

RELATED CORRESPONDENCE

11/13/79



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of	)	Docket Nos. 50-250-SP
	)	<u>50-251-SP</u>
FLORIDA POWER & LIGHT COMPANY	)	(Proposed Amendments to
	)	Facility Operating License
(Turkey Point Nuclear Generating	)	to Permit Steam Generator
Units Nos. 3 and 4)	)	Repairs)

INTERVENOR'S MOTION FOR EXTENSION OF
TIME TO RESPOND TO OBJECTIONS TO
INTERROGATORIES; OPPOSITION TO FLORIDA
POWER AND LIGHT COMPANY'S ATTEMPT TO
PRECLUDE PETITIONER'S INTERROGATORIES;
REQUEST FOR LEAVE TO WITHDRAW AS
COUNSEL AND REQUEST FOR HEARING.

Florida Power and Light Company intends to make a mammoth expenditure of funds (at least a quarter of a billion dollars) to repair its nuclear power plant at Turkey Point. That action, should it occur, will have a substantial impact on the economic and environmental future of South Florida. The hearing authorized by this Board at the request of the Intervenor, MARK P. ONCAVAGE, is an attempt to permit a full and fair airing of the issues posed by Florida Power and Light's plans.

The Board, seeking to insure that goal, has been patient and fair. Counsel for the Nuclear Regulatory Commission has been understanding and helpful. The Intervenor and his counsel have attempted to be responsible and diligent.

Florida Power and Light, in its attempts to either preclude a hearing, or make the hearing a hollow forum, has been

7912120 125

G

petulant and arrogant. Those attitudes have caused additional delay, extraordinary burdens upon the intervenor, and since they threaten the integrity of the hearing process itself, prompt this Motion.

Before presenting the specific reasons for the relief requested in this Motion, we submit the following factual background.

FLORIDA POWER AND LIGHT'S
ATTITUDE TOWARD THE HEARING PROCESS

Florida Power and Light has resisted the intervenor at every step. While some of its actions have had legal bases, too many have not. For instance, the Company disclaimed any condensate polishing issue, and this Board found:

FPL apparently overlooked the following sentence in Section 3.1 of the SER:
'Along with the absence of phosphates, planned condenser retubing and the installation and use of condensate polishes will essentially eliminate sludge.'

Order Relative to Contentions and Discovery,
September 25, 1979, p. 3.

At an August 30, 1979 conference the Company refused to concede the possibility that other contentions beyond those admitted in the Board's August 3, Order had any merit. Nevertheless, several additional contentions were found by the Board to have merit.

In its letter of October 31, 1979, complaining of the tardy filing of interrogatories, Florida Power and Light arrogated

unto itself the right "to treat the unauthorized filing as a nullity" and disclaimed any obligation to respond to it. At a conference call sparked by the letter, the Board observed that some of the questions posed in the interrogatories were pertinent and needed answering. Florida Power and Light would obviously prefer to avoid any response, even though the health and safety of workers and the surrounding area are at stake. The need for information is underscored by the Board's October 11, 1979 Order Requesting Additional Information:

The Board requests that licensee and staff address in greater detail the problem of assuring the continued integrity of the radioactivity retention barriers either in supplements to the prepared documents or in their prefiled testimony before the evidentiary hearing.

Instead of addressing itself to the real issues in this case, Florida Power and Light has adopted a series of strategies designed to divert attention from the health, safety and economic questions raised by the Turkey Point repairs. Some of their approaches are amusing: Mr. Coll's concern during a recent conference call with the Board over whether counsel for intervenor should be addressed as "Dean" or "Mister." (He neglected to consider counsel's academic title of "Professor.") Mr. Reis' request for adjournment of that same conference call and his quavering remark, "If you hear emotion in my voice...."

Florida Power and Light Company's other strategies are less amusing.... During the two conference calls prompted by Florida Power and Light Company's October 31 letter, the Company

first took the position it could not present its objections to the interrogatories within the time set by the Board. The next day it changed its mind. The Company also suggested it even be excused from answering the unobjectionable interrogatories, although the Board had agreed the day before that the tardy filing should be accepted. Now Florida Power and Light has presented the Board and counsel with a massive set of objections and still has not agreed to answer the interrogatories which admittedly are relevant and unobjectionable.

It is against that background that the following motions are made.

THE REQUEST FOR AN EXTENSION OF TIME TO
RESPOND TO FLORIDA POWER AND LIGHT COM-
PANY'S OBJECTIONS AND OPPOSITION TO
FLORIDA POWER AND LIGHT'S ATTEMPT TO
PRECLUDE INTERVENOR'S INTERROGATORIES.

Intervenor's counsel are serving on a pro bono basis. Each has other obligations beyond this case. They have already spent over three hundred hours on this proceeding. They are serving without compensation because they believe the issues raised by the intervenor are significant and need to be fully heard before a decision is made on the proposed Turkey Point repairs. Counsel has no nuclear energy technical expertise. They have never engaged in a proceeding of this nature. The intervenor is a music teacher. He, like counsel, has had to spend long hours learning the technological language. Counsel and the intervenor have limited supportive resources for the typing, duplicating and delivery of pleadings.

On the other hand, Florida Power and Light Company has nearly unlimited resources. The Company's counsel have both technological expertise and vast experience in these kinds of proceedings. They have immediate access to experts in every field of nuclear energy. The Company spares no expense in providing itself with everything from counsel to couriers to achieve its goals. The irony is that these expenses are passed on to the local consumers of electricity, including intervenor and his counsel, who thus find themselves paying the expenses of the Company.

Florida Power and Light Company's counsel makes their living opposing consumer review of the utility's actions and can be expected to act rapidly. Intervenor's pro bono counsel cannot fairly be required to respond to the series of objections to interrogatories by the November 13, 1979 date suggested by the Board. The objections were received at 11:10 A.M. on November 8, 1979. Counsel requests that an extension be granted for the intervenor's response. That extension should be for ten (10) days from receipt of the Board's order granting an extension. It makes little sense for intervenor's counsel to divert their energies only to learn that no extension has been granted. Had Florida Power and Light Company deigned to work with intervenor's counsel, instead of creating extraneous issues and time crises, this additional delay could have been avoided.



The intervenor's opposition to the Company's attempt to totally exclude consideration of the submitted interrogatories is based upon the extraordinary burdens a case such as this poses for counsel and a client with limited resources. It must be apparent that the intervenor and his counsel have tried to formulate issues and interrogatories which will achieve the ultimate goal—a full and fair hearing. The Board has, with patience, found merit in some of the intervenor's work.

Certainly "good cause" for accepting the interrogatories requires consideration of several factors. The tardiness was at the least, five days, or at the most, nine days. Mr. Coll was apprised of the fact of lateness one day after the interrogatories were due. The nuclear inexperience of intervenor's counsel is relevant insofar as it explains the difficulty in formulating appropriate questions. (We have done our mea culpas for not submitting to the Board a timely request for an extension.). The lateness causes no terrible burden to the Company. The Company's main complaint is the quality of the interrogatories.

Finally, it is appropriate to look to the interrogatories themselves in determining whether they should be accepted. To do as the Company suggests, utilize the "good cause" standard to dismiss good interrogatories, would mean that substantive due process would be sacrificed on the altar of procedure. The issue in this case is the validity of the repair process. Florida Power and Light should not be permitted to impede that determination because interrogatories were a few days late.

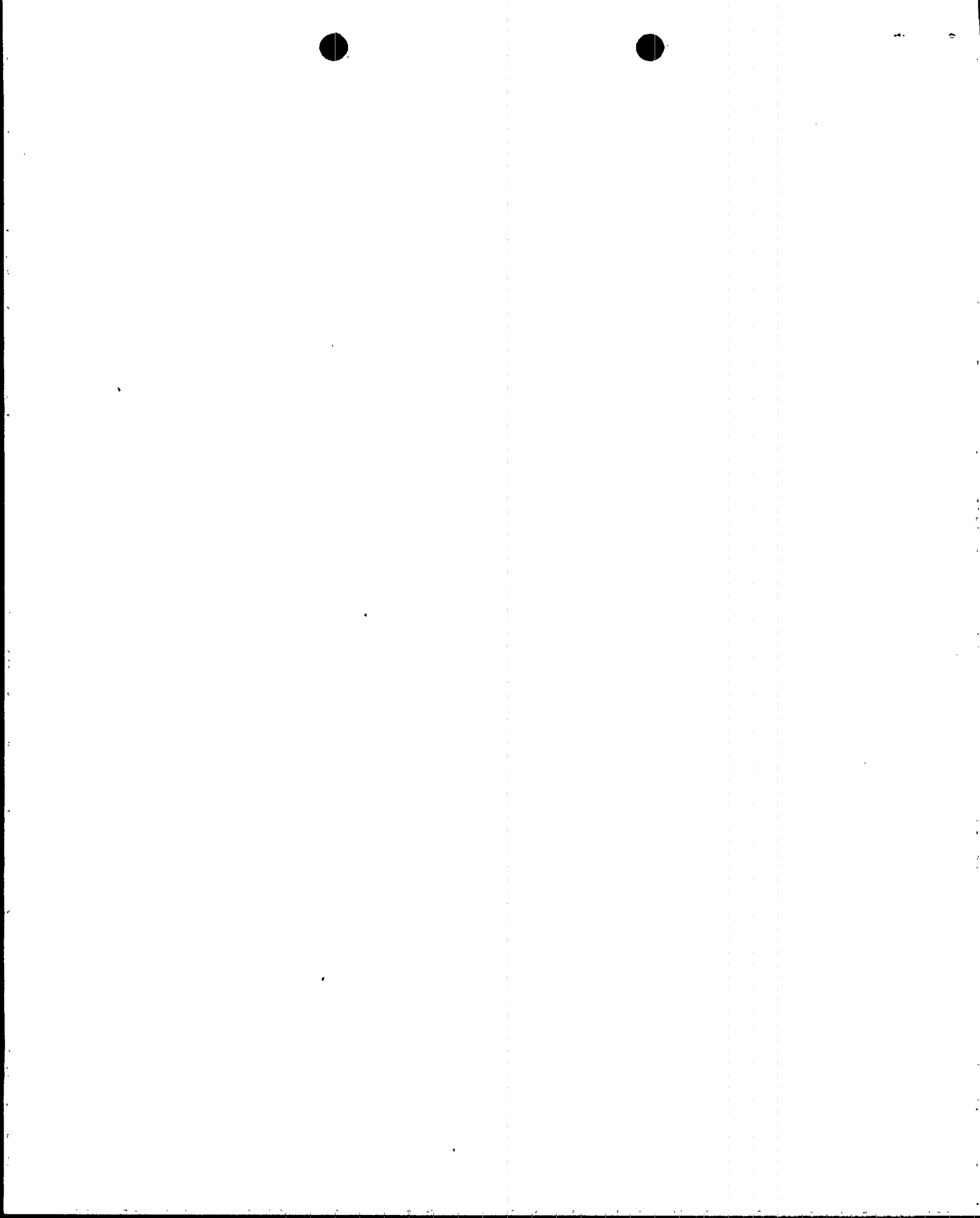


THE ALTERNATIVE SUGGESTED BY FLORIDA POWER AND LIGHT WILL MAKE THIS A HOLLOW PROCEEDING AND PLACE AN EXTRAORDINARY BURDEN UPON THE BOARD.

Florida Power and Light suggests that the Board determine whether any information sought in the interrogatories is necessary, and then the Company will "address those subjects in its prepared written testimony." Memorandum of Licensee Relating to Untimely Discovery, p. 15. That method of providing information would, of course, preclude the intervenor from any real ability to analyze it and subject it to expert scrutiny. The hearing is set for January 8, 1980. The prepared written testimony is due on December 21, 1979.

The Company's approach is consistent with its continuous effort to avoid answering relevant interrogatories, or to answer them in a way which will minimize their value. Since the Company's suggestion precludes effective participation of the intervenor, his role is rendered superfluous. There can be no effective cross examination or presentation of contrary evidence utilizing the Company's alternative.

The burden will be placed upon the Board to decide what information is appropriate and to evaluate it. The Board will be placed in the position of being advocate, judge and jury. We respectfully submit that result is not consonant with the role this panel is supposed to play.



THE WITHDRAWAL OF COUNSEL
AND REQUEST FOR A HEARING

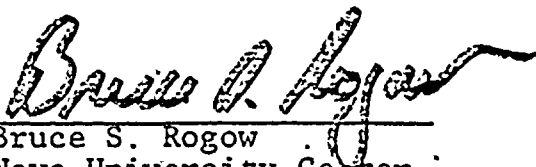
Unless the interrogatories are accepted and Florida Power and Light Company is compelled to answer the unobjectionable interrogatories and unless a reasonable opportunity be^s given the intervenor to respond to the objections, this proceeding will become meaningless. If that occurs, counsel for the intervenor request leave to withdraw.

This request for leave to withdraw is not designed to bolster the positions taken above. It is in recognition of the futility of a hearing process in which the intervenor is foreclosed from effective participation.

We do not lightly attempt to avoid the responsibility initially undertaken. In fact, we respectfully request that the Board, before ruling in this matter, schedule a hearing to measure, first hand, the responses of counsel and their commitment to insuring that the Board's Order of August 13, 1979 is fully and fairly carried out.

Respectfully submitted;

By:


Bruce S. Rogow
Nova University Center
For the Study of Law
3100 S.W. 9th Avenue
Ft. Lauderdale, FL 33315
(305) 522-2300

Richard A. Marshall
18450 S.W. 212 Street
Miami Florida 33157

Joel Lumer
3134 Virginia Street
Miami, Florida 33134

11. "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors," U.S. Nuclear Regulatory Commission, Regulatory Guide 1.111, Revision 1, July 1977.
12. "Estimating Aquatic Dispersion of Effluents from accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I," U.S. Nuclear Regulatory Commission, Regulatory Guide 1.113, Revision 1, April 1977.
13. "Natural Background Radiation in the United States," National Council on Radiation Protection and Measurements, NCRP No. 45, 1975.
14. "Radioactive Material Released from Nuclear Power Plants (1976)," T.R. Decker, U.S. Nuclear Regulatory Commission, NUREG-0367, March 1978.
15. "Technology, Safety and Cost of Decommissioning a Reference Pressurized Water Reactor," R. I. Smith, G. J. Konzek and W. E. Kennedy, Jr., Pacific Northwest Laboratories, NUREG/CR-0130, June 1978.
16. Radioactive Materials Released from Nuclear Power Plants (1977) T. R. Decker, U.S. Nuclear Regulatory Commission, NUREG-0521, January 1979.
17. "Annual Operating Report of the Survey Power Station for 1977," Virginia Electric and Power Company.
18. "Steam Generator Retubing and Refurbishment" Westinghouse Electric Corp. WCAP-9398 January 1979.
19. Letter from A. Schwencer NRC, to R. E. Uhrig, FPL transmitting Amendments 38 and 31 to Facility Operating License Nos. DPR-31 and DPR-41, dated October 26, 1978.
20. "Final Environmental Statement related to the Constructions of St Lucie Plant Unit 2", Section 8.1, U.S. Atomic Energy Commission, May, 1974.
21. Letter from R. E. Uhrig, FPL to V. Stello, NRC dated July 20, 1977 transmitting "Report on Systems Disturbance, May 16, 1977", Florida Power and Lights Co., June 29, 1977.
22. Letter from A. Schwencer NRC, to R. E. Uhrig, FPL dated June 15, 1979 transmitting Amendment Nos. 49 and 41 to the Turkey Point licenses.

though the immediate cost of the repair would be about \$228,000,000. The option of replacing the Turkey Point plant nuclear units with fossil-fired units entails a significant environmental cost and is prohibitively expensive. Available alternative methods of steam generator repair have higher environmental costs and higher economic cost than the proposed repair method.

On the basis of the foregoing analysis, we conclude that the proposed steam generator repair action will not significantly affect the quality of the human environment.

We have reviewed this proposed facility modification relative to the requirements set forth in 10 CFR Part 51 and the Council of Environmental Quality's Guidelines, 40 CFR 1500.6. We have determined that the proposed license amendment will not significantly affect the quality of the human environment. Therefore, the staff has found that an environmental impact statement need not be prepared, and that pursuant to 10 CFR 51.5(c), the issuance of a negative declaration to this effect is appropriate.

Date: June 29, 1979

7.0 REFERENCES

1. "Steam Generator Repair Report - Turkey Point Units 3 and 4," Florida Power and Light Co., September 20, 1977 and supplements dated December 20, 1977, March 7, April 25, June 20, August 4, and December 15, 1978, and January 26, 1979.
2. "Radiological Assessment of Steam Generator Removal and Replacement," G. R. Hoenes, D. A. Waite, and W. D. McCormack, Pacific Northwest Laboratories, NUREG/CR-0199, September 1978.
3. Safety Evaluation by the Office of Nuclear Reactor Regulation, License Nos. DPR-31 and DPR-41, Florida Power and Light Co., Turkey Point Plant Units 3 and 4, Docket Nos. 50-250 and 50-251, U.S. Nuclear Regulatory Commission, May 14, 1979.
4. Steam Generator Repair Program, Surry Power Station, Unit Nos. 1 and 2, Virginia Electric and Power Company, August 17, 1977, and revisions dated December 2, 1977; April 21, June 2, June 13, June 30, September 1, October 25, and November 10, 1978.
5. Safety Evaluation Report by the Office of Nuclear Reactor Regulation, License Nos. DPR-32 and DPR-37, Virginia Electric and Power Company, Surry Power Station Units 1 and 2, Docket Nos. 50-280 and 50-281, U.S. Nuclear Regulatory Commission, December 15, 1978.
6. Environmental Impact Appraisal by the Office of Nuclear Reactor Regulation, License Nos. DPR-32 and DPR-37, Virginia Electric and Power Co., Surry Power Stations, Units 1 and 2, Docket Nos. 50-280, 50-281, U.S. Nuclear Regulatory Commission, January 20, 1979.
7. "Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations will be As Low As is Reasonably Achievable," U.S. Nuclear Regulatory Commission, Regulatory Guide 8.8, Revision 2, March, 1977.
8. "Occupational Radiation Exposure at Light Water Colled Power Reactors 1977," L. J. Peck, U.S. Nuclear Regulatory Commission, NUREG-0482, November 1978.
9. "Final Environmental Statement related to the operation of the Turkey Point Plant," U.S. Atomic Energy Commission, July 1972.
10. "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," U.S. Nuclear Regulatory Commission, Regulatory Guide 1.109, October 1977.

Table 5.2Cost of Alternate Disposal Methods (FPL)¹

	<u>Method</u>	<u>Cost, dollars</u>	<u>Exposure^a, Man-rem</u>
a.	Cut up and disposal near term with no decontamination	\$4,560,000	1500-3000
b.	Cut up and disposal near term With solidification agent	\$4,220,000	800-1600
c.	Cut up and disposal near term with decontamination	\$4,750,000	250-1100
d.	Long term on-site storage with deferred cut up and disposal	\$2,490,000	20-40
e.	Long term on-site storage with disposition during decommissioning	\$2,020,000	1-3

^aNote that these doses are for six lower assemblies. The estimates in Table 5.1 are for one lower assembly.

6.0 Basis and Conclusion for not Preparing an Environmental Impact Statement

We have reviewed the proposed steam generator repair action and have reached the following conclusions.

- (1) The proposed replacement of the lower assemblies of the steam generator is the best available option, from both the radiological and economic standpoints, for eliminating the tube degradation problem.
- (2) The one-time occupational dose of 1300 man-rem per unit for the repair effort falls within the range of annual occupational doses which have been experienced in U.S. light water reactors in recent years. Occupational exposures of this order, or larger, would be accumulated in the order of 5 to 7 years by continued operation of the Turkey Point plant should the repair program not be carried out. The proposed repair program would restore the generators to the condition evaluated in the FES and would result in an occupational dose reduction of hundreds of man-rem per year because there would be a marked reduction in the amount of tube inspection and tube plugging required to keep the generators in acceptable operating condition. Therefore, the proposed action will result in a net reduction in occupational dose over the life of the plant.

We have reviewed the dose reduction measures to be used by FPL and conclude that the dose would be ALARA. We conclude that the adverse health effects from such an exposure are not significant.

- (3) The new steam generator design incorporates features which will eliminate the potential for the various forms of tube degradation observed to date.
- (4) Offsite doses resulting from the steam generator repair will be less than those from recent plant operations, comparable to doses presented in the FES, and small compared to the annual doses from natural background radiation. Therefore, the offsite doses will not be significant.
- (5) The alternatives to the proposed action offer no environmental advantage. Continued operation of the Turkey Point units in the present mode, with frequent shutdowns to inspect and plug degraded tubes and to eventually build replacement capacity, would result in greater environmental and economic costs than the proposed actions. FPL has estimated that, by implementing the new program, there would be a net saving of about \$200,000,000, compared to continued operation in the present condition, even

Table 5.1
Steam Generator Disposal Alternatives²

<u>Option</u>	<u>Approximate Man-Rem per Steam Generator</u>	<u>Approximate Airborne Release, Ci per Generator</u>
Immediate intact shipment	2.4 ^c	Negligible ^b
Long-term ^a storage (including surveillance) with intact shipment	10	Negligible ^b
Long-term ^a storage with cut-up and shipment	16	0.005
Short-term storage with cut-up		
- at 5 yr.	230	0.026
- at 15 yr.	60	0.015
Immediate cut-up and shipment by rail/truck - no decontamination	580	0.042
Immediate cut-up and shipment by rail/truck - with chemical decontamination	270	0.010

^a30 to 40 years

^bSince the steam generator will be sealed before it is removed from containment, no release of radioactive material is expected during the repair operation.

^cEstimates for short-term storage followed by intact shipment would be only slightly larger than this, perhaps 5 man-rem.

Immediate cut-up and shipment to a burial facility would involve a substantial cost in occupational exposure, even after chemical decontamination. Comparing Tables 5.1 and 4.2, it is seen that the airborne releases from the segmenting operation would be larger than those from the rest of the repair effort.

The five disposal alternatives considered by FPL¹ (Section 5.4) and their estimated economic and radiological costs are given in Table 5.2 for the disposal of six steam generators.

According to the FPL estimates, the proposed disposal method of on-site storage with final disposition at the time of plant decommissioning is expected to result in the least cost in dollars and in radiation exposure.

On the basis of our evaluation above we conclude that the proposed disposal method costs less in radiation exposure than alternatives available at present. The proposed onsite storage leaves open the option of intact barge shipment in the event that a burial ground with adequate off-loading facilities becomes available. We also conclude that the other available alternatives offer no environmental advantage over the option selected by FPL.

the radioactivity inside tubes which are plugged; large volumes of contaminated fluids would be produced and require processing and that processing would incur further costs and occupational doses. In summary, we conclude that the costs of decontamination, including costs due to time delays and additional occupational doses, would outweigh the subsequent dose reduction. Therefore, although we believe that local decontamination may be advantageous, the use of large scale decontamination in this repair effort is not a viable option.

5.2 Retubing of Existing Steam Generators

The retubing operation would involve (1) removing the upper or dome portion of the steam generator, (2) removing the lower assembly internals and tubes, (3) replacing the latter with state-of-the-art internals and tubes, (4) refurbishing the upper internals, and (5) welding the dome back in place. FPL has estimated¹ (Section 7.3 and 7.4) that the cost of this operation in both dollars and occupational exposure would be higher than the proposed replacement of the complete lower assembly. Further, it should be noted that shop fabrication of new lower assemblies could provide more positive assurance that the quality of the repaired generators was acceptable.

On the other hand, we are aware of recent developments by Westinghouse in the technology of in-place refurbishment which show some promise of reducing unit outage and personnel exposure below the values for the FPL proposed repair method. A detailed proposal of the Westinghouse in-place refurbishment is being reviewed.¹⁸ If our assessment is favorable, in-place retubing may be an alternative for steam generator repairs in the future. Estimates of the time required to wait for the NRC approval of retubing for the Turkey Point Plant indicate that it would likely take a minimum of two years for this approval to be granted. This includes time for the NRC staff to approve the Westinghouse Plan, time for FPL to adapt the Westinghouse plan to Turkey Point and to prepare a report for the NRC to review and approve, and time for the NRC review. It does not include time for any additional technical problems to be solved. The economic cost of derating was discussed in Section 4.2.

In the time frame contemplated for the proposed licensing action, this is not considered to be an available alternative to the proposed action. Contributing to this judgement are the following facts; 1) the NRC approval of the retubing technique is not assured, 2) ability to reuse the tube sheet is not assured, 3) continued operation with the present steam generators would continue the higher industrial exposure rate, and 4) Unit 4 and Unit 3 both would likely be derated before the retubing process is implemented.

5.3 Replacement of the Entire Steam Generator

FPL considered this alternative in two ways. Based on FPL analysis, which we have reviewed and found reasonable, a construction opening in the containment wall about 20 feet wide and 40 feet high would be required, since the upper assembly of the steam generator could not pass through the existing equipment hatch. An alternative plan also considered was removal of the steam generator through a 20 foot diameter hole in the containment dome. The personnel exposure for these alternatives would be about the same as for the proposed repair, because essentially the same high-dose operations will be required in each case. Elimination of the cut across the diameter of each steam generator results in only a small saving of radiation exposure. The capital costs are estimated to be about 15% higher. The principal cost difference is due to an estimate additional outage of about 100 days per unit for the alternative. This corresponds to an additional requirement of about \$60,000,000 worth of replacement power during the repair of both units, calculated at the rate of about \$300,000 per day of outage per unit.

In summary, this alternative would have essentially the same environmental impact as the FPL proposal (primarily occupational dose) and greater economic cost. Also, there would be significant structural repairs involved to assure that the containment is returned to the original state after completion of this repair program. For these reasons, we conclude that the FPL proposed repair method is preferable.

5.4 Alternate Disposal Methods

In the Appendix to NUREG/CR-0199² the radiological costs of several alternative methods for the disposal of the degraded steam generators are evaluated. The results of this analysis are summarized in Table 5.1.

From the table it is seen that the options involving intact shipment would have the lower radiological costs; but intact shipment is possible only by barge and (at present) there is no licensed burial ground with facilities for off-loading an entire lower assembly from a barge. On the basis of environmental impact (largely occupational dose) we conclude that immediate intact shipment would be the best alternative. The second best alternative is long term storage with intact shipment. We note that the proposed disposal method would leave open the option of intact shipment should the appropriate facilities become available during the storage period.

We conclude that the next best alternative, on the basis of environmental impact would be long-term storage of the generators onsite until the reactors are decommissioned, followed by sectioning and shipment at that time. This is the plan proposed by FPL.

5.0 Impacts of Alternatives

The basic choices of future action regarding the tube degradation problem are (1) repair of the degraded steam generators, (2) continuation of the present mode of operation, (with increasing costs in plant efficiency and occupational exposure), and (3) shutdown of the Turkey Point Units 3 and 4 and replacement by generating plants of different design. The option of operating the FPL system without Turkey Point 3 and 4 is not feasible in light of our review of the power demand in the FPL service area.^{9,20,21} FPL opted for repairing the degraded steam generators, with changes in design, materials and operating procedures calculated to eliminate the tube denting problem. The units can be run in a derated mode and no doubt would be operated in a derated mode in preference to shutting the units down with no replacement power.

In the absence of methods to arrest or greatly reduce denting, the continuation of operation for an extended period in the present mode is impractical. With tube degradation and plugging continuing at the present rate, the units would likely be derated within a few years as discussed earlier in Section 4.2. FPL has estimated the cost of replacement power, based on fuel differential costs, to be about \$300,000 per day for the shutdown of a unit. Consequently, as discussed in Section 4.2, the cost of derating the Turkey Point units would be about \$480,000 in ten years. Also, the man-rem cost of occupational exposure during the inspection and plugging of degraded tubes would continue. The cumulative dose due to inspection and plugging would exceed the 2600 man-rem cost of the repair in five to seven years.

