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February 18, 2000

ORIGINAL

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RECORDS AND REPORTING

Blanca S. Bayó, Director  
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Florida Public Service Commission  
4075 Esplanade Way, Room 110  
Tallahassee, FL 32399

RE: DOCKET NO. 991462-EU

Dear Ms. Bayó:

Enclosed for filing please find the original and twenty (20) copies of the Direct Testimony of Samuel S. Waters filed on behalf of Florida Power & Light Company in the above referenced docket.

Very truly yours,



Matthew M. Childs, P.A.

MMC:ml

Enclosure

cc: All Parties of Record

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02269 FEB 18 8

**CERTIFICATE OF SERVICE**  
**DOCKET NO. 991462-EU**

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Direct Testimony of Samuel S. Waters has been furnished by Hand Delivery\* or Federal Express\*\*, this 18th day of February, 2000 to the following:

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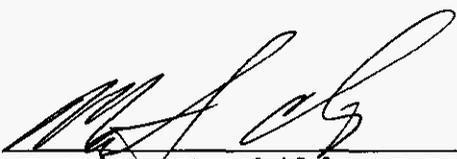
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By: 

Matthew M. Childs, P.A.

**ORIGINAL**

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 991462-EU  
Florida Power & Light Company**

**Petition for Determination of Need  
For an Electrical Power Plant  
In Okeechobee County by  
Okeechobee Generating Company, L.L.C.**

**Testimony of  
Samuel S. Waters**

DOCUMENT NUMBER-DATE

02269 FEB 188

RECORDS/REPORTING

1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                   **FLORIDA POWER & LIGHT COMPANY**

3                   **DIRECT TESTIMONY OF Samuel S. Waters**

4                   **DOCKET NO. 991462-EU**

5                   **February 18, 2000**

6

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

8

9   A.     My name is Samuel S. Waters and my business address is 9250 West  
10         Flagler Street, Miami, Florida 33174.

11

12 **Q.     By whom are you employed and in what capacity?**

13

14 A.     I am employed by Florida Power & Light Company (FPL) as Director of  
15         the Resource Assessment and Planning Department.

16

17 **Q.     Please describe your duties and responsibilities in that position  
18         as they relate to issues in this docket.**

19

20 A.     I am responsible for oversight of the Department that performs studies  
21         to determine the magnitude and timing of FPL's future resource  
22         needs; analyzing construction, purchased power contracts, and  
23         demand side management (DSM) options which could potentially meet

1           these future needs; and have worked on developing FPL's integrated  
2           resource plan with which FPL intends to meet these needs. I have  
3           also been FPL's principal witness in planning-related proceedings at  
4           the Commission and the Federal Energy Regulatory Commission  
5           including several need determination cases.

6

7   **Q.    Please describe your education and professional experience.**

8

9   **A.    I graduated from Duke University with a Bachelor of Science Degree**  
10       **in Electrical Engineering in 1974. From 1974 until 1985, I was**  
11       **employed by the Advanced Systems Technology Division of**  
12       **Westinghouse Electric Corporation as a consultant in the areas of**  
13       **Transmission Planning and Power System Analysis Software. While**  
14       **employed by Westinghouse, I earned a Masters Degree in Electrical**  
15       **Engineering from Carnegie-Mellon University in 1976. I have also**  
16       **completed several business courses at Florida International University.**

17

18       **I joined the System Planning Department of FPL in 1985 and worked in**  
19       **the area of Power Supply/Integrated Resource Planning until 1994. At**  
20       **that time, I served a brief rotational tour in FPL's Marketing**  
21       **Department, followed by an assignment as Director of Regulatory**  
22       **Affairs Coordination. In February of this year, I assumed my present**  
23       **position.**

1 I am a registered Professional Engineer in the States of Pennsylvania  
2 and Florida and a Senior Member of the Institute of Electrical and  
3 Electronics Engineers, Inc. (IEEE).

4

5 **Q. What experience have you had in determination of need hearings**  
6 **and/or related regulatory hearings?**

7

8 A. I have served as a witness in a number of regulatory hearings, as well  
9 as participated in regulatory filings that are pertinent to the issues in  
10 this docket. These hearings include: need determination hearings for  
11 FPL's Lauderdale unit repowerings, FPL's Martin Unit Nos. 3 and 4,  
12 Indiantown Cogeneration and the Cypress Energy Project. Other  
13 hearings include the Scherer Unit No. 4 Purchase and Oil Backout  
14 Proceedings. In addition, I have had responsibility for the filing of  
15 FPL's Ten-Year Site Plans and have either participated in, or  
16 supervised others who have participated in, numerous DSM and  
17 cogeneration filings.

18 This experience provides me with a good vantage point from which to  
19 comment on the need filing by the Okeechobee Generating Company  
20 (OGC).

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

2

3 A. My testimony has five primary points. First, I discuss the information  
4 necessary for a meaningful review in a need determination filing and  
5 describe the analyses provided by the applicant to supply that  
6 information to the Commission. Second, I point out that OGC's need  
7 determination filing fails to provide this necessary information because  
8 OGC has not performed the analyses needed to develop the  
9 information. Third, I demonstrate that OGC does not establish a  
10 reliability need for its project. Fourth, I explain that OGC has failed to  
11 demonstrate that its project is the most cost-effective alternative. Fifth,  
12 I point out that there is less risk and customer cost associated with a  
13 utility building and operating a unit such as OGC's than with OGC  
14 building and operating it.

15

16

17 **I. A PLANNER'S PERSPECTIVE OF ANALYSES NECESSARY FOR A**  
18 **MEANINGFUL REVIEW OF NEED DETERMINATION FILINGS.**

19

20 **Q. Based on your experience, what types of information and**  
21 **analyses should be submitted to the Commission in a need**  
22 **determination hearing?**

1 A. The Commission has a rule setting forth the information it has  
2 identified as the minimum necessary for inclusion in the need petition,  
3 Rule 25-22.081, Florida Administrative Code. In addition, there are a  
4 number of analyses provided in need determination cases.

5  
6 There are two types of analyses that should be presented to address  
7 the first three need criteria - need for electric system reliability and  
8 integrity; need for adequate electricity at a reasonable cost; and  
9 whether the plant is the most cost-effective alternative. When I refer to  
10 need criteria I am referring to §403.519, Fla. Stats. The first of these  
11 two types of analyses I refer to as "reliability analyses," and the second  
12 of the two types of analyses I refer to as "economic analyses."

