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February 4, 1988

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 50-335-OLA
FLORIDA POWER AND LIGHT COMPANY	)	
	)	(SFP Expansion)
	)	
(St. Lucie Plant, Unit No. 1)	)	

NRC STAFF RESPONSE TO AMENDED PETITION TO INTERVENE

I. INTRODUCTION

On August 31, 1987, pursuant to 10 C.F.R. § 2.105(a)(4)(i), the NRC published in the Federal Register a notice of consideration of the issuance of an amendment to the St. Lucie Plant, Unit No. 1 (St. Lucie) license and offered an opportunity for hearing on the amendment. 52 Fed. Reg. 32857. The amendment would allow the expansion of the spent fuel pool storage capacity from 728 to 1706 fuel assemblies. The notice established September 30, 1987, as the deadline for filing a request for hearing and petition for leave to intervene.

Based on a newspaper article concerning the proposed expansion, Campbell Rich (Petitioner) wrote a letter, dated September 30, 1987, to the Secretary of the Commission and asked that a public hearing be held concerning the amendment. The letter was accompanied by a "petition" page listing the signatures of Petitioner and 19 other Florida residents.

After holding a conference call with the parties, the Licensing Board set January 15, 1988, as the deadline to file an amended intervention

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petition, including a statement of contentions, in accordance with 10 C.F.R. § 2.714. Memorandum and Order, November 13, 1987, at 3. In a document transmitted in an envelope postmarked January 15, 1987, Petitioner filed an amended petition to intervene (pro se), which included 16 contentions. 1/ Amended Petition to Intervene (Amended Petition). The Amended Petition (a) supplements the original petition by offering additional information on Petitioner's interest and (b) requests that a hearing be held and an environmental impact statement prepared before the amendment issues. 2/

II. DISCUSSION

A. Interest and Standing

In its response to Petitioner's letter petition to intervene, the Staff noted that while Petitioner resides within the geographical proximity of the facility, Petitioner had not shown his standing to intervene because he had not alleged potential injury from operation of the facility under the proposed amendment. 3/ Because Petitioner alleges a potential injury from accidental releases as a result of the proposed amendment, Petitioner

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1/ The Staff notes that the Amended Petition was neither dated nor accompanied by proof of service upon all parties (i.e., a service list) as required by 10 C.F.R. 2.701.

2/ Pursuant to 10 C.F.R. § 50.91(a)(4), if the Staff makes a final no significant hazards determination, the contested amendment may issue despite the pendency of a request for hearing.

3/ NRC Staff Response to Letter Hearing Request By Campbell Rich, November 9, 1987, at 6-7.

has adequately demonstrated his standing and interest to intervene in this proceeding.

B. Petitioners' Proposed Contentions

In his Amended Petition, Petitioner proffers 16 contentions (designated as Contentions 1-16) for admission and litigation. 4/ In the discussion below, the Staff addresses the legal standards governing the admission of contentions in NRC adjudicatory proceedings, followed by the Staff's position on the admissibility of Petitioner's proposed contentions.

1. Legal Standards Governing Admissibility of Contentions

Only those contentions which fall within the scope of issues set forth in the Federal Register notice of opportunity for hearing and comply with the requirements of 10 C.F.R. § 2.714(b) and applicable Commission case law may be admitted for litigation in NRC licensing proceedings. See, e.g., Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426 (1980); Vermont Yankee Nuclear Power Corp.

4/ The Staff notes that nine of the sixteen contentions (Contentions 1, 2, 3, 5, 6, 7, 8, 13, and 15) and their bases are almost identical to contentions and bases proffered in the Turkey Point spent fuel pool expansion proceeding. See Florida Power & Light Co. (Turkey Point Plant, Units 3 and 4), LBP-85-36, 22 NRC 590 (1985) (hereafter "Turkey Point"). Some of the Turkey Point contentions were dismissed in response to motions for summary disposition, Memorandum and Order, March 25, 1987 (unpublished); however, a licensing board decision on those issues considered at hearing has not issued.

The lack of pleading originality, alone, will not defeat intervention in NRC licensing proceedings. E.g., Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 and 2), LBP-80-30, 12 NRC 683, 689 (1980). Consequently the Staff has evaluated each contention separately against the basis and specificity requirements of 10 C.F.R. § 2.714(b).