Laboratory test programs on the denting phenomenon are currently underway to define the corrosion process more precisely and to develop preventive measures such as corrosion inhibitors. While the combination of steam generator secondary side cleaning and corrosion inhibitors is being studied by some utilities to combat denting in its early stages, the denting phenomenon at Turkey Point is too advanced for such measures to be practical. Therefore, FPL cannot count on a greatly reduced future rate of tube degradation to justify continuing the present mode of operation.

The option of shutting down the Turkey Point Units and replacing them with Units of different design is easily shown to be much more costly than that of repairing the steam generators. FPL estimates¹ (Section 7.7) that the capital cost of new nuclear units with improved steam generators would be about \$2.0 billion dollars and would require about 12 1/2 years to build. New fossil units would cost about \$1.5 billion in capital and require about 8 years to build. The capital cost for gas turbine units would be about \$310 million and would require about two years to build. VEPCO made similar comparisons for the steam

generator repair program at the Surry Station and found that the cost comparison overwhelmingly favored the repair option.

Based on our review of the above figures we find that the time and cost estimates are reasonable. We conclude that the plant replacement option is not economically feasible. In addition, there would be significant environmental impacts from such a large scale construction operation. The most practical overall option is therefore to repair the degraded steam generators.

In the remainder of this section, we shall consider the radiological and economic costs of several alternative ways of repairing and disposing of the degraded steam generators. An important item in estimating economic costs is the cost of replacement power during unit outage. The FPL cost estimate of \$62,000,000 for the replacement power needed during the 207 day outage of each unit corresponds to a replacement power cost of about \$300,000 per unit per day of outage. The replacement power cost of \$300,000 per day is based on the availability of fossil fired fuel capacity which normally would be used only during periods of peak demand. The repair program was planned to be carried out during the seasonal periods of relatively low demand. However, if shutdown is required during peak demand periods, or if long-term derating is necessary, new replacement capacity would have to be installed resulting in replacement power costs about 50% higher.

5.1

Decontamination

FPL has estimated¹ (Section 8.2) that chemical decontamination of the steam generators before cutting would result in a net saving of 150 to 400 man-rem (two unit total) in occupational exposure. However, it would cost about 2 weeks in additional outage of each unit. Replacement power for this additional outage would cost about \$8,000,000. In addition, a quantity of liquid radioactive waste would be produced (VEPCO estimated⁴ about 200,000 gallons.)

Based on our knowledge of the limited experience of the nuclear industry in large scale, high volume chemical decontamination of reactor coolant systems, we can make the following statements: decontamination would add significant expense and time delays to the repair effort, including the cost of replacement power during those time delays; there is a degree of uncertainty about the compatibility of the decontamination fluid with materials in the coolant system; the research and testing which would be required to provide adequate assurance of material compatibility to obtain our approval to decontaminate would have an adverse impact on the cost and schedule of this repair effort; while the lower dose rates resulting from decontamination would reduce occupational dose during the repair operations, occupational radiation doses received during the decontamination effort itself would at least partially offset the dose reduction; decontamination would not remove

the tubes and crevices, plated on the internal surfaces, and would be in flakes or pieces that would not easily escape from the break. Even dust or liquids would not find a ready path to escape in large quantities because of the complexity of the internals and lack of simple flow paths. Assuming that some material did escape, any material in gaseous or dust form would have an effect such as described in the previous paragraph. The remainder of any escaping material would be in flakes or pieces that would tend to stay in the surface layers of the dirt and could be removed if necessary. However, for the purpose of this assessment we have assumed that 0.1% of the activity as given in Table 3.4-1 of the SE³ would escape the steam generator due to some accident and that surface and/or ground water would be involved in spreading the radioactive material.

First, we assumed that the release would be to surface water caused by flooding (by rain storm, hurricane, or combinations of such storms). According to 10 CFR Part 20, Appendix B, Table II, the maximum allowable concentration of Co-60 in water is 5×10^{-5} uCi/ml. For a 0.1% release, the volume of water required for dilution would be about 20 acre-feet per steam generator. This amount of water would be easily exceeded many times by any flooding event that would breach the generators. In addition, the contaminated water would eventually be carried to Biscayne Bay where dilution would be several orders of magnitude greater than that required.

Next, we assumed that the release would be to ground water and we arbitrarily assumed that breaching occurred and that the radioactive material would enter the ground at the floor of the storage building. The radioactive material would migrate downward through the unsaturated (vadose) zone to the Biscayne aquifer. During this migration the radioactive material would be dispersed in the soil and radionuclide particles may be retarded due to ion exchange with the soil. On entering the groundwater, radioactive material would migrate in the direction of the hydraulic gradient (seaward). The radioactive material would be diluted in the groundwater and further dispersed and retarded. The radioactive material would migrate seaward toward Loch Rosetta which is roughly 650 feet from the steam generator storage building. There are no ground water users⁹ between the storage area and Biscayne Bay, which is east of Loch Rosetta. Water from the cooling canal is returned to Loch Rosetta where it is picked up by the plant intake and recirculated. The postulated radioactive material in the ground water would be intercepted by Loch Rosetta and mixed with cooling canal return water. Therefore, the radioactive material would become part of the liquid effluents of the plant and subject to plant restrictions on liquid radioactive releases. In addition, the facilities radiological monitoring program, which is performed routinely, is intended to detect unanticipated buildup of radioactivity in environment.

If the plant was not in operation at the time of the breaching event, there would be little or no water circulating through Lock Rosetta. However, with four units at the site it is not likely that this would be the case for longer than an hour or so.

Loch Rosetta is saline and therefore not usable for drinking water. Also, since it is on plant property, it is not accessible to the general public. Nevertheless, in this case, a mixing in the Loch would reduce the concentration. Radioactive material transported by groundwater would enter the Loch over a long period of time primarily due to dispersion and retardation. Therefore, even with the above conservative assumptions, the release of radioactive material postulated is not expected to exceed 10 CFR Part 50.

Accordingly, we conclude that the proposed temporary storage of the steam generators will not cause an adverse environmental impact on the public due to public due to unacceptable surface or ground water contamination.

FPL has analyzed the potential for steam generator crane rigging accidents which may affect the refueling water storage tank and primary water storage tank. They conclude that rigging operations will be conducted in areas sufficiently removed from these tanks to preclude damage to these structures. They have also evaluated the potential for a steam generator being dislodged from the rigging and striking the radwaste or fuel handling building. They concluded that both buildings are capable of withstanding all postulated impacts with no breach of integrity. We have evaluated the FPL report¹ and concur with this conclusion.

In summary, we conclude that the consequences of postulated accidents from the repair operation would not be environmentally significant.

$$\left(\frac{0.03}{1-0.25}\right) \times \$219,000,000 = \$8,760,000$$

The 0.03 corresponds to 3% derating per year, the $1-0.25$ term corresponds to the number of remaining sound tubes after 25% are plugged. The \$219,000,000 is the yearly cost of replacement power due to fuel differential cost for two units at \$300,000 per day per unit. By the end of the second year of derating, the cumulative cost would be three times as high (\$26,300,000) since the first 3% derated batch of tubes would have been out for two years and the second 3% derated batch of tubes would have been out for one year, for an effective total of three years of 3% derating. By the end of the third year of derated operation the cumulative cost would be six times the first year cost ($3+2+1$). After ten years the cumulative cost would be,

$$\frac{0.03}{1-0.25} \times 219,000,000,000 \times 55 = \$482,000,000.$$

$$(55 = 10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1)$$

Therefore, the estimate that \$200,000,000 would be saved over the life of the plant, even after spending \$102,000,000 for the steam generator repair, is conservative. The present value of the replacement power assuming a net discount rate of 3% (corresponding to a discount rate of 10% minus an inflation rate of 7%) would be about \$390,000,000.

The FPL estimate of \$2,000,000 for final disposal of the degraded steam generators assumes onsite storage for 30 years followed by sectioning and shipment to a licensed burial facility for low-level waste. This estimate is not out of line when compared to recent estimates¹⁵ for the decommissioning of complete reactors by dismantlement after a cooling period (about \$30,000,000).

This consideration of costs does not take into account the continuing costs of tube inspection and plugging services, nor the costs of possible future modifications to control corrosion, if the repair is not done. It also does not consider the cost of the reduced generating capacity and the current lack of reliability and availability. In 1978, the approximate outage times for steam generator tube inspection and plugging were 10.5 days for Unit 3 and 27 days for Unit 4. Experience at the Turkey Point Plant indicates that such an inspection takes about ten days when combined with a refueling outage and about 21 days when not combined with a refueling outage. Inspections have been carried out about two times per year.

4.3 Non-Radiological Environmental Costs

The non-radiological impacts of the repair project on the environment are small compared to those of building and operating the reactors. These small costs include the commitment of about one acre of land on the site for the storage of the degraded steam generators for the life of the station. There will be some noise generated by onsite equipment and a small effect on local traffic by approximately 100 construction workers per shift, but these effects will be insignificant. The material costs of the proposed action will be a small fraction of those of building the original units¹ (Table 6.2-1).

4.4 Environmental Impact of Postulated Accidents

As is discussed in our SE,³ the design and plant operating parameters which are relevant to accident analyses will not change as a result of the steam generator repair effort. Therefore, the assessment of the environmental impact of postulated accidents presented in the FES⁹ for Turkey Point Plant Units 3 and 4 will be unchanged and remain valid. However, there are types of accidents due to the operations involved in the repair effort which we have considered.

One type of postulated accident related to the repair effort would involve the dropping and rupture of a removed steam generator outside the reactor containment while it was being transported to the storage vault. This accident would involve the rupture of the steel covers which will have been welded over each of the steam generator cuts to prevent the spread of the neutron-activated corrosion products adhering to the inner surfaces. The method used to assess the radiological consequences of a rupture which could release contamination on the primary side surfaces to the atmosphere is described in our SE.³ We assumed that 0.1 percent of the primary side activity became airborne and used an atmospheric dispersion factor of 5.5×10^{-6} seconds per cubic meter. On this basis, we concluded that this accident would result in a dose of 0.02 rem to the lungs of an individual at the site boundary. The dose consequences of such a drop accident inside containment would be lower since the containment ventilation system would reduce the radioactivity released to the environment.

We have also analyzed the impact of a postulated breach of the steam generator seal while it is in the storage building. We note that the radioactive material involved is plated onto the internals of the steam generator; it does not wash off during operation which involves rapidly flowing water at over 500°F. Also, the radioactive material would be dried in place and would tend to come loose in flakes or pieces, if it did come loose at all. If the welded plates that seal the openings of the steam generator should be breached by some accident, much of the radioactive material would be trapped in

The steam generators will be stored in an onsite storage facility which will be a concrete structure approximately 110 ft. by 60 ft. with a height of 17 ft. The outside walls will be about 2 ft. thick. The stored steam generators will present a source of direct and scattered radiation. We estimate that each steam generator will contain about 1000 Ci of radioactivity which is about 65% Cobalt-60, the principal contributor to direct dose. This is based on the estimate of the contamination of steam generator primary side surfaces given in NUREG/CR-0199.² We estimate a dose rate of less than 0.0001 milli-rem per hour at the nearest site boundary due to this activity. An individual spending an entire year at this location would receive less than 1 milli-rem of radiation exposure. This dose would be approximately halved every 5 years because of the decay of the principal contributing activity, Co-60. FPL made a similar calculation and reached the same conclusion. Since this dose represents roughly one percent of the annual dose from natural background,¹⁴ we conclude that the dose impact to the public from the stored generators will be minimal and not environmentally significant.

The repair effort will return the plant to the design condition on which our evaluation in the FES⁹ was based. Therefore, we conclude that the estimates of routine releases of radioactivity and the potential doses to the public from those effluents after the repair will remain as presented in the FES.

Since our estimates of radioactive effluents from FPL during normal operation after the repair effort are about the same or lower than those effluents presented in the FES,⁹ we conclude that the impact on biota other than man will be no greater than that impact presented in the FES.

In summary, the offsite doses resulting from the steam generator repair will be less than those from recent plant operation since the expected releases of radioactive material as a result of the repair effort will be less than the releases from normal operation. These doses are comparable to doses presented in the FES,⁹ and small compared to the annual doses from natural background radiation. Therefore, the radiological impact of the repair project to the public will not significantly affect the human environment.

4.2 Economic Costs of Steam Generator Repair

Steam generators generally are built with more tubes than necessary to allow for any tubes that may have to be plugged. We have evaluated the Turkey Point plant and find that each unit can operate safely with up to 25% of the steam generator tubes plugged. If the percentage of plugged tubes gets high enough so that there is not enough heat transfer surface, the unit will have to be operated at some level of

power less than 100%. " If the unit is required to operate at some lower level of power, the operation is referred to as derated. In addition to the percentage of plugged tubes, the nuclear peaking factor, F_0 (a number which is related to the uniformity of the neutron flux over all positions in the reactor core), imposes limitations on the unit, and depending upon the fuel burnup, is also expected to require the plant to derate. Based on the above discussion and the latest amendment to the Technical Specifications²² it is likely that unit 4 will be derated for cycle 7, which is expected to begin in the Fall of 1980. Unit 3 has about 3% less plugged tubes than unit 4 and therefore may be expected to be derated about one year after unit 4.

FPL has estimated that, over the life of the plant, the proposed steam generator repair project will result in a net dollar savings of at least \$200,000,000 compared with the cost of continued operation of the existing steam generators, with an optimistic assumed scenario of tube plugging and derating. The cost of purchasing and installing the steam generator lower assemblies and associated activities is estimated at about \$102,000,000 for the two units.

The cost of onsite storage and final disposal of the six degraded lower assemblies is expected to be about \$2,000,000. The estimate for replacement power during the outage for repair is about \$124,000,000. The total project cost is therefore about \$228,000,000.

The cost of replacement power during the outage is based on the FPL estimate of \$300,000 per day per unit and an outage duration of 207 days per unit. The FPL estimate of \$300,000/day-unit based on differential fuel costs is reasonable in view of the fact that replacement power would be provided by oil and gas-fired units which FPL would press into service. ($690,000 \text{ kW} \times 24 \text{ hrs/day} \times \text{a fuel differential cost of about } \$0.018/\text{kW hr.} = \$298,000/\text{day/unit}$). We consider this replacement power cost estimate reasonable.

The FPL estimated net saving of \$200,000,000 is based largely on the cost of replacement capacity. We assessed the reasonableness of this estimate by comparing it to the cost of replacement power if both units had to be derated. The replacement power cost would be about \$480,000,000 for only 10 years of derated operation at an assumed derating rate of 3% per year beginning when 25% of the tubes were plugged. If the derated period lasted longer the cost would be larger. (The current rate of tube degradation is such that the rate of tube plugging is about 3% per year.)

The calculation was made as follows. For the first year of derating the cost would be,

The FPL estimates of gaseous releases from the repair effort are the same as the NRC estimates (SE Section 2.6.3), but larger than the PNL generic estimate because FPL will be using a different filtration scheme than assumed by PNL. For the gaseous releases from pipe cutting, FPL used commonly accepted calculational methods (for example, in calculating the kerf for each cut and in assuming that all radioactive material adhering to the inner cut surface would become airborne). Therefore, we conclude that the FPL estimates of gaseous releases, were carried out in an acceptable manner and represent reasonable estimates.

In Table 4.2, the estimates for liquid releases of tritium vary widely because FPL plans to store the reactor coolant water for reuse, whereas the generic (NUREG/CR-0199)² estimate assumes that the coolant is discharged after processing for nuclides other than tritium. However, FPL has estimated the magnitude of the release should it become necessary to discharge the coolant. Any such release would be treated by the chemical and volume control systems prior to release and would amount to a maximum of 0.8 Ci of mixed fission and activation products released from the reactor coolant system. The FPL estimate for the release of mixed fission and activation products is larger than the generic estimate because the latter did not include the releases of the secondary coolant nor the local decontamination solutions. Both estimates included the activities in laundry waste water. FPL based its estimates of releases from the laundry waste water and secondary coolant on past measurements of these sources at Turkey Point. FPL used commonly accepted methods to calculate the releases from local decontamination solutions. Based on these several considerations, we conclude that FPL has made reasonable estimates of the radioactive liquid effluents during the repair effort, and that these estimates correspond well to our own best estimates.

Any liquid effluent containing radioactivity would be discharged into the condenser cooling water and subsequently be discharged into the closed cycle cooling canal. Pursuant to a Final Judgment in the U. S. District Court for the Southern District of Florida (Civil Action No 70-328-CA; reproduced in Appendix C of the FES⁹) Florida Power and Light Company shall not discharge into Biscayne Bay or Card Sound any water used for cooling its condensers at its generating facilities at Turkey Point.

Our estimates of dose to individuals and to the population as a whole in the area surrounding the Turkey Point site are based on the radioactive effluents which FPL estimated for the repair effort (summarized in Table 4.2) and on the calculational methods presented in Regulatory Guides 1.109, 1.111 and 1.113.^{10,11,12} We conclude that offsite individuals will receive doses from the repair effort of the same order as, or less than, the annual dose consequences presented in the

FES.⁹ The doses to the population within 50 miles will be less than 5 man-rem to the thyroid or total body from liquid effluents, and less than 2 man-rem to the thyroid or total body from airborne effluents. Every year the same population (about 2 million) will receive a total body dose of about 200,000 man-rem from the natural background radiation in the vicinity of Turkey Point (0.1 rems per year).¹³ Thus, the population total body dose from the repair effort is less than 0.01% of the annual dose due to natural background. On these bases, we conclude that the doses to individuals in unrestricted areas and to the population within 50 miles due to gaseous and liquid effluents from the repair project will not be environmentally significant.

FPL has estimated that the repair of one unit will result in a total solid waste volume (exclusive of the steam generators lower sections) of 27,400 cubic feet (about 780 cubic meters) containing 130 Ci to be shipped to a licensed burial facility. Based on the information presented in NUREG/CR-0199,² we estimate that 81,000 cubic feet (3,850 cubic meters) of solid waste will be generated per unit. Our estimate of the volume is higher than the FPL estimate; however, we find the FPL estimate of 130 Ci reasonable. This does not include the radioactivity on the inside surfaces of the old steam generators. In 1976 and 1977, Turkey Point generated an annual average of 44,400 cubic feet (about 1255 cubic meters) of solid waste per unit containing 450 Ci per unit of radioactivity.^{2 14} Since the solid wastes represent a radiological impact which is smaller than the impact from solid wastes from normal operation and an increase in volume of solid waste which is less than 3% over the life of the plant, we conclude that the radiological impact is not environmentally significant.

The steam generator lower sections may be considered as solid waste; however, facilities are not available for barge unloading of such large pieces of radioactive waste. Truck hauling would require cutting the sections into smaller pieces and would entail the additional dose accumulated during the cutting and packaging process. For these reasons the steam generator lower sections will be stored on site for a period of time. This period may be for as long as the life of the plant at which time the disposal of the sections would become part of the decommissioning process of the plant. The period may last just until facilities for barge shipment become available.

On the basis of long term onsite storage of the degraded steam generators until the reactors are decommissioned, there will be essentially no radioactive effluents from the generators for 30 years. Final disposal at that time will result in small offsite gaseous and liquid radioactive releases, because a large fraction of the radioactive nuclides in the steam generators will have decayed in 30 years.

of several years will recoup the immediate large one-time dose resulting from the repair operation. The individual risks associated with the exposures involved in the repair program will be controlled and limited so as not to exceed the limits set forth in 10 CFR Part 20 for occupational exposure. These limits assure that the hazard to any exposed individual is small.

For a 2600 man-rem increase in occupational exposure, the increased risk of premature fatal cancer induction is predicted to be less than one event (0.2 events from data for the population as a whole as given in the BEIR report).¹⁴ The increased risk from this exposure with respect to genetic effects to the ensuing five generations is also predicted to be less than one event (0.5 events from data for the population as a whole as given in the BEIR report). For the selected population of workers exposed in the repair program, consisting principally of males in the age ranges from 20 to 40, these risks would tend to be somewhat less. Therefore, we conclude that the impact of occupational radiation dose from the repair effort will not be environmentally significant.

4.1.2 Public Radiation Exposure

Our independent analysis of the gaseous and liquid releases of radioactivity from the plant site during the steam generator repair project is based in large part on the generic report, NUREG/CR-0199.² The estimates of releases in this report are upper bound values, based on conservatively high estimates for each type of release.

Similar estimates of the gaseous and liquid effluents during the repair were made by FPL.¹ These estimates were based on the specific equipment design and procedures to be used at the Turkey Point Plant. Table 4.2 presents the NUREG/CR-0199 estimates² and FPL estimates¹ of the radioactive effluents which will be released as a result of the repair effort. Table 4.2 also presents the FPL reported average radioactive effluent releases for 1976¹⁴ and 1977¹⁶ and the annual average radioactive effluent release estimates presented in the Turkey Point FES.⁹

Table 4.2 shows that the releases for the repair effort estimated by FPL and PNL are much lower (except for the airborne particulates) than the Turkey Point 1976 and 1977 releases and the FES⁹ annual average estimates. For airborne particulates, the FPL estimates of releases are in the same range as or lower than the 1976 and 1977 releases as shown in Table 4.2. The Turkey Point FES does not present numerical estimates of airborne particulate and tritium releases. However, airborne particulates and tritium are small dose contributors compared to radioiodine and noble gases for the highest dose pathways of exposure to individuals in the general public. Therefore, the conclusions regarding dose consequences presented in the FES are still valid.

Table 4.2

Radioactive Effluents for Turkey Point Plant

Type of Radioactive Effluent	<u>Steam Generator Repair</u>		<u>Operating Experience</u>		<u>FES</u>
	FPL Release Estimates (Ci/Unit)	NUREG/ CR-0199 Release Estimates (Ci/Unit)	1976 Average Releases (Ci/Unit)	1977 Average Releases (Ci/Unit)	Annual Average Release Estimates (Ci/Unit/Yr)
<u>GASEOUS</u>					
Noble Gases	-	-	7800	12,000	3650
Halogens (Iodines)	0.0021 ^a	included in particulates	0.3	0.7	0.8*
Particulates	0.0085 ^a	0.0001	0.038	0.026	-
Tritium	-	-	3	2.0	-
<u>LIQUID</u>					
Mixed fission & activation products	0.55	0.14	4.3	4.5	28
Tritium	185	190	390	460	1000

* includes particulates

a These are the releases for Unit 3; the releases for Unit 4 will be slightly smaller since Unit 4 is less contaminated.

In summary, the above discussion shows that the differences between the lower generic estimate (3320 man-rem per unit) and the FPL detailed estimate (1300 man-rem per unit) can be reconciled in consideration of (1) the use of lower dose rates measured at Turkey Point in the FPL estimate and (2) the use of more dose reducing measures by FPL than in the generic estimate. We therefore conclude that the FPL detailed estimate of 1300 man-rem per unit is a more realistic estimate than 3380 man-rem per unit for the repair of the steam generators in one Turkey Point unit. Consequently, in the remainder of this appraisal, we have used 1300 man-rem per unit as the occupational dose for the steam generator repair work at Turkey Point.

To put into perspective the occupational doses to be incurred in repairing steam generators, it is helpful to compare these doses with (1) those expected from the normal operation of nuclear plants, (2) the projected long-term man-rem reduction resulting from steam generator repair and (3) the doses from major maintenance operations at other plants.

Although the AEC was starting to compile occupational exposure estimates for nuclear power plant operation at the time that the Turkey Point FES⁹ was prepared in 1972, such exposures were not specifically considered in the Turkey Point FES.

In recent environmental statements, we have estimated an annual occupational dose of about 50 man-rem per reactor unit, averaged over the life of the plant (30-40 years). This value is based on the average of annual doses received at operating plants. In 1977, the average occupational dose per unit for light water reactors in the United States was 570 man-rem.⁸ The doses ranged from 87 to 3140 man-rem per reactor unit, with major maintenance during the year accounting for the larger values. Occasional large doses associated with major maintenance, such as the 1300 man-rem dose per unit for the proposed steam generator repair, will occur. NRC regulations require that measures be taken to keep these doses ALARA.

In 1976 and 1977, workers at Turkey Point received whole body doses of 600 man-rem¹ and 450 man-rem¹ (combined totals for both units), respectively, during the inspection and plugging of degraded steam generator tubes. The total occupational doses for the two units combined were 1184 man-rem in 1976 and 1036 man-rem in 1977. These doses are comparable to the 570 man-rem per unit per year average for U.S. light water reactors in 1977.⁸ At the end of Section 3.1 in our SE³, we concluded that the proposed repair would eliminate the potential for the kinds of the tube degradation observed to date. Based on our experience with plants without severe denting problems and our conclusion regarding corrosion

reduction, doses due to the inspection and plugging of degraded tubes would be markedly reduced. We conclude that occupational exposure after the repair will be reduced by hundreds of man-rem per year for the two units combined. This would result in total occupational exposures at Turkey Point lower than the national average value for light water reactors (570 man-rem per unit in 1977). We further conclude that the dose reduction of hundreds of man-rem per year would, over a period of years tend to offset the immediate one-time dose of about 1300 man-rem for repairing the three steam generators in each unit.

FPL has estimated that the occupational dose for the inspection and repair of degraded steam generator tubes will be reduced to 100 man-rem per year for the two Turkey Point units combined after the repair has been completed. Based on our experience regarding such inspections, we find this to be a realistic estimate.

The reduction of occupational exposure resulting from the repair effort may be estimated by subtracting the estimated annual dose after repair from the observed annual dose before repair. The doses of 600 man-rem in 1976 and 450 man-rem in 1977 are considered representative of exposures related to steam generator operation at the Turkey Point Units before repair. Subtracting the after-repair dose of 100 man-rem from the before-repair range of 450 to 600 man-rem leads to a reduction of 350 to 500 man-rem per year. At these rates of reduction the 2600 man-rem cost of the repair would be offset in about 5 to 7 years.

Operating experience at the Turkey Point plant over the last three years demonstrates that the steam generators can continue to operate with the degraded tubes plugged, but frequent inspection and plugging as performed during the last three years would be required to assure that the integrity of the steam generators would be maintained. At the current rate of tube plugging, somewhat over 3% per year, it is our judgment that, with continued inspections and plugging, the Turkey Point units could be safely operated and, even if reduced power were required, the economic balance would favor continued operation of the units, as opposed to decommissioning the reactors.

In summary, we have drawn the following conclusions regarding occupational radiation exposure. The FPL estimate of 1300 man-rem per unit for the repair of the steam generators is reasonable. This dose falls within the range of annual occupational doses which have been observed in recent years.⁸ In our SE³ we conclude that FPL is taking the necessary steps to insure that occupational doses will be maintained ALARA. Finally, the renovation of the steam generators will lead to an occupational dose reduction of hundreds of man-rem per year. This dose reduction over a period

4.0 ENVIRONMENTAL IMPACTS OF STEAM GENERATOR REPAIR PROJECT
4.1 Radiological Assessment
4.1.1 Occupational Exposure

The generic radiological assessment of steam generator repair, prepared for the NRC by PNL and reported in NUREG/CR-0199,² provides an upper bound estimate of the occupational doses and off-site radiological releases associated with the repair of steam generators at a large PWR. The conservatism in the PNL methods of assessment, described below, provide the opportunity to reduce occupational doses for the repair operations in specific cases considerably below the generic estimates in NUREG/CR-0199.

