UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

FLORIDA POWER & LIGHT COMPANY

Docket Nos. 50-250 OLA-2 50-251 OLA-2

(Turkey Point Plant, Units 3 and 4)

(Spent Fuel Pool Expansion)

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LICENSEE'S RESPONSE TO AMENDED PETITION TO INTERVENE

I. Introduction

On July 9, 1984, the Center for Nuclear Responsibility, Inc. ("Center") and Joette Lorion (jointly referred to herein as "Petitioners") filed a "Request for Hearing and Petition for Leave to Intervene" ("Petition") in the above captioned proceeding. Florida Power & Light Company ("FPL" or "Licensee") and the NRC Staff filed answers to the Petition on July 24 and 30, 1984, respectively, which objected to the Petition in part. 1/ In an "Order Scheduling Prehearing Conference" dated February 7, 1985, the Licensing Board directed the Petitioners to file a supplement to their Petition, including a list of the contentions

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[&]quot;Licensee's Answer to Request for a Hearing and Petition for 1/ Leave to Intervene with respect to Spent Fuel Pool Expansion" (July 24, 1984) ("Licensee's Answer"); "NRC Staff Response to Request for Hearing and Petition for Leave to Intervene regarding Amendments to Expand the Spent Fuel Pool" (July 30, 1984). 2503

which the Petitioners seek to have litigated, by February 25, 1985, and directed the Licensee and the NRC Staff to file responses thereto by March 11 and March 18, 1985, respectively.

The Petitioners did not file a supplement to their Petition by February 25, 1985, as ordered by the Board. In a conference call among the Board, Licensee, NRC Staff, and Petitioners held on March 6, 1985, the Licensing Board directed the Petitioners to file a supplement by March 7, 1985 (together with a justification for the late filing) and directed the Licensee and NRC to file any answer by March 21, 1985.

On March 7, 1985, the Petitioners filed their "Amended Petition to Intervene" ("Amended Petition") and a "Motion to File Not in Accordance with the Board But in Accordance with the Rule" ("Motion"). The Motion requested that the Board extend the filing date for the Amended Petition from February 25, 1985, until March 7, 1985, and sought to justify the untimely filing under the five factors enumerated in 10 C.F.R. § 2.714(a).

The Licensee opposes the grant of the Motion to extend the time for filing the amended Petition to March 7, 1985. Petitioners have wholly failed to show "good cause," as required by 10 C.F.R. § 2.714(a)(1)(i), for filing late. Although Ms. Lorion initially told the Board in the March 6, 1985 conference call that she mistakenly took the Licensee's March 11, 1985 date in the February 7 order as Petitioners' date, Ms. Lorion now states that, although she "is a pro se litigant," she "was advised by counsel" or received "the vicarious advice of counsel"

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that the supplemental petition to intervene could be filed "no later than 15 days prior to the holding of the first prehearing conference," i.e., no later than March 12, 1985. (Motion, pp.1,2) She does not identify counsel who allegedly so advised her. However, the prehearing conference order expressly required the Petitioners to file their supplement to the petition to intervene "by February 25, 1985," and the Licensee to respond to the supplement "on or before March 11, 1985," i.e., one day before Ms. Lorion states she thought the supplement was due. Even a layman such as Ms. Lorion should have been able to recognize that her interpretation was not merely inconsistent with the Board's instructions but also would have created an impossible situation for the filing of responses. At a minimum, Ms. Lorion should have inquired further concerning her obligations in this proceeding. Her additional assertion that her personal "deadlines and time constraints" prevented her from making the February 25 deadline does not square with either her original explanation in the March 6 conference call or her March 7 motion. Her explanation, therefore, is unsubstantiated by any facts and should, not be accepted as establishing "good cause."

Second, the Petitions have not identified any experts upon whom the Petitioners intend to rely in order to assist in developing a sound record as required by 10 C.F.R. § 2.714(a)(1) (iii). As emerges from the discussion in Section II, <u>infra</u>, the proposed contentions, as submitted by the Petitioners, largely consist of issues which are outside the scope of this proceeding,

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misunderstandings of the Commission's rules and the Staff's regulatory guidance, and vague and unparticularized allegations. The nature of these proposed contentions indicates that the Petitioners' participation in this proceeding is not likely to contribute to the development of a sound record but instead will likely result in substantial expenditures of resources by FPL, the Staff, and the Board in responding to undirected, unsubstantiated, and mistaken allegations regarding the safety of Turkey Point.

Licensee submits that, in the present circumstances, these two factors outweigh the other factors in 10 C.F.R. § 2.714(a)(1), and the late contentions should be denied. It, nevertheless, hereby submits its response to the Amended Petition as directed by the Licensing Board on February 7. In addition, Licensee's Answer of July 24, 1984, addressed Petitioners' claims of standing to intervene in this proceeding. Licensee incorporates that discussion herein by reference and does not re-argue questions of standing in this pleading. <u>2</u>/ We turn now to consider the proposed contentions.

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^{2/} The Center now attempts to base its claim of standing upon a factor not previously asserted. However, this factor is insufficient to establish its standing. The Amended Petition states that the Center "manages" a resource library that could be damaged as a result of an accident at the Turkey Point Plant. (Amended Petition, p. 2). However, the Amended Petition does not explain how an accident at Turkey Point could possibly adversely affect such a library or adversely affect the Center in its capacity as the "manager" of the library. Thus, this allegation does not provide a sufficient basis for the standing of the Center to intervene.