13  
14 In addition, to satisfy the fourth need criteria, that is whether there is  
15 conservation reasonably available that would mitigate the need for the  
16 proposed plant, the information presented by a utility seeking to build is  
17 a summary of the conservation historically offered, as well as  
18 conservation projected to be offered by the utility to meet its approved  
19 conservation goals. In the case of a wholesale applicant, the analysis  
20 presented is whether the utility to which the applicant will sell has  
21 conservation reasonably available that would mitigate the need for the  
22 proposed plant. This analysis is critical and necessary to ensure that  
23 generation capacity that is not needed is not built.

1 All these analyses should be submitted for the Commission to have the  
2 information necessary to conduct a meaningful determination of need  
3 review.

4  
5 **Q. Could you describe the types of reliability analyses that are**  
6 **needed in need determination cases?**

7  
8 A. The first type of reliability analysis is a reserve margin analysis. This  
9 analysis is usually done for a load-serving utility seeking to build a  
10 plant of its own, and in the case of a wholesale provider, is performed  
11 for the utility to which the provider has committed its capacity by  
12 contract. In a reserve margin analysis the petitioner identifies an  
13 appropriate reserve margin criterion for the system in question. After a  
14 reserve margin criterion is identified, then an analysis is presented to  
15 the Commission showing the building or purchasing utility's load  
16 forecast, including total firm and non-firm load, as well as utility owned  
17 generating resources and resources available to the utility under firm  
18 contract. After a justification of the load forecast is made, a calculation  
19 is then performed to determine whether the capacity from the proposed  
20 unit is necessary for the building or purchasing utility to meet its  
21 reserve margin reliability criteria. In the past, the Commission has  
22 declined to treat uncommitted wholesale capacity as capacity that can

1 contribute to a reserve margin calculation, finding that there was no  
2 way to assess such a unit's contribution to reserve margin calculations.  
3 A second type of reliability analysis that is often performed and  
4 presented in a need petition is a probabilistic analysis that most often  
5 takes the form of a Loss-of-Load-Probability (LOLP) study or an  
6 Expected Unserved Energy (EUE) study. As with the reserve margin  
7 analysis, these probabilistic studies are performed by the utility seeking  
8 a determination of need to build its own unit, and they are run in regard  
9 to that utility's system. In the case of a wholesale provider, the study  
10 would be performed for the utility purchasing the wholesale provider's  
11 firm capacity.

12  
13 These studies are the only means by which the Commission may truly  
14 address whether a plant is needed to maintain reliability.

15

16 **Q. You stated that the Commission has declined to recognize**  
17 **uncommitted wholesale capacity in reserve margin calculations.**  
18 **Please elaborate.**

19

20 **A.** For years the Commission has consistently determined that non-  
21 committed capacity should not be treated as firm capacity, declining (a)  
22 to recognize non-committed capacity in reserve margin computations

1 and (b) to require utilities to make capacity payments to Qualifying  
2 Facilities (QFs) for as-available energy.

3  
4 In 1983, when adopting cogeneration rules, the Commission had this  
5 to say about the uncommitted resource of as-available energy from  
6 wholesale providers: “[b]ecause as-available energy carries with it no  
7 enforceable assurances as to quantity, time or reliability of delivery, the  
8 rule provides that no capacity payments shall be made to a QF for the  
9 delivery of as-available energy.” (Order No. 12634). In response to a  
10 proposal that as-available energy should be given capacity payments,  
11 the Commission stated, “there was no showing that what, in essence,  
12 is an interruptible source of supply, not controlled by the utility, would  
13 be able to permit a prudent utility to defer any capacity related costs.”  
14 (Order No 12634)

15  
16 Similarly, when the Commission adopted rules for identifying avoided  
17 units for pricing cogeneration, those rules required utilities not to  
18 include non-contracted-for QF capacity when determining the avoided  
19 unit. The Commission noted that this decision not to recognize  
20 uncommitted capacity in generation expansion plans was intentional.  
21 (Order No. 13247).

1 That Commission prescribed practice continues to be followed today,  
2 almost twenty years later. Neither FPL nor any other Peninsular Florida  
3 utility of which I am aware recognizes uncommitted capacity in reserve  
4 margin calculations when determining whether reserve margin criteria  
5 are being met. This practice is consistent with at least three prior  
6 Commission decisions in which the Commission has explicitly stated  
7 that either uncommitted capacity should not be recognized in the  
8 calculation of reserve margin or that the effect of uncommitted capacity  
9 on reliability cannot be analyzed.

10

11 In the Dade County Resource Recovery Facility's determination of  
12 need proceeding, the facility did not have a firm contract for the sale of  
13 its output, making it an uncommitted resource. The Commission had  
14 this to say about its potential contribution to reliability:

15 We find that Dade County's expanded solid waste facility **will**  
16 **not contribute to the reliability and integrity of the state's**  
17 **electric system.** Dade County has not committed to sell firm  
18 capacity pursuant to a Commission-approved contract. Dade  
19 County has only stated that it might sell as-available energy  
20 from its expanded facility. **Because there are no plans to sell**  
21 **firm capacity, there is no way to analyze any effect on the**  
22 **state's reliability and integrity due to Dade County's energy**  
23 **sales.** (Order No. PSC-93-1715-FOF-EQ). (Emphasis added)

1 The Commission went on to state the following about the proper  
2 calculation of reserve margins:

3 Because there is no firm capacity commitment, the only  
4 consequence to FPL [the utility to whom it was envisioned Dade  
5 county would sell its energy] is that its customers will not receive  
6 any as-available energy from Dade County if the facility  
7 expansion is not complete. **A utility's reserve margin is**  
8 **calculated using only firm capacity resources.** (Order No.  
9 PSC-93-1715-FOF-EG). (Emphasis added.)

10  
11 Several years later in the reserve margin rulemaking proceeding the  
12 Commission adopted a reserve margin standard of 15% and adopted a  
13 rule provision that only firm power purchases were to be recognized in  
14 calculating reserve margins absent a waiver. (Order No. PSC-96-  
15 1076-FOF-EU).

16  
17 Even in the recent Duke New Smyrna need determination decision the  
18 Commission found that the output of a merchant plant that was not  
19 committed by a firm contract could not be counted for long-term  
20 reserve margins:

21 The capacity should be considered for hourly and short-term  
22 operating reserves, but not for long term planning reserve

1 margins, unless contracted for. (Order No. PSC-99-0535-FOF-  
2 EM).