The PNL estimates were derived by dividing the repair program into sub-activities ("maintenance activities") and ascertaining the estimated exposure rates for each sub-activity. The man-hours required for each sub-activity multiplied by the corresponding exposure rates in rem per hour gave the exposure in man-rem for each sub-activity. The total exposure for the repair program is the sum of all the sub-activity exposures.

Repair program sub-activities were developed by PNL as a composite of the work descriptions for repair of the steam generators at Surry and Turkey Point as determined by VEPCO and FPL. Man-hour estimates for each activity were developed by PNL based on prior experience with similar activities, using standard estimating techniques. Exposure rates were based on information from several sources including data from measurements made at several operating PWRs including the Turkey Point Units. PNL usually selected exposure rate values on the high end of the range of values measured at the several plants.

The generic estimate of the total occupational whole body dose for the repair of the three steam generators associated with each reactor unit was presented in NUREG/CR-0199² as a range of values, 3380 to 5840 man-rem per unit. Both ends of this range were conservatively estimated and represent upper bound values. The upper value, 5840 man-rem per unit was estimated assuming no credit for dose saving techniques. The lower value, 3380 man-rem per unit was estimated taking credit for three dose reduction methods: (1) shielding by raising the steam generator water level, (2) using a limited amount of remote tooling, and (3) increasing the source-to-receiver distance.

The FPL occupational exposure estimates include a detailed estimate of doses, based on major job functions, of 1300 man-rem per unit. This detailed estimate does not include dose reductions from use of temporary shielding and local decontamination or dose costs from their implementation. It does include the dose reduction due to the three reduction methods listed above and measures such as pre-job planning and pre-job training. FPL has estimated a range of doses

for the steam generator repair program of from 650-1450 man-rem per unit. This range of doses reflects the uncertainties in estimating job man-hours and radiation intensities, and in predicting the effectiveness of temporary shielding and the exposures during its installation. Therefore, although FPL has not included the effect of temporary shielding and local decontamination in its detailed estimates, FPL has considered the effect in its predicted range of doses.

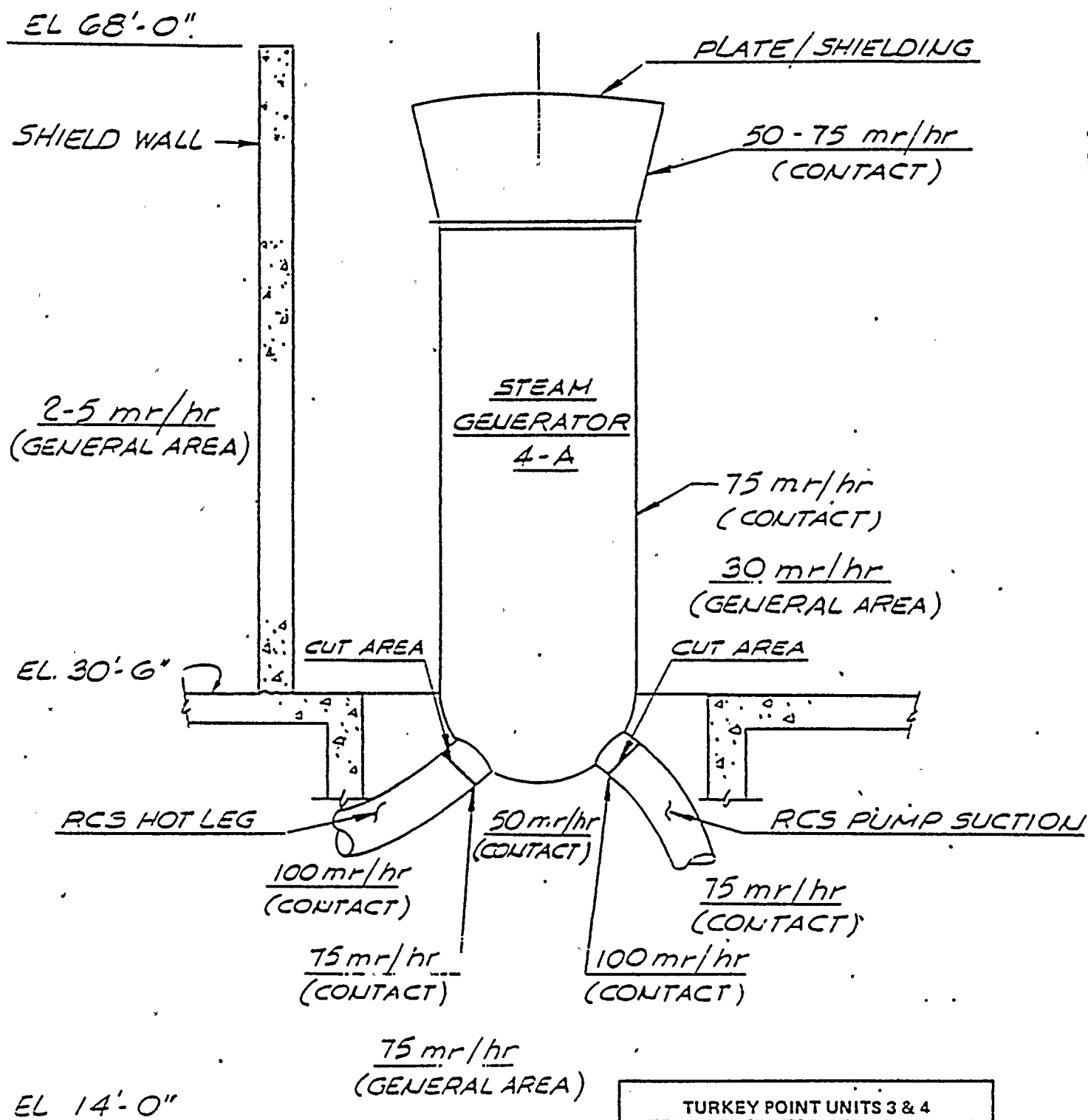
In view of the above discussion, the lower end of the generic range, 3380 man-rem per unit is taken as the appropriate estimate for comparison with the detailed estimate of 1300 man-rem per unit. A summary comparing FPL detailed estimates with our generic estimates from NUREG/CR-0199² for the four main phases of the project is given in Table 4.1. Figure 3.2 shows the radiation levels in the regions where the main cuts are proposed to remove the degraded steam generator.

Table 4.1

Comparison of Occupational Collective Whole Body Dose Estimates

<u>Phase</u>	<u>NRC Generic Estimate</u> Dose, man-rem/unit	<u>FPL Estimate</u> Dose, man-rem/unit
Preparation	450	257
Removal	1100	436
Installation	1800	569
Storage	30	39
<hr/>		
Total	3380	1301

The differences between the detailed estimates are accounted for by the same factors discussed above for the total estimates. FPL calculations of doses used commonly accepted practices for calculating doses and took into account the dose reduction measures proposed to maintain doses As Low As Reasonably Achievable (ALARA), including pre-job training and use of remote tools where practicable. Temporary shielding and local decontamination will be used when such measures are determined to be consistent with ALARA requirements. In Section 3 of its report¹, FPL has documented its consideration of the guidance with regard to ALARA issues in Regulatory Guide 8.8, Revision 2.⁷ We have reviewed the FPL treatment of ALARA issues in detail in Section 2.6 of our SE.³ We concluded that the FPL efforts to maintain occupational doses ALARA during the repair effort are acceptable.



TURKEY POINT UNITS 3 & 4
STEAM GENERATOR REPAIR REPORT

DOSE RATES AROUND STEAM
GENERATOR 4A

Figure 3.2

After removal and storage of all three steam generator lower assemblies, their replacements will be transported from the barge dock or temporary storage location to the equipment hatch. The same machinery used to remove the lower assemblies will be used to install the new assemblies in their cubicles. The steam generator support system will be reinstalled and the upper assembly with its refurbished internals will be mounted on the lower assembly. After welding the two assemblies together, the piping will be reconstructed. Following these major repair activities there will be cleaning, hydrostatic testing, baseline inservice inspections, and pre-operational testing of instruments, components and systems. Then the reactor will be refueled and startup tests will be performed. The performance of the repaired steam generators will be tested for moisture carryover and verification of thermal and hydraulic characteristics.

3.0 REMOVAL AND REINSTALLATION OPERATIONS

A drawing showing the principal parts of a typical steam generator is presented in Figure 3.1. Figure 3.2 shows the regions where the main cuts are proposed to remove the degraded steam generator. It shows also the radiation levels in these regions. A brief description of the FPL proposed repair procedure follows.

FPL is planning to repair all six steam generators at the Turkey Point plant, Units 3 and 4. The units will be repaired in series; one unit will be conducting normal power operations while the other unit is undergoing steam generator repairs. The repair will consist of replacing the lower assembly of each steam generator including the shell and the tube bundle and refurbishing and partially replacing the steam separation equipment in the upper assembly. The old lower assembly will be removed from the containment building through the existing equipment hatch and transported to a special storage facility that will be constructed on the Turkey Point site. The new lower assemblies will arrive at the site by barge. They will be transferred to a wheeled transporter and hauled on the existing road to the containment building equipment hatch.

Prior to the repair work, the unit will be shut down and all systems will be placed in condition for long term layup. The reactor vessel head will be removed for refueling. All of the normal procedures for fuel cooling and fuel removal will be followed. The fuel will be removed from the reactor and placed in the spent fuel storage facility and then the reactor vessel head will be replaced. The equipment hatch will be opened and access control will be established. The biological shield wall and a section of the operating floor concrete and structural steel will be removed to provide access to the steam generator. Guide rails will be installed for transporting the lower assembly through the equipment hatch.

After this preparatory work, the cutting of system piping will begin. This will include cutting and removal of sections of steam lines, feedwater lines, reactor coolant inlet and outlet lines, and miscellaneous smaller lines for the service air and water and the instrumentation system. The steam generator will then be cut at the transition cone and the upper shell will be removed. The steam generator supports will be disassembled and the steam generator lower assembly will be lowered and placed in a horizontal position on a transport mechanism. This mechanism will carry the assembly through the equipment hatch. A mobile crane will lift the lower assembly onto a transporter that will carry it to the steam generator storage facility on the site.

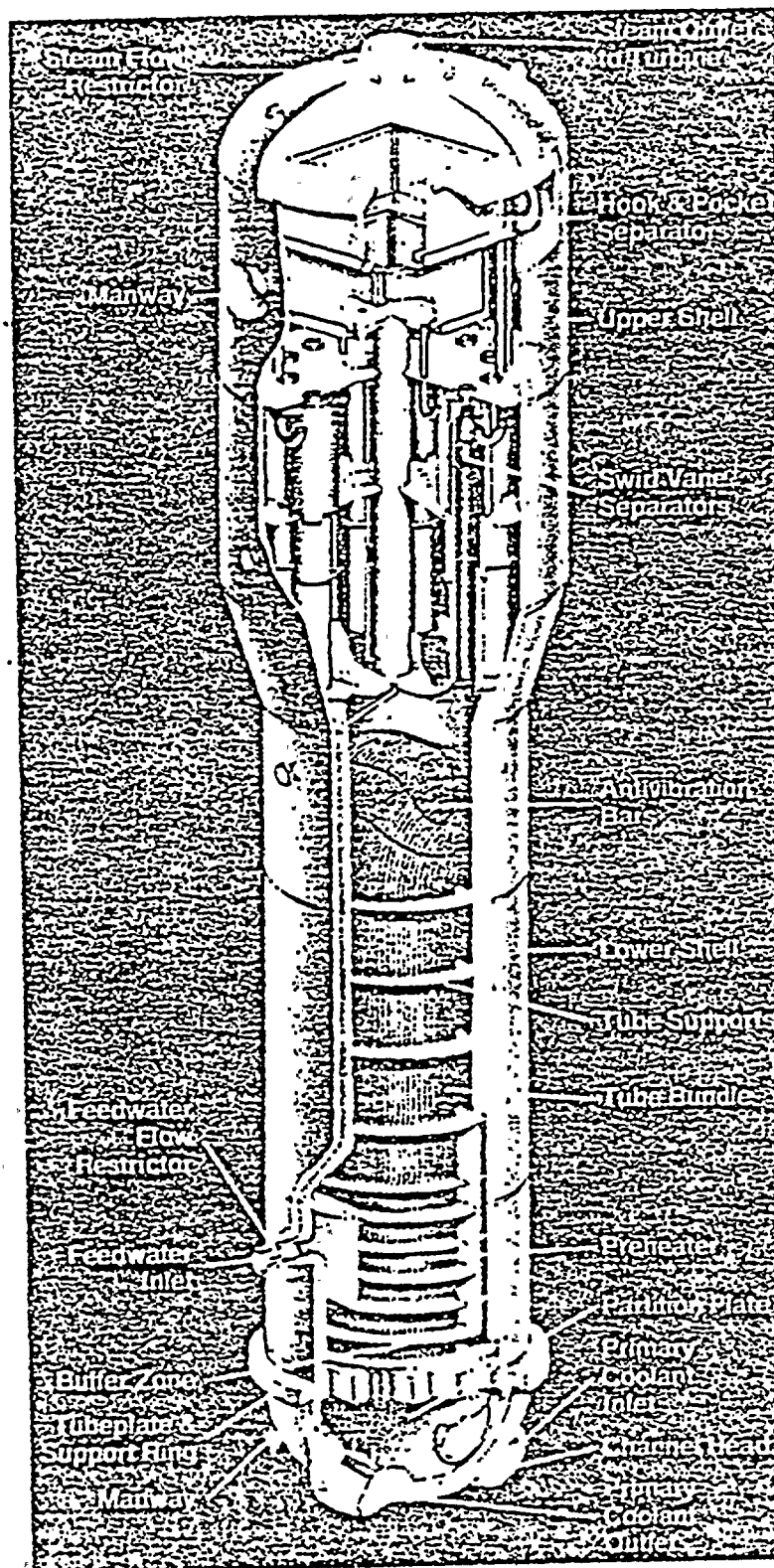


Figure 3.1 - A TYPICAL WESTINGHOUSE STEAM GENERATOR

2.0 BACKGROUND

In order to provide the NRC staff with an independent basis for evaluating the radiological impacts associated with the repair of degraded steam generators at large pressurized water reactors (PWRs), we contracted with Battelle Pacific Northwest Laboratories (PNL) to perform a generic radiological assessment of the steam generator repair and disposal operations. This assessment has been published in an NRC report² NUREG/CR-0199, "Radiological Assessment of Steam Generator Removal and Replacement."

Information useful to the environmental review is also contained in the NRC staff's Safety Evaluation (SE)³ on the repair project, particularly the sections evaluating (1) the measures to reduce corrosion, (2) the As Low As is Reasonably Achievable (ALARA) considerations, and (3) the radiological consequences of postulated accidents.

The steam generator repair program proposed by FPL is similar to the one proposed by the Virginia Electric Power Company (VEPCO)^{4,5,6}. The two plants are similar. Each of the plants contain two Westinghouse three loop PWR's and commenced commercial operation in 1972 and 1973. Both plants began operation using a sodium phosphate secondary water chemistry treatment and both plants changed to all volatile chemistry treatment (AVT); Turkey Point in late 1974, Surry in early 1975. The repair program of the Surry units was approved in January 1979.

2.1 History of Steam Generator Operation

Turkey Point Units 3 and 4 began commercial operation on December 14, 1972, and September 9, 1973, respectively. Like almost all units with U-tube design steam generators, they began operation using a sodium phosphate secondary water chemistry treatment. Largely to correct a wastage and caustic stress corrosion cracking encountered with the phosphate treatment, most PWRs with a U-tube design steam generator using a phosphate treatment for the secondary coolant have now converted to an all volatile chemistry (AVT). Both Turkey Point 3 and 4 were converted around August, 1974.

In 1975, radial deformation, or the so-called "denting," of steam generator tubes occurred in several PWR facilities including Turkey Point 3 and 4, after 4 to 14 months operation, following the conversion from a sodium phosphate treatment to an AVT chemistry for the steam generator secondary coolant. On September 15, 1976, during normal operation, one U-tube in the innermost row parallel to the rectangular flow slots in steam generator A at Surry Unit No. 2 rapidly developed a substantial primary to secondary leak (about 80 gpm).

Subsequent to the 80 gpm leak at Surry Unit 2, the NRC has imposed augmented inservice inspection requirements on Surry Units 1 and 2,

Turkey Point Units 3 and 4, San Onofre Unit 1 and Indian Point Unit 2. In addition, operating restrictions and limited periods of operation, typically six months, between inspections are also imposed at Surry Units 1 and 2 and Turkey Point Units 3 and 4. The augmented inspection requirements include an assessment of the magnitude and progression of tube denting, and support plate deformation and/or cracking.

2.2 Reasons for Steam Generator Repair

The six steam generators at Turkey Point Units 3 and 4 have all undergone a significant amount of degradation since they began operation. The wastage and denting phenomena, discussed earlier, have led to tube wall thinning, support plate flow slot hourglassing and plate ligament cracking, tube denting, stress corrosion cracking, and several instances of reactor coolant leakage through cracked tubes. As of May 1979, tube plugging for various reasons has resulted in removing about 17.5% of the steam generator tubes in Unit 3 and about 20.5% of the tubes in Unit 4 from continuing service.

Due to the continuing denting related problems, the certainty of additional tube plugging that may result in power derating, and the economic considerations for operating with substantially reduced heat transfer capacities on the two units, Florida Power & Light Company (FPL) submitted a proposal¹ for the replacement of the degraded portions of the steam generators.

TABLE of CONTENTS

	<u>Page</u>
1.0 PROPOSED ACTION	1-1
2.0 BACKGROUND	2-1
2.1 History of Steam Generator Operation	2-1
2.2 Reasons for Steam Generator Repair	2-2
3.0 REMOVAL AND INSTALLATION OPERATIONS	3-1
4.0 ENVIRONMENTAL IMPACTS OF THE STEAM GENERATOR REPAIR PROJECT	4-1
4.1 Radiological Assessment	4-1
4.1.1 Occupational Exposure	4-1
4.1.2 Public Radiation Exposure	4-5
4.2 Economic Costs of Steam Generator Repair	4-10
4.3 Non Radiological Environmental Costs	4-12
4.4 Environmental Impact of Postulated Accidents	4-12
5.0 IMPACTS OF ALTERNATIVES	5-1
5.1 Decontamination	5-2
5.2 Retubing	5-3
5.3 Replacement	5-4
5.4 Alternative Disposal Methods	5-4
6.0 BASIS AND CONCLUSION FOR NOT PREPARING AN ENVIRONMENTAL IMPACT STATEMENT	6-1
7.0 REFERENCES	7-1

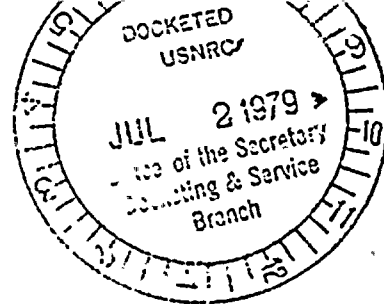
1.0 PROPOSED ACTION

By letter dated September 20, 1977 Florida Power and Light Company (FPL) submitted a report¹ entitled "Steam Generator Repair Report Turkey Point Units 3 and 4." This report has been supplemented on December 20, 1977, March 7, April 25, June 20, August 4, and December 15, 1978 and January 26, 1979. The report describes a proposed program to repair the six steam generators in Units 3 and 4 by replacing the lower assembly, including the tube bundles, of each generator.

FPL plans to repair all six steam generators in Turkey Point 3 and 4. The Unit 4 steam generators have the most tubes plugged and therefore will be repaired first. The repair of Turkey Point 3 steam generators is expected to be started about one year later. Since power demands in the FPL system peak in the summer, and the repair is expected to take from six to nine months per unit, the repair should be started in the fall in order to be completed before the next summer peak demand. When FPL submitted the repair plan on September 20, 1977 the corporate plan was to be prepared to start the repair for Unit 4 in October 1978. The repair of Unit 4 steam generator is now not expected to start before fall of 1979.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555



June 29, 1979

Elizabeth S. Bowers, Esq., Chairman
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Oscar H. Paris
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. David B. Hall
400 Circle Drive
Santa Fe, New Mexico 87501

In the Matter of
Florida Power and Light Company
(Turkey Point Nuclear Generating Unit Nos. 3 and 4)
Docket Nos. 50-250 & 50-251 (Proposed Amendments to
Facility Operating Licenses to Permit Steam Generator Repair)

Dear Members of the Board:

Enclosed please find a copy of the NRC Office of Nuclear Reactor Regulation's Environmental Impact Appraisal issued in connection with the above-captioned matter.

Sincerely,

Steven C. Goldberg
Counsel for NRC Staff

Enclosure: As stated

cc w/enclosure:

Mr. Mark P. Oncavage
Harold F. Reis, Esq.
Norman A. Coll, Esq.
Martin H. Hodder, Esq.
Bruce S. Rogow, Esq.
Atomic Safety and Licensing
Board Panel
Atomic Safety and Licensing
Appeal Board Panel
Docketing and Service Section

ENVIRONMENTAL IMPACT APPRAISAL
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
LICENSE NOS. DPR-31 AND DPR-41
FLORIDA POWER AND LIGHT COMPANY
TURKEY POINT PLANT UNITS 3 AND 4
DOCKET NOS. 50-250 AND 50-251

JUNE 29, 1979

Norman A. Coll, Esquire
STEEL, HECTOR & DAVIS
1400 Southeast First
National Bank Building
Miami, Florida 33131

Harold F. Reis, Esquire
Lowenstein, Newman, Reis,
Axelrad & Toll
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

Richard A. Marshall, Jr.
RICHARD A. MARSHALL, JR.
18450 S.W. 212th Street
Miami, Florida 33187
(305) 233-8104

7/25/79
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Nuclear Generating
Units Nos. 3 and 4)

Docket Nos. 50-250-SP
50-251-SP

(Proposed Amendments to
Facility Operating License
to Permit Steam Generator
Repair)

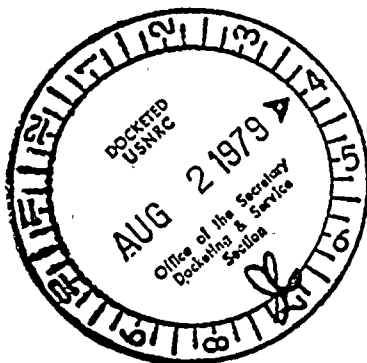
NOTICE OF APPEARANCE

RICHARD A. MARSHALL, JR., hereby enters his Notice of
Appearance as co-counsel for Petitioner MARK P. ONCAVAGE,
12200 S.W. 110th Avenue, Miami, Florida.

I certify that I am admitted to practice by the Supreme
Court of Florida; the United States District Court for the
Southern District of Florida; and the United States Court of
Appeals for the Fifth Circuit.

Respectfully submitted,

Richard A. Marshall, Jr.
RICHARD A. MARSHALL, JR.
18450 S.W. 212th Street
Miami, Florida 33187
(305) 233-8104



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Nuclear Generating
Units Nos. 3 and 4)

Docket Nos. 50-250-SP
50-251-SP

(Proposed Amendments to
Facility Operating
License to Permit Steam
Generator Repair)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the attached Notice of
Appearance were served on the following by deposit in the
United States mail, first class, properly stamped and addressed,
on July 25, 1979.

Elizabeth S. Bowers, Esquire
Chairperson
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

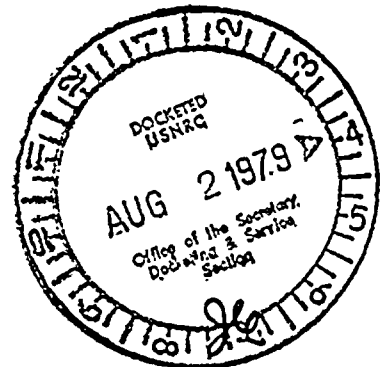
Dr. Oscar H. Paris
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. David B. Hall
400 Circle Drive
Santa Fe, New Mexico 87501

Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Guy Cunningham, Esquire
Steven C. Goldberg, Esquire
U.S. Nuclear Regulatory Commission
Office of the Executive Legal Director
Washington, D.C. 20555



Secretary of the Commission,
U.S. Nuclear Regulatory Commission,
Docketing & Service Section,
Washington, D.C. - 20555

8254 S.W. 37 Street
Miami, Florida, 33155
August 20, 1979

8/20/79

Dear Secretary:

I would like to request permission to speak at the coming Public Hearing regarding Mr. Mark Oncavage filing an intervention of the Florida Power & Light Company's 2 Nuclear Power plants which are leaking which are located at Turkey Point, Florida.

I am an inventor/research scientist covering many scientific fields, as well as having knowledge in Alternate Sources of Energy.

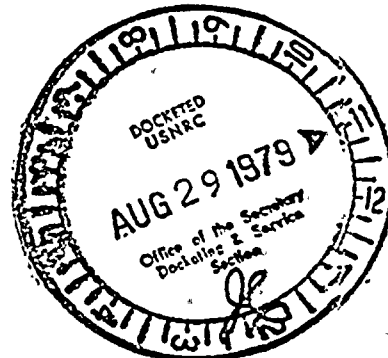
I am highly interested as a concerned citizen regarding the hazards involved with the leaks at both Turkey Point nuclear power plants, over the past several years after being in operation only 6 & 7 years as well as the dangers involved in repairs & costs.

Hoping to hear from you regarding my permission to speak at the coming Hearing. Thank you.

Sincerely,

Enos L. Schera, Jr.

Enos L. Schera Jr.



Acknowledged by card. 8/29/79

50-251

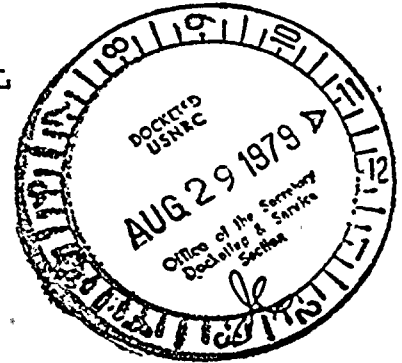
8/21/79

DOCKET NUMBER

PROD. & UTIL. FAC.

50-250, 251 SP

August 21st, 1979
17720 N. Bay Rd.
N. Miami Beach, FL
33160



Mr. Joseph Hendrie
Secretary
U S. Nuclear Radiation Commission
Washington, DC 20555

Dear Mr. Hendrie:

I have learned of the grave dangers and great expense that will result from the process of repairing the Turkey Pt. Nuclear Reactors Three and Four, from the report of Mark Oncavage. After building the nuclear reactor at a cost of \$212 million projected to last for 30 years, we now find that it will cost an additional 232 million dollars just to repair - and that after only 7 years, for a total to date of nearly $\frac{1}{2}$ billion dollars! Costwise on a per kilowatt hour projection, this is extravagance rather than economy, plus the additional radiation hazard as an added burden.

Thusfar we have not found a satisfactory way of disposing or storing the waste products. Until such time as we do, we are faced with an ever-growing volume of waste products that will be a danger to all of us for $\frac{1}{4}$ million years.

Currently the answers are offered us of putting it in the ground or cement blocks which are 2 feet thick. However, our soil is porous and the water table picks up every component in the soil and distributes it widely. Florida, the vegetable garden of the U.S. will be exporting a new danger with its fruits and vegetables.

We do not offer this suggestion in a vacuum or propose that we do without. Rather, we suggest that the abundant energy sources available to us in harnessing solar power, wind power, tidal and gulf stream currents, dams, subterranean thermal power as well as other fuels, such as, coal, alcohol, and the utilization of combustible gases, collectively will provide us with a happier, healthier and more persistent source of our power at lesser cost and self-renewing for the greater part.

