been formed whose 23 24 purposes are to supply members' requirements from utility-

owned or purchased resources or both. These arrangements
 might be characterized as power pools.

3 Similar types of firm transactions would be unit or 4 station sales, which may include some or all of the units in 5 a generating station, or a combination of units from a number 6 of stations. For example, some Florida utilities purchase 7 power from designated units at the Scherer and Miller 8 generating stations of the Southern Company. The purchasing 9 utility may use the power as requirements or to offset more 10 expensive resources or to resell.

11 There are a number of types of non-firm sales which can 12 vary from hourly (such as the Florida Energy Broker) to long-13 term sales. The potential configurations of these sales are 14 effectively limitless except that each has some condition(s) 15 which allows the seller to recall the power. Over the last 16 four or five years, the non-firm sales have shifted away from 17 the hourly market to longer periods such as day-ahead, weekly 18 (typically 5 days per week for 16 hours per day) and even 19 monthly or seasonal "call" contracts. The tight capacity situations during peak periods experienced in Florida and 20 21 elsewhere in the United States have led to more transactions 22 for longer periods in order to assure the purchaser of the 23 availability of the energy. Significant exports out of 24 Florida by the incumbent generation owners during regional

shortages have become more commonplace over the last two or
 three years.

3

#### 4 Q: How are the rates arrived at for these wholesale sales?

5 A: In the past, most of the rates were negotiated or were under 6 a published FERC rate schedule and were based on "costs." 7 For the Florida Energy Broker a price between the buying 8 utility's and the selling utility's incremental generation 9 costs was used to produce a "shared savings" price. More 10 recently, "market-based rates" have become common. A FERC-11 jurisdictional utility, as long as it does not have market 12 power in generation, can generally obtain the FERC's approval 13 charge market-based negotiated to or rates. Non-14 jurisdictional utilities (such as municipals, cooperatives 15 and G&T organizations) have always had the ability to charge 16 market-based rates. Most utilities have maintained some negotiated "cost-based" tariffs 17 which they use in 18 coordination sales between utilities (e.g., emergency sales).

19

#### 20 Q: Why are market-based rates allowed for wholesale sales?

A: The wholesale market is considered to be a competitive market. Competition is more effective in giving proper generation price signals (i.e., price signals that will lead to maximally efficient transactions) to buyers and sellers

1 than more traditional, regulatorily-established "cost-based 2 rates."

3

Q: Do all the load-serving utilities in Peninsular Florida have
 market-based rate authority?

Α: 6 Yes, either by FERC approval or due to the absence of FERC 7 jurisdiction. Florida's two largest utilities, Florida Power & Light Company ("FPL") and Florida Power Corporation ("FPC") 8 9 only have market-based rate authority for sales outside 10 Peninsular Florida, i.e., outside the Florida Reliability 11 Coordinating Council ("FRCC") area. Both, in their final 12 petitions to FERC for market-based rate authority, limited 13 their requests to sales outside the FRCC area. Tampa 14 Electric Company has market-based rate authority that is not 15 restricted to any geographic area. The municipal and 16 cooperative utilities may sell at market-based rates because 17 the FERC has no jurisdiction over their wholesale rates. 18 This synopsis of market-based rates in Florida is made on the 19 basis of my experience and observations in my career working 20 in relevant regulatory processes.

21

22 Q: Earlier in your testimony, you stated that robust competition
23 in the wholesale market is likely to exist when there are a
24 large number of buyers and sellers of power. Does such a

#### 1 situation exist in Peninsular Florida?

2 A: No, not in my opinion. Generation resource ownership or control is the primary determinant in evaluating the "seller" 3 side of the market competition equation. It matters little 4 5 if there are many sellers if a few sellers own or control 6 significant portions of the total generation resources. The 7 two largest utilities in Peninsular Florida own or control 8 approximately two-thirds of the resources. The Peninsular 9 Florida market is, at a minimum, highly concentrated. With this concentrated market, there is the potential for market 10 11 power abuses, particularly under transmission-constrained 12 conditions.

13

#### 14 Q: Are there any remedies for this situation?

15 A: Some are, however, more radical than others. Across a Yes. 16 continuum of solutions, divestiture of generation assets 17 would be on the far left (i.e., most extreme) and easing 18 entry for new wholesale generation participants might be on 19 the far right. At this time, increasing the number of 20 suppliers through the development of wholesale plants like 21 the Osprey Project appears to be practical and feasible. 22 Wholesale-only plants could be built by non-affiliated 23 developers and also by load-serving utilities who would 24 exclude their wholesale generation capacity from their

regulated utility rate bases. Of course, potential market power issues and the possible need to have either functional or structural protections for captive customers would have to be addressed before incumbent load-serving utilities could build wholesale-only generation.