3 In addition to this explicit guidance from the Commission, there is also  
4 the Commission's long standing practice of reviewing and approving  
5 ten year site plans and other reliability criteria calculations in which  
6 utilities have consistently not included uncommitted capacity in the  
7 calculation of reserve margins. Several years ago FPL attempted to  
8 include unidentified firm capacity purchases (not uncommitted energy  
9 purchases, but firm capacity purchases) in its Ten-Year Site Plan, and  
10 the Commission balked at FPL relying on such an unspecified  
11 resource.

12  
13 I conclude that both the industry and Commission practice in Florida is  
14 that uncommitted capacity is not properly recognized in the calculation  
15 of reserve margin. Based on this conclusion, it is apparent that  
16 uncommitted capacity, such as the OGC project cannot defer or avoid  
17 a single MW of planned utility capacity. More importantly, there is no  
18 valid basis for assuming that the needs of specific utilities can be  
19 ignored and instead, some evaluation from a Peninsular Florida  
20 perspective is sufficient.

21

22 **Q. What types of "economic analyses" are presented in need**  
23 **determination cases?**

1 A. Since the third need determination criterion is comparative (the  
2 Commission is to consider whether the unit is “the **most** cost-effective  
3 alternative”), the economic analyses appropriately performed are  
4 comparative analyses. They are usually linked to the results of the  
5 reliability analyses described above, but in a few instances they have  
6 been linked to a determination of “economic need.” In the cases of  
7 economic need, the need has been tied to fuel displacement or oil  
8 backout, as expressly recognized by PSC Rule 25-22.081(3), and the  
9 benefits to customers associated with fuel savings from the new unit  
10 (savings from displacing costly oil-fired generation) exceeding the cost  
11 of the new unit.

12  
13 Whether tied to a reliability need or an economic need, the economic  
14 analyses performed are and must be comparative, addressing the  
15 relative cost-effectiveness to the retail customers of competing  
16 alternatives. The first step in performing such a comparative economic  
17 analysis is to identify all feasible alternatives that can, either alone or in  
18 combination, satisfy the reliability or economic need. The second step  
19 is to compare the total system cost of the competing alternatives on a  
20 meaningful basis such as the net present value of total system revenue  
21 requirements or total system average electric rates, so that a  
22 conclusion may be made as to the relative cost effectiveness to retail  
23 customers.

1 **Q. Should these reliability and economic analyses be utility specific?**

2

3 A. Definitely. The only meaningful way to evaluate the need criteria is  
4 from a utility specific perspective. The appropriate focus is: whether  
5 the plant is needed to serve utility specific customers, whether the  
6 plant is the most cost-effective alternative to serve those specific utility  
7 customers, and whether there is conservation available to the specific  
8 utility that mitigates the need for the plant.

9

10 Attempting to address the need criteria solely from a Peninsular Florida  
11 basis rather than from a utility specific basis risks substantial error and  
12 confusion. Peninsular Florida is a planning construct; it is not an entity,  
13 and there is no one entity with a responsibility to serve Peninsular  
14 Florida. There cannot be a Peninsular Florida need, either due to  
15 reliability or economics, unless there is a utility specific need of one or  
16 more utilities. However, there can be a utility specific need for a power  
17 plant when there is not a Peninsular Florida need.

18

19 If there is a specific utility reliability need that gives rise to a Peninsular  
20 Florida need, assessing need from a Peninsular Florida perspective  
21 fails to assure that the power plant will be devoted or committed to the  
22 utility with the need. Moreover, assessing need from a Peninsular  
23 Florida perspective may understate or fail to disclose the specific utility

1 need due to other utilities having more capacity than they need,  
2 offsetting in whole or in part the specific utility need.

3  
4 The determination of the most cost-effective alternative must be  
5 determined from a utility specific perspective. Indeed, the purpose of  
6 this determination is to protect the utility customers from incurring costs  
7 associated with uneconomic duplication. So the key term is that the  
8 unit be the “**most**” cost-effective option. This requires a comparative  
9 analysis of the impact on a utility’s customers of competing options.  
10 Even though gas fired combined cycle technology appears to be the  
11 capacity of choice for most Florida utilities, the economics of the  
12 technology vary from utility system to system given each utility’s  
13 existing units, cost parameters, needs for capacity, and the specific  
14 model of combined cycle unit which is selected. When all these factors  
15 are combined into Peninsular Florida, there can be a mismatch  
16 between what is the most cost-effective option for Peninsular Florida’s  
17 utilities in the aggregate and what is the most cost-effective option for  
18 the specific utility with the need. It was this repeated mismatch that led  
19 the Commission to abandon using a statewide avoided unit for  
20 cogeneration pricing and to quit using APH findings as a surrogate in  
21 need determination proceedings.

1 The assessment of conservation is also meaningful only from a utility  
2 specific perspective. Clearly, the objective of this criterion is to assess  
3 whether proposed new capacity can be avoided through conservation.  
4 A merchant plant supplier cannot appropriately avoid this assessment  
5 when it proposes to sell to retail utilities by maintaining that it doesn't  
6 have any conservation.

7  
8

9 **II. INFORMATION AND ANALYSES NOT PRESENTED BY OGC.**

10

11 **Q. From your review of OGC's petition, testimony and exhibits, has**  
12 **OGC performed the types of analyses necessary used to justify**  
13 **need?**

14

15 A. No. There are a few attempts to make it appear that some of the  
16 analyses have been performed for some of the criteria, but no such  
17 analyses have actually been performed by OGC. Instead, OGC either  
18 presents no analysis or presents data that superficially looks like a  
19 meaningful analysis.

20

21 **Q. What reliability analyses performed for a need determination filing**  
22 **have not been performed by OGC?**

1 A. OGC does not appear to have even evaluated need on the basis of  
2 appropriate reliability criteria. OGC does not perform either a reserve  
3 margin or probabilistic analysis for a specific utility. Instead, OGC  
4 offers a Peninsular Florida reserve margin calculation without ever  
5 suggesting an appropriate Peninsular Florida reserve margin criterion  
6 and without ever explaining why its unit is appropriately considered in a  
7 reserve margin calculation since it is not committed by contract. OGC  
8 offers no probabilistic analysis for Peninsular Florida. Instead, OGC  
9 relies on an approach that begs the question saying, in effect, "more  
10 capacity, even if not committed, is better" when the very issue is how  
11 much more is necessary.