II. PROPOSED CONTENTIONS

The Amended Petition includes ten proposed contentions, numbered 1 through 10, which Petitioners desire to litigate. 10 C.F.R. § 2.714(b) requires the proponent of a proposed contention to "set forth with reasonable specificity" the basis for each contention. The petition need not detail the evidence which will be offered to support the contentions, Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 547-49 (1980); Mississippi Power and Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973), however, a proposed contention must be presented with sufficient specificity and basis to put the parties on sufficient notice as to "what they will have to defend against or oppose." Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974). Thus, a proposed contention is not admissible if it contains only "vague generalized assertions, drawn without any particularized reference to the details of the challenged facility," Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-73-10, 6 AEC 173, 174 (1973), or if it does not "seek resolution of concrete issues," Peach Bottom, supra, ALAB-216, 8 AEC at 21. In order to satisfy the "basis" and "specificity" requirement, a petitioner cannot merely allege that a specific portion of the licensee's or the Staff's analysis is incorrect, but also must specify the basis for the allegation that the analysis is incorrect. Pacific Gas & Electric Co.

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(Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-728, 17 NRC 777, 801-02 n.73 (1983). The basis must provide "a clear articulation of the theory of the contention," Commonwealth Edison Co. (Quad Cities Station, Units 1 and 2), LBP-81-53, 14 NRC 912, 916 (1981), and state the "reasons" for the petitioner's concern. Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1654 (1982). Thus, where the licensee or the Staff have identified a potential problem and have identified a solution to the problem, it is incumbent upon the petitioner to specify why the licensee's or Staff's solution is inadequate. Commonwealth Edison Co. (Dresden Nuclear Power Station, Unit No. 1), LBP-82-52, 16 NRC 183, 188 (1982). With respect to a safety contention the petitioner must "either allege with particularity that an applicant is not complying with a specified regulation, or allege with particularity the existence and detail of a substantial safety issue on which the regulations are silent." Seabrook, supra, LBP-82-106, 16 NRC at 1656. Thus, the bare allegation that a particular facility or procedure is "unsafe" will not meet the particularity standard. Finally, it should be noted that a licensing board is under no obligation, "to recast contentions offered by one of the litigants for the purpose of making those contentions acceptable." Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-226, 8 AEC 381, 406 (1974).

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In addition to the general principles controlling the admissibility of proposed contentions, a substantial body of case law has developed regarding the admissibility of contentions and consideration of issues in a license amendment proceeding. To be admissible in a license amendment proceeding, a contention must raise an issue "arising directly from the proposed change." Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-245, 8 AEC 873, 875 (1974). The jurisdiction of a licensing board in an amendment proceeding is limited by the notice of the proceeding and extends only to the issues fairly raised by the notice. Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426 (1980). As a result, issues which have no nexus to an amendment are not cognizable in the amendment proceeding but instead are properly raised by means of a petition pursuant to 10 C.F.R. § 2.206. See Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear 1), ALAB-619, 12 NRC 558, 570 (1980).

The notice establishing the Atomic Safety and Licensing Board jurisdiction in this proceeding limited that jurisdiction "to rule on petitions for leave to intervene and/or requests for hearing" with respect to proposed amendments to Florida Power & Light Company's operating license Nos. DPR-31 and DPR-41. 49 Fed. Reg. 29689 (July 23, 1984). The notice further specified that: "The amendments would allow spent fuel pool storage capacity expansion from 621 to 1404 spaces for each fuel pool. The proposed expansion . . . to be achieved by reracking each

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spent fuel pool with two discrete regions, within each pool." <u>Id</u>. Thus, any proposed contentions that are not reasonably related to the amendments at issue or within the scope of the Board's jurisdiction may not be considered in this proceeding.

The proposed contentions, as submitted by Petitioners, are listed below, followed by the Licensee's objections to each proposed contention and the reason that the proposed contention should not be admitted.

Proposed Contention 1

That the expansion of the spent fuel pool at the Turkey Point facility is a significant hazards consideration and requires that a public hearing be held before issuance of the license amendments.

Bases for Contention

a) The expansion of the spent fuel pool at the Turkey Point facility increases the possibility of a criticality and loss of cooling water accident, involves a significant reduction in the margin of safety of the spent fuel pool, and creates the possibility of a new and different kind of accident occurring, which would cause the pool to lose its structural integrity.

b) The Commission has traditionally held, in a series of case law, that expansion of the spent fuel facility involves a significant hazards consideration. As noted by Commissioner Asselstine, during an exchange with Senator Mitchell in Congress in 1983 and quoted in a letter of March 15, 1983 from Senators, Simpson, Hart, and Mitchell to Palladino. Mr. Asselstine is quoted as saying:

That is correct, Senator. The Commission has never been able to categorize the spent fuel storage as a no significant hazard consideration.

c) Congress clearly intended the spent fuel pool expansion be considered a no significant hazards consideration. During a meeting in Congress on House Bill 4255, a Mr. Ottinger was guoted as saying:

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If the gentlemen will yield, the expansion of spent fuel pools and the reracking of the spent fuel pools are clearly matters which raise significant hazards consideration . . . (127 Cong. Record H 8156)

The Senate Committee on Environment and Public Works reiterated this understanding on its report on S. 1207:

The Committee anticipates, for example, that consistent with prior practice, the Commission's standards would not permit a "no significant hazards consideration determination" for license amendments to permit reracking of spent fuel pools." S. Rep. 97-113, p. 15.

Thus, the legislative history behind PL 97-415 clearly contemplates that reracking is an example of licensing amendments involving a significant hazards consideration.