6

# Q: Mr. Kordecki, will Calpine's Osprey Project be competing for all types of wholesale sales?

9 As I understand Calpine's proposal as stated in its need A: 10 determination petition, Calpine will not, at least initially, normally be competing for all types of wholesale power sales. 11 Consistent with Calpine's basic plan and by virtue of 12 13 Calpine's efforts to comply with the Florida Supreme Court's 14 opinion reversing the Commission's determination of need for 15 the Duke Energy-New Smyrna Beach power plant, Calpine will 16 only be competing to supply power to Florida load-serving 17 utilities pursuant to what I would characterize as long-term 18 contracts. If Calpine enters into firm contracts as planned, 19 it might occasionally have economy power to sell 20 competitively, if, for example, the utility to which the capacity and energy was committed elected not to take the 21 22 energy during a certain time period. If at some future time, 23 Calpine is able to operate the Project or some portion of the 24 Project's capacity as merchant capacity, then Calpine would

be competing for all types of wholesale sales, including long-term and short-term firm sales and economy sales. In any event, however, Calpine will only make sales to wholesale purchasers and those purchases made by load-serving utilities will normally be made as a substitute for the purchasing utility's higher-cost generation resources.

- 7

8 Q: Do the same changing wholesale market circumstances also 9 characterize transactions between market areas such as the 10 FRCC and SERC?

A: Yes, in the sense that increasing levels of entry of
 wholesale-only generators and load-serving utility resource
 additions will make wholesale markets more competitive.

Transmission issues aside, wholesale competition from 14 wholesale-only plants locating in the SERC region is on the 15 16 increase. Since November of 1999, the Southern Company has announced a 550 megawatt wholesale-only plant to be built in 17 Lee County, Alabama, and Southern is increasing the size of 18 its Plant Dahlberg in order to sell 225 megawatts to Dynegy 19 Power Marketing, which plans to sell the output from these 20 units into the wholesale market. Duke Energy Corporation has 21 announced two new wholesale plants of approximately 500 22 23 megawatts each which will be located in the western part of the SERC region. Calpine Corporation itself has announced 24

two 700 megawatt plants in Alabama.

2 Ι have identified these wholesale generation 3 construction announcements to establish that markets are 4 changing at an accelerated pace. These wholesale-only plants 5 are being built in the SERC Region -- a region which has been 6 characterized as having relatively low average production 7 costs, both below the national average and significantly 8 below electricity production costs for Peninsular Florida. 9 Peninsular Florida's costs are the highest among all of the reliability council regions in the U.S. 10

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Q: Please explain how individual utility customers will be
affected if Calpine's Osprey Project and other efficient
wholesale-only plants enter the Florida wholesale market.
A: Calpine's Osprey Project and other efficient, non-rate-based

plants will increase the number of competitive, predictably 16 low-cost resource options available to utilities. Many times 17 these units will be able to supply power into the Peninsular 18 Florida market at lower costs than the marginal unit or units 19 which would be supplying electricity incrementally into the 20 If cost-effective plants such as the Osprey Project 21 grid. are excluded from the Florida wholesale market, 22 the 23 consequences will almost certainly be higher costs for Florida ratepayers. This conclusion applies equally to the 24

Osprey Project as a wholesale contract plant, as proposed by
 Calpine, or if Osprey were developed or operated as pure
 merchant capacity.

4

## G: Are wholesale-only plants likely to provide any other benefits to Florida electric customers?

7 A: Yes, wholesale plants will also participate as competitors 8 for long-term firm sales which can be used by load-serving 9 utilities as generating resources. Increasing the number of 10 resource options available to load-serving entities should 11 put downward pressure on the pricing of new resources, 12 thereby lowering long-term supply costs.

13

14

#### RISK ALLOCATION AND OTHER STRATEGIC FACTORS

Q: Mr. Kordecki, what, if any, strategic factors are involved in
 the consideration of alternative power supply options,
 including both power purchase opportunities and utility-self built generating plants?