12  
13 Thus, OGC never offers an analysis showing that its plant is needed by  
14 either an individual utility or by Peninsular Florida. Instead, OGC offers  
15 the weak observation that its plant will "enhance reliability." The  
16 suggestion that the addition of one more plant will increase or enhance  
17 reliability is not a showing that a plant is needed for reliability. The  
18 addition of virtually any new plant will increase system reliability. That  
19 is an obvious observation of little or no consequence. The real inquiry  
20 is whether the plant is needed to achieve a reliability criterion.  
21 However, if the addition of a plant causes a reliability measure to  
22 increase but it was already in excess of the reliability criterion, that is  
23 not a showing of a reliability need. This is an important distinction, for

1 OGC never shows that its unit is necessary for a utility or Peninsular  
2 Florida to meet a reliability criterion. Therefore, OGC fails to make a  
3 demonstration of a reliability need.

4  
5 **Q. You testified that OGC has failed to provide a utility-specific**  
6 **reliability analysis, but haven't they provided a Peninsular Florida**  
7 **reliability analysis and hasn't the Commission relied upon**  
8 **Peninsular Florida reliability analyses in prior need determination**  
9 **cases?**

10  
11 **A. OGC has not provided a Peninsular Florida reliability analysis. OGC**  
12 **has merely provided a Peninsular Florida reserve margin recalculated**  
13 **to include the OGC unit. OGC does not attempt to justify, or even use**  
14 **an appropriate reserve margin criterion for Peninsular Florida. OGC**  
15 **does not show that the OGC unit is necessary to achieve a reserve**  
16 **margin criterion. Under the OGC approach virtually any additional**  
17 **capacity would be "needed" and the Commission would have no**  
18 **appropriate way to find that "no need" exists. This result simply erodes**  
19 **the function of the PSC under the Siting Act for expediency.**

20  
21 In prior need determination cases there have also been reserve margin  
22 and probabilistic analyses for Peninsular Florida performed. However,  
23 these Peninsular Florida reliability analyses have basically been

1 secondary analyses which, once a utility-specific need has been  
2 demonstrated, examined Peninsular Florida to ensure that the needed  
3 capacity did not already exist elsewhere (i.e., that the new unit would  
4 not result in an uneconomic duplication of facilities).

5  
6 **Q. What economic analyses performed for a need determination  
7 filing have not been performed by OGC?**

8  
9 A. There is no comparison calculation of competing alternatives on either  
10 a net present value of system revenue requirements or total system  
11 electric rate basis to show which alternative, or combination of  
12 alternatives, is really the most cost-effective option. By choosing to  
13 analyze the Project's purported economic impacts in isolation, without  
14 comparing the impact of competing alternatives on utility customers,  
15 OGC is not meeting the standard of identifying "the **most** cost-effective  
16 alternative".

17  
18 Although OGC's petition states that the proposed project is the "most  
19 cost-effective option", OGC offers no analysis which supports this  
20 statement. Instead, OGC merely offers two tables that provide partial  
21 cost information for some viable options. This cost data has nothing to  
22 do with the price OGC might charge and thus OGC pointedly fails to  
23 address whether it will sell the output at a price that is most cost-

1 effective to the customers of the purchasing utility. As a consequence  
2 of OGC's choosing not to provide analyses which demonstrate the  
3 relative cost-effectiveness of all reasonable alternatives on a  
4 meaningful basis, the economic information required in a need  
5 determination petition to judge whether the proposed project is the  
6 most cost-effective option has not been provided.

7  
8 **Q. Previously, you testified there was information that the**  
9 **Commission required by rule to be in determination of need**  
10 **petitions. One of the requirements is that the petition contain a**  
11 **general description of the utility or utilities primarily affected. Will**  
12 **FPL be one the utilities primarily affected by the OGC plant as the**  
13 **OGC plant is described in the petition?**

14  
15 **A.** If the OGC unit were to operate as it is presented in the petition, FPL  
16 would be one of the utilities principally affected by the OGC unit. OGC  
17 alleges the unit is needed by Peninsular Florida for both reliability and  
18 economic purposes. FPL serves almost half the load of Peninsular  
19 Florida, so it is difficult to imagine that a unit premised upon a  
20 *Peninsular Florida reliability need is not premised at least in part upon*  
21 *an FPL reliability need.* The economic need OGC claims Peninsular  
22 Florida has is for the displacement of energy from existing utility-owned  
23 generating units. Once again, FPL owns about half of the generating

1 units including those of the type OGC asserts it will displace in  
2 Peninsular Florida. If OGC is forecast to displace generation and sales  
3 from such units, it appears OGC is forecast to displace sales and  
4 generation from FPL's units. (Unfortunately, the way OGC has  
5 modeled its analysis, one cannot tell the individual units whose  
6 generation will be displaced.) In addition, the OGC unit will be directly  
7 interconnected with the Florida grid through an interconnection with an  
8 FPL transmission line. Thus, I conclude that FPL will be one of the  
9 utilities directly and principally affected by the proposed unit.

10

11 **Q. In its petition, did OGC provide a general description of FPL or**  
12 **any other purchasing utility?**

13 A. No. And it did not include any identification or assessment of  
14 continuing costs of units that it proposed to displace.

15

16 **Q. In its petition and exhibits, did OGC identify the model or models**  
17 **on which the load forecasts it offers were based and include**  
18 **sufficient detail to permit analysis of the model or models?**

19

20 A. No. OGC presented no models used to develop the load forecasts  
21 upon which it relies. In fact, OGC did not develop a load forecast;  
22 instead, it borrowed load forecasts prepared by entities other than  
23 OGC but never addressed whether these forecasts were consistent

1 with the use made of them by OGC. There is no mention of the  
2 models used to develop these load forecasts, much less a description  
3 of the load forecast models that would allow analysis of the models.

4  
5 Instead of identifying and explaining its load forecast models, OGC  
6 provided a description of the models that appear to have been used by  
7 OGC to determine the economic viability of the OGC Project for OGC  
8 and the purported impact of the OGC unit on so-called wholesale price  
9 suppression. However, there was not enough detail provided to permit  
10 a meaningful analysis of those models.

11  
12 **Q. A primary justification offered in the petition and exhibits for the**  
13 **OGC unit was one of economic need resulting from the**  
14 **displacement of older, less efficient oil and gas fired generation**  
15 **and sales and the supposed suppression of wholesale prices.**  
16 **Did the OGC petition and exhibits provide detailed analysis and**  
17 **supporting documentation of the costs and benefits associated**  
18 **with this purported energy displacement and wholesale price**  
19 **suppression?**

20  
21 **A.** No. The petition and exhibits provided a lot of verbiage and some very  
22 summary quantification, but they contained no detailed analyses or  
23 supporting documentation of the associated costs and benefits. This

1 was particularly frustrating to me as a planner, as I was anxious to  
2 investigate the supporting analysis and numbers rather than relying  
3 upon unsupported assertions. I hope the Commission would have the  
4 same concern. Unfortunately, we were left to unravel the story. The  
5 petition is particularly deficient in its lack of presentation of detailed  
6 analyses and supporting documentation. The same is true of OGC's  
7 testimony. The Commission does not have enough information from  
8 those documents to conduct a meaningful review of the assertions in  
9 the petition.