Turkey Pt. has shown us only the tip of the iceberg insofar as costs are concerned. We can expect this turkey to end up as a multi billion cost over its 30 year projected life. Applying just a fraction of what this and the hundreds of other atomic plants around the country will represent into perfecting technology of alternative source development, we will end up with true independence from foreign sources of energy while improving the whole ecological future of our country.

Sincerely yours,

Ruth Leopold
Ruth Leopold

Acknowledged by card... 8/29/79

PROPOSED SCHEDULE - TURKEY POINT
STEAM GENERATOR REPAIRS
LICENSING HEARING

Thursday	August 30, 1979	Parties meet in Miami - to discuss contentions, possible stipulations, and set a schedule for discovery.
Friday	August 31, 1979	Parties report to Board (ASLB) on meeting of August 30. All parties commence discovery on contentions ruled admissible by Board in Order of August 3, 1979. (Contentions 2, 5, 6, 7, 12 and 18).
Friday	September 14, 1979	Parties simultaneously file and serve statements concerning admissibility of Intervenor's contentions filed with Board with report of August 31, 1979.
Tuesday ^{*/}	October 30, 1979	Cut-off for discovery requests on contentions ruled admissible by the Board in Order of August 3, 1979.
Friday ^{**/}	November 16, 1979	File prepared testimony.
Tuesday ^{**/}	December 4, 1979	Commence hearing.

*/ All parties agree that discovery on any other contentions ruled admissible by the Board may commence upon issuance of the Board's order so ruling.

**/ Assuming it is consistent with the Board's schedule, both Licensee and Intervenor agree to the proposed December 4 hearing date. The NRC Staff believes it is premature to project dates to file testimony or commence a hearing.

14. The measures proposed to be taken to protect against fire hazards associated with the steam generator repairs are inadequate to protect against radioactive releases in violation of 10 CFR Parts 20, 50, 51, 100, NRC guidelines, and NEPA.

13. The proposed method of radiation monitoring during repair of the steam generators is inadequate in that it fails to comply with 10 CFR Parts 20, 50, 51, 100, NEPA, and FWPCA.

12. The programs and procedures proposed to be followed by the Licensee in making the steam generator repairs demonstrate that it will not make every reasonable effort to maintain occupational radiation exposures at a reasonably safe level and at a level within 10 CFR Parts 20 and 51.

11. The utility has failed to provide an accurate cost/benefit analysis contrary to 10 CFR Parts 50 and 51, and the National Environmental Policy Act, and the FWPCA because:
 - a. it has failed to consider the cost of future recurring steam generator repairs;
 - b. it has used the inaccurate figure of \$300,000 per day per unit for replacement power costs for reactor outage;
 - c. the use of a radiation exposure value guideline of \$1,000 per man-rem for plant workers is inaccurate;
 - d. it has failed to provide a cost/benefit analysis for an additional commitment of land resources for the creation of a nuclear waste storage facility.
 - e. it has failed to consider the costs of addition of a full flow condensate demineralizer and of condenser retubing;
 - f. it has failed to consider the additional costs caused by inflation and delay.

10. The Commission's NEPA Analysis is inadequate in that it fails to adequately consider the following alternative procedures:

- a. arresting tube support plate corrosion;
- b. in-place tube restoration (sleeving);
- c. in-place steam generator tube replacement (retubing);
- d. derating;
- e. decommissioning;
- f. bioconversion;
- g. conservation;
- h. solar energy;
- i. natural gas; or
- j. coal

9. The cumulative offsite radiation releases as a result of all activity at Turkey Point, during the proposed repairs, are contrary to 10 CFR Parts 20, 50, 51, 100, and the National Environmental Protection Act.

8. The continued operation of Turkey Point Units 3 and 4 should be suspended because:

- a. the impaired condition of the steam generators poses the possibility of accidental loss of coolant;
- b. the impaired condition of the steam generators subjects onsite workers to unacceptable levels of radiation exposure;
- c. the impaired condition of the steam generators poses the possibility of offsite radiation releases endangering the public health and environment and violate the Federal Water Pollution Control Act by the discharge of primary coolant.

7. The Licensee has not considered in its cost benefit analysis in violation of 10 CFR Parts 50 and 51, and

NEPA:

- a. the cost of a full-flow condensate polishing demineralizing system;
- b. the effluent release from a full-flow condensate polishing demineralizing system; or
- c. the environmental degradation caused by a full-flow condensate polishing demineralizing system.

6. Whether the creation of a long-term nuclear waste storage facility at Turkey Point is in compliance with 10 CFR Parts 50, 51, NEPA, FWPCA, or any laws protecting Biscayne Bay or Biscayne National Monument, their surroundings, and their delicate life forms, with particular attention being drawn to the proposed floorless steam generator disposal building?

5. Whether the use of transient workers with unknown radiation exposure histories is in compliance with 10 CFR Parts 20, 51 or NEPA?

4. Whether the discharge of untreated laundry waste water complies with 10 CFR Parts 20, 50, 51, NEPA or FWPCA?

3. Whether the handling, processing, storing, or discharging of primary coolant is in conformance with requirements of 10 CFR Parts 20, 50, 51, 100, NEPA or FWPCA?

2. Whether the steam generator repairs proposed by the utility comply with 10 CFR Part 20, NEPA, or the FWPCA?

INTERVENOR CONTENTIONS - AUGUST 30, 1979

1. Whether pursuant to requirements of the National Environmental Policy Act (NEPA), 10 CFR Parts 50, 51, the Commission must prepare an Environmental Impact Statement on the proposed operating license (OL) amendments, with specific references to 10 CFR 50.90?
 - a. Whether the requirements of the FWPCA are met in the form of inclusion in a NEPA cost/benefit analysis?

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of	)	Docket Nos. 50-250-SP
	)	50-251-SP
FLORIDA POWER & LIGHT COMPANY)	
(Turkey Point Nuclear Generating	)	(Proposed Amendments to
Units Nos. 3 and 4)	)	Facility Operating License to
	)	Permit Steam Generator Repair)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the attached letter of this date to the Members of the Licensing Board, captioned in the above matter, were served on the following by deposit in the United States mail, first class, properly stamped and addressed, this 31st day of August, 1979.

Elizabeth S. Bowers, Esquire
Chairman
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Oscar H. Paris
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20055

Dr. David B. Hall
400 Circle Drive
Santa Fe, NM 87501

Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Atomic Safety and Licensing Appeal Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

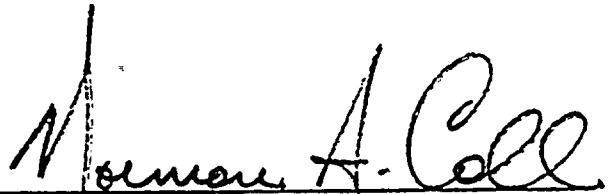
Mr. Mark P. Oncavage
12200 S.W. 110 Avenue
Miami, FL 33176

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Steven C. Goldberg, Esquire
U.S. Nuclear Regulatory Commission
Office of the Executive Legal Director
Washington, DC 20555

Bruce S. Rogow, Esquire
NOVA Law School
3301 College Avenue
Fort Lauderdale, FL 33314

Harold F. Reis, Esquire
Lowenstein, Newman, Reis, Axelrad & Toll
1025 Connecticut Avenue, NW
Washington, DC 20036


NORMAN A. COLL

STEEL HECTOR & DAVIS
1400 Southeast First National
Bank Building
Miami, Florida 33131

Telephone: (305) 577-2863

Dated: August 31, 1979

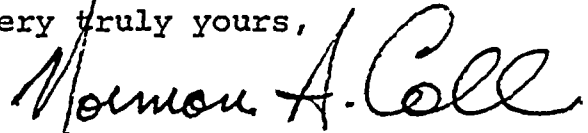
STEEL HECTOR & DAVIS

Atomic Safety and Licensing
Board Panel
August 31, 1979
Page 3

Counsel for the NRC Staff believes it is premature to project dates to file proposed testimony or for commencement of a hearing. With respect to the date for commencement and cut-off of discovery on those issues identified by the Board in its August 3 order, counsel for the Licensee and NRC Staff agree to the dates specified in the schedule. Counsel for the Intervenor agrees to those dates, subject to the understanding that the hearing is to be held in December 1979.

In order to resolve the question of scheduling the date for filing proposed testimony and the commencement of a hearing, Licensee intends shortly to file a formal motion with the Board requesting that it adopt a proposed schedule.

Very truly yours,

A handwritten signature in cursive script that reads "Norman A. Coll". The signature is written in dark ink and is positioned above the printed name.

Norman A. Coll

jb

Attachments

cc: See attached Certificate of Service

STEEL HECTOR & DAVIS

Atomic Safety and Licensing
Board Panel
August 31, 1979
Page 2

August 3, 1979 (Contentions 2, 5, 6, 7, 12 and 18 submitted May 2, 1979). In addition, counsel for Intervenor indicated that certain contentions which had been refined from the original May 2, 1979 submittal, as well as certain other contentions which the Licensee had refined and to which additions had been made by Intervenor should also be litigated. Taken together, these contentions now supersede all prior contentions and contain all of the matters which Intervenor wishes to litigate in this proceeding. They are contained in Attachment A to this letter.

The parties are unable to reach complete agreement as to the admissibility or form of these proposed contentions. Counsel for the NRC Staff understands the Board to have admitted the contentions identified by the Board in its Order of August 3, 1979 (Contentions 2, 5, 6, 7, 12 and 18), but reserves the right to submit that certain statutes and regulations referenced therein are inapplicable. The NRC Staff counsel also expressed the view that other contentions lacked specificity and basis, or otherwise contained matters beyond the scope of this proceeding. Counsel for Licensee expressed the view that the contentions identified by the Board in its Order of August 3, 1979 need further refinement, in particular the elimination of references to statutes and regulations which are inapplicable. In addition, counsel for Licensee believes certain of the proposed contentions in Attachment A are beyond the scope of this proceeding and the jurisdiction of this Board, and others require further refinement, particularization and specificity. The parties agreed that each would file a statement with the Board no later than September 14, 1979 setting forth its position concerning these matters.

In addition, the parties attempted to establish a tentative pre-hearing schedule. Depending upon the Board's schedule, the Licensee and the Intervenor have agreed to a tentative December 4, 1979 hearing commencement date. A procedural schedule keyed to that date is attached to this letter as Attachment B.

STEEL HECTOR & DAVIS

SOUTHEAST FIRST NATIONAL BANK BUILDING

MIAMI, FLORIDA 33131

WILLIAM C. STEEL
LOUIS J. HECTOR
DARREY A. DAVIS
DWIGHT SULLIVAN
WILLIAM B. KILLIAN
ERNEST J. HEWETT
JERRY B. CROCKETT
WILSON SMITH
TALBOT D'ALEMBERT
JAMES H. SWEENEY, III
JOHN EDWARD SMITH
NORMAN A. COLL
THOS. E. CAPPS
SHEPARD KING
MATTHEW M. CHILDS
BARRY R. DAVIDSON
NOEL H. NATION
BRUCE S. RUSSELL
ALVIN B. DAVIS
JOSEPH P. KLOCK, JR.
RICHARD C. SMITH

THOMAS R. McGUIGAN
DENNIS A. LARUSSA
PATRICIA A. SEITZ
PAUL J. BONAVIA
JUDITH M. KORCHIN
JOHN M. BARKETT
ROBERT J. IRVIN
JEFFREY I. MULLENS
VANCE E. SALTER
DONALD M. MIDDLEBROOKS
HENRY J. WHELCHER
GERRY S. GIBSON
BRIAN A. HART
SHARYL L. POULSON
RICHARD J. LAMPEN
JOSE L. ASTIGARRAGA
THOMAS J. MATKOV
DEAN C. COLSON
KATHLEEN F. PATTERSON
JEFFREY S. BERGOW
W. GLENN DEMPSEY

8/31/79

August 31, 1979

WILL M. PRESTON
DENNIS P. COYLE
OF COUNSEL

TELEPHONE
(305) 577-2800

TELEX 51-5758

DIRECT DIAL NUMBER

Elizabeth S. Bowers, Esq.
Chairman
Atomic Safety and Licensing
Board Panel
U. S. Nuclear Regulatory
Commission
Washington, DC 20555

Dr. Oscar H. Paris
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, DC 20555

Dr. David B. Hall
400 Circle Drive
Santa Fe, NM 87501

In the Matter of
Florida Power & Light Company
(Turkey Point Units Nos. 3 & 4)
Docket Nos. 50-250-SP and 50-251-SP

Dear Members of the Board:

The purpose of this letter is to report to the Board on the meeting between all parties held August 30, 1979, in Miami, Florida, pursuant to the Board's Order of August 3, 1979. The purpose of the meeting was to discuss proposed contentions and possible stipulations, and to attempt to set a realistic schedule for discovery.

Prior to the meeting, counsel for the Licensee and counsel for the Intervenor exchanged proposed refined contentions. At the meeting, counsel for Intervenor indicated that the contentions Intervenor wished to litigate in this proceeding would consist in part of those contentions identified by the Board in its Order of



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD PANEL
WASHINGTON, D.C. 20555

9/4/79

September 4, 1979



Robert M. Lazo, Esq.
Acting Chairman
Atomic Safety and Licensing Board
Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

RE: FLORIDA POWER AND LIGHT COMPANY
(Turkey Point Nuclear Generating
Units 3 and 4, Dockets 50-250 (SP)
and 50-251 (SP), (Proposed Amendments
to Facility Operating License to Permit
Steam Generator Repairs)

Dear Bob:

I have considered the total situation in the proposed Turkey Point proceeding and have determined that I must recuse myself from the Licensing Board. I cannot apply the objectivity and the impartiality required by a member of the Licensing Board Panel. My dissenting opinion to the Board's Order of August 3, 1979, clearly states my position in this matter. I therefore recuse myself from the Turkey Point Board.

Very truly yours,

Elizabeth S. Bowers

for

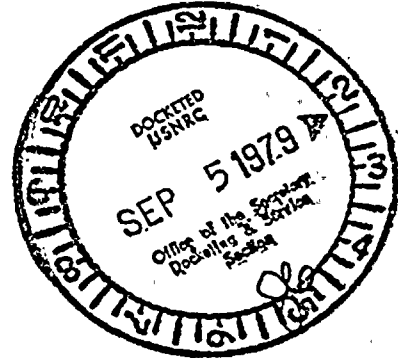
David B. Hall, Member
Atomic Safety and Licensing Board
Panel

50-251-SP
9/05/79
9/13/79
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-250-SP and 50-251-SP]

FLORIDA POWER AND LIGHT COMPANY

(Turkey Point Nuclear Generating Units Nos. 3 and 4)
Facility Operating Licenses Nos. DPR-31 and DPR-41



NOTICE OF RECONSTITUTION OF BOARD

Dr. David B. Hall was a member of the Atomic Safety and Licensing Board for the above proceeding. Dr. Hall has recused himself from further service on this Board.


Accordingly, Dr. Emmeth A. Luebke, whose address is Atomic Safety and Licensing Board Panel, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, is appointed a member of this Board. Reconstitution of the Board in this manner is in accordance with Section 2.721 of the Commission's Rules of Practice, as amended.

Robert M. Lazo
Robert M. Lazo, Acting Chairman
Atomic Safety and Licensing
Board Panel

Dated at Bethesda, Maryland
this 5th day of September 1979.

Martin H. Hodder, Esq.
1131 N.E. 86th Street
Miami, Florida 33138

Bruce S. Rogow, Esq.
Nova Law School
3301 College Avenue
Ft. Lauderdale, Florida 33314



Steven C. Goldberg
Counsel for NRC Staff

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
FLORIDA POWER AND LIGHT COMPANY	)	Docket Nos. 50-250
(Turkey Point Nuclear Generating	)	50-251
Unit Nos. 3 and 4)	)	(Proposed Amendments to Facility
	)	Operating Licenses to Permit
	)	Steam Generator Repair)

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF STATEMENT OF POSITION ON CONTENTIONS AND MOTION TO STRIKE" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 14th day of September, 1979:

*Elizabeth S. Bowers, Esq., Chairman
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. David B. Hall
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Dr. Oscar H. Paris
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Mark P. Oncavage
12200 S. W. 110th Avenue
Miami, Florida 33176

Harold F. Reis, Esq.
Lowenstein, Newman, Reis,
Axelrad & Toll
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

*Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Atomic Safety and Licensing
Appeal Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

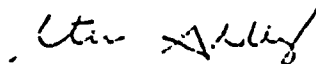
Norman A. Coll, Esq.
Steel, Hector & Davis
Southeast First National
Bank Building
Miami, Florida 33131

In any case, a favorable evaluation of the plant fire protection program, subject to the imposition of specified license conditions, accompanied a March 21, 1979 amendment to the operating license for Turkey Point, Units 3 and 4. Additional fire protection measures will be taken during the proposed repair activities which the Staff has found acceptable. SE, §3.2.3. Intervenor has not provided any information to question the adequacy of those provisions. Thus, the Staff opposes the admission of this contention.

CONCLUSION

For the reasons stated above, the Staff moves to strike the above-referenced citations in admitted contentions 1 through 6. The Staff opposes the admission of proposed contentions 7 through 14.

Respectfully submitted,



Steven C. Goldberg
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 14th day of September, 1979.

The contention lacks the requisite specificity and basis and fairly typifies the "shot-gun" approach evidenced in the contentions. First, neither 10 CFR Part 51, 100 nor the FWPCA prescribe radiation levels or radiological monitoring requirements and are, thus, irrelevant to the apparent issue. Second, technical specifications incorporated into the facility operating licenses restrict radiological effluent releases to regulatory levels and prescribe surveillance measures to assure compliance with such level. Intervenor has not indicated why these measures are "inadequate". Personnel radiological monitoring will take place as part of the Licensee's existing plant health physics procedures. SE, §2.6.1.5. Moreover, the Staff has concluded that anticipated occupational exposures during the repair effort will not exceed 10 CFR Part 20 levels and that the proposed efforts to maintain occupational exposure ALARA are acceptable. Id. With regard to offsite radiological releases, such releases will be monitored under the existing surveillance program in the technical specifications to assure compliance with the design objectives in Appendix I to 10 CFR Part 50. SE, §§2.6.3, 2.6.4. Thus, the Staff opposes the admission of this contention.

Contention 14

The measures proposed to be taken to protect against fire hazards associated with the steam generator repairs are inadequate to protect against radioactive releases in violation of 10 CFR Parts 20, 50, 51, 100, NRC guidelines, and NEPA.

The contention lacks the requisite specificity and basis. The relevance of the cited regulations and unspecified "NRC guidelines" can only be surmised.

governing low-level with disposal. See 10 CFR §20.302. Subpart (e) seeks the introduction of an issue that is beyond the scope of the proceeding. See position on contention 7 supra. Subpart (f) lacks reasonable specificity, is unduly vague and not susceptible to a reasonable degree of proof. Thus, the Staff opposes the admission of this contention.

Contention 12

The program and procedures proposed to be followed by the License in making the steam generator repairs demonstrate that it will not make every reasonable effort to maintain occupational exposures at a reasonably safe level and at a level within 10 CFR Part 20 and 51.

The contention lacks the requisite specificity and basis. The reference to 10 CFR Part 51 is irrelevant to the substance of the contention in that this part does not prescribe permissible levels of occupational exposure. See position on contention 2 supra. More fundamental, by inferring that occupational exposures must be kept at a "reasonably safe level and at a level within 10 CFR Part 20", the contention constitutes an impermissible challenge to the applicable regulations establishing permissible dose levels and the ALARA concept in 10 CFR Part 20. See 10 CFR §2.758. At best, the term "reasonably safe level" is unduly vague and not susceptible to a reasonable degree of proof. The contention also appears repetitive in light of contention 2. Thus, the Staff opposes the admission of this contention.

Contention 13

The proposed method of radiation monitoring during repair of the steam generators is inadequate in that it fails to comply with 10 CFR Parts 20, 50, 51, 100, NEPA, and FWPCA.

- b. it has used the inaccurate figure of \$300,000 per day per unit for replacement power costs for reactor outage;
- c. the use of a radiation exposure value guideline of \$1,000 per man-rem for plant workers is inaccurate;
- d. it has failed to provide a cost/benefit analysis for an additional commitment of land resources for the creation of a nuclear waste storage facility.
- e. it has failed to consider the costs of addition of a full flow condensate demineralizer and of condenser retubing;
- f. it has failed to consider the additional costs caused by inflation and delay.

Neither NEPA nor 10 CFR Part 51 require the preparation of a cost-benefit analysis in connection with an action for which no EIS is required. See, e.g., 10 CFR §51.7 (contents of EIA). Nonetheless, while it did not perform an overall cost-benefit analysis in its EIA, per se, the appraisal does reflect consideration of the costs and benefits of the proposed action. (See, e.g., EIA, §4.2). Even assuming the presence of such a requirement, it does not derive from 10 CFR Part 50 or the FWPCA as seemingly alleged.

The contention is deficient on alternate grounds. Subpart (a) is speculative and without basis. Proposed mechanical design and material changes, along with a preoperational testing program prior to fuel loading, combine to reduce the potential for recurrent tube leaks. SE, §§2.1 - 2.5. Subpart (b) lacks basis. Yet, even assuming the truth of the matter asserted therein, Intervenor fails to indicate what effect this has on the ultimate decision of whether the proposed action should be authorized or not. Subpart (c) lacks specificity and basis. Subpart (d) lacks basis. Disposal of the replaced steam generator lower assemblies will be onsite and, thus, will not entail any additional commitment of land. The replaced assemblies will be stored in an onsite engineered storage facility consistent with Commission regulations

circumstances. Assuming arguendo that some obligation to consider alternatives arises under NEPA under the circumstances of this case, such alternatives must, nonetheless, pass some threshold test of reasonableness. See e.g., Vermont Yankee Nuclear Power Corp. v. NRDC, et al., 435 U.S. 519 (1978); NRDC v. Morton, 458 F.2d 827, 837 (D.C. Cir. 1978). The Staff believes that the alternatives considered and rejected by the Staff in the EIA, which encompass preferred alternatives (c) through (e), more than satisfy such obligation. Intervenor has not explained why the consideration of these alternatives is "inadequate" as claimed. The Staff is of the opinion the preferred alternatives (a) and (b) not reasonable or viable alternatives to the proposed action. With regard to "alternative" (a), the Staff is unaware of a technically feasible way to arrest serious tube support plate corrosion. An attempt was made to arrest the wastage (tube wear) and stress corrosion cracking problem at Turkey Point by a change in the secondary water treatment. This attempt was unsuccessful and, in turn, led to the present phenomenon of denting. See SE, §1.1.

With regard to "alternative" (b), sleeving is a temporary measure to control wastage. However, it is not a feasible means to control denting because once denting begins it reduces the diameter of the tubes. Therefore, the sleeves no longer fit the tubes. This is the situation at Turkey Point.

Preferred alternatives (f) through (j) are subsumed with consideration of alternative (e) and are not otherwise reasonable.

Contention 11

The utility has failed to provide an accurate cost/benefit analysis contrary to 10 CFR Parts 50 and 51, and the National Environmental Policy Act, and the FWPCA because:

- a. it has failed to consider the cost of future recurring steam generator repairs'

Part 50 (SE, §§2.6.3, 2.6.4), less than the releases from normal operation, and will not significantly affect the human environment (EIA, §4.1.2). The Intervenor has not controverted these conclusions nor otherwise supplied the basis for his apparently contradictory claim. It should also be borne in mind that the unit under repair will be shutdown and the core unloaded before repair work is started. Therefore, no gaseous wastes will be generated from reactor operations during the repair period (SE, §2.6.3). Therefore, the Staff opposes the admission of this contention.

Contention 10

The Commission's NEPA Analysis is inadequate in that it fails to adequately consider the following alternative procedures:

- a. arresting tube support plate corrosion;
- b. in-place tube restoration (sleeving);
- c. in-place steam generator tube replacement (retubing);
- d. derating;
- e. decommissioning;
- f. bioconversion;
- g. conservation;
- h. solar energy;
- i. natural gas; or
- j. coal

This contention seeks the consideration of certain alternatives to the proposed action. Since an EIS is not required pursuant to §102(2)(C) of NEPA under the circumstances of this case, the attendant obligation to consider alternatives does not arise. The Staff recognizes an obligation to consider alternatives independent of the EIS requirement under §102(2)(E) of NEPA under certain

This contention seeks the introduction of an issue that is beyond the scope of this proceeding and outside the jurisdiction of this Board. The scope of the Board's jurisdiction in the instant action is confined to determining whether, or not the proposed steam generator repairs should be authorized. Licensing Boards are empowered to hear only those matters which the Commission has designated them to decide in the applicable notice of hearing. 10 CFR §2.104(a); 2.717(a); Public Service Co. of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170 (1976). Continued operation of units 3 and 4 in their existing condition was authorized by license amendments dated October 26, 1978. The amendments were accompanied by Staff safety and environmental evaluations. Notice of the proposed issuance of those amendments was published in the Federal Register on August 9, 1978 with an opportunity to request a hearing. 43 F.R. 3506. No petitions to intervene were filed with respect thereto. Thus, the Staff opposes the admission of this contention.

Contention 9

The cumulative offsite radiation releases as a result of all activity at Turkey Point, during the proposed repairs, are contrary to 10 CFR Parts 20, 50, 51, 100, and the National Environmental Policy Act.

This contention lacks the requisite degree of basis and specificity required by 10 CFR §2.714. On the basis of its detailed evaluation, the Staff concluded that the proposed repairs could be accomplished without exceeding the exposure limits in 10 CFR Part 20, that the efforts proposed to maintain occupational exposures ALARA are acceptable (SE, §2.6.1) and that the resultant occupational radiation dose will be environmentally insignificant (EIA, §4.1.1). It was further concluded that airborne and liquid radioactive effluent releases from the plant during the proposed repairs will be within the design objectives of Appendix I to 10 CFR

Contention 7

The Licensee has not considered in its cost benefit analysis in violation of 10 CFR Parts 50 and 51, and NEPA:

- a. the cost of a full-flow condensate polishing demineralizing system;
- b. the effluent release from a full-flow condensate polishing demineralizing system; or
- c. the environmental degradation caused by a full-flow condensate polishing demineralizing system.

This contention seeks the introduction of an issue that is irrelevant to the proceeding. The installation and operation of a full-flow condensate polishing demineralizing system is not proposed in the Licensee's Steam Generator Repair Report. Should the Licensee reveal plans to install such a system during the pendency of this proceeding, the Intervenor may attempt to seek the introduction of a contention regarding such a system. Therefore, the Staff opposes the admission of this contention.

Contention 8

The continued operation of Turkey Point Units 3 and 4 should be suspended because:

- a. The impaired condition of the steam generators poses the possibility of accidental loss of coolant;
- b. the impaired condition of the steam generators subjects onsite workers to unacceptable levels of radiation exposure;
- c. the impaired condition of the steam generators poses the possibility of offsite radiation releases endangering the public health and environment and violate the Federal Water Pollution Control Act by the discharge of primary coolant.

together in its August 3 Order as placing in question whether the releases of radioactive effluent into the cooling system will be within permissible levels. Nonetheless, the Staff believes that certain references within the contentions are inapplicable. Accordingly, the Staff moves that references in these contentions to 10 CFR Parts 51, 100, and the FWPCA be stricken. Compliance with the FWPCA, under the circumstances of this case, is outside NRC jurisdiction for the reasons noted above. Parts 51 and 100 do not prescribe levels of liquid radioactive effluent releases against which the acceptability of the several "releases" referenced in the contentions are sought to be measured. Therefore, the chapters are irrelevant to the substance of the contentions.

Contention 6

Whether the creation of a long-term nuclear waste storage facility at Turkey Point is in compliance with 10 CFR Parts 50, 51, NEPA, FWPCA, or any laws protecting Biscayne Bay or Biscayne National Monument, their surroundings, and their delicate life forms, with particular attention being drawn to the proposed floorless steam generator disposal building?