Licensee's Objection

Petitioners' Proposed Contention 1 seeks to litigate the validity of the NRC Staff's "no significant hazards consideration" determination and contends that a public hearing must be held prior to the issuance of the spent fuel pool license amendment. <u>3</u>/ As demonstrated on pages 8-10 of the Licensee's Answer of July 24, 1984, which is incorporated herein by

^{3/} Petitioners interpret the legislative history of Section 189a(2)(A) of the Atomic Energy Act of 1954, Pub. L. 97-415, as amended, (42 U.S.C. § 2239(a)(2)(A)) (known as the Sholly Amendment) as requiring the Commission to find that spent fuel pool expansions involve a significant hazards consideration, (Petitioners' Amended Petition, pp. 4-5). Suffice it to say that the Commission's interpretation of this legislative history differs from that of the Petitioners, and the Commission has permitted the Staff to determine on a case-by-case basis whether a spent fuel pool expansion involves a significant hazards consideration. See 48 Fed. Reg. 14864-73, Standards for Determining Whether License Amendments Involve No Significant Hazards Considerations (April 6, 1983) (Statements of Consideration).

reference, this Licensing Poard has no authority to review the Staff's "no significant hazards consideration" determination. Additionally, this Board has already ruled, in another license amendment proceeding involving the same parties, that such a contention "is moot as a result of [the] issuance of the amendments and offers nothing to litigate." <u>Florida Power &</u> <u>Light Co.</u> (Turkey Point Nuclear Generating Units 3 and 4), ASLBP No. 84-496-03LA, Prehearing Conference Order, p. 10, May 16, 1984.

Consequently, this proposed contention should be rejected.

Proposed Contention 2

Expansion of the spent fuel pool at Turkey Point constitutes a major Federal action and requires that the Commission prepare an environmental impact statement in accordance with the National Environmental Policy Act of 1969 ("NEPA") and 10 C.F.R. Part 51.

Bases for Contention

The proposed expansion and reracking of the spent fuel pool at Turkey Point increases both the possibility and probability of an occurrence of a release of radiation or radioactive materials into the environment, both as a result of normal operation and in the event that there is a total or partial loss of coolant from the spent fuel pool. The licensee and staff must also address the following:

 as a result of the expansion there will be an increased amount of spent fuel stored at the Turkey Point plant. There is the possibility that this site could become a permanent waste disposal facility. The Licensee and Staff have not looked at long term, perpetual maintenance of these wastes, or calculated the costs associated with such in both monetary losses and losses of land use. b) There has not been alternate on site storage methods and alternatives to the expansions, including alternatives, such as derating, which would reduce the amount of spent fuel produced.

Licensee's Objection

The National Environmental Policy Act of 1969 (NEPA), Section 102(2)(c), (42 U.S.C. § 4332(2)(c)) only requires the preparation of an Environmental Impact Statement (EIS) for "major Federal action significantly affecting the quality of the human environment." However, Petitioners completely ignore the requirement that the action significantly impact "the quality of the human environment" and fail to allege any relevant significant impacts. Indeed, the expansion of a spent fuel pool's capacity has repeatedly been found in other cases not to be a major Commission (Federal) action significantly affecting the quality of the human environment. Commonwealth Edison Co., (Dresden Station, Units 2 and 3), LBP-82-65, 16 NRC 714, 727 (1982); Public Service Electric and Gas Co. (Salem Nuclear Generating Station, Unit 1), LBP-80-27, 12 NRC 435, 456 (1980); see, e.g., Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 264-68 (1979). Moreover, Petitioners do not express disagreement with any aspect of the Staff's Environmental Assessment and Finding of No Significant Impact 4/, nor do they express any basis to support the contention that the issuance of the licensing amendments constitutes a major Federal action.

^{4/} See 49 Fed. Reg. 45514, Florida Power & Light Co.; Issuance of Environmental Assessment and Finding of No Significant Impact (Nov. 16, 1984)

Petitioners do assert, as a basis for Proposed Contention 2, a general allegation concerning the possibility and probability of a release of radiation into the environment. However, Petitioners have offered no basis for assuming the occurrence of such a release, nor have they alleged (or provided a basis for an allegation) that such a release would significantly affect the quality of the human environment. Petitioners further express concern that Turkey Point "could become a permanent waste disposal facility." However, the Commission has determined by rulemaking that such issues are outside the scope of adjudicatory proceedings. 5/

Petitioners' final claim, as part of the basis for Proposed Contention 2, is that Licensee and Staff failed to consider alternatives to the expansion of the fuel pool, such as derating. However, there is no obligation to search out possible alternatives, such as derating, to a course of action which itself will not harm the environment. <u>Portland General Electric</u> <u>Co</u>. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 266 (1979).

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^{5/} The Commission in a recent rulemaking proceeding, 49 Fed. Reg. 34688, Requirements for Licensee Actions Regarding the Disposition of Spent Fuel Upon Expiration of Reactor Operating Licenses (Aug. 31, 1984) (to be codified at 10 C.F.R. Parts 50 and 51) has determined that "no discussion of any environmental impact of spent fuel storage in reactor facility storage pools . . . for the period following the term of the reactor operating license . . . is required in any . . . analyses prepared in connection with the issuance or amendment of an operating license 49 Fed. Reg. at 34694 (to be codified at 10 C.F.R. § 51.23(b)). The rule does not, however, alter the requirements currently in force for operating reactors. See id. at 34694 (to be codified at 10 C.F.R. § 51.23(c)).