10

11 **Q. Did the OGC petition and exhibits contain a summary description**  
12 **of the major generating alternatives that were examined and an**  
13 **evaluation of each alternative in terms of economics, reliability,**  
14 **long-term flexibility, and usefulness?**

15

16 A. The petition and exhibits contained a summary description of the major  
17 generating alternatives OGC considered for OGC's purposes.  
18 However, they did not contain a summary description of the major  
19 generating alternatives available to utilities within Peninsular Florida.  
20 This was an important omission, for the need for the unit is premised  
21 upon Peninsular Florida's need. There was no examination of  
22 competing utility alternatives available to meet the Peninsular Florida  
23 need OGC purports to meet. Moreover, there was no discussion of

1           how the unit chosen compares among even the units considered by  
2           OGC as to reliability, long-term flexibility or usefulness. None of these  
3           deficiencies with the petition were remedied with OGC's testimony.  
4           Moreover, there is absolutely no comparison of life cycle costs to retail  
5           customers and most significantly there is no evaluation of fuel  
6           displacement benefits.

7  
8           **Q. Did OGC include in its petition and exhibits a detailed description**  
9           **of the selection process used and a detailed description of the**  
10           **generating unit alternatives proposed by each finalist selected to**  
11           **participate in subsequent contract negotiations?**

12  
13           **A.** No. Even though OGC alleged it was an electric utility and that it was  
14           owned by others, OGC's petition and exhibits contained no description  
15           of any capacity solicitation process that OGC might have undertaken.

16  
17           **Q. Did OGC's petition and exhibits contain a "discussion of the**  
18           **viable nongenerating alternatives including an evaluation of the**  
19           **nature and extent of reductions in growth rates of peak demand,**  
20           **kWh consumption and oil consumption resulting from the goals**  
21           **and programs adopted pursuant to the Florida Energy Efficiency**  
22           **and Conservation Act both historically and prospectively and the**  
23           **effects on the timing and size of the proposed unit"?**

1 A. No. OGC premises its need for its plant upon the need of *Peninsular*  
2 *Florida*. Although it relies upon *Peninsular Florida* to attempt to  
3 demonstrate that its plant is needed, OGC makes no attempt to assess  
4 whether *Peninsular Florida* has viable nongenerating alternatives that  
5 would mitigate the need for its plant.

6  
7  
8 **III. THE INFORMATION PRESENTED IN OGC'S PETITION AND**  
9 **TESTIMONY FAIL TO SHOW OGC IS NEEDED FOR RELIABILITY.**

10  
11 **Q. Please discuss OGC's attempt to show a reliability-based need for**  
12 **its proposed project?**

13  
14 A. OGC has offered misleading testimony from a number of witnesses  
15 regarding *Peninsular Florida* reliability. Most of this testimony lacks  
16 substantive documentation and consists largely of unsubstantiated  
17 opinions.

18  
19 OGC's one attempt at a reliability need analysis was to insert the  
20 proposed new unit into the FRCC's reserve margin projection to show  
21 that the reserve margin would increase. This is the calculation shown  
22 in OGC Tables 6 and 7 in the Exhibits to OGC's Petition For  
23 *Determination Of Need For The OGC Project*.

1 The calculation provided in Tables 6 and 7 is flawed in at least two  
2 ways. First, it assumes that uncommitted capacity such as OGC's  
3 proposed unit should be included in a reserve margin calculation. This  
4 runs counter to Florida utility and Commission practice of including  
5 only committed capacity in reserve margin analysis. Consequently, it is  
6 incorrect to insert OGC's proposed project into the FRCC's reserve  
7 margin projection. Second, OGC's approach simply does not show that  
8 Peninsular Florida without OGC is unreliable from a reserve margin  
9 perspective. It merely shows that if you added more MW of capacity,  
10 the projected reserve margins would be higher. This does not  
11 constitute demonstration of a need for a project.

12

13 OGC's Tables 6 and 7 actually show that Peninsular Florida will  
14 achieve its 15% reserve margin criterion without the addition of the  
15 OGC unit. Therefore, OGC's exhibits actually show that the OGC unit  
16 is not needed for Peninsular Florida reliability.

17

18 **Q. Should any Peninsular Florida utilities rely upon the OGC unit for**  
19 **short-term operating reserves?**

20

21 **A.** A utility's reliance upon a totally uncommitted resource for operating  
22 reserves would be unreasonable. It would be particularly  
23 unreasonable for a utility to rely upon OGC to provide operating

1 reserves when OGC forecasts that its plant will be operating 100% of  
2 the time it is available. OGC would hardly be available for spinning or  
3 non-spinning reserves if it were otherwise committed to making sales.  
4 Finally, as FPL understands the reserve margin rule, it would be  
5 improper for a utility to rely on an uncommitted resource to meet its  
6 operating reserve requirements.

7

8 **Q. Earlier you stated that OGC has presented misleading testimony**  
9 **about Peninsular Florida reliability. What is misleading about Mr.**  
10 **Kordecki's and Dr. Nesbitt's testimony regarding Peninsular**  
11 **Florida reliability?**

12

13 A. Both Mr. Kordecki and Dr. Nesbitt mislead the Commission in three  
14 ways. First, they paint only half the reliability picture, by arguing that  
15 the OGC unit will increase Peninsular Florida reliability, but failing to  
16 acknowledge that the OGC unit is not necessary for Peninsular Florida  
17 to meet its reliability criteria. Second, they both erroneously suggest  
18 that OGC will sell its output only in Florida. Third, both witnesses  
19 erroneously suggest that the OGC unit may be added to Peninsular  
20 Florida reserve margin calculations even though the OGC unit has no  
21 contract to provide firm capacity to any utility within Florida and Dr.  
22 Nesbitt is modeling the OGC unit to provide only energy sales.