This contention was formerly denominated contention 18 in the Intervenor's May 2 statement of contentions. The Board apparently admitted this contention in its August 3 Order as placing in question the "adequacy of the method proposed for storing the steam generator assemblies with regard to protecting the assemblies from storm floods." Order at 28. Nonetheless, the Staff believes that the reference in the contention to the FWPCA is inapplicable and moves that it be stricken on the grounds noted above. The Staff will seek through discovery specification of the other applicable "laws" alluded to in the contention and seek such additional relief as may be necessary.

in the appraisal which more closely parallels an EIS than the traditional Staff EIA in both form and substance.

Contention 2

Whether the steam generator repairs proposed by the utility comply with 10 CFR Part 20, NEPA, or the FWPCA?

Contention 5

Whether the use of transient workers with unknown radiation exposure histories is in compliance with 10 CFR Parts 20, 51, or NEPA?

These contentions were formerly denominated contentions 5 and 12 in the Intervenor's May 2 statement of contentions. The Board apparently admitted these contentions in its August 3 Order as placing in question "whether the occupational exposure during the repair, especially of transient workers, can be kept ALARA." Order at 28. Nonetheless, the Staff believes that certain references within these contentions are inapplicable. Specifically, the Staff moves that the reference in contention 2 to the FWPCA be stricken on the grounds noted above. The Staff further moves that the reference to 10 CFR Part 51 in contention 5 be stricken on the grounds that this chapter does not contain requirements regarding the use of transient workers with unknown radiation exposure histories and is, therefore, irrelevant to the substance of the contention.

Contention 3

Whether the handling, processing, storing, or discharging of primary coolant is in conformance with requirements of 10 CFR Parts 20, 50, 51, 100, NEPA or FWPCA?

Contention 4

Whether the discharge of untreated laundry waste water complies with 10 CFR Parts 20, 50, 51, NEPA or FWPCA?

These contentions were formerly denominated contentions 6 and 7 in the Intervenor's May 6 statement of contentions. The Board apparently admitted these contentions

Contention 1

Whether pursuant to requirements of the National Environmental Policy Act (NEPA), 10 CFR Parts 50, 51, the Commission must prepare an Environmental Impact Statement on the proposed operating license (OL) amendments, with specific references to 10 CFR 50.90?

- a. Whether the requirements of the FWPCA are met in the form of inclusion in a NEPA cost/benefit analysis?

This contention was formerly contention 2 in Intervenor's May 2, 1979 statement of contentions. The Board apparently admitted this contention in its Order of August 3, 1979. Nonetheless, the Staff believes that certain references within the contention are inapplicable. References to 10 CFR Part 50, and specifically 10 CFR §50.90, fall within this category. The Commission's regulations implementing NEPA are contained solely in 10 CFR Part 51. Part 50 provides no criteria to assess when or whether an environmental impact statement (EIS) must be prepared. Section 50.90 governs the contents of a construction permit or license amendment application.^{4/} It imposes no obligations whatsoever upon the NRC. It surely does not establish criteria under which the need for an EIS is to be adjudged. Accordingly, the Staff moves to strike the references to "10 CFR Part 50" and "10 CFR §50.90" in this contention.

Though the nature of the reference to the FWPCA in subpart (a) is unclear, the Staff does not construe the context of its usage therein as necessarily violative of the authorities cited at page 4 supra. The Staff does not otherwise concede that the issue has merit.

Significantly, the NRC Staff issued an environmental impact appraisal (EIA) of the proposed action on June 24, 1979. The contention fails to allege any deficiency

4/ That regulation states:

Whenever a holder of a license or construction permit desires to amend the license or permit, application for an amendment shall be filed with the Commission, fully describing the changes desired, and following as far as applicable the form prescribed for original applications.

The Staff position on the contentions follows:

STATEMENT OF POSITION AND MOTION TO STRIKE

In general, none of the contentions proposed by the Intervenor contain the necessary basis and specificity required by 10 CFR §2.714(b). Significantly, the contentions of the Intervenor are devoid of any reference to the documentary submissions of either the Licensee or the Staff notwithstanding their importance as licensing documents. The contentions represent sweeping allegations of inadequate or complete failure to comply with various undifferentiated statutes, rules, or regulations without regard to action-specific information. They provide no effective "notice" of the nature of the complained of matters.

A majority of the contentions contain allegations of noncompliance with unspecified provisions of the Federal Water Pollution Control Act (FWPCA). The Environmental Protection Agency (EPA) issued a National Pollutant Discharge Elimination System (NPDES) Permit (No. FL0061562) for the Turkey Point facility on June 14, 1978 pursuant to §402 of the FWPCA. The establishment of effluent limitations and compliance with the NPDES permit is a matter of EPA, rather than NRC, jurisdiction. See §511(c)(2) of the FWPCA, 33 U.S.C. §1371; Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1,25-26 (1978); Tennessee Valley Authority (Yellow Creek Nuclear Plant, Units 1 and 2), ALAB-515, 8 NRC 702 (1978). Accordingly, the Staff moves to strike those portions of admitted contentions 2, 3, 4 and 6 alleging noncompliance with the FWPCA. Those analogous portions of contentions 8, 11 and 13 are similarly inadmissible as a matter of law.

The Staff now turns to consideration of the contentions individually.

The United States Supreme Court recently made the following observation in connection with the assertion of contentions arising under the National Environmental Policy Act (NEPA) in NRC proceedings:

"... while it is true that NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action, it is still incumbent upon intervenors who wish to participate to structure their participation so that it is meaningful, so that it alerts the agency to the intervenor's position and contentions.

Vermont Yankee Nuclear Power Corporation v. NRDC, et al., 435 U.S. 519 (1978).

In this regard, the Supreme Court further stated that a petitioner's comments "must be significant enough to step over a threshold requirement of materiality * * * The comment cannot merely state that a particular mistake was made, it must show why the mistake was of possible significance in the results." Id., quoting from Portland Cement Assn. v. Ruckelshaus, 486 F.2d 375, 394 (D.C. Cir. 1973), cert. denied, 417 U.S. 921 (1974).

The Appeal Board has indicated that there is no need to duplicate the review afforded the plant at the operating license stage in connection with a license amendment application:

"Nothing in NEPA or in those judicial decisions to which our attention has been directed dictates that the same ground be wholly explored in connection with a proposed amendment to those 40-year operating licenses. Rather, it seems manifest to us that all that need be undertaken is a consideration of whether the amendment itself would bring about significant environmental consequences beyond those previously assessed and, if so, whether those consequences (to the extent unavoidable) would be sufficient on balance to require a denial of the amendment application." Northern States Power Company (Prairie Island Units 1 and 2), ALAB-455, 7 NRC 41, 46 at n. 4 (1978) (spent fuel pool expansion).

basis and specificity per the requirements of 10 CFR §2.714(b) and applicable case law. See, e.g., BPI v. Atomic Energy Commission, 502 F.2d 424, 429 (D.C. Cir. 1974). A major reason for requiring the articulation of specificity and basis is to help assure that other parties are put on sufficient notice of what they will have to defend against^{2/} and to ensure that the hearing process is invoked solely for the resolution of concrete issues.^{3/} This is especially true in a proceeding for which a hearing is not mandatory. Cf. Cincinnati Gas and Electric Company (Zimmer Nuclear Station), ALAB-305, 3 NRC 8, 12 (1976); Gulf States Utilities (River Bend Units 1 and 2) ALAB-183, 7 AEC 222, 226 n. 10 (1974).

With regard to environmental contentions, the now familiar "rule of reason" must be applied. See NRDC v. Morton, 458 F.2d 827 (D.C. Cir. 1972); See also Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-455, 7 NRC 41, 48-49 (1978). As the D.C. Circuit stated in NRDC v. Morton:

There is reason for concluding that NEPA was not meant to require detailed discussion of the environmental effects of "alternatives" put forward in comments when these effects cannot be readily ascertained and the alternatives are deemed only remote and speculative possibilities, in view of basic changes required in statutes and policies of other agencies -- making them available, if at all, only after protracted debate and litigation not meaningfully compatible with the time-frame of the needs to which the underlying proposal is addressed. 458 F.2d at 837-38.

^{2/} Philadelphia Electric Company (Peach Bottom, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974).

^{3/} Philadelphia Electric Company (Peach Bottom, Units 2 and 3), CLI-73-10, 6 AEC 173, 174 (1973).



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

9/14/79

In the Matter of

FLORIDA POWER AND LIGHT COMPANY

(Turkey Point Nuclear Generating
Unit Nos. 3 and 4)

Docket Nos. 50-250

50-251

(Proposed Amendments to Facility
Operating Licenses to Permit
Steam Generator Repair)

NRC STAFF STATEMENT OF POSITION ON
CONTENTIONS AND MOTION TO STRIKE

By letter, dated August 31, 1979, the Licensee forwarded a revised statement of the Intervenor's proposed contentions identified at a meeting held between counsel for the NRC Staff, Licensee and Intervenor on August 30. As reflected in the letter, the parties agreed to file statements of position on the contentions by September 14. The Staff position thereon follows. Additionally, the Staff hereby moves pursuant to 10 CFR §2.730 to strike certain referenced citations in previously admitted contentions on the grounds that they are irrelevant to the subject matter of the contentions or otherwise beyond the jurisdiction of the Board to consider.

DISCUSSION

As a general precept, contentions must fall within the scope of the action described in the Federal Register Notice of Proposed Issuance of Amendments to Facility Operating Licenses (Notice) (42 F.R. 62569)^{1/} and be set forth with

1/ According to the Notice, the proposed amendments would:

authorize the licensee to repair the steam generators now in use in each facility, replacing major portions of such steam generators with new components, and to return the units to operation using the steam generators, so repaired. The work on each unit would be carried out while the other unit is in operation.

Martin H. Hodder, Esq.
1131 N.E. 86th Street
Miami, Florida 33138

Bruce S. Rogow, Esq.
Nova Law School
3301 College Avenue
Ft. Lauderdale, Florida 33314

Steve Goldberg
Steven C. Goldberg
Counsel for NRC Staff

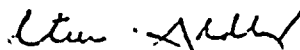
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

(Proposed Amendments to Facility
Operating Licenses to Permit
Steam Generator Repair)

Norman A. Coll, Esq.
Steel, Hector & Davis
Southeast First National
Bank Building
Miami, Florida 33131

- 6-6 What specific requirements of 10 CFR Part 50 alluded to in Contention 6?
- 6-7 What specific requirements of 10 CFR Part 51 alluded to in Contention 6?
- 6-8 What specific requirements of NEPA are alluded to in Contention 6?
- 6-9 What specific requirements of FWPCA are alluded to in Contention 6?
- 6-10 What specific "laws protecting Biscayne Bay [etc.]" are alluded to in Contention 6?
- 6-11 What is the basis for the supposition that the proposed action will lead to the creation of a "long-term nuclear waste storage facility" as that phrase is used in Contention 6?
- 6-12 What "particular attention" does Intervenor assert in Contention 6 should be drawn to the "proposed floorless steam generator disposal building".
- 6-13 Does Intervenor contend that the postulated "waste storage facility" and/or "steam generator disposal facility" will not comply with the several provisions specified in response to interrogatories 6-7 through 6-10. If so, please articulate the bases for such contention.

Respectfully submitted,



Steven C. Goldberg
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 14th day of September, 1979.

Contention 6

6-1 a. State whether you intend to call any person or persons as witnesses in this proceeding in support of Contention 6.

b. Provide the names, addresses, educational background, and professional qualifications of any persons named above.

6-2 Provide summaries of the views, positions, or proposed testimony on Contention 6 of all persons named in response to Interrogatory No. 6-1 that you intend to present during this proceeding.

6-3 Identify by author, title, date of publication and publisher, all books, documents, and papers that you intend to employ or rely upon in presenting your direct case on Contention 6 and provide copies of, or make available for Staff inspection and copying, these items.

6-4 Identify by author, title, date of publication and publisher, all books, documents or papers that you intend to employ or rely upon in conducting your cross-examination of prospective NRC Staff witnesses testifying in connection with Contention 6.

6-5 If the representations made in Contention 6 are based in whole or in part on any documents prepared by the Applicant or NRC Staff which you contend are deficient, specify which documents, and the particular portions thereof, you regard as deficient and explain why they are deficient.

5-6 What specific requirements of 10 CFR Part 20 are alluded to in Contention 5?

5-7 What specific requirements of 10 CFR Part 51 are alluded to in Contention 5?

5-8 What specific requirements of NEPA are alluded to in Contention 5?

5-9 What is the basis for the supposition in Contention 5, that transient workers with unknown radiation histories will be utilized in the proposed action?

5-10 Does Intervenor contend that the postulated utilization of transient workers will not comply with the several provisions specified in response to interrogatories 5-6 through 5-8? If so, please articulate the bases for such contention.

Contention 5

- 5-1 a. State whether you intend to call any person or persons as witnesses in this proceeding in support of Contention 5.
- b. Provide the names, addresses, educational background, and professional qualifications of any persons named above.
- 5-2 Provide summaries of the views, positions, or proposed testimony on Contention 5 of all persons named in response to Interrogatory No. 5-1 that you intend to present during this proceeding.
- 5-3 Identify by author, title, date of publication and publisher, all books, documents, and papers that you intend to employ or rely upon in presenting your direct case on Contention 5 and provide copies of, or make available for Staff inspection and copying, these items.
- 5-4 Identify by author, title, date of publication and publisher, all books, documents or papers that you intend to employ or rely upon in conducting your cross-examination of prospective NRC Staff witnesses testifying in connection with Contention 5.
- 5-5 If the representations made in Contention 5 are based in whole or in part on any documents prepared by the Applicant or NRC Staff which you contend are deficient, specify which documents, and the particular portions thereof, you regard as deficient and explain why they are deficient.

- 4-6 What specific requirements of 10 CFR Part 20 are alluded to in Contention 4?
- 4-7 What specific requirements of 10 CFR Part 50 are alluded to in Contention 4?
- 4-8 What specific requirements of 10 CFR Part 51 are alluded to in Contention 4?
- 4-9 What specific requirements of NEPA are alluded to in Contention 4?
- 4-10 What specific requirements of FWPCA are alluded to in Contention 4?
- 4-11 Specify what "discharge of untreated laundry waste water" is alluded to in Contention 4 and the perceived source thereof?
- 4-12 Does Intervenor contend that the "discharge of untreated laundry waste water", as explained in response to interrogatory 4-11, will not comply with the several provisions specified in response to interrogatories 4-7 through 4-10 above? If so, please articulate the bases for such contention.

Contention 4

4-1 a. State whether you intend to call any person or persons as witnesses in this proceeding in support of Contention 4.

b. Provide the names, addresses, educational background, and professional qualifications of any persons named above.

4-2 Provide summaries of the views, positions, or proposed testimony on Contention 4 of all persons named in response in Interrogatory No. 4-1 that you intend to present during this proceeding.

4-3 Identify by author, title, date of publication and publisher, all books, documents, and papers that you intend to employ or rely upon in presenting your direct case on Contention 4 and provide copies of, or make available for Staff inspection and copying, these items.

4-4 Identify by author, title, date of publication and publisher, all books, documents or papers that you intend to employ or rely upon in conducting your cross-examination of prospective NRC Staff witnesses testifying in connection with Contention 4.

4-5 If the representations made in Contention 4 are based in whole or in part on any documents prepared by the Applicant or NRC Staff which you contend are deficient, specify which documents, and the particular portions thereof, you regard as deficient and explain why they are deficient.

3-6 What specific requirements of 10 CFR Part 20 are alluded to in Contention 3?

3-7 What specific requirements of 10 CFR Part 50 are alluded to in Contention 3?

3-8 What specific requirements of 10 CFR Part 51 are alluded to in Contention 3?

3-9 What specific requirements of 10 CFR Part 100 are alluded to in Contention 3?

3-10 What specific requirements of NEPA are alluded to in Contention 3?

3-11 What specific requirements of FWPCA are alluded to in Contention 3?

3-12 Specify what "handling, processing, storing or discharging of primary coolant" is alluded to in Contention 3.

3-13 Does Intervenor contend that the "handling, processing, storing or discharging of primary coolant", as explained in response to interrogatory 3-12, will not conform to the several provisions specified in response to interrogatories 3-7 through 3-11 above? If so, please articulate the bases for such contention.

Contention 3

- 3-1 a. State whether you intend to call any person or persons as witnesses in this proceeding in support of Contention 3.
- b. Provide the names, addresses, educational background, and professional qualifications of any persons named above.
- 3-2 Provide summaries of the views, positions, or proposed testimony on Contention 3 of all persons named in response to Interrogatory No. 3-1 that you intend to present during this proceeding.
- 3-3 Identify by author, title, date of publication and publisher, all books, documents, and papers that you intend to employ or rely upon in presenting your direct case on Contention 3 and provide copies of, or make available for Staff inspection and copying, these items.
- 3-4 Identify by author, title, date of publication and publisher, all books, documents or papers that you intend to employ or rely upon in conducting your cross-examination of prospective NRC Staff witnesses testifying in connection with Contention 3.
- 3-5 If the representations made in Contention 3 are based in whole or in part on any documents prepared by the Applicant or NRC Staff which you contend are deficient, specify which documents, and the particular portions thereof, you regard as deficient and explain why they are deficient.

- 2-6 What specific provisions of 10 CFR Part 20 are alluded to in Contention 2?
- 2-7 What specific provisions of NEPA are alluded to in Contention 2?
- 2-8 What specific provisions of the FWPCA are alluded to in Contention 2?
- 2-9 Does Intervenor contend that the proposed "repairs" will not comply with the above-referenced provisions? If so, please articulate the precise activities complained of and the bases for such contention.

Contention 2

- 2-1 a. State whether you intend to call any person or persons as witnesses in this proceeding in support of Contention 2.
- b. Provide the names, addresses, educational background, and professional qualifications of any persons named above.
- 2-2 Provide summaries of the views, positions, or proposed testimony on Contention 2 of all persons named in response to Interrogatory No. 2-1 that you intend to present during this proceeding.
- 2-3 Identify by author, title, date of publication and publisher, all books, documents, and papers that you intend to employ or rely upon in presenting your direct case on Contention 2 and provide copies of, or make available for Staff inspection and copying, these items.
- 2-4 Identify by author, title, date of publication and publisher, all books, documents or papers that you intend to employ or rely upon in conducting your cross-examination of prospective NRC Staff witnesses testifying in connection with Contention 2.
- 2-5 If the representations made in Contention 2 are based in whole or in part on any documents prepared by the Applicant or NRC Staff which you contend are deficient, specify which documents, and the particular portions thereof, you regard as deficient and explain why they are deficient.

- 1-6 What specific requirements of NEPA does Intervenor suggest in contention 1 require preparation of an environmental impact statement (EIS) in the instant action?
- 1-7 What specific requirements of 10 CFR Part 50 does Intervenor suggest require preparation of an EIS?
- 1-8 What specific requirements of 10 CFR Part 51 does Intervenor suggest require preparation of an EIS?
- 1-9 What does the phrase "with particular reference to 10 CFR 50.90" mean as utilized in Contention 1?
- 1-10 Does Intervenor contend that an EIS must be prepared in this action. If so, please articulate the factual bases for such contention.
- 1-11 Explain the meaning of subpart (a) to Contention 1.

Contention 1

- 1-1
 - a. State whether you intend to call any person or persons as witnesses in this proceeding in support of Contention 1.
 - b. Provide the names, addresses, educational background, and professional qualifications of any persons named above.
- 1-2 Provide summaries of the views, positions, or proposed testimony on contention 1 of all persons named in response to Interrogatory No. 1-1 that you intend to present during this proceeding.
- 1-3 Identify by author, title, date of publication and publisher, all books, documents, and papers that you intend to employ or rely upon in presenting your direct case on Contention 1 and provide copies of, or make available for Staff inspection and copying, these items.
- 1-4 Identify by author, title, date of publication and publisher, all books, documents or papers that you intend to employ or rely upon in conducting your cross-examination of prospective NRC Staff witnesses testifying in connection with Contention 1.
- 1-5 If the representations made in Contention 1 are based in whole or in part on any documents prepared by the Applicant or NRC Staff which you contend are deficient, specify which documents, and the particular portions thereof, you regard as deficient and explain why they are deficient.



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

9/14/79

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of
FLORIDA POWER AND LIGHT COMPANY
(Turkey Point Nuclear Generating
Unit Nos. 3 and 4)

Docket Nos. 50-250
50-251
(Proposed Amendments to Facility
Operating Licenses to Permit
Steam Generator Repair)

NRC STAFF INTERROGATORIES TO, AND REQUEST
FOR THE PRODUCTION OF DOCUMENTS FROM,
INTERVENOR MARK P. ONCAVAGE

The Nuclear Regulatory Commission (NRC) Staff hereby requests that Intervenor Mark P. Oncavage (Intervenor), pursuant to 10 CFR §2.740(b), answer separately and fully, in writing under oath or affirmation, the following interrogatories within 14 days after service hereof.

For each response to the interrogatories listed below, identify the person or persons who prepared, or substantially contributed to the preparation of, the response.

The interrogatories attached are to be considered the Intervenor's continuing obligation. Accordingly, if, after he has answered these interrogatories, additional information comes to his attention with respect to one or more of the answers, the answers should be amended in a timely manner to provide such additional information.

The NRC Staff further requests that the Intervenor, pursuant to 10 CFR §2.741, provide copies of, or make available for Staff inspection and copying, the documents designated by him in response to certain of the accompanying interrogatories within 30 days after service thereof.

Norman A. Coll, Esq.
STEEL, HECTOR & DAVIS
1400 Southeast First National Bank Building
Miami, Florida 33131

Harold F. Reis, Esq.
Lowenstein, Newman, Reis, Axelrad & Toll
1025 Connecticut Avenue, N.W.
Washington D.C. 20036

Richard A. Marshall, Jr.
RICHARD A. MARSHALL, JR.
18450 S.W. 212th Street
Miami, Florida 33187
(305) 233-8104

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of

Docket Nos. 50-250
50-251

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Nuclear Generating
Units Nos. 3 and 4)

(Proposed Amendments to
Facility Operating License
to Permit Steam Generator
Repair)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the attached Intervenor's
Statement of Admissibility of Proposed Contentions were served
on the following by deposit in the United States mail, first
class, properly stamped and addressed on September 15, 1979.

Elizabeth S. Bowers, Esq.
Chairperson
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

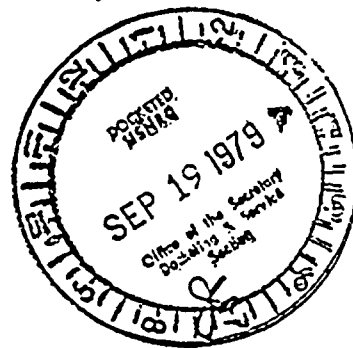
Dr. Oscar H. Paris
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Dr. Emmeth A. Luebke
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Steven C. Goldberg, Esq.
U.S. Nuclear Regulatory Commission
Office of the Executive Legal Director
Washington D.C. 20555



FWPCA also applies with regard to any potential discharge of high level radioactive effluent into navigable waters. 33 USC Sec. 1311(f). The Board in weighing the viability of Licensee's proposed repairs must consider pursuant to this provision whether or not there is inherent in the proposed plan a substantial risk for the release of highly radioactive effluent.

FWPCA standards are further involved by reference to the NEPA cost benefit analysis which must be required before NRC decision on the proposed amendments. When considering the impact on public health and the environment of this complete repair project some reference to already promulgated standards such as FWPCA must be performed in order to accurately assess the potential harm that may accrue as a result of the repairs.

For these stated reasons and all that maybe forthcoming Intervenor respectfully requests the Board to accept for litigation his proposed contentions 7 through 14.

Respectfully submitted,
BRUCE S. ROGOW
JOEL V. LUMER
RICHARD A. MARSHALL, JR.
Counsel for Intervenor
3301 College Avenue
Fort Lauderdale, Florida 33314
(305) 587-6660

By Richard A. Marshall, Jr.
Richard A. Marshall, Jr.
18450 S.W. 212th Street
Miami, Florida 33187
305-233-8104

protective shields can produce a fire risk much higher than normal reactor operations. The consequences of a fire in the area of radioactive materials will compromise normal isolating devices such as HERA filters, protective shields and protective clothing. In addition radioactive material may volatilize under fire conditions allowing an uncontrolled release of radiation.

Another objection raised by the NRC Staff and Licensee as to various of Intervenor's Contentions, both accepted for litigation and proposed, questions the applicability of the Federal Water Pollution Control Act (FWPCA) to this proceeding. It is Intervenor's position that FWPCA applies in at least the following ways. 33 USC Sec. 1311(a) imposes the requirement on Licensee of amending their current NPDES permit in order to obtain authorization for changes in their effluent discharges which will occur as a result of new proposed systems such as the condensate polisher demineralizing system and from construction effluents. Both the NPDES permit and the state certification required by 33 USC Sec. 1341 (1978) are requisites for issuance of amendments to Licensee's operating license by the NRC. Section 1341 is unambiguous: there shall be no federal approval of any private activity which results in the release of any water pollutants unless the appropriate state has been duly notified and given an opportunity to hold hearings or conduct other proceedings incident to the issuance or denial of certification. The NRC under this provision of FWPCA is legally powerless to grant the license amendments until the certification is in hand.

effluent release, but day to day concentrations of activity can only be measured on a day to day, sample by sample basis. The SGRR sampling procedure does not conform with the laundry waste water procedure outlined in the FSAR. All liquid wastes will be held up in tanks, analyzed then disposed properly. FSAR p. 11, 1-9.

Dosimetry on workers remains suspect. Badges only record doses that strike the badge. Varying radiation fields may produce exposures far higher than recorded when a worker is confined to a cramped space in high radiation fields such as the interior of a steam generator.

A NEPA mandated decision should be based on the most accurate of information. If monitoring procedures are insufficient the NEPA decision may not sufficiently calculate the dangers to the public health and the impact on the environment.

The reports of accidents at the Three Mile Island plant and Rocky Flats show that monitoring procedures during accidental releases were grossly inadequate.

Contention 14. The Licensee is violating NRC Fire Protection Guidelines specified in "Manpower Requirements For Operating Reactors", June 5, 1978. The NRC Staff recommends a fire brigade of 5 men. The Licensee insists on 3 men. The 1 1/2 inch hose is a two man operation in a windowless room. An occurrence of simultaneous fires could not be handled by a 3 man crew. Against the recommendations of the NRC, the Licensee will not install a firewater standpipe system in containment.

The consequences of a fire are grave. Workers will be in a containment building with only one exit. Cutting and welding operations in conjunction with solvents, scaffolding, and

associated with any reduction in Man-Rem exposure. One overriding consideration is the duration of the Unit outage. Since each day of Unit unavailability is worth about \$300,000, any Man-Rem reduction measures must result in savings of at least 300 Man-Rem per day of increased downtime."

Thus the overriding principle appears to be that any Man-Rem exposure is acceptable if the economic considerations are reasonably high.

Contention 13. Public health is dependent on the accuracy of the monitoring of radioactive releases from Turkey Point. If the monitoring is insufficient NRC effluent standards may be exceeded and the public health may be endangered and may degenerate. Accurate monitoring is central to all NRC effluent standards which in turn impact on the state of the state of the human environment and the accuracy of NEPA related decisions.

Monitoring procedures that are performed infrequently are immediately suspect. The proposed swipe tests on steam generator seals at quarterly intervals demonstrate a callous disregard for the ALARA principle. The storage of radioactive wastes demands the isolation of these wastes from the environment. Having information on the movement of radioactivity only four times a year greatly compromises accurate monitoring on the integrity of the sealwelds. Continual monitoring under some conditions may even prove to be inadequate, but if such a procedure is the safest alternative it must be pursued.

