Commissioners: THOMAS M. BEARD, CHAIRMAN BEITY EASLEY J. TERRY DEASON SUSAN F. CLARK LUIS J. LAUREDO

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TIMOTILY DEVLIN, Director Auditing & Financial Analysis (904) 488-8147

Public Service Commission

February 11, 1992

Mr. Al Farinelli Florida Power and Light 9250 West Flagler Post Office Box 029100 Miami, Florida 33174-3414

Dear Mr. Farinelli:

DOCKET NO. 910981-EI DECOMMISSIONING WITH REUSE OF EQUIPMENT

A review of the information filed by FP&L in November, 1991 in this docket has produced several points which Staff would like to clarify. As we are aware, the entire process of decommissioning nuclear plants is very much a developmental topic. Probably, it would be advantageous for us to discuss these points directly with the appropriate personnel. If the Company deems it necessary to provide written answers, please provide the appropriate responses by March 16, 1992. If you can arrange for us to discuss these points directly with the Company personnel who are responsible for these subject areas, we would need to do this by the same date.

ACM1. Regarding the classification of low-voltage motors, the
study shows on page 19 that the low voltage classification
goes up to 480 volts, while page 27 shows this class going up
to 550 volts. Please clarify the difference between these two
segments of your presentation.

Are there any non-contaminated motors in use at these St. Lucie or Turkey Point sites which have ratings above the lowvoltage limit?

2. The equipment in the classification "large cranes" is designated reusable in your study, and the descriptive information provided appears to support that conclusion. Please tell us about the drives involved with these large cranes in your nuclear facilities. While it is doubtless that there would be some low voltage motors involved, are there any motors above the low voltage ceiling? Are all drives

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> associated with the operation of these cranes considered to be integral with the crane assembly, and reused with it? For any plans other than reuse of the complete assemblies, please explain what the Company would expect to do, and why.

> The diesel generators are also designated reusable, with 3. apparent support in the information provided. Do we understand correctly that these generators supply power needed for cold start-up, rather than production of any power for sale? How do these generators differ from start-up generators at any of the other facilities operated by FP&L? Does the Company stock such generators as reserve items or spare-parts? Would it be possible that the diesel generators might take on such a functional role long before installation of any generating plant "replacing" St. Lucie or Turkey Point nuclear Please let us know how you viewed this with fossil? possibility in the analysis which led to Exhibit 3 of your filing.

> 4. Please refer to item 12 on page 15. In this paragraph, certain expectations of the Company in regard to equipment remaining life are delineated. The Company states that at the end of a 40 year plant life, the component end of life cycle will be reached for items having a 20 year service life. This assumption also applies to equipment with a reported life cycle of 40 years, according to the Company writing.

> The Company cites an increase in frequency of random failures a major or definitive factor in recognizing life as Our concern here relates to the fact that expectancy. failures are scattered across time, as the Company recognizes in its reference to "(higher) frequency of random failures." which is associated with It is the scattering the survivor/mortality pattern, rather than the failure of groups of equipment at a specific age or time. The pattern of failures may in fact begin quite early within the period of plant life, so that throughout the operational life of the plant there is a continuous stream of equipment completing its life and being replaced. Some of these replacements will be relatively new and good condition at the time of in decommissioning of the plant, and junking them might not be a reasonable course of action.

> Our concern is exacerbated when we turn some attention to the facts of inflation and mandated additions and/or upgrades. In the present time we are aware that nuclear plants are being retrofitted with control and other devices which far exceed the cost of the original plant. Should this pattern continue

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> into the final decade of operation of the plants, there will be an implication of great amounts of investment having a young age at decommissioning. The useful condition and remaining life of this equipment might be considerable, and the possible salvage value related to further useful life, rather than junk value of the equipment, cannot be ignored.

> We agree that it is completely impractical to try to predict now what remaining life would be expected for a particular pump or motor at the time of dismantlement. However, it is to be expected that many thousands of dollars worth of equipment would have expended a small percentage of the expected service life. Staff agrees that it certainly is impractical to attempt to reuse any piece equipment where salvage costs exceed the cost to purchase a new piece of similar equipment. We would be interested in discussing your views regarding the practicality of reusing relatively young aged equipment, with cost to salvage and cost to replace included in the analysis.

> Specifically, looking at the larger pumps, the Company 5. states they "will be close to their expected life cycles." In fact, even for the pumps having attributes which result in an average service life of 50 years, we would expect to see significant pump replacements during plant age of 30 years to As an example, for equipment with an R-3 life 40 years. pattern and a 50 year average service life, approximately 10% of the equipment would be replaced before the equipment reaches 31 years of age; and by age 39.5, 21% would be Many of the nominally long-lived mechanical items replaced. in place at start-up, or installed in the first five years of the plant life, would almost certainly not live to shut down at plant age 40 years. The replacements, however, might have seen very little service -- meaning 10% or 20% of the expected life. Please consider the possibility of reuse, or even resale and market value, for such items and advise us of your views.

> 6. In a cursory review of information presented in Exhibit 3 of your November, 1991 filing, we see that the "Incremental Decommissioning" amounts for low voltage motors at the St. Lucie sites appear much greater than the amounts listed for removal of the low voltage motors at the Turkey Point sites. Please describe the situation which leads to this difference.

> 7. Has FP&L included any contingency or analysis related to the possibility of radiation exposure during the removal of the reusable equipment? Please explain the approach which the Company has used in regard to this question as it would apply

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to the recovery of reusable equipment.

8. As part of this study, the Company has considered the implication of land use at both St. Lucie and Turkey Point as it would impact the possibility of reuse with fossil fuel. We agree that such evaluation of land use is a primary and governing factor, and some current limitations can be expected to continue or become more stringent in the future. Please provide the citations for Federal or other governing regulations regarding the land use and permits associated with the wetlands and mangroves at these sites, so that Staff can become familiar with those regulations and requirements in their current status.

Should the Company need clarification of any of these questions, please contact either Jeanette Bass or myself at (904) 488-8147.

Sincerely,

atricia S. X.

Patricia S. Lee Utility Systems Engineer Supervisor

PSL/JSB/ss cc: Division of Legal Services Division of Electric and Gas Division of Records and Reporting