(Vermont Yankee Nuclear Power Station), ALAB-245, 8 AEC 873, 875 (1974); Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974); Commonwealth Edison Co. (Byron Station, Units 1 and 2), LBP-80-30, 12 NRC 683, 689 (1980). See also Portland General Electric Co. (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979).

Pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to file "a list of contentions which petitioner seeks to have litigated in the matter, and the bases for each contention set forth with reasonable specificity." A petitioner who fails to file at least one contention which satisfies the requirements of § 2.714(b) will not be permitted to participate as a party. A proffered contention must be rejected where:

(1) it constitutes an attack on applicable statutory requirements;

(2) it challenges the basic structure of the Commission's regulatory process or is an attack on the regulations;

(3) it is nothing more than a generalization regarding the Petitioner's view of what applicable policies ought to be;

(4) it seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or

(5) it seeks to raise an issue which is not concrete or litigable.

Peach Bottom, supra, 8 AEC at 20-21. The purpose of the basis requirement of 10 C.F.R. § 2.714(b) is: (a) to assure that the matter sought to be put into question does not suffer from any of the infirmities listed above; (b) to establish sufficient foundation to warrant further inquiry into the subject matter; and (c) to put the other parties sufficiently on

notice "so that they will know at least generally what they will have to defend against or oppose." Id. at 20.

At the early states of a proceeding, petitioners need to identify only the reasons "(i.e., the basis)" for each contention. Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 548 (1980). The basis stated for each contention need not "detail the evidence which will be offered in support of each contention." Mississippi Power & Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973). Accordingly, in examining contentions and the bases therefor to determine admissibility, a licensing board may not reach the merits of contentions. Id.; Peach Bottom, supra, 8 AEC at 20. Nevertheless, the basis for contentions must be sufficiently detailed and specific: (a) to demonstrate that the issues raised are admissible and further inquiry into the matter is warranted; and (b) to put the parties on notice as to what they will have to defend against or oppose. This is particularly important where, as here, a hearing is not mandatory, in order to assure that an asserted contention raises an issue which clearly is open to adjudication. Cincinnati Gas & Electric Co. (William H. Zimmer Nuclear Power Station), ALAB-305, 3 NRC 8, 12 (1976; Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-183, 7 AEC 222, 226 (1974).

In addition, a board is not authorized "to admit conditionally for any reason, a contention that falls short of meeting the specificity requirements." Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 466 (1982), modified on other grounds, CLI-83-19, 17 NRC 1041 (1983). The NRC's Rules of Practice do not

permit "the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff." Id., at 468.

Finally, a licensing board has no duty to recast contentions offered by a petitioner to remedy the infirmities of the type described in Peach Bottom, supra, in order to make inadmissible contentions meet the requirements of 10 C.F.R. § 2.714. Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-226, 8 AEC 381, 406 (1974). Should a board nevertheless elect to rewrite a petitioner's inadmissible contentions so as to eliminate the infirmities that render the contentions inadmissible, the scope of the reworded contentions may be made no broader than the bases that were previously provided by the petitioner for the inadmissible contentions. Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-675, 15 NRC 1105, 1114-16 (1982).

2. Proposed Contentions

Petitioners' proposed Contention 1 states:

> CONTENTION 1: That the expansion of the spent fuel pool at St. Lucie, Unit No. 1 is a significant hazards consideration and requires that a public hearing be held before issuance of the amendments (sic).

In Contention 1, Petitioner asserts that the amendments cannot issue until after a hearing on the amendments is held because the amendment involves a significant hazard. This contention is not relevant to any issues properly before the Board and does not raise an issue as to which the Board may take effective action or provide an effective remedy.

Pursuant to Public Law 97-415, the Commission amended its regulations effective May 6, 1983 to specify standards for determining

whether proposed operating license amendments involve significant hazards considerations and to revise procedures for noticing and issuing operating license amendments. 5/ The legislation, as implemented in the revised regulations:

> authorized NRC to issue and make immediately effective an amendment to a license, upon a determination that the amendment involves no significant hazards consideration (even though NRC has before it a request for a hearing by an interested person) and in advance of the holding and completion of any required hearing.