1 **Q. Explain how Dr. Nesbitt and Mr. Kordecki mislead the**  
2 **Commission by stating that the OGC unit increases reliability but**  
3 **failing to disclose whether the unit is necessary for Peninsular**  
4 **Florida to achieve a reliability criterion?**

5  
6 A. Mr. Kordecki and Dr. Nesbitt begin by stating that the OGC unit will  
7 enhance Peninsular Florida's reliability. This is less than half a picture;  
8 it is true only so far as it goes. As I stated earlier, the addition of any  
9 new generating capacity will enhance Peninsular Florida reliability,  
10 unless it is totally committed outside of Florida. The fact that a plant  
11 enhances reliability does not mean that the unit is needed for reliability.  
12 That is the other half of the picture that both Mr. Kordecki and Dr.  
13 Nesbitt conveniently ignore. They ignore whether the unit is needed  
14 for Peninsular Florida to meet its reliability criterion, and that is one of  
15 the purposes of this proceeding. This omission is misleading.

16  
17 **Q. Why do you believe that it is misleading for Mr. Kordecki and Dr.**  
18 **Nesbitt to state that the OGC output will be sold only in Florida?**

19  
20 A. OGC is motivated to maximize its sales price. That means it will sell in  
21 Florida when the price it can receive in Florida is higher than the price  
22 it will receive selling outside of Florida. It also means that OGC will sell  
23 outside of Florida when the price OGC receives for selling outside of

1 Florida will be higher than the price it would receive selling in Florida.  
2 Both Mr. Kordecki and Dr. Nesbitt conclude that OGC will sell only in  
3 Florida, although even Dr. Nesbitt acknowledges that there will be  
4 some times when OGC will sell outside of Florida because it can  
5 achieve a higher price. Dr. Nesbitt offers no proof in support of his  
6 assertion.

7  
8 I believe the potential for OGC selling outside of Florida is much higher  
9 than Mr. Kordecki speculates and Dr. Nesbitt forecasts especially  
10 during critical peak demand periods. My belief is based upon the  
11 market opportunities FPL has enjoyed over the last two years. Like  
12 OGC, FPL is authorized to sell at market based rates outside of  
13 Florida. It has seized opportunities to make significant, out of state,  
14 off-system sales. In 1998 and 1999 FPL made off-system sales,  
15 realizing a gain of \$135,342,919. In 1999, FPL made off-system sales,  
16 realizing a gain of \$64,818,010. The gain from sales outside of Florida  
17 was \$54,945,102, all of which was passed back to FPL's customers  
18 through adjustment clauses. FPL made these sales from the higher  
19 cost, less efficient generating units which Dr. Nesbitt forecasts the  
20 OGC unit will displace.

21  
22 OGC has an incentive to displace all of these lucrative off-system  
23 sales. OGC is not committed to selling within Florida. It has no

1 obligation to serve load within Florida. It has no contractual obligation  
2 to sell to a Florida utility. OGC has every incentive and no disincentive  
3 to undertake to displace these sales. Certainly OGC has the capacity  
4 to displace a significant portion of these off-system sales. I believe this  
5 market opportunity is an irresistible opportunity for a profit maximizing  
6 merchant plant, and it belies the assertions that OGC will sell all of its  
7 energy within Florida.

8

9 **Q. How have Mr. Kordecki and Dr. Nesbitt misled the Commission by**  
10 **including the OGC capacity in Peninsular Florida reserve**  
11 **margins?**

12

13 **A.** *It is misleading for Mr. Kordecki and Dr. Nesbitt to suggest that the*  
14 *OGC capacity is properly included in the determination of Peninsular*  
15 *Florida's reserve margin. Uncommitted power is not properly*  
16 *recognized in reserve margin calculations. It is inconsistent with*  
17 *industry practice. It is inconsistent with prior Commission decisions. It*  
18 *is an unreasonable practice. Utilities do not include uncommitted*  
19 *capacity in reserve margin calculations because the utilities have no*  
20 *entitlement to rely upon the capacity at the time of peak (or for any*  
21 *other time).*

1 It was only a few years ago that the Commission chastised FPL and  
2 other utilities for including in their reserve margin calculations in their  
3 ten-year site plans unspecified capacity purchases. Those proposed  
4 purchases were at least for firm purchases of capacity. OGC  
5 postulates that it will sell energy to the wholesale market; that is the  
6 way OGC has been modeled. It is nothing more than as-available  
7 energy, which the Commission has consistently found does not have  
8 capacity deferral value and should not be compensated with capacity  
9 payments. Reserve margin calculations appropriately rely only upon  
10 firm committed capacity, whether from units owned by utilities with an  
11 obligation to serve load or from capacity under firm contract, and OGC  
12 is not is not such a firm resource.

13  
14 However, I will address Mr. Kordecki's erroneous conclusion that OGC  
15 may properly be recognized in a reserve margin calculation.

16  
17 Even if OGC could be compelled to provide its power into the Florida  
18 grid under emergencies (and I am not agreeing that it could), that  
19 would be the only circumstance in which OGC, as an uncommitted  
20 merchant plant, would have any obligation to serve Florida. It has no  
21 obligation to assist Florida utilities to meet peak demand outside of the  
22 extreme circumstances of a capacity emergency. That is the primary  
23 purpose of reserve margins, to provide continuing reliability at times of

1 peak. It should also be remembered that in addition to reserve  
2 margins there is another approximately 3,800 MW of operational  
3 measures available to utilities. These measures would be  
4 implemented before a capacity emergency declaration. Most, if not all,  
5 peaks have happened without there being a capacity emergency  
6 declared under the grid bill. I am not aware of a single instance when  
7 a capacity emergency has been declared and an order by the  
8 Governor and the Cabinet requiring Florida utilities to sell into the  
9 Florida grid has been issued. I hardly think that a resource that is  
10 available only under circumstances that have never occurred is  
11 reasonably characterized as a firm resource properly available for  
12 inclusion in a reserve margin.

13  
14 Dr. Nesbitt's basis for including the OGC capacity in the reserve  
15 margin calculation has even less justification. He simply says that it  
16 will increase reliability, therefore, he includes it in a revised reserve  
17 margin calculation. For all the reasons previously addressed in my  
18 testimony, the inclusion of uncommitted capacity not owned by a utility  
19 with an obligation to serve or under firm contract with such a utility is  
20 not properly included in a reserve margin calculation. Dr. Nesbitt's  
21 calculation of Peninsular Florida reserve margins including the OGC  
22 unit is misleading.

1 **IV. THE INFORMATION PRESENTED IN OGC'S PETITION AND**  
2 **TESTIMONY FAIL TO SHOW OGC IS THE MOST COST-EFFECTIVE**  
3 **ALTERNATIVE.**

4  
5 **Q. Has the OGC unit been demonstrated in the petition and**  
6 **testimony to be the most cost-effective alternative available?**

7  
8 **A.** No. No attempt has been made to show that the OGC plant is the  
9 most cost-effective alternative available to an individual utility.