Furthermore, the Petitioners have not alleged, and have not provided any basis for an allegation, that the alternatives identified in Proposed Contention 2 are environmentally superior to the spent fuel pool expansion for Turkey Point. Consequently, this proposed contention should be rejected, because the NRC is not required to consider alternatives which are not environmentally preferable to a proposed action. <u>See Florida</u> <u>Power & Light Co</u>. (Turkey Point Nuclear Generating Units Nos. 3 and 4), ALAB-660, 14 NRC 987, 1007 n. 28 (1981). In any case, the Petitioners' allegation is without basis since both the Staff and FPL have considered alternatives (including alternative storage sites and shutdown of Turkey Point). 6/

Thus, to the extent that Petitioners' proposed contention relates to long term storage of spent fuel beyond the operating license at issue, it is outside the scope of this proceeding and not cognizable by the Board. To the extent that Petitioners are concerned about spent fuel storage during the operating license period, they have failed to state with the requisite specificity any claim at all. Consequently, Petitioners have failed to provide a sufficient basis for this proposed contention and it should be rejected.

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^{6/} See Florida Power and Light Co., (Turkey Point Units 3 and 4) Spent Fuel Storage Facility, Safety Analysis Report (hereinafter FPL-SAR) (March 14, 1984), § 5.1.3; Environmental Assessment, § 1.3.

Proposed Contention 3

That the calculation of radiological consequences resulting from a cask drop accident are not conservative, and the radiation releases in such an accident will not be ALARA, and will not meet with the 10 CFP [sic] Part 100 criteria.

Bases for Contention

The Florida Power and Light Company did not comply with the conservative assumption for a cask drop accident that are specified in the Standard Review Plan 15.7.5 (5) and Regulatory Guide 125 [sic] (5), in that they used a 1.0 radial peaking factor, rather than a 1.65 factor. Thus, the potential offsite dose using the more conservative calculations could cause FPL to exceed the 10 CFP [sic] Part 100 criterion.

Licensee's Objection

Petitioners' Proposed Contention 3 is a product of misunderstanding sound engineering practices and misapplying the NRC Staff's regulatory guidance. 7/

First, Petitioners claim that the "calculation of radiological consequences resulting from a cask drop accident are not conservative." They assert that the methodology employed by FPL was not conservative because FPL "used a 1.0 radial peaking factor, rather than a 1.65 factor" specified in Regulatory Guide 1.25. In fact, FPL did use the 1.65 radial peaking factor (RPF) contemplated by Regulatory Guide 1.25 in analyzing an accident scenario involving a normal core refueling offload. Additionally, FPL analyzed a second accident sequence involving all of the fuel assemblies in a full core offload, and, in this

^{7/} It should be noted that the Staff's guidance is not a regulatory requirement, and a Licensee need not comply with that guidance. Petition For Emergency Remedial Action, CLI-78-6, 7 NRC 400, 406-07 (1978).

sequence, a more appropriate value of 1.0 was assigned to the RPF. 8/ In both accident sequences, the calculated radiological consequences are well within the 10 C.F.R. Part 100 criterion. In sum, FPL performed an analysis of a cask drop accident in conformance with the assumptions in Regulatory Guide 1.25 and

8/ The FPL-SAR provides in Section 5.3.1.2.2

For the calculation of radiological consequences potentially resulting from a cask drop accident, two cases were evaluated regarding the number of fuel assemblies that are assumed to suffer a loss of integrity:

> Case 1: The number of assemblies damaged is equal to the number of offloaded during a normal refueling plus the remainder of the pool filled with discharged assemblies from previous refuelings.

Case 2: The number of assemblies damaged is equal to a full-core offload plus the remainder of the pool filled with discharged assemblies from previous refuelings.

The model for calculating the thyroid and whole-body site boundary doses incorporated the conservative assumptions specified in Standard Review Flan (SRP) Section 15.7.5[4] and Regulatory Guide 1.25[5] with the exception that a 1.0 Radial Peaking Factor (RPF) was utilized for Case 2. An RPF of 1.65 as specified in Regulatory Guide 1.25 is intended to represent the highest burnup fuel assembly to which all the impacted fuel assemblies are to be equated. While this value may be appropriate for the analysis of a postulated accident involving a single assembly, it is grossly overconservative when applied to an analysis of a full core whose fuel assemblies have various exposure histories. An RPF of 1.0 has been determined as being more representative for the offload of a full core and has been applied to each assembly in the Case 2 analysis.

also performed a second analysis of the same type of accident using different assumptions; in both, the results of the analysis were acceptable. Consequently, this proposed contention is baseless and should be rejected. 9/

Second, Petitioners claim that the radiation releases in a cask drop accident will not be ALARA. This statement involves a misapplication of the relevant law. The ALARA principle is embodied in 10 C.F.R. § 20.1(c). However 10 C.F.R. Part 20 requirements only apply to the normal operating practices of a plant and not to accidents. <u>Florida Power & Light Co.</u> (Turkey Point Nuclear Generating Station, Units 3 and 4), LBP-81-14, 13 NRC 677, 702-03, <u>aff'd</u>; ALAB-660, 14 NRC 987 (1981). Thus, the ALARA standards are not applicable when analyzing an accident scenario. In any case, ALARA applies to the practices of a licensee to minimize radiation releases and exposures; it does not apply to the methodology used to calculate radiation releases and exposures.

Petitioners' Proposed Contention 3 misinterprets FPL's safety analysis and misapplies the Staff's regulatory guidance, is supported by no basis, and should be rejected by the Board.

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^{9/} In any case nonconformance with Regulatory Guides does not mean that the appropriate regulatory requirements are not met. <u>Gulf States Utilities Co.</u> (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 772-73 (1977).

Proposed Contention 4

That FPL has not provided a site specific radiological analysis of a spent fuel boiling event that proves that offsite dose limits and personal exposure limits will not be exceeded in allowing the pool to boil with makeup water from only seismic Category 1 sources.