19 A: Strategic factors that enter into these considerations 20 include fuel diversity, technology and obsolescence risks, 21 the related risks of a retail-serving utility's ratepayers' 22 exposure to stranded cost liability, environmental impacts 23 and environmental regulatory risks, and operational risks.

24

1 Q: What, if any, strategic benefits would competitive, 2 wholesale-only power plants like the Osprey Project provide 3 to Florida electric customers? 4 A: Competitive, wholesale-only power plants like the Osprey 5 Project would provide some or all of the following benefits 6 to Florida electric customers: 7 1. reduced exposure to stranded costs; 8 2. reduced or eliminated risks of cost overruns associated 9 with plant construction; 10 3. reduced obsolescence and technology risks; enhanced reliability and reduced risks of losses of 11 4. 12 property and production due to service interruptions; enhanced wholesale competition and reduced concentration 13 5. 14 of generation ownership vested in the dominant suppliers, which in this case are the large incumbent 15 load-serving utilities; 16 enhanced generation production efficiency; 17 6. reduced exposure to potential price spikes such as have 18 7. recently been experienced in California; and 19 reduced exposure to the risks of increased environmental 20 8. compliance costs, which would be shifted to the 21 22 wholesale suppliers away from the incumbent load-serving 23 utilities and their ratepayers. 24

Q: Please explain how competitive wholesale power plants like
 the Osprey Project can reduce the risk of cost overruns,
 obsolescence, and operational failures to retail electric
 customers.

5 A: Competitive wholesale power plants like the Osprey Project 6 differ from traditional "rate-based" plants in that the costs 7 of a rate-based plant are recovered through rates charged to the utility's captive retail customers. If, after a rate-8 9 based plant is constructed, lower cost power becomes available, the utility nevertheless remains entitled to 10 recover the costs of its plant through its rates. Hence, the 11 12 utility's ratepayers, rather than its shareholders, bear the 13 risks associated with obsolescence. Similarly, absent a finding of imprudence, a utility is permitted to recover the 14 fixed and operating costs of its rate-based plant, even if 15 these costs are higher than originally projected or if the 16 17 plant fails to operate as well as projected.

In contrast, a competitive wholesale power plant has no retail rate base and no captive customers. A competitive wholesale plant simply offers its capacity and energy to potential wholesale customers, who are free to purchase or decline to purchase capacity and energy offered by the competitive plant. All things being equal, an economically rational purchasing utility will only enter into an agreement

1 to purchase electric capacity or energy from a competitive 2 wholesale plant if the costs of that capacity and/or energy 3 are lower than the costs of alternatives otherwise available 4 to the utility (e.g., generation from its own power plants or 5 purchases from others). If the cost of power from a 6 wholesale plant is higher than the costs of other 7 alternatives, a purchasing utility will simply choose not to 8 buy the plant's output. In such circumstances, any unrecovered costs of the wholesale-only plant will be borne 9 by the plant's owners, and not by any wholesale customers 10 (and therefore not by any ultimate retail customers, either). 11 The same result will occur if the plant incurs cost overruns 12 or fails to operate as efficiently or reliably as projected 13 -- the wholesale plant's owners, rather than any ultimate 14 ratepayers, bear all of the capital, operating, and market 15 risks associated with the power plant. Consequently, if the 16 competitive wholesale plant's economics are favorable, other 17 utilities and power marketers will purchase its output and 18 If the plant turns out not to be enjoy cost savings. 19 economically preferred, ultimate retail customers will incur 20 a competitive 21 financial harm. For these reasons, no 22 wholesale plant can only benefit ultimate retail customers.

23

Q: Are there any strategic benefits to purchasing utilities of
 entering into long-term power purchase agreements, as
 anticipated by Calpine from the Osprey Project, instead of
 building their own generating units?

5 Yes. Such contracts provide a beneficial hedge against most A: 6 or all of the risk factors that I identified earlier. Three-7 to-five-year contracts, with or without renewal options, provide significant protection to ultimate ratepayers against 8 technology and obsolescence risks because they enable the 9 purchasing utilities to vacate the transaction after the 10 11 initial contract period. This situation is contrasted to the traditional regulatory situation in which utilities -- and, 12 more importantly, their captive ratepayers -- are saddled 13 with the cost of a rate-based power plant for the plant's 14 entire life. 15

16 Similarly, this type of arrangement effectively 17 eliminates the risk of stranded costs for captive ratepayers 18 (and for utility shareholders as well).

