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Subject: e-filing (Dkt. No. 070650-EI)
Attachments: 070650 Citizens Posthearing Statement.doc

Electronic Filing

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b. Docket No. 070650-EI

In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by Florida Power & Light Company.

c. Document being filed on behalf of Office of Public Counsel

d. There are a total of 11 pages.

e. The document attached for electronic filing is Citizens Post-Hearing Statement.

(See attached file: 070650 Citizens Posthearing Statement.doc)

Thank you for your attention and cooperation to this request.

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by Florida Power & Light Company.

Docket No. 070650-EI

Filed: February 15, 2008

CITIZENS' POST-HEARING STATEMENT

The Citizens of Florida, through the Office of Public Counsel, file this post-hearing statement addressing issues 6 and 9 in this proceeding.

Issue 6: Will the proposed generating units provide the most cost-effective source of power, as this criterion is used in Section 403.519(4), Florida Statutes?

OPC Position: * The Commission must take into account the very high probability of carbon dioxide emission regulation during the economic lives of the proposed Turkey Point Nuclear Units 6 and 7. The magnitude of carbon and other emission costs affects the determination of whether the proposed plants are cost effective compared to alternatives such as combined cycle gas plants and IGCC plants. The Commission should give greatest weight to the emission costs derived from the medium gas cost, ENV II (ICF expected) scenario for the purpose of determining whether the proposed plants are cost effective. *

Discussion: In the recent Glades Power Park certificate of need proceeding, the Commission cited uncertainty about future fuel prices and

DOCUMENT NUMBER + DATE

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environmental costs among the reasons for denying the certificate. In its final order, the Commission determined that “FPL has failed to demonstrate that the proposed plants are the most cost-effective alternative available, taking into account the fixed costs that would be added to base rates for the construction of the plants, the uncertainty associated with future natural gas and coal prices, and the uncertainty associated with currently emerging energy policy decisions at the state and federal level.” Order no. PSC-07-0557-FOF-EI issued July 2, 2007, at 4. The Commission further stated that “uncertainty about cost-effectiveness alone will not necessarily control the outcome of every need determination decision. We find in this case, however, that the potential benefits regarding fuel diversity offered by FPL in support of the FGPP fail to mitigate the additional costs and risks of the project, given the uncertainty of present fuel prices, capital costs, and current market and regulatory factors.” *Id.*

Citizens recognize that there is great uncertainty about future fuel prices and emission costs. The Commission must still make judgments about future prices and costs, however, in order to determine the cost effectiveness of the proposed plants. Not only is there a long lead time to build the proposed plants, but they will have economic lives of forty years or more once constructed. The Commission should make its best judgment about the future cost for fuel and emissions, along with other costs, in order to determine which alternative will best serve the citizens of Florida.

In this proceeding Florida Power & Light Company presented three possible scenarios for fuel costs and four possible scenarios for environmental costs, resulting in twelve combinations for evaluating the cost effectiveness of Turkey Point Units 6 &

7. The results for nine of the twelve scenarios were presented in Florida Power & Light Company's prefiled testimony; the results for the other three were presented in response to Citizens' first interrogatory (exhibit 7, bates stamp nos. 000243 - 000250).

With respect to the fuel forecasts, the "medium" forecast for gas used the July 31, 2007, forward curve for the Henry Hub natural gas commodity prices for 2007 through 2009, a 50/50 blend of the forward curve and projections from the PIRA Energy group for 2010 and 2011, PIRA Energy Group projections for 2012 through 2020, and price changes from the Energy Information Administration for years beyond 2020. Yupp, Tr. 708. During cross examination, Mr. Yupp described the medium forecast as "something that takes into account all of the currently available information that is out in the marketplace that is used to develop fuel price forecasts" and as "what we would believe at this point in time, given the information we have, a reasonable forecast." Yupp, Tr. 720.

The forecasts of high and low fuel prices were based on the medium forecast. Florida Power & Light Company took the high and low ranges of what they paid for natural gas during the period January 2000 through April 2007, and applied the high and low percentages to the medium fuel price forecast in order to create the high and low band. Yupp, Tr. 718 - 719. A consistent approach was used for developing the medium forecast for coal and petroleum coke prices. Yupp, Tr. 709. The medium, or reference, price for nuclear fuel was performed in a manner consistent with the method used in fuel clause filings. Villard, Tr. 732.

From these descriptions of the fuel forecasts performed by Florida Power & Light Company, it is clear that the medium forecast is Florida Power & Light

Company's best estimate of future fuel prices. The Commission should give greatest weight to the medium fuel price forecasts when considering the cost effectiveness of the proposed plants.

Three of the four environmental cost scenarios presented by Florida Power & Light Company were based on forecasts of environmental costs prepared by the firm ICF International. Kosky, Tr. 775. The first scenario, ENV I, is a mild forecast of CO₂ compliance costs based on the 2006 Bingaman bill. Kosky, Tr. 782 - 783. ENV III, called the "stringent" or "high" case by Florida Power & Light Company, is based upon a bill by Senator McCain. Kosky, Tr. 785. ENV II, the "expected" CO₂ compliance cost projection, is the result of weightings applied to different bills for different years. ICF developed CO₂ price trajectories for each bill it analyzed at various future times. They then applied probabilities to each of the bills and to each of the years analyzed in order to estimate the expected case. Kosky, Tr. 790; confidential exhibit 97, page 142. These same three environmental cost scenarios were used by Florida Power & Light Company in the Glades Power Park certificate of need proceeding. Kosky, Tr. 785.