The monitoring procedure for laundry waste water in the SGRR presents the possibility for greatly underestimating the radiation released to the cooling canals. Reliance on a table of estimated releases may have a measure of accuracy for total

(d) The Licensee has failed to state the final disposition of the defective steam generators. Merely delaying the decision process until the decommissioning of the reactor does not absolve Licensee from assessing the costs of using an irretrievable resource. Until an environmental impact statement is written, questions about future land use cannot be answered. Reasonable questions are (1) when, if ever, will this land be safe for purposes other than storing wastes? (2) What are the costs associated with restoring the land to a higher use? (3) Will the presence of this land, if contaminated pose a hazard to the human environment?

(e) The licensee has attempted to obscure the true scope of the repair project. The SER p.3-1 states:

"Along with the absence of phosphates, planned condenser retubing and the installation and use of condensate polishers will essentially eliminate sludge."

Under NEPA, the Board is charged with the duty of reviewing the entire repair project.

(f) The economic estimate used in the EIA was originally published in the SGRR Rev. 2 December 1977. These estimates have not been revised to account for inflation occurring since 1977. If the target date for repairs is the Fall of 1980 accurate estimates must be provided to arrive at a valid cost benefit analysis.

Contention 12. The Licensee in the SGRR has not made a strong commitment to the ALARA principle. The Licensee in the SGRR p. 7-6 states:

"FP&L subscribes to the precept of maintaining exposures ALARA. This principle must take into account the state of technology and the economics

of the commencement of commercial operation. It should also be noted that the economic cost of steam generator repairs will be passed on to the rate payers as pure inflation, since no additional generating capacity will be built. If the redesigned lower assemblies fail to prevent reoccurrence of tube degradation the economic burden on the rate payers considerably worsens.

(b) In the letter of June 8, 1979 to the Office of Nuclear Reactor Regulation, FP&L states "fossil fuel used to generate replacement electricity while Turkey Point is Off-Line will cost \$300,000-\$400,000 a day." This statement indicates that the flat \$300,000 per day costs is an insufficient projection. Another problem arising from this statement is that replacement power may encompass many costs other than fossil fuel costs. In effect the most recent estimate on fuel costs may not be a total estimate of replacement power costs. The situation is further worsened if repairs substantially exceed the 207 day outage period.

(c) When assessing costs to the Man-Rem area is should be noted that the research of Dr. Karl Z. Morgan, Health Physicist indicates that the statistical occurrence of cancer may be significantly higher than the FP&L estimate of 0.2 cancers for the 2600 Man-Rem project. In view of the NEPA mandate to consider the degradation of the human environment the consideration of Dr. Morgans analysis is within the jurisdiction of the Board. 40 CFR 1500.4. 10 CFR 50 Appendix I offers interim dollar amounts until better figures can be developed. In view of an increased cancer risk assessment and the skyrocketing costs of health care, under NEPA the Board may consider more realistic costs of a Man-Rem other than \$1,000.

Contention 11. The Licensee has not provided a cost benefit analysis for steam generator repairs. One major factor is assessing costs that has been obfuscated is the time period estimated for accomplishing the proposed repairs. The steam generator repair report (SGRR) p. 2-5 projects an outage time of 207 days. The SER, p. 1-1 states an outage time from 6 to 9 months (183 to 274 days) and later, p.2-13, mentions a projection of a 300 day outage. While the Licensee and the NRC Staff allows a wide latitude in outage time for repairs, all stated replacement electricity costs are based on 207 days which is a very low end estimate. Were the actual outage time to exceed 207 days many other projections become less credible; (1) the costs of replacement electricity, (2) the costs of maintaining a work force, (3) the costs of maintaining construction equipment, (4) the costs related to longer periods of worker exposure, (5) environmental costs of construction effluent (dust, liquid wastes, laundry wastes), and (6) environmental costs of replacement electricity, e.g. thermal pollution from the possible reopening of the Cutler, Riviera and Palatka fossil fuel plants.

(a) All benefits of steam generator repairs can be negated if tube corrosion or other processes requiring tube plugging reoccur. Worker exposure rates will be again elevated and the one time large estimated dose of 2600 Man-Rem (3300 to 5800 Man-Rem according to NUREG-0199) will never show a positive balance. Unit no. 4 was put into commercial operation September 1973. The letter of September 20, 1977 from FP&L to the NRC states that inspections and plugging operations were initiated two years prior to the letter. Thus Unit 4's tubes were degraded within 2 years

(3) Defective tubes will be cut and packaged for shipment to a licensed land disposal site. This removes the potential hazards associated with storing defective steam generators in an earthen floor building onsite.

(d) Derating appears as an acceptable course of action when taken in conjunction with alternate methods.

The EIA, June 29, 1979 states that the Westinghouse re-tubing may take 2 years to win approval. Since the present projection of the commencement of repairs is the fall of 1980, there may be a delay of one year incurred if retubing is chosen as the best method. During that year (Fall 1980 to Fall 1981) only Unit no. 4 would be derated at a cost of \$4,380,000 while Unit no. 3 would run full power. In the fall of 1981, the Licensee could elect to repair Unit 4 or Units 4 and 3 in sequence. If Unit 3 is kept running through 1981 to 1982 it would then be in its first year of derated operation and the cost would be \$4,380,000 plus inflation.

(e-j) These may be discussed as one option. The derating formula allows broad flexibility in phasing in Bioconversion, conservation and solar techniques while phasing out the defective operation of Units 3 and 4. Power interruptions and economic dislocation need not occur as conservation and renewable sources slowly expand.

Decommissioning would become necessary if the safest and most economical option is fossil fuel generation of electricity. Economic savings would occur if components used for Units 3 and 4 were converted to fossil fuel generation. The use of cooling canals, barge facilities, existing grid, transformers, turbines and possibly reuse of the reactor buildings can represent areas of great economic savings.

Contention 10.

(a) The SGRR, December 1977, p.2-2 indicates there is no present process to arrest tube and plate corrosion. The EIA issued June 29, 1979 fails to consider this possibility. Such consideration becomes important in two ways: Arresting corrosion before 25% of the tubes become plugged would obviate the necessity of costly steam generator repairs, and if, after repairs are completed, corrosion continues to occur there may still be no mechanism for preventing the degradation of tubes. Thus a new round of costly and dangerous steam generator repairs may have to be undertaken. The NRR has voiced serious doubts about the ability of the re-designed steam generators to withstand corrosive attack. The SER p. 3-1 states:

"The Quatrefoil Plate design has led to some tube degradation in the form of a type of erosion cavitation mechanism in once-through steam generators."

At page 3-2 the SER also states:

"In the event that denting reactions be initiated we would have some concern over the propensity of this material for stress corrosion cracking in a chloride environment."

(b) The alternative of sleeving degraded tubes should be considered based on the experience of the sleeving project at the Palisades Nuclear Power Station in Michigan.

(c) The Westinghouse Report, WCAP 9398, "Steam Generator Retubing and Refurbishment", describes a process vastly superior to the method proposed in the SGRR.

(1) Worker exposure is estimated at 450-600 Man-Rem per unit. This represents a saving of 1400 Man-Rem for 2 units over the Licensee's estimation of 2600 Man-Rem.

(2) Work can be accomplished in a quarter (91 days) as stated on p.5-18 which represents a saving of 232 days outage time for the station.

Contention No. 9.

The licensee and the NRC Staff have failed to determine the total amount of radiation released offsite, during steam generator repairs. Sources of radiation must include the operating reactor, reactor buildings, steam generators in transit, gaseous emissions, construction dust, air particulates, cooling canal water, decontamination liquids, liquid construction effluent, laundry wastes, primary coolant, processed primary coolant, stored primary coolant, fuel movement, resins, filters, runoff, secondary coolant, spent fuel pits, storage tanks, ducts, radwaste building, concrete, tools, clothing, scaffolding, protective shields, work envelopes, clean rooms, and postulated accidents. Calculations are to be performed in conformance with Regulatory Guide 1.109.

Special consideration must be given to the characteristics of the porous limestone rock underlying Turkey Point and the close proximity of Discayne Bay. 10 CFR 100.10, (c) states:

"(2) Meteorological conditions at the site and in the surrounding area should be considered."

"(3) Geological and hydrological characteristics of the proposed site may have a bearing on the consequences of an escape of radioactive material from the facility. Special precautions should be planned if a reactor is to be located at a site where a significant quantity of radioactive material effluent might accidentally flow into nearby streams or rivers or might find ready access to underground water tables."

This statement may satisfy the licensee and the NRC Staff, but it leaves too many questions unanswered to be reassuring. The board should be dissatisfied with such an evasion of a safety problem of such magnitude.

The NLEA charges the decision making Federal Agency, the overriding duty of protecting the human environment. One of the facets of the steam generator repair decision is a determination of when repairs become necessary. Until the NRC Staff clearly demonstrates why 25% tubes plugged may be a safety problem and not a threshold of 24.9% or 23%, this threshold stands as arbitrary and capricious. If no proof exists, the safety of the South Florida Community may now be in jeopardy.

The explanation of "not enough heat transfer area" fails to explain what parameters become unconservative..

1. Will decreased transfer area induce transients?
2. Will transients be more likely to lead to IOCAs?
3. Will decreased transfer area induce IOCAs?
4. Will decreased transfer area reduce the safety margin for reacting to a IOCA?
5. Will defective tubes in conjunction with 25% tubes plugged, rupture when primary coolant is lost, thereby stalling the ECCS?
6. Will the workers and the public face the possibility of high radiation exposure due to defective steam generators?

The NRC Staff by concealing important safety parameters is violating 10 CFR 30, Appendix K, 1, sec. a.

Contention No. 3.

Concerns of public safety during operation of a reactor, with a large percentage of primary coolant tubes plugged, comes within the jurisdiction of the Board that is hearing litigation on steam generator repairs.

Apparently, the overriding reason for repairing the steam generators at Turkey Point is to obviate the derating scheme outlined by the NRC Staff in the Environmental Impact Appraisal.

There appears to be a momentous safety problem involved, since the Office of Nuclear Reactor Regulation will take the drastic step of beginning a phaseout of the Turkey Point Facility if the corrosion continues. The consequences of a reactor accident that occurs during normal operation and is aggravated by defective steam generators slated for repairs, may be of the highest magnitude of disasters. The NRC, whose primary purpose is to guard the health and safety of the public, must consider the safety problems involved with all aspects of steam generator repairs. The residents of South Florida deserve assurance of safe operation or strong protective measures, if their safety has been compromised. In either case, a reasonable explanation of the dangers, of operating a reactor with defective steam generators should be made public.

The NRC Staff has cryptically stated in the EIA that at 25% tubes plugged, there may not be enough heat transfer area to operate safely.

"During a national power emergency, regional emergency, reactor emergency, or at any time when the health, safety, or welfare of the public may be endangered by the inability of Florida Power and Light to supply electricity from any other sources available to it, the operating limits provided in this final judgement shall be inapplicable."

Barnes Sound, Little Card Sound, Card Sound, South Biscayne Bay, and Biscayne Bay are all interconnected inshore lagoons.

Pursuant to the salinity and dissolved solids specifications in the Final Judgement, the Licensee will be allowed higher discharge rates than the 1200 cfs limit. If the condensate polisher effluent steadily concentrates the salinity, the discharge rate will increasingly exceed the 1200 cfs limit.

The Board should concern themselves with this new effluent source. A new "National Pollutant Discharge Elimination System" permit must be sought by the Licensee to include this new source of pollution.

10 CFR 50, Interim policy statement on implementation of section 511 of the FWPCA Amendments of 1972, Section 5 states:

"If it is determined that the facility or activity, or any part thereof, will not comply with the limitations or other requirements, then the facility or activity or particular part in question, shall not be approved in the AEC License or Permit."

NaCl 800 ppm
CO ppm avg - 100 ppm max of TSS

- 3) In addition to items 1 & 2, the following chemicals may be evident:

10 ppm HCO_3^-
75 ppm SO_4^-
1 ppm NO_3^-
2 ppm Br-
1 ppm F-
10 ppm Ca-
40 ppm Mg-
15 ppm K-

This effluent will concentrate in the cooling canal environment until released to Piscayne Bay or Card Sound. The release to these Federal Waterways may be accomplished by tidal flushing, storm surge which may breach the dike system, and direct discharge to Card Sound via the Card Sound Canal.

The Final Judgment of Civil Action 70-828-CA, prohibiting the discharge of cooling water into Piscayne Bay contains several exceptions:

- "1. Discharges to and withdrawals from Card Sound shall be made only through the Card Sound Canal.;"
- "6. The flow measured at the control structure shall not exceed 1200 cfs." (cubic feet per second)
- "7. Discharges and withdrawals shall be limited to a tidal regimen (which approximates a six hour period), except in the event that salinity in the cooling system approaches 1.20 times the salinity of the water of Card Sound, or 44 parts per thousand, whichever is more limiting and an additional time period is required to avoid exceeding those limits;"

The NRC Staff violated 10 CFR 51.8, a, 1C by not including the costs of the acknowledged condenser polishers in a cost/benefit analysis of an Environmental Impact Statement. Furthermore, the NRC Staff has violated 10 CFR 50.55, e, (i), (iii), and (iv) by not evaluating the adequacy of the structure system or component to perform its intended safety function.

The Licensee and the NRC Staff have concealed environmental impact information by the failure to disclose the chemical composition of the condensate polisher effluent, the frequency of discharges, volume per discharge, environmental impact on affected biota, pathways which will allow effluent to enter Federal waterways, and other processes which will allow the effluent to impact the human food chain.

A portion of this information was made available in the "Surry Steam Generator Repair Project", p. 5.5-8:

"(Total of 250-400 regenerations for the station per year.) Total waste volume is approximately 25,600 gallons per regeneration.

- 1) During normal polisher operation
(H-OH operation, to the ammonia break),
the waste volume consists of:

pH = 8.0 to 9.0
 $(\text{NH}_4)_2\text{SO}_4 = 1800 \text{ ppm}$
 $\text{Na}_2\text{SO}_4 = 2540 \text{ ppm}$
30 ppm average 100 ppm max of
Total Suspended Solids (TSS)

- 2) During condenser in-leakage operation,
the waste volume consists of:

pH = 8.0 - 9.0
 $(\text{NH}_4)_2\text{SO}_4 = 900 \text{ ppm}$
 $\text{Na}_2\text{SO}_4 = 2530 \text{ ppm}$

-2A-

Equipment includes the radioactive waste disposal system, fuel handling system, main transformers, main condensers, and all auxiliaries, structures, and other on site facilities required to provide complete and operable nuclear power units."

The economic and environmental costs of this one component must be fully considered when the costs of repairs are calculated.

of concern Intervenor desires to raise in this proceeding.

Regulation 10 CFR 2.714(b) does not envision that prior to Board acceptance of litigable issues Intervenor must provide the ultimate factual predicate to these proposed contentions. However for purposes of assisting the Board in determining the acceptability for litigation of the remaining contentions Intervenor provides here a discussion of his factual analysis of the concerns framed by the contentions. The discussion is in no way meant to be all inclusive nor does Intervenor intend to be in any way limited in his factual proofs in this proceeding to matters discussed. As to the Contentions numbers 7 through 14:

Contention 7. The Licensee and the NRC Staff have failed to state the costs associated with the addition of a "Condensate Polishing System". The only reference to this system is found in the "Safety Evaluation Report", May 14, 1979, p. 3-1, "...the installation and use of condensate polishers will essentially eliminate sludge." The Licensee has denied that the addition of this new system is in any way related to steam generator repairs. In the "Response of Florida Power and Light to Board Order of May 19, 1979", p. 4, the Licensee states: "...installation of non-nuclear components not the subject of the proposed license amendments Within the scope of NEPA, 42 USC sec. 4332(C), the Board has jurisdiction to approve all facets of the repair project.

The isolation of this one component is not compatible with statements in the Licensee's Final Safety and Analysis Report, p.1-1:

"The nuclear power units incorporate a closed cycle pressurized water nuclear steam supply system and a turbine-generator system utilizing dry saturated steam

9/15/79

DOCKETED
HARRIS
SEP 19 1979
Office of the Secretary,
Regulating & Service
Section

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	Docket Nos. 50-250
FLORIDA POWER & LIGHT COMPANY	)	50-251
(Turkey Point Nuclear Generating	)	(Proposed Amendments to Facility
Units Nos. 3 and 4)	)	Operating License to Permit
	)	Steam Generator Repair)


INTERVENOR'S STATEMENT OF ADMISSIBILITY
OF PROPOSED CONTENTIONS

On August 30, 1979 pursuant to the Atomic Safety and Licensing Board's August 3, 1979 Order, the parties in this action met for discussion on proposed contentions, possible stipulations and to devise a discovery schedule. One outcome of the meeting was that a revised list of 14 contentions was adopted by Intervenor as the issues he chooses to litigate in this proceeding. Of the list of 14 the first 6 contentions are those ruled by the Board as acceptable for litigation in its Order of August 3, 1979, and as such they are not included herein as subject for this statement of admissibility. There was no complete agreement reached thus far between the parties as to either the admissibility or form of the remaining proposed contentions 7 through 14.

Intervenor's position is that Contentions 7 through 14 should be accepted by the Board for litigation. He submits that these contentions clarify the scope of the repair project and resolve potential health hazards to the public and the repair work force. They are sufficiently specific as stated to give Licensee and the NRC Staff adequate notice of the particular areas

Martin H. Hodder, Esq.
1131 N.E. 86th Street
Miami, Florida 33138

Bruce S. Rogow, Esq.
Nova Law School
3301 College Avenue
Ft. Lauderdale, Florida 33314



Steven C. Goldberg
Counsel for NRC Staff

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	Docket Nos. 50-250
FLORIDA POWER AND LIGHT COMPANY	)	50-251
(Turkey Point Nuclear Generating	)	(Proposed Amendments to Facility
Unit Nos. 3 and 4)	)	Operating Licenses to Permit
	)	Steam Generator Repair)

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO LICENSEE MOTION TO ADOPT PRE-HEARING SCHEDULE AND TO SCHEDULE FINAL HEARING" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 17th day of September, 1979:

*Elizabeth S. Bowers, Esq., Chairman
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Emmeth A. Luebke
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Dr. Oscar H. Paris
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Mark P. Oncavage
12200 S. W. 110th Avenue
Miami, Florida 33176

Harold F. Reis, Esq.
Lowenstein, Newman, Reis,
Axelrad & Toll
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

*Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Atomic Safety and Licensing
Appeal Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Norman A. Coll, Esq.
Steel, Hector & Davis
Southeast First National
Bank Building
Miami, Florida 33131

9/17/79

A circular stamp from the U.S. Coast Guard. The outer ring contains numbers 1 through 24. The center text reads: "DOCKED", "45889", "SEP 19 1979" (with a triangle pointing right), and "Office of the Commandant, District of Columbia".

(Proposed Amendments to Facility
Operating Licenses to Permit
Steam Generator Repair)

Dated at Bethesda, Maryland
this 17th day of September, 1979.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

FLORIDA POWER AND LIGHT COMPANY)

(Turkey Point, Units 3 and 4))
)
)

Docket No.(s) 50-250SP
50-251SP

SERVICE LIST

Elizabeth S. Bowers, Esq., Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Emmeth A. Luebke
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Oscar H. Paris
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Counsel for NRC Staff
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Florida Power and Light Company
ATTN: Dr. Robert E. Uhrig
Vice President
P.O. Box 529100
Miami, Florida 33152

Michael A. Bauser, Esq.
Lowenstein, Newman, Reis,
Axelrad and Toll
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

Mr. Mark P. Oncavage
12200 S.W. 110th Avenue
Miami, Florida 33176

Norman A. Coll, Esq.
Steel Hector & Davis
1400 S.E. First National Bank Building
Miami, Florida 33131

Bruce S. Rogow, Esq.
Nova University Center for the
Study of Law
3301 College Avenue
Fort Lauderdale, Florida 33314

Joel V. Lumer, Esq.
245 Catalonia Avenue
Coral Gables, Florida 33134

Richard A. Marshall, Jr., Esq.
18450 S.W. 212th Street
Miami, Florida 33187

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
FLORIDA POWER AND LIGHT COMPANY)
)
(Turkey Point, Units 3 and 4))
)
)
)
)
)

Docket No.(s) 50-250SP
50-251SP

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document(s) upon each person designated on the official service list compiled by the Office of the Secretary of the Commission in this proceeding in accordance with the requirements of Section 2.712 of 10 CFR Part 2 - Rules of Practice, of the Nuclear Regulatory Commission's Rules and Regulations.

Dated at Washington, D.C. this

25th day of SEPT 1979.

Pratt T. Downing
Office of the Secretary of the Commission

B. Discovery and Hearing Schedule

The Board has considered the proposed schedule, its support by the Intervenor and objections in part by the Staff. Considering the scope of this proceeding we believe the following schedule is realistic (also taking into account the various holidays):

- | | |
|---------------------------|--|
| Monday, October 22, 1979 | - Final date for filing discovery requests on all contentions. |
| Friday, November 30, 1979 | - Final date for filing responses to discovery requests. |
| Friday, December 21, 1979 | - File Prepared Testimony. |
| Tuesday, January 8, 1980 | - Commence hearing. |

The Board urges the parties to fully cooperate during discovery and to make every effort to resolve possible differences. If any party determines a discovery request is inappropriate and is not able to resolve the matter, the party objecting should take immediate action and not wait for the final day for filing the responses.

IT IS SO ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Elizabeth S. Bowers
Elizabeth S. Bowers, Chairman

Dated at Bethesda, Maryland
this 25th day of September 1979.

Contention 11. -- The contention is reworded in part, accepted in part and rejected in part:

The SGRR is inadequate because:

- (a. Rejected -- No basis for this speculation).
- b. Accepted -- It has used the inaccurate figure of \$300,000 per day per unit for replacement power costs for reactor outage;
- (c. Rejected -- This is a challenge to the regulations).
- d. Accepted as follows:
it has failed to provide an analysis for an additional commitment of land resources for the storage of the defective steam generators.
- e. Accepted -- it has failed to consider the costs of addition of a full-flow condensate demineralizer and of condenser retubing.
- f. Accepted as follows:
it has failed to update costs from December 1977 due to inflation.

Contention 12. -- Rejected as a separate contention.

This falls within Contention 2.

Contention 13. -- Accepted as follows:

The proposed method of radiation monitoring during repair of the steam generators will not provide accurate information to comply with 10 CFR Parts 20 and 50.

Contention 14. -- Accepted as follows:

The measures proposed to be taken to protect against fire hazards associated with the steam generator repairs are inadequate to protect against radioactive releases in violation of 10 CFR Parts 20 and 50.

- b. the effluent release from a full-flow condensate polishing demineralizing system; or
- c. the environmental degradation caused by a full-flow condensate polishing demineralizing system.

Contention 8.-- This contention is outside the scope of this proceeding. The Federal Register notice (42 Fed.Reg. 62569) dated December 13, 1977, in pertinent part states:

Accordingly, notice is hereby given that the NRC has under consideration amendments to these licenses which would authorize the licensee to repair the steam generators now in use in each facility, replacing major portions of such steam generators with new components, and to return the units to operation using the steam generators, so repaired. The work on each unit would be carried out while the other unit is in operation.

The contention is rejected since the matter before the Board does not include a question of suspending operation prior to the repair of the steam generators. This question was the subject of a separate notice on August 9, 1978 (43 Fed. Reg. 3506).

Contention 9. -- The contention is accepted with the following rewording:

The cumulative offsite radiation releases as a result of all activity at Turkey Point, during the proposed repairs, do not comply with 10 CFR Parts 20 and 50.

Contention 10. -- This contention falls within Contention 1 and is rejected as a separate contention.



discharging of primary coolant or (b) the discharging of laundry waste water is likely to result in the release of radioactive material to unrestricted areas in quantities which will not be as low as is reasonably achievable within the meaning of 10 CFR Parts 20 and 50.

Contention 6 --

There are likely to occur radioactive releases from one or more stored assemblies to unrestricted areas which violate 10 CFR. Part 20 or are not as low as is reasonably achievable within the meaning of 10 CFR Part 50, as a result of:

- a. substantial immersion of the steam generators in sea water during a hurricane;
- b. movement of steam generators while so immersed;
- c. impact of such moving steam generators upon the walls of the structure in which they are stored or upon another object or objects;
- d. corrosion resulting from moisture, sea water, or salt spray; or
- e. leakage through the floor beneath the stored steam generators.

The Board's determination relative to the remaining contentions is as follows:

Contention 7. -- FPL apparently overlooked the following sentence in Section 3.1 of the SER: "Along with the absence of phosphates, planned condenser retubing and the installation and use of condensate polishes will essentially eliminate sludge."

The contention is admitted as revised:

In evaluating the steam generator repair, the following has not been considered:

- a. the cost of a full-flow condensate polishing demineralizing system;

by the Intervenor on August 30, 1979.

A. Contentions

We agree with the September 14, 1979 proposed revised language and regrouping by FPL for the reasons stated for those contentions admitted in the Board's order of August 3, 1979. We expect the parties to address all questions raised by Dr. Paris relative to these contentions. The revised contentions are as follows:

Contention 1 --

Section 102(2)(C) of the National Environmental Policy Act (42 U.S.C. § 4332(2)(C) or 10 CFR § 51.5 requires the preparation of an Environmental Impact Statement prior to the issuance by the Nuclear Regulatory Commission of amendments to the operating licenses for Turkey Point Units Nos. 3 and 4 (Facility Operating Licenses Nos. DPR-31 and DPR-41) authorizing the Licensee to repair the steam generators now in use in each facility.

Contention 2 -- (Contentions 2 and 5 combined and refined)

A. The programs and procedures proposed to be followed by the Licensee in making the steam generator repairs demonstrate that it will not make every reasonable effort to maintain occupational radiation exposures as low as is reasonably achievable (ALARA) within the meaning of 10 CFR Part 20 or that it will not comply with 10 CFR §20.101, in that the Licensee intends to use transient workers with unknown radiation exposure histories.

B. A sufficient work force, both skilled and unskilled, cannot be obtained to perform the repairs without violating the limits on individual exposures contained in 10 CFR § 20.101.

Contention 3 -- (Contentions 3 and 4 combined and refined)

During the course of the repairs proposed by the Licensee, (a) the handling, processing, storing or



9/23/79

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)
)
FLORIDA POWER & LIGHT COMPANY)
)
(Turkey Point Nuclear Generating)
Units 3 and 4)

Docket Nos. 50-250-SP
50-251-SP
(Proposed Amendments to
Facility Operating License
to Permit Steam Generator
Repairs)

ORDER RELATIVE TO CONTENTIONS AND DISCOVERY

On August 31, 1979, Florida Power & Light, on behalf of all parties, reported to the Board on the meeting between all parties held on August 30, 1979. Since the parties did not reach agreement, they committed themselves to submit their positions to the Board by September 14, 1979. Those filings were received. The Board also received a motion from FPL for adoption of a proposed discovery and hearing schedule which stated the position of the other parties. The Staff responded on September 17, 1979.

The Board's order of August 3, 1979, granted standing to Petitioner Mark P. Oncavage based on interest and six contentions. The order briefly paraphrased the admitted contentions. It was our intention to have the language refined by the parties when they met but the order did not recite this intention. The reference to FWPCA is clearly beyond the jurisdiction of this Board and the admitted contentions contain references to regulations not relevant to the subject matter of the contention. We deem it appropriate to clarify the language in the admitted contentions and to rule on the remaining contentions. We adopt the renumbering submitted

The earlier statement in the SGRR regarding this appeared as 4 lines:

"4.0 RETURN-TO-SERVICE TESTING

Following steam generator repair, a preoperational testing program will be conducted as required to provide the necessary assurance that the facility can be operated in accordance with design requirements and in a manner that will not endanger the health and safety of the public."