Additionally, under many contract structures, the wholesale supplier (Calpine in this instance) will absorb the operational risks of its plant's performance. Typically, in contrast to a rate-based, utility-owned plant, if the wholesale supplier's plant does not operate as projected or incurs significant repair costs, the purchasing utility and

its customers are not at risk. Typically, the purchasing utility does not have to make payments if the plant does not satisfy minimum availability factors, and the purchasing utility does not normally have to pay for any repair costs.

5

6 Q: Do wholesale-only utilities provide any other risk reduction

7 or risk transfer benefits to retail electric customers? 8 A: Yes. Competitive, wholesale-only utilities also reduce the risk to the purchasing utility's customers of changes in 9 environmental regulations. With a rate-based plant, if 10 regulations change, the cost burden of complying with the new 11 regulations will fall on retail-serving utilities and thus on 12 13 their captive ratepayers. If, however, the utility is buying power from a wholesale supplier like Calpine under a 5-year 14 15 power purchase agreement, then, unless the contract provides otherwise, the owner of the supplying plant will bear the 16 17 cost and other burdens of complying with regulatory changes. That owner may or may not be able to recoup part of those 18 19 compliance costs from its customers (i.e., the retail-serving 20 utilities from which it purchases power), depending on all 21 relevant market conditions.

22

23 Q: Are there any other benefits?

24 A: Yes. Florida ratepayers will not have to bear the costs of

1 the Osprey Project in the rate base of their local utility. However, if their retail-serving utility makes a firm 2 purchase from the Osprey Project in lieu of building 3 generation, it will generally be because it represents the 4 least-cost option for the utility and therefore, will reduce 5 6 the costs associated with increased generation resources. 7 The presence of competitive wholesale plants with uncommitted capacity may also provide enhanced competition, and thus 8 lower costs, when load-serving utilities solicit bids for new 9 thus enhancing the operation of 10 supplies, the power Commission's "Bidding Rule." 11

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#### MERCHANT POWER PLANTS

14 Q: Mr. Kordecki, you stated earlier in your testimony that it is 15 your understanding that Calpine does not intend to develop 16 the Osprey Energy Center as a merchant power plant. Please 17 explain the basis for your statement.

18 A: The basis for this statement is Calpine's position, set forth 19 in its petition for determination of need, that it is 20 developing the Project as a firm contract wholesale power 21 plant and that it will commit the output of the Project to 22 Florida retail-serving utilities. Accordingly, my testimony 23 addresses the benefits of the Project assuming that it will 24 be developed as presently proposed by Calpine.

1 However, since it is possible that circumstances could 2 change to allow the Osprey Project to be operated as merchant capacity in the future, my testimony also addresses the 3 implications and impacts if the Project were, in fact, to be 4 5 operated as merchant capacity at some future time. In 6 summary, merchant capacity can also be expected to provide 7 substantial benefits to the retail electric customers of 8 load-serving utilities that purchase merchant capacity and 9 energy.

10

11 Q: Some of the utilities claim that competitive wholesale-only 12 plants will hurt the wholesale sales activities of existing 13 utilities thereby reducing the revenues these utilities are 14 flowing back to their customers. What is your reaction? 15 A: These assertions are self-serving statements which attempt to 16 minimize and detract from the tangible benefits which 17 competitive wholesale plants can provide. While it is true 18 that the entry of competitive wholesale generators may reduce 19 the profitability of some of the incumbent utilities' wholesale activities, the Commission's focus should be on the 20 21 Florida electric customers. broad interests of all 22 Wholesale-only plants, such as Calpine's Osprey Project, will only operate when they are the lowest cost resource, 23 24 therefore, the conclusion that their entry will result in

lower total electric costs considered as a whole, is predictable. This will occur because no load-serving utility is obligated to buy from Calpine or any other competitive wholesale plant. In the case of merchant capacity, sales will only be made when their incremental operating costs are less than the incremental operating costs of other generation units in Peninsular Florida.

8 Competition -- or the threat of competition -- will 9 often provoke hostile or negative reactions by incumbents, 10 particularly if the incumbents' markets are somewhat 11 protected against entry from new participants.

12 Maximizing the revenues from wholesale sales and flowing 13 back the profits (or some of the profits as proposed recently 14 by the investor-owned utilities) may be a laudable goal for 15 the utilities, but protection against competition from 16 wholesale-only plants in order for incumbent utilities to 17 maximize these profits may not equate to the lowest cost per 18 kilowatt-hour for all customers, which should be the 19 Commission's goal.

