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UNCLASSIFIED CORRESPONDENCE

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION 85 DEC -2 11:03

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
DOCKET NO. 50-250
BRANCH

In the Matter of)	Docket Nos. 50-250 OLA-2
)	50-251 OLA-2
FLORIDA POWER & LIGHT COMPANY)	
)	(Spent Fuel Pool Expansion)
Turkey Point Units 3 and 4)	
_____)	

INTERVENORS' RESPONSE TO
LICENSEE'S INTERROGATORIES
TO CENTER
FOR NUCLEAR RESPONSIBILITY AND
JOETTE LORION

Pursuant to 10 C.F.R. 2.740 (b), Intervenor, the Center for Nuclear Responsibility and Joette Lorion, hereby respond to interrogatories propounded by the Florida Power & Light Company.

Intervenor understands that the interrogatories are a continuing obligation and will provide additional information when it comes to Intervenor's attention.

I. General interrogatories to be answered for each contention.

- (a) For contentions 3,4,5,6,7,8, and 10, witness selection has not presently been determined. As required by Rule 2.740 (b), Intervenor will inform the Board and parties when a witness has been selected.
- (b) Not applicable since witness selection has not been determined.

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(c) General documents, books, reports and papers that Intervenor's will use in presenting their case on all contentions are:

General Design Criteria (GDC), 62 10 C.F.R. Part 50, Appendix A.

Policy Issue, SECY-83-337, August 15, 1983, Study on Significant Hazards.

Review and Evaluation of Spent Fuel PWR Expansion Potential Hazards Consideration, SAI Report No. 84-221-WA Rev. 1, July 29, 1983, Science Applications Inc.

ANSI 2-1973, "Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants."

ANSI N210-1976 "Design Objectives for PWR Spent Fuel Storage at Nuclear Power Stations".

"NRC Position for Review and Acceptance of Spent Fuel Storage and Handling Applications", April 14, 1978, revised January 18, 1979.

"Turkey Point Plant, Units 3 & 4, Updated Final Safety Analysis Report", Docket Nos. 50-250, 50-251.

"Turkey Point Plant Units 3 and 4, Safety Evaluation Report, Docket Nos. 50-250, 50-251.

NRC Standard Review Plan, "Spent Fuel Storage", Section 9.1.2, July 1981.

Nuclear Regulatory Commission, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants", NUREG-0800, Rev. 1, July 1981.

"Environmental Assessment and Finding of No Significant Impact-Spent Fuel Expansion, Turkey Point Plant Units 3 & 4, November 14, 1984.

Turkey Point Plant Units 3 & 4, Safety Evaluation Report and Final No Significant Hazards Determination Supporting Amendments No. 105 and 111, November 21, 1984.

Letter from Steven A. Varga, NRC, to J.W. Williams, FPL, July 19, 1984.

Specific documents to be used for individual contentions:

Contention 3: Standard Review Plan 15.7.5 and Regulatory Guide 125.

Contention 4: Letter from J.W. Williams, FPL, to Steven Varga, NRC, October 5, 1984.
SRP 9.1.3, Spent Fuel Cooling and Cleanup System.

Contention 5: Letter from Williams, FPL, to Varga, NPC, Feb. 1, 1985.

Contention 6: Documents haven't been determined.

Contention 7: Policy Issue, SECY-83-249, September 29, 1983, concerning a no significant hazards declaration for Oconee Nuclear Station, Unit 3.

Board Notification (BN 85-080, Spent Fuel Expansion Turkey Point Units 3 & 4, August 23, 1985.

Policy Issue, SECY-83-337, August 15, 1983, Study on Significant Hazards.

Board Notification (BN 85-030), Memorandum from Paul Bemis, March 25, 1985.

Contention 8: SAI Report No. 84-221 W/A Rev. 1, July 29, 1983.

"Spent Fuel Heat-Up Following Loss of Water During Storage", A.J. Benjamin, Sandia Labs, (Draft Sept. 1978, SAND-77-1371.

SRP 9.1.3.

Contention 10: ANSI6-1975, "Nuclear Criticality Safety in Operations with Fissionable Material Outside Reactors".

(d) The documents listed in the response (c) will be used in cross examination.