10

11 Likewise, no analysis has been offered that shows that the OGC unit is  
12 the most cost-effective alternative available for Peninsular Florida.  
13 OGC neglects to analyze all options available to meet Peninsular  
14 Florida's purported need. Moreover, OGC fails to demonstrate that the  
15 OGC unit is the most cost-effective type of generating unit that could  
16 be built to meet Peninsular Florida's purported need.

17

18 **Q. Please explain why you state that no analysis has been offered to**  
19 **demonstrate that the OGC is the most cost-effective alternative**  
20 **available for Peninsular Florida.**

21

22 **A.** Determining whether a plant is the most cost-effective alternative  
23 requires a comparative analysis. Although OGC offers several

1 analyses, there is nothing I have seen in the Petition and testimony  
2 that is a comparative analysis of cost-effectiveness.

3  
4 Table 9 and the supporting text in the Exhibits is the closest OGC  
5 comes to addressing comparative cost-effectiveness, but the  
6 information presented in Table 9 is not a comparison of cost-  
7 effectiveness -- a comparison of total costs and benefits to customers.  
8 Table 9 is an incomplete comparison of selected costs not even  
9 presented on a uniform basis of generating alternatives. There is no  
10 comparison of alternatives to OGC supplied power and OGC never  
11 commits to supply power and never commits to any price for that  
12 power.

13  
14 The only other analysis offered by OGC intended to address cost-  
15 effectiveness is the Altos Management Partners analysis referred to in  
16 the Petition and testimony. If FPL offers other testimony, it will address  
17 in detail the problems with Dr. Nesbitt's testimony and analysis. My  
18 observations are limited to what the Altos analysis fails to do.

19  
20 As best as can be discerned from the Petition and testimony, the Altos  
21 models perform two principal functions: they measure whether a unit  
22 may be economically viable and whether a unit may suppress  
23 wholesale prices. Neither type of analysis is a comparative analysis in

1 which competing new alternatives are evaluated head-to-head to  
2 determine the most cost-effective alternative for electric customers.

3

4 An assessment of whether a unit may be economically viable for a  
5 merchant plant developer is not an assessment of whether a unit is the  
6 most cost-effective alternative available to the electric customers of  
7 Peninsular Florida. Providing one quantification of potential wholesale  
8 cost suppression is not a determination of whether a unit is the most  
9 cost-effective alternative. Among its other problems, it begs the  
10 relevant questions of whether there is another alternative(s) that would  
11 drive prices lower and whether there are other costs and benefits that  
12 should be considered.

13

14 **Q. Please elaborate as to why you conclude that Table 9 is not a**  
15 **comparative analysis of cost-effectiveness.**

17 A. OGC's petition and testimony lack any analysis which compares the  
18 total costs and benefits of different generating unit options to utility  
19 customers. Instead, OGC presents in Table 9 a listing of partial cost  
20 data for various generating units that have been recently proposed in  
21 Florida. This information appears to largely come from utilities' Ten-  
22 Year Site Plans as well as from other Commission filings. Table 9 does  
23 not come close to demonstrating the most cost-effective unit. One

1 simply cannot answer this question due to a fundamental flaw in the  
2 information presented.

3

4 The fundamental flaw is that no calculation of total costs (generation  
5 capital and O&M, transmission capital and O&M, fuel delivery capital,  
6 and fuel unit costs), and benefits (the fuel displacement impacts of the  
7 new unit on the affected utility system) is made. Only by a comparison  
8 of total costs and benefits can one determine the most cost-effective  
9 type of generating unit to add in a given situation.

10

11 Instead of presenting the true picture (i.e., the total costs and benefits),  
12 OGC attempts to “get by” with Table 9. This table provides a \$/kW  
13 value for various units/projects. These \$/kW values are supposed to  
14 represent “Total Installed Cost”. While falling far short of providing the  
15 needed total costs and benefits picture, this information might have  
16 provided some useful insight into the costs of the various  
17 units/projects. However, the table fails to serve even that limited role  
18 due to the misleading way in which the data is presented.

19 The table is misleading for several reasons:

20 (1) The reader is not told which installed costs (generation capital,  
21 transmission capital, and/or fuel delivery capital) are included. For  
22 example, the values for FPL’s projects did include costs for all  
23 three of these components. The cost for OGC’s project is said to

1 include transmission and generation capital costs, but no mention  
2 is made of fuel delivery capital costs. Similarly, no mention is  
3 made of which of these costs components are included in the  
4 values quoted for all listed projects. Therefore, the numerators of  
5 the various \$/kW values may not include the same cost  
6 components.

7 (2) Also, the "\$" value shown in the numerator of the \$/kW figures  
8 makes no distinction as to the years in which the dollars will be  
9 spent. Since the projects listed in Table 9 have in-service dates  
10 ranging from 1999 through 2008, the "total installed costs" are not  
11 stated on a comparable (NPV) basis.

12 (3) OGC does not state the basis for the capacity ratings used in the  
13 denominator of the \$/kW value. The "kW" in the \$/kW calculation  
14 could be based on either the Winter or the Summer capacity  
15 rating. OGC used a Winter rating while FPL has typically used a  
16 lower Summer rating. Thus even if the total unit costs for an FPL  
17 option and an OGC option were identical, OGC's \$/kW value  
18 would appear to be lower than FPL's since FPL used a smaller  
19 denominator (the Summer MW rating rather than the Winter MW  
20 rating). The choice of the seasonal MW rating used as the  
21 denominators in the various \$/kW values are inconsistent and  
22 misleading.

1 (4) These cost values, even if they had been calculated on a  
2 consistent basis, are meaningless in terms of a comparison if the  
3 efficiencies of the units are different (which they are in OGC's  
4 table). For example, FPL's Martin Units Nos. 5 and 6 have  
5 significantly lower heat rates than does OGC's proposed project.  
6 In a similar vein, FPL's Ft. Myers and Sanford repowering projects  
7 offer substantial efficiency gains for the existing capacity at the  
8 site, which are not captured in the table.

9  
10 **Q. What viable alternatives do the OGC petition and testimony fail to**  
11 **seriously consider?**

12  
13 **A.** The OGC petition uses as a basic premise that existing customers of  
14 Florida's utilities would be the ones who could potentially benefit from  
15 its proposed new power plant. This benefit would be derived as these  
16 utilities lower their costs by substituting OGC-produced kWh for  
17 (supposedly) higher cost kWh from utilities' existing units. Therefore,  
18 OGC has chosen a "standard" of lowered costs for customers of  
19 Florida utilities to examine the cost-effectiveness of its project.