For instance, some of the Florida utilities have claimed that merchant plants locating in Florida will, at times, sell their power out-of-state and the local load-serving utilities will, as a result, lose any sales benefits that would have gone to their customers. As explained below, I strongly

1 disagree with this assertion. Real-world conditions, 2 including high power production costs in Florida relative to 3 other regions, new efficient capacity being built in regions 4 adjacent to Florida, and transmission issues all make this 5 assertion grossly speculative at best. If the Osprey Project 6 were developed as a merchant plant, or if Calpine's contracts 7 with Florida load-serving utilities had option provisions that enabled the purchasing utilities not to take the 8 9 Project's power, there could conceivably be times when the 10 Osprey Project would sell power into Georgia or the SERC 11 region. In such a scenario, however, Calpine would be at a 12 significant disadvantage since Calpine would be required to 13 reserve transmission paths on at least two or possibly three 14 transmission systems and pay the associated charges. The 15 incumbent utilities with rights to the Georgia/Florida 16 interface would only be required to "charge themselves," 17 whereas, Calpine must actually pay the transmission owners. 18 Calpine would incur multiple transmission payments because 19 transmission rates are pancaked in Florida at this time.

20 Moreover, there are a number of wholesale-only plants 21 being developed in the SERC region which will have 22 geographical advantages over the Osprey Project in 23 transmission access and lower costs. These SERC based 24 generators will be located closer to the "Florida out-of-

state markets" and will require crossing fewer transmission 1 systems than generators located in Peninsular Florida. The 2 bottom line is that the Florida utilities' sales out-of-state 3 will be more competitively challenged by generators located 4 5 closer to markets than the Osprey Project in Auburndale, 6 Florida. All things being equal, and even assuming that the 7 Osprey Project was developed or operating as merchant 8 capacity, the other wholesale plants located in the SERC 9 region, including Calpine's planned Alabama projects, will 10 make sales in and through the SERC region before sales are 11 made by the Osprey Project through the Florida/Georgia 12 interface. It is obvious from Calpine's ten-year site plan 13 that Calpine's decision to locate in Auburndale, Florida is 14 not based on making out-of-state sales but rather is 15 predicated on selling its output into the FRCC market. If Florida's load-serving utilities are going to lose out-of-16 state sales to non-load-serving, wholesale-only utilities, 17 those wholesale-only utilities will be probably located in 18 the SERC or other regions of the country. Thus, I strongly 19 20 disagree with the assertion made by opponents of non-load-21 serving, wholesale-only utilities that these opponents' out-22 of-state sales would be harmed by the introduction of the 23 Osprey Project or other wholesale-only plants into the 24 Peninsular Florida supply system. This is a grossly

speculative assertion even in the scenario where the Project
 was developed as merchant capacity.

3

4 Q: Some opponents of wholesale-only plants advocate that the
5 wholesale revenue impacts on existing load-serving utilities
6 should be determined before a new merchant plant is
7 certified. What is your opinion?

8 A: A requirement for a wholesale-only plant to attempt to 9 calculate the effects of their sales on the wholesale sales 10 of individual incumbent utilities is inappropriate.

11 In my experience, the determination of need process in Florida requires load-serving utilities to justify resource 12 13 additions based on the additions being the most cost-14 effective for that utility's customers. The approval process 15 for any given power plant is an independent event from the needs of other load-serving utilities. A utility's need 16 application does not require an analysis of the financial 17 effects on other utilities wholesale revenues or any other 18 19 operating revenues. Applying such a benchmark to wholesale plants would require these applicants to adhere to a standard 20 21 more severe than the incumbent utilities.

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1 GENERATING RESERVES AND SYSTEM RELIABILITY 2 Q: How are the reserve obligations of individual load-serving 3 utilities affected by the entry of projects such as the 4 Osprey Project or by the entry of pure merchant plants? 5 A: The output of Calpine's Osprey Project will be contractually 6 committed to load-serving utilities and thus fully 7 "countable" toward satisfying those utilities' reserves and 8 reliability criteria. To the extent that the Osprey Project 9 offers favorable pricing and other terms, it will make it 10 more feasible and cost-effective for purchasing utilities to 11 enhance their reserves and reliability. Even pure merchant 12 plants are, for all practical and meaningful purposes, 13 similar to any other generating units located in Peninsular 14 Florida, in that they could -- and would be expected to -- be 15 available to load-serving utilities during times of shortage in order to help serve peak loads. Just the presence of an 16 17 increased number of generating units will contribute to 18 increased reliability.