In the Glades Power Park certificate of need proceeding, a witness for the Sierra Club and the Natural Resources Defense League provided their own forecast of emission costs. Their middle projection of emission costs was "pretty close" to the ICF expected emission cost projection in that case, which is the same ENV II projection provided by Florida Power & Light Company in this proceeding. Kosky, Tr. 790 - 791. The comparability of the forecast provided by the Sierra Club and the Natural Resources Defense League to the ICF "expected case" provides additional evidence

that the ICF expected case is a reasonable forecast.

Subsequent to the preparation of the mild, expected, and stringent scenarios which were used by FPL in this proceeding and in the Glades Power Park proceeding, there have been other studies suggesting that those cost projections may be conservative. One of those reports was a study conducted by M.I.T. showing that compliance costs may be much higher than projected by ICF in 2006. Kosky, Tr. 785 - 786. FPL created a fourth scenario, with emission costs 30% higher than the ICF stringent case, based in part on this study. Kosky, Tr. 785 - 786. The ICF study evaluated a number of legislative proposals, but it did not make a specific forecast of carbon dioxide emission costs. Kosky, Tr. 786.

The most recent forecast from ICF shows probable emission compliance costs higher than forecasted in 2006. For example, the new "mild" forecast for 2020 shows CO₂ costs of \$18 per ton vs. \$13 per ton in the previous "mild" forecast, and 2030 costs of \$45 per ton vs. \$19 per ton in the previous "mild" forecast. The new "expected" forecast for 2020 shows CO₂ costs of \$27 per ton vs. \$26 per ton in the previous "expected" forecast, and 2030 costs of \$67 per ton vs. \$52 per ton in the previous "expected" forecast. The new "stringent" forecast for 2020 shows CO₂ costs of \$41 per ton vs. \$29 per ton in the previous "stringent" forecast, and 2030 costs of \$101 per ton vs. \$70 per ton in the previous "stringent" forecast. See exhibit 99.

The new ICF study evaluates several legislative proposals made subsequent to the M.I.T. study (Kosky, Tr. 844 - 845) and is more current than the M.I.T. study (Kosky, Tr. 822 - 823). It follows that the break-even points for nuclear vs. combined cycle and IGCC would be higher using the new ICF forecasts. Sim, Tr. 962, 969; See

a/so late filed exhibit 103, page 6 of 6.

While the various emission scenarios provide useful information concerning the range of possible emission costs, the original “expected” scenario, which was used to prepare detailed cost comparisons between nuclear, combined cycle, and IGCC alternatives in FPL’s filing, should be given the greatest weight for the purpose of evaluating the cost effectiveness of the proposed plants. The Commission should also consider the effect of the most recent ICF forecasts on the comparisons.

Issue 9: If the Commission grants Florida Power & Light Company's petition to determine the need for the proposed generating units, should FPL commit, prior to the completion of the Rule 25-6.0423 cost recovery proceeding in 2008 (the "2008 NPPCR Proceeding"), to make advance forging reservation payments of approximately \$16 million to Japan Steel Works in order to preserve the potential for 2018-2020 in-service dates for the proposed generating units?

OPC Position: * It is appropriate for FPL to make a commitment of approximately \$8 million to \$16 million either directly to Japan Steel Works or through intermediaries Westinghouse or General Electric for an advance forging reservation to preserve the potential for 2018 - 2020 in service dates; however, the prudence of all aspects of the commercial arrangement itself should be determined in the ordinary course of the annual cost recovery proceeding. *

Discussion: Procurement of an option for certain long lead items will enable an expeditious and cost-effective construction schedule. Scroggs, Tr. 290. The details regarding expenditures and contractual terms for an advance forging reservation have yet to be developed (Scroggs, Tr. 291), but FPL expects the price for the reservation to be in the range of \$8 million to \$16 million. Scroggs, Tr. 467 - 477; exhibit 15, bate stamp pages 712 - 713.

During the 2006 Regular Session, the Florida Legislature enacted s. 366.93, Florida Statutes, relating to nuclear plants. This statute required the PSC to establish

rules creating alternative cost recovery mechanisms for costs associated with the siting, design, licensing, and construction of nuclear plants. The mechanisms adopted by the PSC are to be designed to promote utility investment and allow for cost recovery in rates of all prudently incurred costs. Through the enactment of s. 366.93, Florida Statutes, the Florida Legislature has indicated a shift in the regulatory paradigm relating to nuclear generated energy. The new process will require a much greater level of participation and oversight by the Commission in the development of this unique and important resource option.

Advance payment for long lead procurement items involves reserving manufacturing space and initiates the process to complete the design, purchase and delivery of special heavy forgings and equipment so that they will be prepared and ready to be placed at the appropriate time during the complex construction process. The unique nature (e.g., size, shape, quality requirements) of these forgings requires several years to design, fabricate and deliver them to the site. FPL expects that commitments for some of those purchases will have to be made prior to completion of the 2008 NPPCR Proceeding.

The nuclear plants proposed in this petition, if built, will be the most expensive power plants ever built in Florida. Cost estimates for two 1100 MW plants range from about \$12 billion to almost \$18 billion, and for two 1520 MW plants cost estimates range from about \$16 billion to \$24 billion. These costs will ultimately be funded by the state's consumers of electricity. If the PSC grants FPL's petition to determine the need for this proposal, delays which will inflate these costs should be avoided. Thus, it is appropriate for FPL to take into account advance payment for long lead

procurement items to preserve the potential for 2018-2020 in-service dates. The specific contractual terms, including price terms, of those advance payment commitments should remain subject to prudence review in the ordinary course of subsequent NPPCR proceedings. Likewise, the prudence of making future advance payment commitments after the completion of the 2008 NPPCR Proceeding, as well as the contractual terms of any such commitments, would be reviewed in the ordinary course of subsequent NPPCR proceedings.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Citizens' Post-Hearing Statement has been furnished by electronic mail and U.S. Mail to the following parties on this 15th day of February, 2008, to the following persons:

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