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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
SUPPLEMENTAL TESTIMONY OF CHRIS J. KLAUSNER
ON BEHALF OF
FLORIDA MUNICIPAL POWER AGENCY
JEA
REEDY CREEK IMPROVEMENT DISTRICT
AND
CITY OF TALLAHASSEE
DOCKET NO. 060635
DECEMBER 26, 2006

Q. Please state your name and business address.

A. My name is Chris J. Klausner. My business mailing address is 11401 Lamar Avenue, Overland Park, Kansas 66211.

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

A. I am employed by Black & Veatch Corporation. My current position is Senior Consultant/Project Manager.

Q. Have you previously submitted testimony in this proceeding?

A. Yes.

CMP _____
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ECR _____
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SEC 1
OTH _____

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

2 A. The purpose of my testimony is to provide updated capital cost estimates for the
3 supply-side alternatives considered in the TEC Need for Power Application,
4 Exhibit No. __ (TEC-1).

5
6 **Q. Have there been any market changes that would impact the capital cost
7 estimates used for the available alternatives?**

8 A. Yes. Certain market impacts on the costs of major equipment, commodities, and
9 labor have occurred that would increase the capital cost estimates for the
10 available alternatives.

11
12 **Q. Are you familiar with the updated capital cost estimate for TEC discussed
13 in the supplemental testimony of Paul Hoornaert?**

14 A. Yes. I have reviewed the updated capital cost estimate for TEC.

15
16 **Q. By how much did the capital cost estimate increase for TEC?**

17 A. As stated in Mr. Hoornaert's supplemental testimony, the increase is
18 approximately 19 percent.

19
20 **Q. By how much do you estimate the capital costs for the coal-fired
21 alternatives presented in the TEC Need for Power have increased?**

22 A. Based on my independent analysis, I estimate that the costs of the coal-fired
23 alternatives presented in the Need for Power Application have increased by
24 approximately 20 percent. This is because market influences that have led to the
25 updated capital cost estimate for TEC, a supercritical pulverized coal unit, are

1 similar to those that would be expected to impact the coal-fired alternatives in
2 the TEC Need for Power Application since these alternatives utilize relatively
3 the same proportions of commodities such as steel and concrete, construction
4 labor, and pollution control equipment and other equipment unique to coal fired
5 units such as chimneys.

6

7 **Q. Would the estimated change in the capital cost estimates for coal fired**
8 **generation be the same as for natural gas fired generation?**

9 A. No. Natural gas fired generation would be subject to some degree of capital cost
10 increases associated with major equipment and labor, similar to the coal fired
11 alternatives. However, the impact on the capital cost estimates for coal fired
12 alternatives would likely be more pronounced than for natural gas fired
13 generation. The estimated percentage increase in the capital cost of natural gas
14 fired generation alternatives from that in the Need for Power Application is
15 approximately 12 percent. The lower percentage increase in the capital cost for
16 natural gas fired generation alternatives compared to coal fired alternatives is
17 due to the fact that there are proportionally less commodities such as concrete
18 and steel in natural gas fired generation compared to coal generation as well as
19 proportionally less construction labor required. Also costs for major engineered
20 equipment such as combustion turbines for natural gas fired generation are not
21 increasing as fast as the major engineered equipment for coal units.
22 Furthermore cost increases for pollution control equipment would be less for
23 natural gas fired generation than for coal units.

24

1 **Q. Is it unusual for capital costs to change over time?**

2 A. No. Capital costs for generating alternatives are subject to change based on
3 changing prices for equipment, labor, commodities and other items.

4 Fundamental supply and demand forces will affect capital costs for generating
5 alternatives.

6

7 **Q. Does this conclude your testimony?**

8 A. Yes.

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