3. SER § 2.4 notes that the preoperational and startup test programs are still being developed. SER § 2.5 does not mention the leak test of the Reactor Containment Building.

The Board requests that Licensee and Staff address in greater detail the problem of assuring the continued integrity of the radioactivity retention barriers, either in supplements to the prepared documents or in their prefiled testimony before the evidentiary hearing.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Elizabeth S. Bowers
Elizabeth S. Bowers, Chairman

Dated at Bethesda, Maryland
this 11th day of October 1979.

coolant envelope and the reactor containment building. It is the view of the Board that the prepared documents, Licensee's SGRR and Staff's SER, do not give sufficient emphasis to the importance of these critical radioactivity retention barriers. In particular, they do not emphasize the special care and precaution to be taken in materials, procedures and workmanship to reclose and reseal these barriers; also, the very special attention that must be given to inspection and testing after the closure.

Examples:

1. The replacement of a large radioactive component, such as the steam generator, is not as "routine" as suggested in SGRR § 1.3.

"1.3 10 C.F.R. 50-59 CONSIDERATIONS

Repair or replacement of equipment at a power plant, performed in accordance with appropriate procedures, is a maintenance activity that is routinely conducted."

2. Response to Staff question 15 at SGRR A-15-1 does not emphasize or explain the leak testing of the resealed equipment hatch of the reactor containment building.

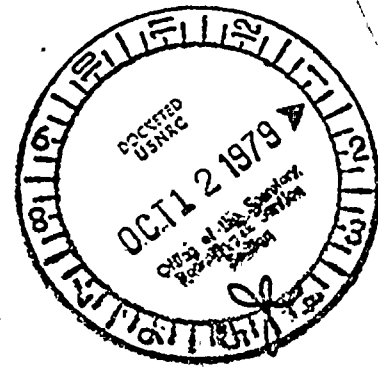
"15. Present your preoperational testing program and your startup testing program for placing a unit back in service with the modified steam generators. Identify all the systems and instrumentation to be tested or recalibrated.

RESPONSE

The preoperational and startup test program is still being developed at this time and thus, certain details remain to be determined . . .".

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)

FLORIDA POWER & LIGHT COMPANY)

(Turkey Point Nuclear Generating)
Units 3 and 4))

Docket Nos. 50-250 (SP)
50-251 (SP)

ORDER REQUESTING ADDITIONAL INFORMATION

(October 11, 1979)

Dr. Luebke has brought the following matter to the attention of the Board:

In a nuclear power plant, there are three very important physical barriers that are designed to prevent radioactivity from fission products to reach the outside world. These are:

1. The slender sealed metal tube of the fuel element that contains the uranium fuel.
2. The thick steel reactor pressure vessel and associated pipes and components that contain the primary reactor coolant.
3. The larger concrete encased steel reactor building built as a pressure vessel and designed to be the final containment to prevent leakage of radioactivity.

The replacement of a steam generator involves the opening of two of these radioactivity retention barriers, the primary

STEEL HECTOR & DAVIS

SOUTHEAST FIRST NATIONAL BANK BUILDING

MIAMI, FLORIDA 33131

WILLIAM C. STEEL
LOUIS J. HECTOR
DARREY A. DAVIS
DWIGHT SULLIVAN
WILLIAM B. KILLIAN
ERNEST J. HEWETT
JERRY B. CROCKETT
WILSON SMITH
TALBOT D'ALEMBERTE
JAMES H. SWEENEY, III
JOHN EDWARD SMITH
NORMAN A. COLL
THOS. E. CAPPS
SHEPARD KING
MATTHEW H. CHILDS
BARRY R. DAVIDSON
NOEL K. NATION
BRUCE S. RUSSELL
ALVIN B. DAVIS
JOSEPH P. KLOCK, JR.
RICHARD C. SMITH

THOMAS R. McGUIGAN
DENNIS A. LARUSSA
PATRICIA A. SEITZ
PAUL J. BONAVIA
JUDITH M. KORCHIN
JOHN M. BARKETT
ROBERT J. IRVIN
JEFFREY L. MULLENS
VANCE E. SALTER
DONALD M. MIDDLEBROOKS
HENRY J. WHELCHER
GERRY S. GIBSON
BRIAN A. HART
RICHARD J. LAMPHEN
JOSE L. ASTIGARRAGA
DEAN C. COLSON
KATHLEEN F. PATTERSON
JEFFREY S. BERGOW

April 9, 1979

WILL M. PRESTON
OF COUNSEL

TELEPHONE
(305) 577-2800

TELEX 51-5758

DIRECT DIAL NUMBER



Steven C. Goldberg, Esquire
United States Nuclear
Regulatory Commission
Office of the Executive
Legal Director
Washington, D. C. 20555

Re: In the Matter of: FLORIDA POWER & LIGHT
COMPANY - Turkey Point Nuclear Generating
Units Nos. 3 and 4 - Docket Nos. 50-250
and 50-251

Dear Mr. Goldberg:

On March 8, 1979, we filed a Notice of Appearance as
co-counsel for the Licensee and a copy was served on you.

My co-counsel, Harold Reis, has provided me with a
copy of the "NRC Staff Response to Revised Petition for Leave
to Intervene Filed by Mark P. Oncavage" served by you April 6,
1979 which indicates that we were not included on your service
list.

I would appreciate very much if you would amend your
service list to indicate that we are co-counsel so that we can
receive, simultaneously, copies of any other pleadings filed by
the Staff.

Thanks very much.

Very truly yours,

Norman A. Coll
NORMAN A. COLL

NAC/sm

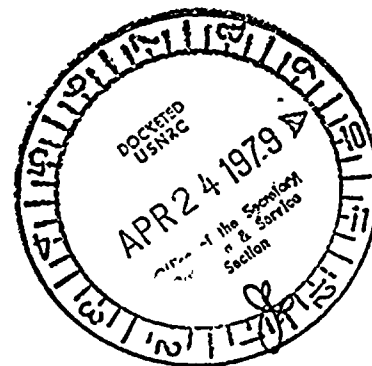
cc: E. S. Bowers, Dr. D. B. Hall, Dr. Oscar H. Paris, Atomic Safety
& Licensing Board Panel, Atomic Safety & Licensing Appeal Board
Panel, Docketing & Service Section, H. F. Reis, Esq., Mark P.
Oncavage

R- BURNSIDE
9721 SOUTHWEST 165 ST
MIAMI FL 33157

WESTERN UNION Mailgram

4-034985E111 04/21/79 ICS IPMMTZZ CSP WSHB
3058544093 MGM TDMT MIAMI FL 100 04-21 0523P EST

JOSEPH M HENDRIE CHAIRMAN
US NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

RICHARD BURNSIDE
9721 SOUTHWEST 165 ST
MIAMI FL 33157

17:23 EST

MGMCOMP MGM

LORIN NELSON
4211 ANDERSON RD
CORAL GABLES FL 33146

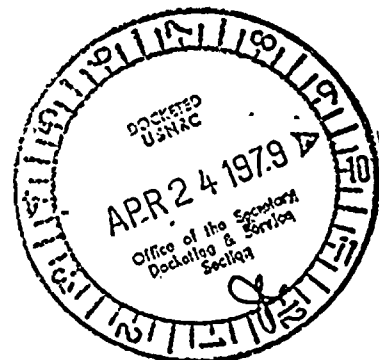


Mailgram



4-041556E111 04/21/79 ICS IPMMTZZ CSP WSHB
3052710717 MGM TDMT MIAMI FL 100 04-21 0837P EST

JOSEPH M HENDRIE CHAIRMAN
US REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS

MRS LORIN NELSON

20:37 EST

MGMCOMP MGM

P-ME-NARY
3390 SOUTHWEST 75 AVE
MIAMI FL 33155

WESTERN UNION

Mailgram

U.S. MAIL
FIRST CLASS

4-041513E111 04/21/79 ICS IPMMTZZ CSP WSHB
3052710717 MGM TDMT MIAMI FL 100 04-21 0834P EST

JOSEPH M HENDRIE CHAIRMAN
US REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS

PEGGY MC NARY

20:34 EST

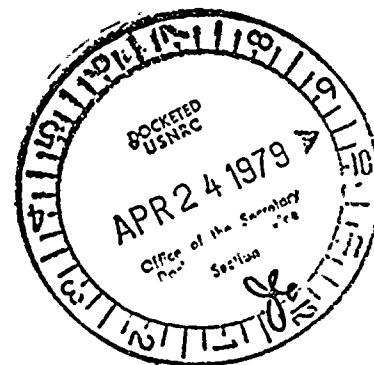
MGMCOMP MGM

MARGARET MURPHY
13301 SOUTHWEST 83 AVE
MIAMI FL 33156

WESTERN UNION

Mailgram

4-041545E111 04/21/79 ICS IPMMTZZ CSP WSHB
3052710717 MGM TDMT MIAMI FL 100 04-21 0836P EST



JOSEPH M HENDRIE CHAIRMAN
US REGULATORY COMMISSION
WASHINGTON DC 20555

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS

MARGARET MURPHY

20:36 EST

MGMCOMP MGM

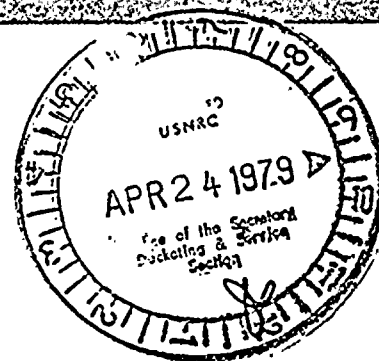
HEITZMAN
5314 SOUTHWEST 141 AVE
MIAMI FL 33155

WESTERN UNION

Mailgram



4-041526E111 04/21/79 ICS IPMMTZZ CSP WSHB
3052710717 MGM TDMT MIAMI FL 100 04-21 0835P EST



JOSEPH M HENDRIE CHAIRMAN
US REGULATORY COMMISSION
WASHINGTON DC 20555

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS

MR AND MRS HEITZMAN

20:35 EST

MGMCOMP MGM

J BEAL
3741 SOUTHWEST 124 COURT
MIAMI FL 33129



4-035350E111 04/21/79 ICS IPMMTZZ CSP WSHB
3058544093 MGM TDMT MIAMI FL 100 04-21 0531P EST

JOSEPH M HENDRIE CHAIRMAN
US NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

JAMES BEAL
3741 SOUTHWEST 124 COURT
MIAMI FL 33175

17:32 EST

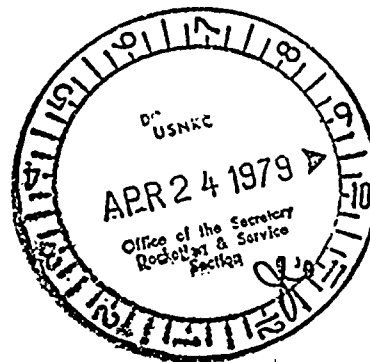
MGMCOMP MGM

H. ALVAREZ
771 SOUTHWEST 11 ST
MIAMI FL 33129



4-035170E111 04/21/79 ICS IPMMTZZ CSP WSHB
3058544093 MGM TDMT MIAMI FL 100 04-21 0530P EST

JOSEPH M HENDRIE CHAIRMAN
US NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

HILDA ALVAREZ
771 SOUTHWEST 11 ST
MIAMI FL 33129

17:30 EST

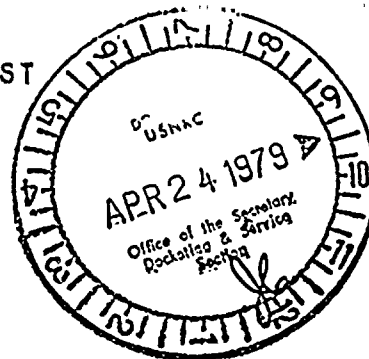
MGMCOMP MGM

V CASALOTTI
13820 SOUTHWEST 70 AVE
MIAMI FL 33158

WESTERN UNION Mailgram

4-035074E111 04/21/79 ICS IPMMTZZ CSP WSHB
3058544093 MGM TDMT MIAMI FL 100 04-21 0526P EST

JOSEPH M HENDRIE CHAIRMAN
US NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

VIRGINIA CASALOTTI
13820 SOUTHWEST 70 AVE
MIAMI FL 33158

17:26 EST

MGMCOMP MGM

HERBERT F ROSS
6625 SOUTHWEST 55 LN
MIAMI FL 33143

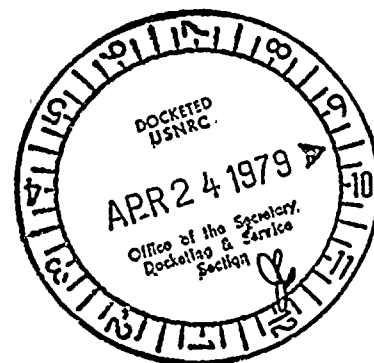
WESTERN UNION

Mailgram

UNITED STATES POST
OFFICE
FIRST CLASS
PERMIT NO. 100
MIAMI, FL 33143

4-030452E103 04/13/79 ICS IPMMTZZ CSP WSHB
3056668651 MGM TDMT MIAMI FL 100 04-13 0114P EST

JOSEPH M HENDRIE, CHAIRMAN
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

NANCY ROSS

13:14 EST

MGMCOMP MGM

April 19, 1979
135 Seminole Avenue
Palm Beach, Florida 33480



Chairperson Joseph Hendrie
Nuclear Regulatory Commission
Washington, D. C.
20055

Dear Mr. Hendrie,

In the best interests of the people of South Florida,
we urgently request that you grant Mark Oncovage's
petition for hearing to intervene on Florida Power
& Light's Turkey Point Repair proceedings.

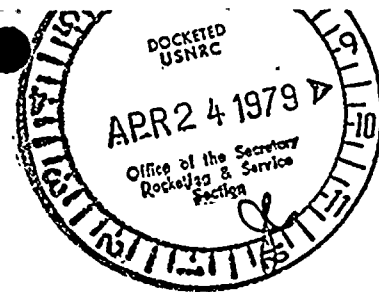
We trust that you will honor our request as we join
with other concerned citizens in this area in support
of this petition.

Thank you very much.

Sincerely,

Scott & Anne Basto

Scott & Anne Basto
(Mr. & Mrs.)



Chairperson Hendrie,

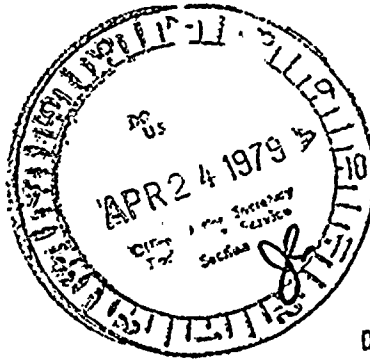
First I must say that I was relieved to see the coverage on the news portraying you the way they did. I was worried, until then that the big guy on top was just another industry puppet. I commend you for your concern for safety to the public.

Which brings me to my problem. I am worried that Florida Power & Light may not have such concern for the public. I have personally heard a spokesman for that utility proclaim (in a private conversation with myself): "At FP&L our main concern is profits....for stockholders, etc."

Repairs are needed at the Turkey Point Reactors. There is the possibility of leakage. There must be a public hearing before they may proceed. Please allow Mark Oncavage have and participate in a public hearing, to determine economic feasibility, Bay contamination, public safety.

Thank you - God bless

Joshua Billig
3595 Avocado Ave
Miami, FL 33133



April 19, 1979
231 Seminole Avenue
Palm Beach, Florida 33480

DOCKET NUMBER
FROM & UTIL. PAC 50-250-251 SP

Chairperson Joseph Hendrie
Nuclear Regulatory Commission
Washington, D. C.
20055

Dear Mr. Hendrie,

I join with other concerned citizens in the South Florida area to request that you grant Mark Oncovage's petition for hearing to intervene on Florida Power & Light's Turkey Point Repair proceedings.

It is my hope that you will consider the best interests of South Florida citizens in this matter and honor the Oncovage petition.

Thank you very much.

Sincerely,

Randy Cousins

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

FLORIDA POWER AND LIGHT COMPANY)

(Turkey Point, Units 3 and 4))
)
)

Docket No.(s) 50-250SP
50-251SP

SERVICE LIST

Elizabeth S. Bowers, Esq., Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. David B. Hall
400 Circle Drive
Santa Fe, New Mexico 87501

Dr. Oscar H. Paris
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Counsel for NRC Staff
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Michael A. Bauser, Esq.
Lowenstein, Newman, Reis,
Axelrad and Toll
1025 Connecticut Avenue, N.W.
Washington, D.C. 20036

Mr. Mark P. Oncavage
12200 S.W. 110th Avenue
Miami, Florida 33176

Norman A. Coll, Esq.
Steel Hector & Davis
1400 S.E. First National Bank Building
Miami, Florida 33131

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

FLORIDA POWER AND LIGHT COMPANY

(Turkey Point, Units 3 and 4)

)
)
) Docket No.(s) 50-250SP
) 50-251SP
)
)
)
)
)

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document(s) upon each person designated on the official service list compiled by the Office of the Secretary of the Commission in this proceeding in accordance with the requirements of Section 2.712 of 10 CFR Part 2 - Rules of Practice, of the Nuclear Regulatory Commission's Rules and Regulations.

Dated at Washington, D.C. this

26th day of April 1979.

Robert T. Downing
Office of the Secretary of the Commission

- #1 - LTR Gossick to Stone dtd 4/19/79
2 - LTR Kammerer to Chiles dtd 4/19/79

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 19 1979



The Honorable Lawton Chiles
United States Senate
Washington, D.C. 20510

Dear Senator Chiles:

Your letter to Chairman Hendrie on behalf of Mr. Mark Oncavage concerning repairs at the Turkey Point nuclear power station has been referred to me for response.

As indicated in Mr. Oncavage's letter, Florida Power and Light Co. is contemplating major repairs to the Turkey Point steam generator system. You should be aware that these repairs will require amendments to the utility's operating licenses for the Turkey Point reactors.

On December 13, 1977 the NRC published in the Federal Register (42 F.R. 62569) a notice of "Proposed Issuance of Amendments to Facility Operating Licenses."

The NRC staff is currently reviewing Florida Power and Light's proposals. Before approving the amendments to the licenses necessary, both a safety evaluation and an environmental impact appraisal will be prepared by the NRC staff.

The Notice of proposed amendments provided an opportunity for any person whose interest might be affected by the proceeding to file a petition for leave to intervene no later than January 13, 1978.

Mr. Oncavage's letters to NRC requesting a public hearing was more than a year late. Nevertheless, an Atomic Safety and Licensing Board (ASLB) has been appointed to review his request. It has not yet ruled. The NRC staff filed a response to Mr. Oncavage's revised petition on April 6, 1979. A prehearing conference has been scheduled for May 2, 1979 by the ASLB.

I hope that this information is helpful in providing background with regard to Mr. Oncavage's request. We will advise you when a determination has been made by the Atomic Safety and Licensing Board.

Sincerely,

A handwritten signature in cursive script, appearing to read "Carlton Kammerer".

Carlton Kammerer, Director
Office of Congressional Affairs


Harold F. Reis, Esquire
Lowenstein, Newman, Reis, Axelrad & Toll
1025 Connecticut Avenue, N. W.
Washington, D. C. 20036

Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Atomic Safety and Licensing Appeal Board Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Docketing and Service Section
Office of the Secretary
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Guy H. Cunningham, Esquire
Steven C. Goldberg, Esquire
U. S. Nuclear Regulatory Commission
Office of the Executive Legal Director
Washington, D. C. 20555

By 
Mark P. Oncevage

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the matter of	)	Docket Nos. 50-250
		50-251
Petition for leave to)	
intervene)	
Turkey Point Nuclear)	
Generating Units)	
<u>Nos. 3 and 4</u>)	

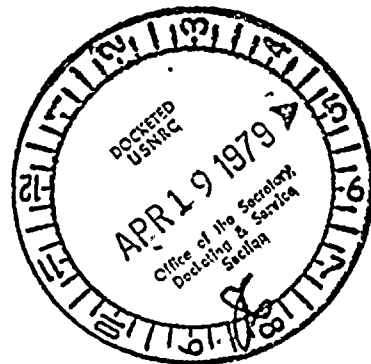
CERTIFICATE OF SERVICE

I, Mark P. Oncavage, hereby certify that copies of the Revision to, Petition For Leave To Intervene, have been served on the following by deposit in the United States mail, first class, properly stamped and addressed, this ___ day of March, 1979:

Elizabeth S. Bowers, Esquire, Chairman
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dr. David B. Hall
400 Circle Drive
Santa Fe, New Mexico 87501

Dr. Oscar H. Paris
Atomic Safety and Licensing Board Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION



BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the matter of:) Docket Nos. 50-250
Petition for leave to) 50-251
Intervene)

MOTION for the production of documents and things and entry
upon land for inspection and other purposes.

Pursuant to regulation of 10 CFR Part 2.741 (a), the
petitioner motions he be permitted to inspect all
documents and things pertaining to proposed charter
amendments specifically described as steam generator
repairs.

Mark P. Oncavage
12200 S.W. 110 th Avenue
Miami, Florida 33176
March 19, 1979

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the matter of:)
PETITION FOR LEAVE TO)
INTERVENE)

Docket Nos. 50-250
50-251

AFFIDAVIT OF RENEE DAILY

STATE OF FLORIDA)
COUNTY OF DADE)



BEFORE ME personally appeared RENEE DAILY, who being
first duly sworn, deposes and says:

I am employed by Florida International University and am
a library technical assistant at the Environmental and Urban
Affairs Library, Miami, Florida.

The September 20, 1977 letter from Florida Power and Light
Company to the Nuclear Regulatory Commission was not found in
the applicant correspondence file for the 1977 letters. We
requested a xeroxed copy of it and received the duplicate
letter January 22, 1979.

RENEE DAILY

SWORN TO and SUBSCRIBED before me this ____ day of March,
1979.

Notary Public, State of Florida

data would be instrumental in determining the cost benefits of the steam generator repairs within the framework of the National Environmental Policy Act of 1969. Cost benefit analysis must include the projected operating life of Turkey Point reactors nos. 3 and 4, and the projected operating life of a coal burning facility.

CONCLUSION

If the licensee cannot demonstrate, to the satisfaction of the Nuclear Regulatory Commission, that the petitioner's concerns are unreasonable or unfounded, then the Nuclear Regulatory Commission is fully justified to deny the charter amendments required by the licensee to repair the steam generators at the Turkey Point nuclear facility.



Mark P. Oncavage

STATE OF FLORIDA
COUNTY OF DADE

Before me personally appeared Mark P. Oncavage, to me well known and known to me to be the person described in and who executed the foregoing instrument for the purposes therein expressed.

WITNESS my hand and official seal, this 18 th day of March A.D. 1979.



Notary Public, State of Florida at Large
My Commission Expires Oct. 31, 1980
Bonded by American Fire & Casualty Company

ISSUES

The petitioner seeks proof or demonstration that all releases of radioactive airborne particulates and radioactive liquid contaminants released from the Turkey Point site, during the steam generator repairs, will be fully and accurately determined by planned monitoring procedures.

The petitioner seeks a determination of the total amount of radioactivity that may be released from the Turkey Point site; during the steam generator repairs, that would not be hazardous to the petitioner's health nor the public's health nor present any hazard to the environment surrounding the Turkey Point site, including South Biscayne Bay.

The petitioner seeks proof or determination that adequate containment and decontamination procedures are immediately available to protect the petitioner's health, the public's health, and protect the environment in the event of any postulated or possible release of hazardous radioactivity, from the Turkey Point site, during the steam generator repairs.

The petitioner seeks to examine the total costs pertaining to the fission generated electricity from Turkey Point and compare the costs to the licensee's projected cost(s) of coal generated electricity. This

10 CFR Part 2.714, BROADEN ISSUES OR DELAY PROCEEDINGS

The petitioner contends that the concerns of public safety from radiation exposure, protection of the environment from radioactive liquid contaminants, and economic feasibility of the steam generator repairs, represent the crux of the proposed hearings. All other matters such as man-rem usage, construction accidents, storage of radioactive steam generator units, radwaste disposal, and security measures find a nexus in the three concerns.

Broadening the issues can only serve to dilute the main concerns. The petitioner's intervention will be directed towards the satisfactory resolution of the three main issues.

The purpose of the petition is not to delay proceedings but to assist in reaching a just decision. The petitioner finds no merit in prolonging the operation of the acknowledged defective steam generators. In an effort to reduce any delay that may occur, the petitioner is prefiling a motion with the Nuclear Regulatory Commission, to grant Discovery Rights immediately.

If a delay becomes unavoidable, the loss of flexibility by the licensee is more than offset by the value of having public hearings where a just decision can be rendered.

10 CFR Part 2.714, iv, EXISTING PARTIES

The petitioner has examined Docket Nos. 50-250 and 50-251 searching for existing parties and other petitions for leave to intervene. None were found. It is apparent that if this petition is denied, the licensee's application for charter amendments will be uncontested.

The position of the Nuclear Regulatory Commission staff recommendation is unknown to the petitioner as of this date.

It is evident that the Honorable Dante Fascell from the 15 th Congressional District, which includes Turkey Point, Senator Richard Stone, and Senator Lawton Chiles have indicated that the petitioner's concerns warrant action, hearings and review

The petitioner will make every effort to assist in developing a sound record. Legal counsel will be available to the petitioner for the hearing. Expert witnesses are anticipated to testify in behalf of the petitioner.

The petitioner brings to the hearing a position not represented by the licensee in philosophy or intensity. The licensee as a profit making company may not have the health and welfare of the residents of South Florida foremost in their philosophy, if the health and welfare issues conflict with company interests.

The Nuclear Regulatory Commission as a judicial body may find it more difficult to render a just decision if the health and welfare concerns of the public are not represented at the hearing, but only licensee's interests are represented.

10 CFR Part 2.714, iii, DEVELOP A SOUND RECORD

As a resident of South Florida and a consumer of electricity produced by the licensee, the petitioner's participation in the hearing will be directed towards the safety and economic well being of the petitioner, his family, and the South Florida community.

These issues are extremely important to the residents of South Florida. This importance is reflected in the correspondence that the petitioner has received from the elected officials representing Florida, concerning the proposed steam generator repairs. In the letter of February 22, 1979, addressed to the petitioner, the Honorable Dante Fascell states:

"I can appreciate your concern about the proposed repairs at Turkey Point. I too, have written to the chairman of the Nuclear Regulatory Commission requesting action in this case."

In the letter of March 1, 1979, addressed to the petitioner, Senator Richard Stone states:

"I can certainly understand your concerns in this matter and your efforts to obtain public hearings on this issue. I am therefore taking the liberty of contacting the appropriate authorities within the Nuclear Regulatory Commission for their thorough review of this matter."

Senator Lawton Chiles, in the letter of March 5, 1979, states:

"In an effort to be of some help to you, I will contact the commission on your behalf. I will ask them to look into this matter and to fully review your request in the light of the comments you have made concerning the safety aspect involved with these repairs."

10 CFR Part 2.714, ii, OTHER MEANS

The petitioner's concerns can be best addressed in the hearings that grant or deny the charter amendments to the licensee. All appeals are remedies that would be appropriate only if the Atomic Safety and Licensing Board were to deny the petition

Another regulatory body which may represent means to protect the petitioner's interest is the Florida Public Service Commission. The licensee has not brought the Public Service Commission into the decision making process, thereby not allowing the petitioner an alternate administrative remedy. In a letter to the petitioner, of February 27, 1979, concerning the proposed steam generator repairs, Commission Chairman Robert T. Mann states:

"It was the first time that this matter had been brought to my attention."