Bases for Contention

FPL used calculation performed for the Limerick plant to prove that they would not exceed radiological limits in a spent fuel pool boiling accident. FPL should not be allowed to extrapolate Limerick's study for their own, because there are many differences between the two plants which could be critical. For example, the saturation noble gas and iodine inventories could be greater for the Turkey Point plant as a result of fuel failure and increased enrichment; more than 1% of the fuel rods may be defective at Turkey Point because of the asme fuel failure; and the gap activity of noble gases, such as krypton 85, and fisson products, such as radioactive iodine may also be greater for Turkey Point.

Licensee's Objection

This proposed contention is based on a misapprehension by Petitioners of the methodology used by FPL to analyze a spent fuel pool boiling event. Furthermore, the proposed contention is purely speculative and does not challenge any specific Staff or FPL analysis, and therefore lacks the requisite specificity and basis to be admitted as a contention.

By letter dated September 6, 1984 <u>10</u>/ the NRC requested, among other things, that FPL "provide the results of an analysis which shows no offsite dose limits and personal exposure limits will be exceeded by allowing the [spent fuel]

^{10/} Letter from Steven A. Varga (NRC) to J.W. Williams, Jr. (FPL). ("Request For Additional Information", Item 7).

pool to boil with makeup from only seismic Category 1 sources." <u>11</u>/ Petitioners' Proposed Contention 4 essentially paraphrases this question. FPL responded to the Staff's question with an analysis "consistent with the methodology and assumptions utilized in a similar pool boiling calculation performed for the Limerick plant . . [that] was reviewed by NRC and found acceptable . . . "<u>12</u>/ The figures and calculations employed in the analysis, however, were specific to Turkey Point Units 3 and 4 or were generically applicable to power reactors, including Turkey Point. Therefore, Petitioners' contention that FPL has not performed a site specific analysis is baseless.

It is apparent, from reading the bases for the proposed contention provided by Petitioners, that they did not understand that FPL had, in fact, used Turkey Point specific factors in calculating that the pertinent offsite dose limits and personal exposure limits would not be exceeded. For example, the following assumptions were used by FPL for the pool boiling analysis:

> a. The saturation noble gas and iodine inventories in the core are based on a power level of 2300 MWt with an initial enrichment of 4.5 w/o and a discharge burnup of 50,000 MWD/MTU.

> d. 1% of the fuel rods in the core are defective. The 1/2-core from the last refueling is assumed to contain the defective 1% of the fuel rods from that core.

11/ Id at 9.

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^{12/} Letter from J.W. Williams, Jr. (FPL) to Steven A. Varga (NRC), October 5, 1984 at 9-10.

e. The gap activity consists of 10% of the total noble gases except Kr-85, 30% of the Kr-85 activity, and 10% of the total radioactive iodine contained in the fuel rods. 13/

The numbers in (a) are Turkey Point site specific figures; the numbers in (d) are also Turkey Point site specific assumptions which also happened to be used at Limerick; and the numbers in (e) were taken from Regulatory Guide 1.25, ¶ C.1.d. Petitioners do not challenge any specific aspect of the figures, relying instead on a generalized statement that Licensee should not be allowed to use a "calculation performed for the Limerick plant to prove that they would not exceed radiological limits . . ." Thus, the proposed contention should be rejected because it is baseless and has no foundation in fact.

Proposed Contention 5

That the main safety function of the spent fuel pool, which is to maintain the spent fuel assemblies in a safe configuration through all environmental and abnormal loadings, may not be met as a result of a recently brought to light unreviewed safety question involved in the current rerack design that allows racks whose outer rows overhang the support pads in the spent fuel pool. Thus, the amendments should be revcked.

a) In a February 1, 1985 letter from Williams, FPL, to Varga, NRC, which describes the potential for rack lift off under seismic event conditions [sic]. This is clearly an unreviewed safety question that demands a safety analysis of all seismic and hurricane conditions and their potential impact on the racks in question before the license amendments are issued, because of the potential to increase the possibility of an accident previously evaluate [sic], or to create the possibility of a new or different kind of accident caused by loss of structural integrity. If integrity is lost, the damaged fuel rods could cause a criticality accident.

13/ Id. at 10.

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Licensee's Objection

In essence, this proposed contention alleges that the potential for lift-off of the spent fuel pool storage racks under seismic conditions constitutes an unreviewed safety question. This proposed contention is objectionable for several reasons.

To the extent that Petitioners are alleging that FFL and the NRC Staff have not considered the potential for rack lift-off, this allegation is clearly without basis. FPL provided the NRC Staff with the results of an evaluation which showed that rack lift-off would not occur, and the NRC Staff accepted the evaluation. <u>14</u>/ This evaluation was predicated upon the existence of certain administrative controls. These controls preclude lift-off during seismic events by prohibiting the loading of outer rows of a rack if those rows overhang the support pads of the rack and if the remaining rows of the rack are empty. 15/

The Petitioners have not alleged that this evaluation is, in any respect, erroneous. Instead, it appears to be the Petitioners' contention that, because FPL's evaluation in support of the amendment did not encompass the potential for rack lift-

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^{14/} Letter from J.W. Williams, Jr. (FPL) to Steven A. Varga (NRc), answer to question 4.1, dated September 28, 1984; SER, pp. 9-10.

^{15/} Letter dated February 1, 1985, from J.W. Williams, Jr. (FPL) to Steven A. Varga (NRC) and letter dated February 26, 1985, from Daniel G. McDonald (NRC) to J.W. Williams, Jr. (FPL). Copies of these letters were provided to the Board by counsel for the NRC Staff in a letter dated February 28, 1985.

off in the absence of these administrative controls, the potential for rack lift-off constitutes an unreviewed safety question.