20 By setting the stage in this manner, it is necessary in determining the  
21 most cost-effective alternative to consider all actions that could be  
22 taken that would lower customers electric bills. Consequently, to  
23 determine which alternative is the most cost-effective for customers, all

- 1 actions that can be taken to serve those customers directly should be  
2 evaluated. These viable alternatives to the OGC project include:
- 3 A. new plant construction by Florida utilities;
  - 4 B. repowering of existing units by Florida utilities;
  - 5 C. other potential power purchases by Florida  
6 utilities;
  - 7 D. additional demand side management (DSM) by  
8 Florida utilities;
  - 9 E. and, a portfolio-type combination of some or all of  
10 the above-mentioned options in an integrated  
11 resource plan approach.

12  
13 The OGC petition and testimony seriously considers none of these  
14 viable alternatives.

15  
16 Instead of looking at all reasonably available options, OGC's petition  
17 and testimony merely state that the proposed plant is a cost-effective  
18 option for OGC's purpose of having a power plant with which to  
19 produce electricity for sale into the wholesale market. Stated  
20 differently, OGC addresses not whether its plant is the most cost-  
21 effective alternative to serve the need of Peninsular Florida utility  
22 customers, but whether the plant is the most economically viable

1 option for OGC. The petition and testimony also indicate that the  
2 proposed project will suppress energy prices in the state.

3  
4 These assertions that the proposed plant will be economically viable  
5 for OGC's purposes and will suppress energy prices do not  
6 demonstrate that the proposed project is the most cost-effective  
7 alternative for the customers it supposedly is needed to serve. Other  
8 more fuel-efficient alternatives may be more cost-effective to utility  
9 customers and may suppress energy prices even more. (That is  
10 certainly a reasonable inference to be drawn from OGC's Table 9,  
11 which shows no less than five units with lower heat rates than OGC.)  
12 The Commission does not know if there are alternatives more cost-  
13 effective than OGC because OGC has not performed the analyses  
14 necessary to demonstrate this.

15

16 **Q. What do you conclude regarding OGC's attempt to demonstrate**  
17 **that its proposed project is the "most cost-effective alternative**  
18 **available"?**

19

20 **A.** OGC has failed to demonstrate that its project is the most cost-  
21 effective alternative available. It failed to present a utility-specific  
22 analysis of cost-effectiveness. The Altos analysis offered does not  
23 demonstrate that the OGC unit is the most cost-effective alternative for

1 Peninsular Florida. An analysis of economic viability to OGC is not an  
2 analysis showing that the OGC unit is the most cost-effective  
3 alternative for Peninsular Florida. An analysis of wholesale price  
4 suppression for one unit even if accurate, is not a comparative analysis  
5 of cost-effectiveness. OGC definitely did not consider a number of  
6 alternatives that are available to meet the "need" of Peninsular Florida  
7 utility customers. OGC did not seriously attempt to demonstrate that  
8 its proposed plant was even the most economical new generating unit  
9 that could be built. Instead, OGC's petition and testimony gave some  
10 incomplete cost information meant to give the impression that its  
11 proposed project is the most cost-effective. That impression vanishes  
12 when one realizes that the cost data is incomplete and misleading.  
13 The OGC Project may likely not be cost-effective at all for Florida  
14 consumers

15  
16  
17 **V. THE PURPORTEDLY REDUCED ASSUMPTION OF RISK OFFERED**  
18 **BY OGC IS NOT WORTH THE INORDINATE PENALTY THAT**  
19 **WOULD BE ASSESSED ON UTILITY RATEPAYERS.**

1 **Q. Should the Commission be concerned about the risk associated**  
2 **with approving utility construction of gas-fired combined cycle**  
3 **capacity relative to the risk of a merchant plant developer**  
4 **building the same capacity?**

5  
6 A. Absolutely, however, a fair, complete and objective assessment of  
7 relative risks and benefits will demonstrate that consumers would fare  
8 better were the utility to build the unit rather than a merchant  
9 developer.

10

11 **Q. What are the relative risks of a merchant developer or and a utility**  
12 **building a gas-fired combined cycle unit?**

13

14 A. Risks associated with this technology are quite low. It is a proven  
15 technology, with high availability, good performance, and low cost.  
16 The risk assumed by either a merchant developer or a utility building  
17 this plant is quite modest.

18

19 **Q. Who bears the financial and operating risks and the related costs**  
20 **and benefits for a gas-fired combined cycle unit being built by a**  
21 **merchant plant developer or by a utility?**

1 A. A repeated mantra in the OGC filing is that the merchant plant  
2 assumes all the financial and operating risk, unlike utility construction  
3 where the risk is borne by utility ratepayers. This assessment of risk is  
4 incomplete and misleading.

5  
6 The financial and operating risks of constructing and operating a gas-  
7 fired combined cycle unit are much the same regardless of whether a  
8 utility or merchant plant builds the plant. They are primarily borne by  
9 the investors in each entity. Certainly, neither set of sophisticated  
10 investors would assume an undue risk for the return expected from  
11 their investment. It goes without saying that the higher the risk, the  
12 higher the expected return will be. So, to the extent that OGC  
13 assumes any higher risk, as it so often suggested in OGC's petition, its  
14 investors will demand a higher return on their investment. This higher  
15 return requirement will be reflected in its power prices, which will be  
16 paid by Florida consumers. So, there is no free lunch. If investors  
17 accept more risk, they get a higher return while customers pay more.

18  
19 One further mistaken assumption OGC makes is that it assumes that  
20 cost recovery by a utility is a foregone conclusion. It is not. Utility  
21 investors, not customers, bear the risk of imprudent decisions and  
22 utilities have constant oversight from the Commission. As such, it is

1 the Commission that ensures that customers pay a fair price for the  
2 risk assumed by the utility's investors.

3

4 When one sets aside the pejorative phrase "captive customers" and  
5 looks objectively at who bears the risk and costs when a merchant or a  
6 utility builds a gas-fired combined cycle unit, merchant plants do not  
7 protect customers from significant risk. The risk of this technology is  
8 modest. If a utility built such a unit, customers would bear very little  
9 risk. However, if a merchant builds the unit, customers bear the risk of  
10 paying too much. By avoiding cost of service regulation, merchant's  
11 stand to make returns which would be excessive by regulatory  
12 standards. If they were regulated, those gains would be returned to  
13 customers, lowering customer rates. However, since they are not  
14 regulated, the merchant's generous returns are borne by utility  
15 customers.

16

17 **Q. Does this complete your testimony?**

18 **A. Yes.**