The granting of the petition for leave to intervene remains to date the only apparent procedure whereby the petitioner's interests may be adequately protected.

1978, is Revision 0. This information is held proprietary and has been excluded from the Public Document Room, but the content and projected costs of this document figure prominently into the areas of public safety economic feasibility.

The process of question and answer between the Nuclear Regulatory Commission and Florida Power and Light Company which forces the licensee to examine their situation more closely, is valuable. The appropriate time for initiating hearings on public safety and economic feasibility is after all revisions have been made and after the Nuclear Regulatory Commission has completed the staff review of the proposed charter amendments. Rather than the petition being considered delaying or untimely, the time for convening hearings is ripe and the petition should be considered appropriate.

Full justification exists for the granting of the petition due to the stated problems in the information organs and the belated nature by which full information has been made public. Members of the public should be allowed to take part in the decision making process whenever possible.

Having crucial documents missing from a Public Document Room for thirteen months justifies good cause for extending the time limit, for filing a petition for leave to intervene, by thirteen months.

Other factors that can meet the qualifications of good cause for a time extension are present, also.

1. The cost projections of the steam generator repairs published in revision 1, arrived at the Florida International University Public Document Room on January 3, 1978, only ten days before the filing deadline.

2. Since January 13, 1978, new evidence has appeared directly related to the concerns expressed in the petition of February 9, 1979. It is Nuclear Power Costs by the Committee on Government Operations, House Report No. 95-1090, April 26, 1978.

3. Other sources of information that have been released, since the filing deadline, are the responses to the sixty two questions asked of Florida Power and Light by the Nuclear Regulatory Commission. The answers were published in Revisions nos. 2, 3, 4, 5, and 6, which arrived at the Florida International University, Public Document Room from March 20, 1978 to February 12, 1979. Many of these questions and responses deal with public safety in relation to radiation release.

4. Also released after the filing deadline of January 13,

concerns the health and welfare of the public, must not be denied.

If the importance of having crucial documents missing from the local Public Document Room can be dismissed, then it follows that the importance of having crucial documents missing from any Public Document Room can be dismissed. If the burden of full and accurate information can be lifted from the Public Document Rooms, then it must fall on the Federal Register. As the petitioner has shown, the Federal Register contained incorrect information.

The circular reasoning used by the Nuclear Regulatory Commission's staff response of March 1, 1979, fails to do the Commission service. Each organ of public information; the local Public Document Room, the Nuclear Regulatory Commission Public Document Room, and the Federal Register must stand on the merits of full and accurate information, otherwise, these organs of information will become functionless.

The contention of the Nuclear Regulatory Commission staff response of March 1, 1979, that the letter of September 20, 1977 was available from the Nuclear Regulatory Commission's Public Document Room, assumes that knowledge of the existence of the letter should have existed even though the letter was missing. The petitioner submits that the discovery, by Ms. Daily, that a crucial document was missing, took thirteen months to be realized.

10 CFR Part 2.714, i, GOOD CAUSE

The "Notice of proposed issuance of amendments to Facility Operating Licenses" as published in the Federal Register on December 13, 1977, Docket Nos. 50-250 and 50-251, contained incorrect information. The statement is:

"For further details pertinent to these matters, see the licensee's letter dated September 20, 1977, along with other material that may be submitted by the licensee in support of this action, all of which are or will be available for public inspection at the NRC's Public Document Room, 1717 H Street NW., Washington, D.C., and at the Environmental and Urban Affairs Library, Florida International University, Miami, Fla. 33199."

The Nuclear Regulatory Commission, staff response of March 1, 1979, states:

"We are informed by the librarian, Ms. Rene Daily, that the documents have, in fact, been in the local PDR since October 4, 1977, though probably misfiled for part of the time."

This statement directly conflicts with the enclosed, sworn affidavit of March 16, 1979 by Ms. Renee' Daily. Ms. Daily states:

"The September 20, 1977 letter from Florida Power and Light Company to the Nuclear Regulatory Commission was not found in the applicant correspondence file for 1977 letters."

The petitioner's contention is not to assign blame for this flaw of procedure. The petitioner's contention is to state that the public's right to domestic information that

and a member of the South Florida economic community.

Reasonable energy costs can have a beneficial effect on the economic health of the petitioner's community and unreasonable or inflated energy costs can place an undue burden on individuals and the entire economic structure.

The petitioner questions the wisdom of proceeding towards expensive repairs without examining the alternatives thoroughly. The petitioner seeks a reanalysis of the total costs of Turkey Point's nuclear electricity, within the framework of cost benefits as outlined by the National Environmental Protection Act, of 1969.

from all forms of pollution if they are to survive. The petitioner owns a sailboat, Fl 1684 Lu, and often cruises these waters with his family. The recreational aspects of cruising include fishing, crabbing, swimming, skin diving, and underwater photography. To be denied the privilege of utilizing the recreational environment of South Biscayne Bay, would diminish the quality of the petitioner's life.

The land surrounding Turkey Point is a low lying mangrove coastal zone. The U.S. Department of interior in the publication Resource and Land Information, for South Dade County, describes the mangrove zone as having an elevation of "0 to 5 feet above mean sea level." There is little land to trap radioactive liquids if a spill occurs. Also, the flow of groundwater in the Biscayne Aquifer starts in the Everglades, west of Turkey Point and flows eastward to South Biscayne Bay. Large portions of a liquid radioactive release would migrate to South Biscayne Bay.

As a user of South Biscayne Bay, as a recreational area, and as a student of environmental affairs, the petitioner has standing and a substantial interest on the matter of radioactive liquid releases.

The third area of concern is the economic feasibility of alternatives to repairing the steam generators. The petitioner is a resident of South Florida, a consumer of the electricity that is produced by Florida Power and Light Co.,

1

live in Dade County, Florida. Approximately 15 miles from the home in which the petitioner and his family resides and owns, are the Turkey Point reactors. Turkey Point lies in a south-southeast direction from the petitioners residence. The climatological tables as found in the U.S. Coast Pilot, No. 4, 1972, were compiled from U.S. Weather Bureau data. The tables for Miami, Florida, state that during the months February, March, April, May, June, July, August, and September the mean prevailing wind direction is either east-southeast or southeast. The release of radioactive airborne particulates coupled with the mean prevailing wind presents a hazardous situation for the petitioner and his family.

The waters of South Biscayne Bay are among the finest of recreational areas in the United States. In close proximity of Turkey Point, the Dade County Metro Government has established two recreational areas, Homestead Bayfront Park and Elliot Key Park. The Federal Government has established the Biscayne National Monument encompassing much of the bay bottom and benthic biota of South Biscayne Bay. From South Biscayne Bay, through the passages of Angelfish Creek, Broad Creek, and Caesar's Creek lies the only living coral reef in the waters of the continental United States. It is the John Pennekamp Underwater Reef State Park.

These sensitive natural communities must be protected

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

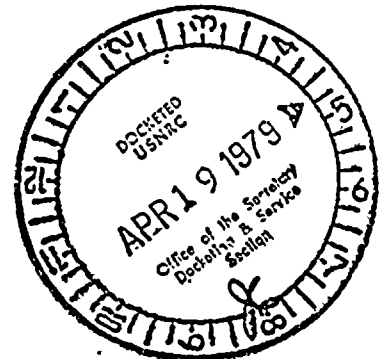
BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the matter of:	)	Docket Nos, 50-250
	)	50-251
FLORIDA POWER & LIGHT CO.	)	(Proposed Amendments to
(Turkey Point Nuclear	)	Facility Operating License
Generating Units Nos.	)	to Permit Steam Generator
3 and 4)	)	Repairs)

PETITION FOR LEAVE TO INTERVENE

Revision

BY MARK P. ONCAVAGE



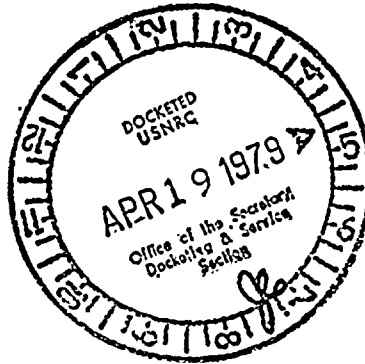
I, Mark P. Oncavage, petition for leave to intervene in the matter of proposed amendments to the facility operating license to permit steam generator repairs at the Turkey Point facility licensed to Florida Power and Light Company.

STANDING TO INTERVENE

The petitioner has grave concerns on the contemplated repairs to the steam generators at Turkey Point Units Nos. 3 and 4. There are three areas of concern and the petitioner's standing to intervene will be demonstrated to each area.

The first concern is about the release of radioactive airborne particulates occurring during the steam generator repair operation. The petitioner considers any radiation exposure above the natural background radiation to be an increased hazard in the formation of degenerative diseases.

The petitioner's wife, two year old son, and the petitioner



9058170010

Mark P. Oncavage
12200 S.W. 110 th Ave.
Miami, Florida
March 19, 1979

Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Members of the Board:

Please accept the revision to the petition for leave to
intervene, dated February 9, 1979.

Very truly yours,

A handwritten signature in ink, appearing to read 'Mark P. Oncavage', written over a horizontal line.

Mark P. Oncavage

RICHARD (DICK) STONE
FLORIDA

COMMITTEES:
AGRICULTURE, NUTRITION, AND
FORESTRY
FOREIGN RELATIONS
VETERANS' AFFAIRS

United States Senate

WASHINGTON, D.C. 20510

March 27, 1979

Our File: 9058170010

Congressional Liaison
Nuclear Regulatory Commission
1717 H Street, NW
Washington, D.C. 20555

Dear Director:

Because of the desire of this office to be responsive to all inquiries and communications, your consideration of the attached is requested. Your findings and views, in duplicate form, along with return of the enclosure, would be greatly appreciated. It would also be helpful to me if your response is mailed to my office at the address below and INCLUDES THE FILE NUMBER SHOWN ON THE COMMUNICATION I HAVE SENT TO YOU.



Cordially,

Richard (Dick) Stone
Richard (Dick) Stone

RDS/vms
Enclosure

PLEASE REPLY TO: POST OFFICE BOX 4081
TALLAHASSEE, FLORIDA 32303

Docket Nos. 50-250.
50-251 SP

APR 19 1979

The Honorable Richard Stone
United States Senator
Post Office Box 4081
Tallahassee, Florida 32303



Dear Senator Stone:

I am writing in response to your letter of March 27, 1979 requesting consideration of Mark P. Oncavage's March 19, 1979 revision to his petition for leave to intervene in the NRC license amendment proceeding involving repair of the steam generators at the Turkey Point Nuclear Generating Station. On April 6, 1979, the NRC Staff filed a response to the revised petition, a copy of which is enclosed. The presiding NRC Atomic Safety and Licensing Board has scheduled a prehearing conference for May 2, 1979 at the Howard Johnson Downtowner, 200 Southeast Avenue, Miami, Florida to consider the petition. At or shortly following this prehearing conference, the Board will rule on whether to grant or deny the petition. If the Licensing Board denies the petition; Mr. Oncavage may immediately appeal to the Atomic Safety and Licensing Appeal Board. If the Licensing Board grants the petition, other parties have the same rights of appeal.

Pursuant to your request a duplicate copy of this letter is enclosed. We are also returning your letter to us and its enclosure, as you have requested.

If you have any further questions regarding this matter, please let me know.

Sincerely,



Telegram

4-502329E101 04/11/79
ICS IPMTZZ CSP

RECEIVED

APR 12 1979

DANTE B. FASCELL

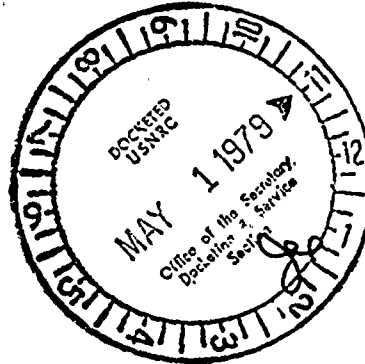
3-54473157 POM TDMT MIAMI FL 14 04-11 0325P ESTPOMA
PMS HONORABLE DANTE FASCELL

WAS-INGTON DC 20515

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION
ON FELIS TURKEY POINT REPAIRS
GLORIA MCSWAIN 1100 NORTHWEST 77 ST MIAMI FL 33150
15:25 EST

MGMC-PP WSM

CK-
13



Telegram

4-027509E097 04/07/79
ICS 1PMPTZZ. CSP

RECEIVED
APR 9 1979
DANTE B. FASCELL

3056660004 POM TDMT MIAMI FL 14 04-07 0249P ESTPOMA
PMS HONCRABLE DANTE FASCELL

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION
ON FPL'S TURKEY POINT REPAIRS
DAVE SHERMAN 1881 NORTHWEST 171 ST CPA LOCKA FL 33054

14:49 EST

MGMCOMP MGM

V3

WILLIAM LEHMAN
13TH DISTRICT, FLORIDA

COMMITTEE:
APPROPRIATIONS

SUBCOMMITTEE ON
FOREIGN OPERATIONS

SUBCOMMITTEE ON
TRANSPORTATION

CRIMINAL JUSTICE
FED. & STATE PROJ. 50-250,251 SP

Congress of the United States

House of Representatives

Washington, D.C. 20515

April 20, 1979

WASHINGTON OFFICE:
2440 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-4211

DISTRICT OFFICE:
2020 NE. 1630 STREET
NORTH MIAMI BEACH, FLORIDA 33162
(305) 945-7518

PLEASE REPLY TO DISTRICT OFFICE ☒

The Honorable Joseph Hendrie
Chairman
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Hendrie:

RE: Turkey Point Nuclear Plant

I am writing in the interest of my constituents who have contacted me regarding Mr. Mark Oncavage's petition for leave to intervene in the proposed repairs at Florida Power and Light's Turkey Point nuclear power plant.

It has been brought to my attention that the licensee's letter of September 20, 1977 was not available for public inspection until nearly 13 months after the deadline for filing a petition. Needless to say, this fact restricted the filing of a timely request for hearing.

Enclosed are copies of correspondence I received which should give you immediate insight into this situation.

I would greatly appreciate your looking into this situation and I look forward to hearing from you as soon as possible.

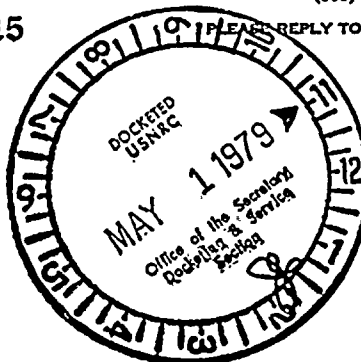
With best wishes, I am

Sincerely,

WILLIAM LEHMAN
Member of Congress

WL/pkt

Enclosure

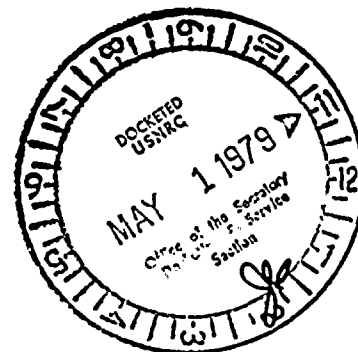


JUDY WOLF
6904 NORTH KENDALL APT F-302
MIAM FL 33156

western union Mailgram



4-033064E118 04/28/79 ICS IPMMTZZ CSP WSHB
3058548503 MGM TDMT MIAMI FL 100 04-28 1031A EST



THE NUCLEAR REGULATORY COMMISSION
ATTN JOSEPH M HENDRIE, CHAIRMAN
WASHINGTON DC 20555

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

JUDY WOLF
6904 NORTH KENDALL
APT F-302
MIAMI FL 33156

10:31 EST

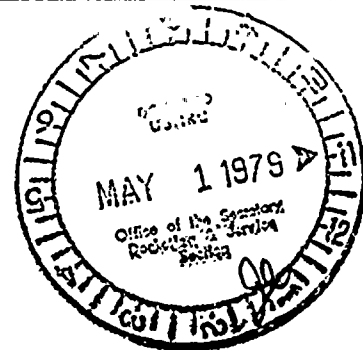
MGMCOMP MGM

62/10/11/79

VICTOR WITHEE
9350 SOUTHWEST 83 ST.
MIAMI FL 33173

Mailgram
western union

4-033017E118 04/28/79 ICS IPMMTZZ CSP WSHB
3058548503 MGM TDMT MIAMI FL 100 04-28 1030A EST



THE NUCLEAR REGULATORY COMMISSION
ATTN JOSEPH M HENDRIE, CHAIRMAN
WASHINGTON DC 20555

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

VICTOR WITHEE
9350 SOUTHWEST 83 ST
MIAMI FL 33173

10:30 EST

MGMCOMP MGM

E ZAKEVICH
3647 ST GAUDENS RD
MIAMI FL 33133

WESTERN UNION

Mailgram



4-033180E118 04/28/79 ICS IPMTZZ CSP WSHB
3058548503 MGM TDMT MIAMI FL 100 04-28 1033A



THE NUCLEAR REGULATORY COMMISSION
ATTN JOSEPH M HENDRIE, CHAIRMAN
WASHINGTON DC 20555

PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

ELOISE ZAKEVICH
3647 ST GAUDENS RD
MIAMI FL 33133

10:33 EST

MGMCOMP MGM

J ZIMMERMAN
7380 WEST CT
HIALEAH FL 33014

WESTERN UNION

Mailgram



4-033213E118 04/28/79 ICS IPMTZZ CSP WSHB
3058548503 MGM TDMT MIAMI FL 100 04-28 1034A EST

THE NUCLEAR REGULATORY COMMISSION
ATTN JOSEPH M HENDRIE, CHAIRMAN
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGE'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

JOSEPH ZIMMERMAN
7380 WEST 15 CT
HIALEAH FL 33014

10:34 EST

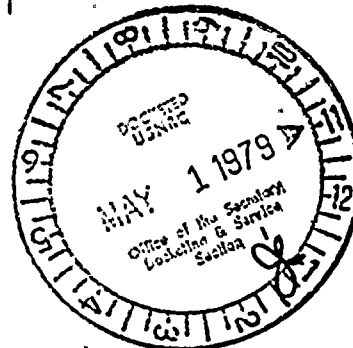
MGMCOMP MGM

DONALD GILDEMEISTER
10325 SOUTHWEST 42 TERRACE
MIAMI FL 33165

Mailgram
WESTERN UNION

4-023892E109 04/19/79 ICS IPMMTZZ CSP WSHB
3052262396 MGM TDMT MIAMI FL 100 04-19 1153A EST

JOSEPH M HENDRIE
CHAIRMAN US NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555



PLEASE GRANT MARK ONCAVAGA'S PETITION FOR HEARING AND INTERVENTION ON
FPL'S TURKEY POINT REPAIRS.

MR AND MRS DONALD GILDEMEISTER
10325 SOUTHWEST 42 TERRACE
MIAMI FL 33165

11:53 EST

MGMCOMP MGM

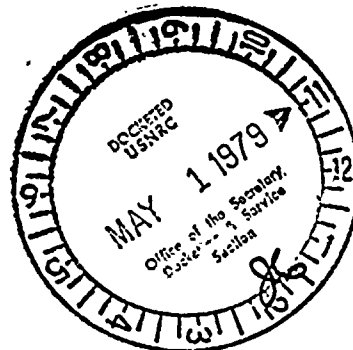
April 18, 1979
303 Pine St.
West Palm Beach
Fl. 33407

Dear Mr. Hendrie, ^{ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED} ~~50-250-251 SP~~

I am writing to request that you
grant Mark Onearage's petition for
the hearing to intervene on FPL Turkey
Point repair proceedings.

Thank you.

A Concerned Citizen,
Rita S. Gates



Dear Mr. Hendrix,

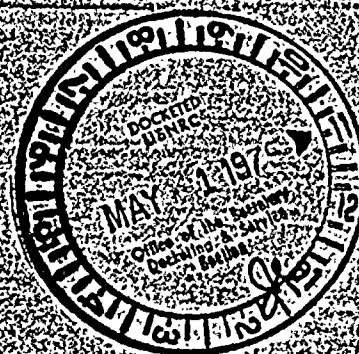
Please grant Mark Omeag's
petition for hearing to intervene
on Florida Power and Light
Turkey Point repair proceedings

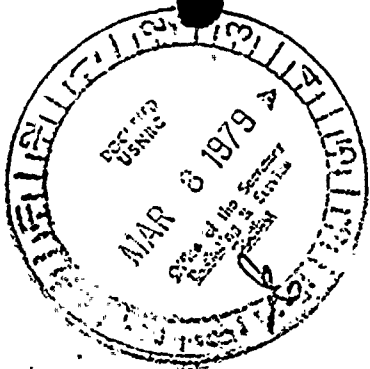
Sincerely,

PROD. & CIL. FILE NO. 50-250,251 SP

Theresa Bertram

Theresa Bertram
135 Seminole Ave.
Palm Beach, FL 33480





Mark P. Oncavage
12200 S.W. 110 th Ave.
Miami, Fla. 33176
February 9, 1979

United States
Nuclear Regulatory Commission
Washington D.C. 20555

Gentlemen:

I request a full hearing and an Environmental Impact Statement on the matter of steam generator repairs at Turkey Point reactor units no. 3 and 4. Florida Power and Light Company is the licensee.

I realize this request for a hearing falls after the deadline of January 13, 1978 as taken from the Federal Register (Dec. 13, 1977, Vol. 42, No. 239, Docket Nos. 50-250 and 50-251.) However, this same entry in the Federal Register directs interested parties to view Florida Power and Light Company's letter of September 20, 1977 and other material at the "Environmental and Urban Affairs Library" at Florida International University, Miami, Florida.

Unfortunately for the residents of South Florida, the licensee's letter of September 20, 1977 arrived at the Environmental and Urban Affairs Library on January 22, 1979, approximately 13 months after the expiration date for filing for a hearing.

I feel that the failure of the licensee to provide information at the time specified in the Federal Register constitutes "good cause" as required by 10 CFR art. 2.714, a, 1, i.

As a student of environmental affairs, I am concerned with the consequences of the execution of extensive repairs. Turkey Point is located directly on the shore of Biscayne Bay. The surrounding area is a sensitive mangrove estuarine environment which is critical to the viability of Biscayne Bay. Adjacent to Biscayne Bay is Homestead Bayfront Park, Elliot Key State Park, John Pennekamp Underwater Coral Reef Park, and Biscayne National Monument, an underwater preserve. These areas are extremely sensitive environments and would be highly susceptible to damage by liquid contaminants.

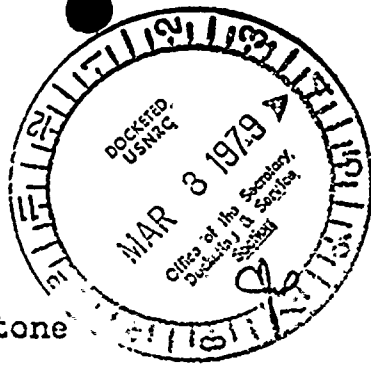
Please also note that Turkey Point is located south of the urban centers of Miami and Fort Lauderdale. For 8 months of each year the prevailing wind direction has a southerly component to it which would put these urban centers downwind from Turkey Point making large populations susceptible to accidental releases of airborne contaminants.

If the nuclear containment vessels are to be breached and radioactive liquids and solids are to be extricated, I hereby request an Environmental Impact Statement be drawn up with the hope that further research may prevent a tragic accident to the South Florida community.

If the repairs appear to be seriously expensive, I request that decommissioning be studied as an economic alternative.

Very truly yours,

Mark P. Oncavage



Mark P. Oncavage
12200 S.W. 110 th Ave.
Miami, Florida 33176
February 19, 1979

Senator Richard Stone
51 S.W. 1 st Ave.
Miami, Florida

SEARCHED
SERIALIZED
MAR 8 1979
FILE # 9058170010

Dear Senator Stone:

Florida Power and Light Company is encountering "denting" in their steam generators at Turkey Point reactor units 3 and 4. FP&L has requested from the Nuclear Regulatory Commission an amendment to their charter which would permit steam generator repairs.

FP&L has submitted 3 alternatives for the actual repair operation. Alternative no. 1 would replace just the lower units of the 6 steam generators. It would cost \$ 102 million and require a shutdown of 207 days per reactor. The cost of repair and replacement power is \$ 226 million.

Alternatives nos. 2 and 3 call for replacing the entire steam generator units. Large holes will have to be cut into the containment vessels of 800 sq. ft. (alt. 2) and 300 sq. ft. (alt. 3). The cost for alternative 2 including replacement power is \$ 320 million and for alternative 3 is \$ 287 million.

Enclosed is a copy of the request for a hearing I made to the N.R.C. The time period for requesting such action had expired, but due to an irregularity in the information entered in the Federal Register, I feel that the granting of my request for a hearing is completely justifiable.

My first concern is about the radiation danger to the population of South Florida and the possible contamination of Biscayne Bay. FP&L has been vague on their proposals of their handling and disposing of radioactive wastes. When the containment vessel is cut, radioactive particles will be released into the environment. When the pipes to the primary

reactor coolant loops are cut, FP&L will have to dispose of 200 tons of radioactive liquid coolant. These issues have not been documented satisfactorily by FP&L.

The second concern I have is about the wisdom of the economics of this repair. The range of costs from \$ 226 million to \$ 320 million is probably a conservative range. These figures do not include inflation since 1977, cost overruns, or technical changes since 1977. Each of these items could substantially increase the estimated price.

Another factor that must be considered, is the remaining number of years of operation left before Turkey Point must be decommissioned.

Alternatives to these costly, hazardous, and possibly unfruitful repairs must be studied. If it can be determined that a replacement conventional facility can be built and operated for less money and have a longer working life, then Turkey Point should not be repaired. The consequences of an erroneous decision can unnecessarily burden the economy of Florida for years.

Would you, Senator Stone, use the prestige of your office to urge the N.R.C. to hold hearings on these issues which are of great importance to the residents of Florida.

Very truly yours,



Mark P. Oncavage

enc: letter to N.R.C.

cc: Senator Chiles

RICHARD (DICK) STONE
FLORIDA

60-250-251

COMMITTEES:
AGRICULTURE, NUTRITION, AND
FORESTRY
FOREIGN RELATIONS
VETERANS' AFFAIRS

United States Senate

WASHINGTON, D.C. 20510

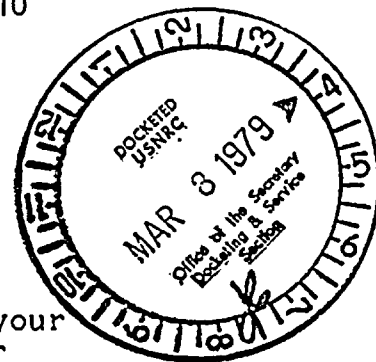
March 1, 1979

Our File: 9058170010

Congressional Liaison
Nuclear Regulatory Commission
1717 H Street, NW
Washington, D.C. 20555

Dear Director:

Because of the desire of this office to be responsive to all inquiries and communications, your consideration of the attached is requested. Your findings and views, in duplicate form, along with return of the enclosure, would be greatly appreciated. It would also be helpful to me if your response is mailed to my office at the address below and INCLUDES THE FILE NUMBER SHOWN ON THE COMMUNICATION I HAVE SENT TO YOU.



Cordially,

A handwritten signature in cursive script, appearing to read 'Dick Stone'.

Richard (Dick) Stone

RDS/vms
Enclosure

PLEASE REPLY TO: POST OFFICE BOX 4081
TALLAHASSEE, FLORIDA 32303