The Licensing Board does not have jurisdiction over the issue raised by this proposed contention. As is made clear in the NRC Staff's letter of February 26, 1985, <u>16</u>/ these amendments are based upon the existence of administrative controls which preclude lift-off. The question postulated by Petitioners -loading of the racks without these administrative controls -- is outside the scope of these amendments as issued. Since the Board only has jurisdiction to rule on matters within the scope of the amendment, <u>Vermont Yankee</u>, <u>supra</u>, the Board has no jurisdiction to consider the potential for lift-off in the absence of these administrative controls. 17/

16/ Id.

17/ Furthermore, the Board has no authority to consider whether a change in or elimination of these administrative controls by FPL would constitute an unreviewed safety question. The Commission's regulations pertaining to unreviewed safety questions are embodied in 10 C.F.R. § 50.59. In brief, this section contains the following relevant provisions: (a) a licensee may make changes in its procedures without prior Commission approval if the changes do not involve an unreviewed safety guestion, (b) a licensee who makes such changes shall maintain a record of the changes (including a safety evaluation) and shall submit such records annually to the NRC Staff for its review. As is apparent from this section, the licensing boards have not been granted any role to play in making the unreviewed safety question determination or in the review of that determination. Thus, the Board has no jurisdiction to hear Petitioners' proposed contention that loading of the spent fuel storage racks in the absence of administrative controls consitutes an unreviewed safety question.

Proposed Contention 6

The Licensee and Staff have not adequately considered or analyzed materials deterioration or failure in materials integrity resulting from the increased generation and heat and radioactivity, as a result of increased capacity and long term storage, in the spent fuel pool.

Bases for Contention

The spent fuel facility at Turkey Point was originally designed to store a lesser amount of fuel for a short period of time. Some of the problems that have not been analyzed properly are:

- (a) deterioration of fuel cladding as a result of increased exposure and decay heat and radiation levels during extended periods of pool storage.
- (b) loss of materials integrity of storage rack and pool liner as a result of exposure to higher levels of radiation over longer periods.
- (c) deterioration of concrete pool structure as a result of exposure to increased heat over extended periods of time.

Licensee's Objection

This proposed contention suffers from a lack of specificity and bases.

To the extent that Petitioners contend that deterioration of fuel cladding, loss of materials integrity and deterioration of concrete pool structure have not been analyzed, they are incorrect. The Staff Safety Evaluation Report analyzes all three areas identified by Petitioners, and FPL's submissions contained similar analyses. <u>18</u>/

^{18/} For example, the NRC Staff Safety Evaluation Report (SER) (footnote continued)

To the extent that Petitioners may be alleging that the Staff's and FPL's analyses are inadequate, no basis is provided for the allegation. Petitioners have not specified why the analyses are inadequate or even what aspects of the analyses are in question.

(footnote continued from previous page)

(Issued in conjunction with the Operating License Amendments; See Letter from Daniel G. McDonald, Jr. (NRC Division of Licensing) to J.W. Williams, Jr. (FPL) (Nov. 21. 1984)) provides in pertinent sections as follows:

Section 2.2.1: Corrosion and Material Compatibility

The pool liner, rack lattice structure and fuel storage tubes are stainless steel which is compatible with the storage pool environment. In this environment of oxygen-saturated borated water, the corrosive deterioration of the Type 304 stainless steel should not exceed a depth of 6.00 X 10-5 inches in 100 years, which is negligible relative to the initial thickness. Dissimilar metal contact corrosion (galvanic attack) between the stainless steel of the pool liner, rack lattice structure, fuel storage tubes, and the Inconel and the Zircaloy in the spent fuel assemblies will not be significant because all of these materials are protected by highly passivating oxide films and are therefore at similar potentials. Id. at 6.

Section 2.7: Spent Fuel Pool Cooling and Makeup Systems

* * *

The structural considerations of the thermal loads imposed by a pool water temperature of 212° on the steel liners and concrete have been reviewed . . . [and] pool function and structural integrity are maintained. Id. at 15.

See also FPL-SAR, supra n. 7, at 3-12 and 4-12 through 4-16; letter dated October 5, 1984, from J.W. Williams, Jr. (FPL) to Steven A. Varga (NRC), response to Question 8. The proposed contention can best be characterized as expressing a general concern about the long term effects of increased heat and radiation on the structural integrity of the storage facilities. General fears or criticisms do not provide an adequate basis for admitting a contention in a license amendment proceeding. <u>Wisconsin Electric Power Co.</u> (Point Beach Nuclear Plant, Units 1 and 2), LBP-81-55, 14 NRC 1017, 1026 (1981). Absent more specificity about what areas have not been adequately considered or the manner in which that consideration was inadequate, this proposed contention should be rejected for a lack of specificity and basis.

Proposed Contention 7

That there is no assurance that the health and safety of the workers will be protected during spent fuel pool expansion, and that the NRC estimates of between 30-130 rem/person will not meet ALARA requirements, in particular those in 10 C.F.R. Part 20.

Bases for Contention

FPL's estimates of between 80-130 rem/person are much higher than the NRC's estimate for reracking of 40-50 person/rem [sic], and much higher than experience at other nuclear plants. Thus, there [sic] estimates are not ALARA.

Licensee's Objection

Petitioners' Proposed Contention 7 is based on an incorrect reading of FPL's analysis, is broadly conclusory and provides no basis for the assertion that FPL's practices will not be ALARA. Petitioners' proposed contention is essentially a restatement of a question addressed by Staff to FPL on July 19, 1984. <u>19</u>/ Petitioners, however, fail to recognize FPL's exhaustive answer to the Staff's concerns. <u>20</u>/ FPL's original Safety Analysis Report conservatively estimated doses of between 88 and 130 person-rems. This was recalculated by FPL in response to the July 19 letter and was lowered to approximately 59 person-rems based upon more recent spent fuel pool dose rate survey and isotopic concentration data and further development of detailed engineering. This figure is substantially the same as the estimates propounded by Petitioners and thus effectively eliminates any source of contention between Petitioners and Licr usee concerning this contention.