An <u>individual</u> utility should not, however, count merchant capacity (which is, by definition, uncommitted and non-firm capacity) as part of its long-term reserves. Only a firm contract with the wholesale supplier should be counted toward an individual utility's reserves.

24

This does not mean, however, that the capacity of

1 merchant plants cannot be counted in evaluating the overall 2 reliability and reserves of Peninsular Florida. In my 3 opinion, the availability of such capacity and the general 4 likelihood that it will be available to serve Peninsular 5 Florida in an emergency situation, which is when reserves are 6 most critical, indicate that the Commission should include 7 merchant capacity in evaluating overall Peninsular Florida 8 reserves and reliability.

In the case of a pure merchant plant, since this 9 10 capacity can, as I understand it, be required under a statewide emergency to be sold into the Florida grid, it is 11 appropriate that this capacity be used in calculating the 12 aggregate reserve margin for Peninsular Florida. Since 13 merchant utilities make their revenues by selling power to 14 load-serving utilities, they would be expected to be making 15 sales well in advance of any declaration of an energy alert 16 or emergency. Having merchant capacity in the Peninsula 17 should be as reliable as utility load-serving generation 18 19 during energy emergencies and far better than relying on import power across the Florida/Georgia interface, the 20 availability of which will depend on the levels of capacity 21 demand in Georgia, the SERC region and alternate capacity 22 23 needs and requests from other regions. This conclusion would 24 also apply to the hypothetical future event of the Osprey

1 Project having merchant capacity for sale.

2

Q: If, in the future, the Osprey Project came to have
 uncommitted, merchant-type capacity, how might the Project
 affect reliability in Peninsular Florida?

6 A: Contracts for power to cover short-term operating reserves 7 deficiencies of load-serving utilities may be very common 8 place in the day-to-day market transactions. Merchant 9 capacity (if lawful) can also be expected to augment the 10 ability of load-serving utilities to find wholesale power for 11 large industrial and commercial customers who want to 12 exercise third-party purchase rights under a number of the 13 utilities' interruptible and commercial/industrial load 14 management rate schedules.

15 Merchant capacity offers more flexibility than the 16 current wholesale bilateral interchange agreements between 17 the load-serving utilities in meeting their retail service 18 obligations. For instance, if a load-serving utility were in 19 an emergency situation (i.e., if the utility were unable to 20 meet all of its firm load requirements), this utility could 21 be required to interrupt its non-firm load in order to make 22 a purchase to cover its firm load requirements. If that 23 utility were to purchase from a merchant plant, the utility 24 would not be required to interrupt any customers. The

utility will use part of the purchase to meet its firm
 customer requirements, and the balance of the purchase can be
 flowed through to the appropriate non-firm customers under
 the optional purchase provisions of their tariffs.

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6 Q: Mr. Kordecki, if the Commission continues to require the 7 individual load-serving utilities to meet their planning 8 reserve levels and also allows merchant capacity to be built, 9 isn't there the potential to have more reserves than 10 necessary?

11 For reliability purposes, the more units and capacity A: 12 available, the more reliable the grid will be. The 13 Commission reviews the level of reserves on an annual basis 14 for each of the State's major load-serving utilities individually and for Peninsular Florida as a whole. 15 The 16 calculation of Peninsular Florida reserves to date has been a sum function and not an allocated function. 17 To my 18 knowledge, the Peninsular Florida reserves have not been 19 calculated with proposed merchant capacity.

The question regarding the possibility of having "more reserve capacity than necessary" must be answered from the perspective of the State's electric customers' costs for capacity. Clearly, no one wants his or her lights to go out. If reserve capacity were effectively free, then the amount of

reserves that would be considered "necessary" or at least 1 2 "reasonable and prudent" would probably approach 100 percent. 3 If, on the other hand, the cost of reserves were 4 prohibitively expensive, the answer would likely be that a 5 lower level of reserves than at present would be considered "necessarv." 6

7 Merchant capacity does not obligate retail customers in 8 advance to pay for capacity. Such capacity does not require 9 individual load-serving utilities to make decisions about the costs of increased reliability. Granted, merchant capacity 10 is not the same as a utility having its own owned resources, 11 12 but the load-serving utilities will be able to contract with 13 merchant capacity suppliers for potential firm purchases 14 under FERC approved bilateral agreements. Moreover, based on 15 my regulatory experience, it is my understanding (not as an 16 attorney) of the regulatory regime in Florida that merchant 17 utilities can be required to sell into the grid during 18 statewide emergencies if they are not already selling all 19 their output.