* Note: Legal Documents were also used in preparing our contentions but these were borrowed from Nina Bell of Nuclear Information and Resource Service in Washington and have been returned.

(e) Intervenors consider parts of the following documents to be deficient:

(1) Letter from Williams, FPL, to Varga, NPC, additional Information on Spent Fuel Storage, August 22, 1984. Responses to Questions 470.02, 0470-03 and 0470.07 are deficient because they state that radionuclide concentrations will be controlled with the spent fuel pool clean-up system. According to the Bemis Memorandum, BN 85-030, March 25, 1985, certain clean-up, leakage and radiation detection systems were either non-operational or degraded.

(2) Safety Evaluation Report for the Spent Fuel Storage Facility Modification of Units 3 and 4, July 15, 1983 by FPL.

3.1. Neutron Multiplication Factor: Intervenors do not agree that the design will prevent criticality.

T.S.5.4-1 Fuel Storage: Intervenors do not agree that the rack design will prevent criticality.

4-6 Seismic Impact and Loads: Intervenors do not agree that sliding or overturning will not occur.

4-11 Fuel Rack Sliding and Overturning Analysis: Analysis does not take into account Westinghouse's concerns about lift-off in the rack design.

Table 5-7 Estimated ALARA Doses: Intervenors do not agree that 88-130 REM is Alara. (See documents listed in response to contention 7.

(3) Environmental Assessment and Finding of No Significant Impact Spent Fuel Pool Expansions, Turkey Point Plant Units 3 and 4, November 14, 1984.

3.2.1 Occupational Exposure: Intervenors do not agree that dose will be kept ALARA and within the limits of 10 C.F.R. Part 20.

3.2.2 Public Exposure: This assumption was based on FPL's statements that their radiation detection and clean-up systems would be operational. Intervenors do not agree with the exposure listed in this part.

3.3 Radioactive Material Released to Atmosphere: Intervenors do not agree that the radiation released would be negligible.

3.4 and 3.5: Based on the assumption that FPL's clean-up system was operational.

6.0 E.I.S. : Intervenors disagree with Staff's decision not to prepare an EIS.

(4) Safety Evaluation Related to Amendments No. 111 and 105,,
NRC Staff, November 21, 1984.

2.2.2 Conclusion: Intervenors do not agree that the corrosion that will occur in the SFP environment will be of little significance.

2.6 Occupational Radiation Exposure: Intervenors do not agree that 59 person rem is ALARA. Also, this is based on certain assumptions for ALARA made in the FPL SER that stated that certain radiation detection and clean up systems would be operational.

Documents to support Intervenors concerned have not yet been decided upon, nor has witness selection been determined.

II. Specific Interrogatories

(a) With respect to contention 3

(1) The specific portions of 10 CFR Parts 20, 50, and 100 that intervenors claim could be exceeded are 20.101, 20.103, 20.105, 20.106, Part 20 Appendix B and C; 10 CFR Part 100 Appendix A

(2) Intervenors believe the radiation dose guidelines in these parts could be exceeded by a cask drop accident. Witness or documents to support our contention have not been identified.

(b) With respect to contention 4

(1) The conditions at Turkey Point are different from those at Limerick. The uranium is more highly enriched, the fuel has experienced fuel failure, and there is a greater inventory of noble gases. Intervenors have not yet identified expert witnesses to support this claim. Documents used are the radiological reports at the F.I.U. Library and Amendments No. 95 and 89, to Turkey Point Units 3 and 4 issued August 31, 1983.

(2) Intervenors do not think the assumptions used were appropriate, because they were based on ideal, not actual, conditions for the fuel.

(3) The parts of 10 CFR and 100 that will be exceeded as a result of a spent fuel pool boiling event are 10 C.F.R. Part 20.101, 20.103, 20.105, 20.106, Appendix B and C; and 10 C.F.R. Part 100 Appendix A.

(c) With Respect to Contention 5

- (1) Yes, Intervenor contend the current rerack design is deficient. Intervenor base this contention on Letter from J.W. Williams, FPL, to Varga, NRC, February 1, 1985 which states that the structural design of the racks could cause lift-off during seismic events. Witnesses for this contention have not been selected.