Additionally, Petitioners make a conclusory statement that the spent fuel pool expansion will not be ALARA but do not provide any basis for the assertion. Petitioners have not referenced any practices of FPL that are not ALARA and have not disputed either the Licensee's or Staff's analysis and conclusions pertaining to the practices used to minimize radiation exposure during reracking of the spent fuel pools. 21/

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^{19/} See Letter from Steven A. Varga (NRC) to J.W. Williams, Jr. (FPL), July 19, 1984, p. 5.

^{20/} See Letter from J.W. Williams, Jr. (FPL) to Steven A. Varga (NRC), Aug. 22, 1984, pp. 3-4, 18-20, and Table 3.

^{21/} These practices are described at FPL-SAR § 5.2.4.1 and SER § 2.6.

Thus, Petitioners' Proposed Contention 7 should be rejected as offering nothing to litigate in this proceeding and as lacking the requisite specificity and bases for an admissible contention.

Proposed Contention 8

That the high density design of the fuel racks will cause higher heat loads and increase in water temperature which could cause a loss-of-cooling accident in the spent fuel pool, which could in turn cause a major release of radioactivity to the environment. And, that the decrease in the time that it takes the spent fuel to reach its boiling point in such an accident, both increases the probability of accidents previously evaluated and increase [sic] the chances accidents not previously evaluated.

Bases for Contention

a) The NRC has stated in numerous documents that the water in spent fuel pools should normally be kept below 122 degrees F. The present temperature of the water at Turkey Point is estimated to be 127 degrees F. After the reracking, the temperature of the water could rise to 141 degrees on a normal basis, and could reach 180 degrees F. with a full core load added. In addition, the time for the spent fuel boiling point to be reached in a loss of cooling accident will go from 15 hours to 4 hours. Four hours is clearly not enough time to take action to prevent a major accident in the spent fuel pool from occurring. Thus, the increase in heat and radioactivity resulting from increases [sic] density will result in an increase in the probability of a major spent fuel pool meltdown occurring.

b) There is also the possibility that a delay in the make up emergency water, could cause the zirconium cladding on the fuel rods to heat up to such higher temperatures that any attempt at later cooling by injecting water back into the pool could hasten the heat up, because water reacts chemically with heated zirconium to produce heat and possible explosions. Thus, the zirconium cladding could catch on fire, especially in a high density design, and create an accident not previously evaluated.

Licensee's Objection

Petitioners' Proposed Contention 8 is stated in broad, conclusory terms without the requisite particularity or basis and should be rejected.

The gravamen of Petitioners' complaint seems to be that the increased storage capacity of the spent fuel pools will lead to a reduction in "the time that it takes the spent fuel [sic] to reach its boiling point" in a loss of coolant accident (LOCA). As a basis for this proposed contention Petitioners first refer to "numerous documents" in which the NRC has stated that the water in spent fuel pools should be kept below 122 degrees F. However, Petitioners have not identified these "numerous documents' and simply cannot incorporate "numerous documents" into a contention or bases for a contention without specifying what those documents are and what parts of the documents relate to the contention. <u>Tennessee Valley Authority</u> (Browns Ferry Nuclear Plant, Units 1 and 2), LEP-76-10, 3 NRC 209, 216 (1976).

Petitioners then recite the pool temperatures that could be reached under certain conditions but provide no basis for an allegation that these temperatures are unsafe. In fact, all of the temperatures mentioned by Petitioners are well within the design basis of the spent fuel storage pool. 22/

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^{22/} A letter from Steven A. Varga, (NRC) to J.W. Williams (FPL) dated September 6, 1984 requested additional information concerning the design basis of the spent fuel pool and cooling system. (See question 8). FPL responded (Letter from J.W. Williams to Steven A. Varga. (NRC) (Oct. 5, 1984) with the results of a study that concluded that "both (footnote continued)

Additionally, the predicted temperatures for a 1/3 core offload and full core offload are also within the limits which have been accepted by the NRC Staff in their Standard Review Plan. 23/ Finally, Petitioners state that the "time for the spent fuel [pool] boiling point to be reached in a loss of cooling accident will go from 15 hours to 4 hours" and conclude, with no basis, that "[f]our hours is clearly not enough time to take action to prevent a major accident . . . " However, the Staff found that the 100-percent-capacity spare pump which is permanently piped into the SFP cooling system, the alternate connections for installing a temporary pump, and the multiple alternate means of providing makeup water in less than an hour are adequate to ensure the cooling of the spent fuel pool in the event of a loss of cooling accident. 24/ Petitioners completely ignore this finding and do not allege (or provide any basis for an allegation) that this finding is incorrect.

Petitioners also speculate, as a purported basis for Proposed Contention 8, that a possiblity exists that the Zirconium cladding on the fuel rods could heat to such high temperatures that they would react chemically with any cooling

- 23/ See SER, pp. 15-16.
- 24/ See Staff SER, at 14-15 for a complete discussion of the adequacy of the spent fuel pool cooling and makeup systems.

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⁽footnote continued from previous page)

structural integrity and pool function will be maintained for an indefinite period of time if water temperature in the pool were to be maintained at 212° F." Oct. 5. 1984 letter at p. 15.

water and explode or catch on fire and thus increase the probability and possibility of an accident not previously evaluated. However, the Zirconium cladding failures postulated by Petitioners are dependent upon the occurrence of the type of accident for which Petitioners have failed to provide any basis. Petitioners allude to no facts and provide no independent basis for their speculations that the Zirconium cladding would react chemically with water at the temperatures expected in the spent fuel pool.