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#### CONDITIONAL DETERMINATIONS OF NEED

Q: In the event that it does not have contractual commitments to sell the output of the Osprey Project to Florida retailserving utilities by the time of the October hearings in this

proceeding, Calpine has asked the Commission for a
 conditional affirmative determination of need. Please
 explain this.

4 A: If Calpine does not have contracts or other evidence of utility-specific commitment for the Project's full output 5 6 with Florida retail-serving utilities before the hearing in 7 this case, Calpine has asked the Commission to grant an 8 affirmative determination of need subject to a condition that 9 Calpine must demonstrate utility-specific commitments and 10 utility-specific cost-effectiveness before it may begin building the Project. 11

12

# 13 Q: Mr. Kordecki, do you believe that a "conditional" approval of 14 Calpine's Osprey Project would be good public policy?

Yes, I believe that it would be good public policy for the 15 A: Commission to grant a "conditional" approval of the Osprey 16 Project in the event that Calpine does not furnish evidence 17 of contractual commitments before the currently scheduled 18 hearings in this case. Such a "conditional" approval, based 19 on and contingent upon Calpine's contracting the Project's 20 output to load-serving Florida utilities could accomplish a 21 22 number of goals and objectives of both this Commission and 23 Florida load-serving utilities.

24

First, if Calpine accomplishes its sales objectives for

1 the Osprey Project, allowing the Osprey Project's permitting 2 schedule to proceed with the Commission's "conditional" 3 approval will mean that load-serving utilities will have 4 capacity purchases available to them earlier than if the 5 Project's permitting were held up while Calpine completed its 6 contract negotiations. This "earlier" capacity will add to 7 the reliability of the purchasing utilities and thus to the 8 reliability of Peninsular Florida.

9 Second, since load-serving utilities are expected (as a 10 general duty to their customers) to build or purchase the 11 most cost-effective capacity and energy available to them, 12 Calpine's Osprey Project will be available to provide costeffective power supply to the purchasing utilities sooner if 13 14 the Commission allows the case to proceed as requested (on a 15 contingent basis) by Calpine. Thus, allowing the Osprey need determination case to proceed as requested by Calpine will 16 17 result in savings to Florida electric ratepayers beginning sooner than if the case were delayed until the Project's 18 19 output was subscribed under power sales contracts.

Third, if the Project's output is subscribed by a number of utilities, a number of efficiencies may be realized. The most obvious would be that marketing the Osprey Project's output to a number of utilities could also bring about a more cost-effective capacity addition than if the individual

1 utilities' specific capacity and energy needs were being met 2 by each utility individually. Generation additions are made 3 to meet utilities' peak demands, supply lower cost energy, or 4 meet reserve requirements. Since individual utilities will 5 meet their needs through the most cost-effective purchase or 6 construction of additional capacity, the highly efficient 7 Osprey Project would likely represent a more efficient 8 alternative than if the individual utilities built or 9 purchased from a number of smaller, less efficient, and less 10 cost-effective units, even though each such unit might be the 11 most cost-effective alternative to each utility individually. 12 Multiple purchases meeting multiple and varied needs of 13 individual utilities could provide a better integrated and 14 cost-effective approach.

15

#### 16 Q: Mr. Kordecki, please summarize your testimony.

17 A: The construction and operation of the Osprey Project will 18 help to reduce Florida retail electric customers' electric 19 bills. The Project would be constructed to make wholesaleonly sales to Peninsular Florida load-serving utilities. 20 Purchases from the Project would only be made by utilities 21 22 when the Osprey Project was expected to have lower costs than 23 other resources available to the load-serving utilities. The 24 retail customers' obligation for the Project is limited to

1 paying for the capacity and energy that the Project provides under a specific contract. As compared to traditional 2 3 utility-built plants, there will be no rate base obligation 4 for customers. The Osprey Project will add to overall 5 Peninsular Florida reliability and will, under all reasonably 6 conceivable scenarios, be available (subject to outages) to 7 be sold into the grid in times of individual utility or 8 statewide capacity needs. 9 Does this conclude your direct testimony? 10 Q: 11 A: Yes, it does.

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