(d) With respect to contention (6)

- (1) Yes, Intervenor contend that the Staff safety evaluation does not correctly analyze or consider the deterioration of spent fuel pool materials or structure. The Sections that Intervenor feel are deficient are 2.2.2 Page 8 and 2.35 (b).
- (2) Yes, Intervenor contend that the Licensee Safety Analysis does not correctly analyze or consider the deterioration of spent fuel pool materials or structure. Sections 4.61 and 4.62 of the Licensee's Safety Evaluation are deficient.
- (3) The metal cladding could experience stress corrosion cracking from long term exposure to heat and radiation present in the spent fuel pool.
- (4) Witness or documents have not been identified.

(e) With respect to Contention 7

- (1) Yes, Intervenor have information about the radiation exposure incurred by workers at Oconee nuclear power plant. Intervenor at Oconee 3 were estimated to receive 22 person-rem based on worker experience during reracking at Oconee 1 and 2.

The source of Intervenors' information is letter from Hal B. Tucker, Duke Power Company, to Harold Denton, NRC, Attachment 2, Unit 3 Spent Fuel Pool Licensing Submittal.

(2) In a Letter from Williams to Varga, August 24, 1984:

- (a) Yes, Intervenors contend that the proposed actions in this attachment are not sufficient to maintain doses ALARA, because they were based on the assumption that certain clean-up systems and radiation monitoring systems were operational. The Bemis memorandum tells us they were not.
- (b) Yes, Intervenors contend that an estimate of 59 person-rem is not ALARA. According to SAI Report No. SAI-84-221-WA, Rev. 1, July 29, 1983, typical radiation exposure during rerack is 15-40 man rems. We have already stated that exposure at Oconee 3 was based on experience of 22 person-rem at Oconee Units 1 and 2. Intervenors also contend that it is doubtful that FPL even adhered to the 59 person-rem ALARA limit, since certain radiation detection and clean-up systems outlined in their SER were not operational during rerack.

(f) With respect to contention 8:

- (1) Numerous documents referred to were among those Intervenors borrowed from Nina Bell of Nuclear Information and Resource Service. Intervenors will provide Licensee with this information when she has obtained their own copies of the documents.

(9)

(2) Intervenors will answer this interrogatory when they have obtained copies of the documents they used to write their contentions.

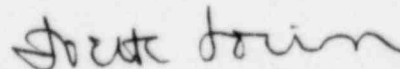
(3) Four hours is not adequate time to provide make-up water to the spent fuel pool in the event of a loss of cooling accident, because boiling could occur in 1.6 hours for maximum heat load conditions according to the SER.

(g) With respect to contention 10:

(1) The ANSI NI6-1975 requirements that will not be met are those that require the spent fuel pool in a safe configuration to protect against criticality. The requirements will be violated because storage of the fuel closer together, and storage of more highly enriched uranium fuel, could cause criticality to occur.

(2) The specific portions of 10 C.F.R Part 100 that will be exceeded by any potential release from the spent fuel pool are 10 C.F.R. Part 100 Appendix A.

Respectfully submitted,



Joette Lorion
Pro se litigant for the
Center for Nuclear Responsibility
and Joette Lorion

Dated: November 27, 1985

State of Florida)

County of Dade)

I, Joette Lorion, being duly sworn, do depose and say that
the information contained in this response is true and correct
to the best of my knowledge.

Joette Lorion
Joette Lorion

Sworn and subscribed before me this 27th day of
November, 1985.

John E. Tavares
Notary Public

State of Florida

My Commission expires:

Notary Public State of Florida at Large.
My Commission Expires Sept. 29, 1987
Bonded by American Fire & Casualty Co.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

85 DEC -2 A11:04

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FLORIDA POWER & LIGHT COMPANY)	Docket Nos. 50-250 OLA-2
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Turkey Point Units 3 & 4)	(Spent Fuel Pool Expansion)
)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Intervenors' Response to Licensee's Interrogatories to the Center for Nuclear Responsibility and Joette Lorion", were served on the following parties by deposit in the United States Mail, first class, properly stamped and addressed on the date shown below:

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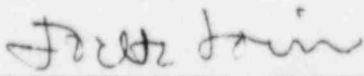
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Center for Nuclear Responsibility
and Joette Lorion

Dated: November 27, 1985