Thus, Proposed Contention 8 should be rejected because it is not stated with sufficient particularity, is purely speculative, and has no basis.

Proposed Contention 9

Licensee has not analyzed the effect that a hurricane or tornado could have on the spent fuel storage facility or its contents, and that the SER neglects certain accidents that could be caused by such natural disasters.

Bases for Contention

The Turkey Point sight is in an area of potential hurricane and tornado activity. Accidents externally initiated by such events should be analyzed, including:

- a) the possibility that a tornado driven or hurricane wind driven missile could damage the spent fuel racks.
- b) the possibility that a tidal wave caused by a hurricane could cause the radioactivity in the spent fuel pool to be washed into the surrounding environment.

Licensee's Objection

This proposed contention is outside the scope of the proceeding and not cognizable by the Board. The Spent Fuel Pool Building has been designed to withstand hurricanes and tornadoes. 25/ This design basis was accepted by NRC when it issued the Construction Permits and Operating Licenses for Turkey Point. The reracking of the spent fuel pool has no effect on the ability of the Spent Fuel Building to withstand tornado or hurricane winds at tidal waves. Thus, Petitioners are essentially seeking to relitigate the design basis of the plant and fuel storage facility. An amendment proceeding is not an appropriate forum for the litigation of issues decided in the construction permit and operating license proceedings, and only the safety issues related to the amendment in question may be examined. Portland General Electric Co. (Trojan Nuclear Plant), LBP-78-40, 8 NRC 717, 745 (1978), aff'd, ALAB-534, 9 NRC 287 (1979).

Thus, the proposed contention should be rejected because it is outside the scope of this proceeding.

Proposed Contention 10

That the increase of the spent fuel pool capacity, which includes fuel rods which have experienced fuel failure and fuel rods that are more highly enriched, will cause the require-

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^{25/} See Florida Power & Light Co. (Turkey Point FSAR Plant Units 3 and 4), Final Safety Analysis Report (FSR). Appendix 5A-12-13 sets forth the design basis for wind loads for Class 1 structures. Hurricane tides are considered at 5A-14. The spent fuel storage facilities are defined as Class 1 structures at 5A-3.

ments of ANSI NI6-1975 [sic] not to be met and will increase the probability that a criticality accident will occur in the spent fuel pool and will exceed 10 C.F.R. Part 50, A 62 criterion.

Bases for Contention

The increase in the number of fuel rods stored and the fact that many of them may have experienced fuel failure or may be more highly enriched and have more reactivity will increase the chances that the fuel pool will go critical, and cause a major criticality accident, and perhaps explosion, that will release large amounts of radioactivity to the environment in excess of the 10 C.F.R. 100 criteria.

Licensee's Objection

Proposed Contention 10 is not admissible because it lacks specificity and basis. The propose contention alleges that "the requirements of ANSI NI6-1975 [sic] will not be met." <u>26</u>/ However, it fails to identify what specific section of ANSI NI6.1-1975 will not be met, to explain why that standard will not be satisfied, or to explain why ANSI NI6.1-1975 is relevant to this proceeding. Therefore, this proposed contention should be rejected for lack of specificity and basis.

Furthermore, Petitioners have provided no basis for their contention that the amendment will increase the probability of a criticality accident. As has been demonstrated by FPL and the NRC Staff, the design basis K_{eff} for the spent fuel pool has

^{26/} ANSI NI6.1-1975, American National Standard for Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors (April 14, 1975). This technical document contains numerous specifications, tables, and charts that provide both single parameter and multiparameter limits and controls for operations with fissile nuclides.

remained unchanged at .95 as a result of the amendment. <u>27</u>/ The Petitioners have not identified any errors in the Staff's and FPL's analyses. Consequently, this proposed contention should be rejected for lack of specificity and basis.

III. Conclusion

A balancing of the five factors in 10 C.F.R. § 2.714(a) weighs against acceptance of the untimely filing of the Amended Petition and of the Motion to file out of time. Additionally, each of the proposed contentions raised by Petitioners is objectionable for lack of specificity or basis or for other reasons. Consequently, Petitioners' request to intervene should be denied.

Respectfully submitted,

Steven P. Frantz

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Of Counsel:

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Dated: March 21, 1985

27/ See FPL-SAR, supra, at 3-1 and 2; NRC Staff SER, supra, at 4 and 17.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NOTICE OF APPEARANCE OF COUNSEL

Notice is hereby given that Steven P. Frantz enters an appearance as counsel for Florida Power & Light Company in the above-captioned proceeding.

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District of Columbia Court of Appeals

Steven P.

Newman & Holtzinger, P.C. 1615 L Street, N.W. Washington, D.C. 20036

Date: March 21, 1985

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

ATT: 30

In the M	latter	of)			
FLORIDA	POWER	& LIGHT	COMPANY) Docket	Nos.	50-250 50-251	OLA-2 OLA-2
(Turkey Units	Point 3 and	Plant, 4))) (Spent	Fuel	Pool E	xpansion)

CERTIFICATE OF SERVICE

I hereby certify that copies of "Licensee's Response to Amended Petition to Intervene" in the above captioned proceeding, together with a Notice of Appearance of Counsel, were served on the following by deposit in the United States mail, first class, properly stamped and addressed, on the date shown below.

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

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

> Attention: Chief, Docketing and Service Section (Original plus two copies)

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Dated this 21st day of March, 1985

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- * additional service by messenger
- ** additional service by Federal Express