51 Fed. Reg. 7745. Under the revised regulations, when the NRC receives an amendment request, it will make a proposed determination as to whether the amendment involves no significant hazards considerations. If that determination is that no significant hazards considerations are involved, the NRC will issue a notice which describes the requested amendment, sets forth the proposed no significant hazards consideration finding, requests comments on that proposed finding, and gives notice of opportunity for a hearing. If, pursuant to such notice, requests for hearing are filed, the NRC will make a final determination on the matter of significant hazards. If the final determination is that the proposed amendment involves no significant hazards considerations, the NRC may (upon making the other requisite health and safety findings) issue the requested amendment despite the fact that there has been a request for a hearing on the amendment and no hearing has yet been held. Any hear-

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5/ See Standards for Determining whether License Amendments Involve No Significant Hazards Considerations, 48 Fed. Reg. 14864 (April 6, 1983); Notice and State Consultation, 48 Fed. Reg. 14873 (April 6, 1983). The interim final rules were later followed by the final rule published March 6, 1986. Final Procedures and Standards on No Significant Hazards Considerations, 51 Fed. Reg. 7744.

ing on the amendment would be held after the amendment was issued and effective. 51 Fed. Reg. 7745, 7759-62.

In promulgating the revised regulations for the treatment of license amendment applications, the Commission noted that, although the substance of public comments on the Staff's proposed no significant hazards considerations determination might be litigated in any hearing ultimately held, neither the Commission nor its adjudicatory boards will entertain hearing requests on Commission actions with regard to such comments. 51 Fed. Reg. 7745, 7759. Accordingly, 10 C.F.R. § 50.58(b)(6) states that:

> No petition or other request for review of or hearing on the staff's significant hazards consideration will be entertained by the Commission. The staff's determination is final, subject only to the Commission's discretion, on its own initiative, to review the determination. 6/

These Commission statements indicate that the Staff's actions in making a final no significant hazards consideration finding, despite contrary comments on the question of significant hazards, and in issuing any license amendment prior to hearing in the face of such contrary comments, are not matters for hearing. The Commission has made it clear that, while the substance of public comments on the Staff's no significant hazards determination and the essence of the Staff determination might be

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6/ In addition, the Commission stated in the interim final rule that "any question about its staff's determinations on the issue of significant versus no significant hazards consideration that may be raised in any hearing on the amendment will not stay the effective date of the amendment." 48 Fed. Reg. 14873, 14876. See 10 C.F.R. § 50.91(a)(4). In this vein, Petitioner's request that a hearing be held before the amendment issues, must be rejected. See Amended Petition at 12.

considered at hearing (at least in the context of considering the health and safety aspects of the amendment itself), any such consideration and subsequent Licensing Board action cannot impact on the effective date of any amendment issued.

In these circumstances, litigation over the finding of no significant hazards considerations, in and of itself, can result in no useful remedy in the event it is found that the no significant hazards determination which Petitioner seeks to challenge is wrong. In short, Petitioner's Contention 1 raises nothing that may be meaningfully litigated and presents no relevant issue for which the Licensing Board may provide a remedy in the event that Petitioner prevails. The issue before the Licensing Board is whether there is reasonable assurance of adequate protection of the public health and safety by operation of the facility with the expanded storage capacity of the spent fuel pool, not whether or not there are significant hazards considerations. The latter issue is irrelevant in this proceeding since, as the Commission has observed, it is a procedural device whose only purpose is to determine the timing of the hearing (before or after issuance of the amendment). Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-86-12, 24 NRC 1, 6 n.3 (1986). For these reasons, the Staff opposes admission of Contention 1. 7/

7/ Basis (b) is also incorrect. See Petition at 2. The Commission has not traditionally held that storage capacity expansions involve significant hazards considerations. In a response to the March 15, 1983 letter referred to in the basis, the Chairman stated that the NRC has not taken a position on whether any particular reracking in-

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Proposed Contention 2 states:

> CONTENTION 2: Expansion of the spent fuel pool at the St. Lucie facility constitutes a major Federal action and equires 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.

Contention 2 asserts that an environmental impact statement (EIS) must be prepared because (1) the reracking of the spent fuel increases the "possibility and probability" of radiation releases resulting from normal operation and in the event there is a total or partial loss of coolant from the spent fuel pool, (2) there has been no analysis of the effect of the site being used for "permanent waste disposal," and (3)

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volves significant hazards. Letter to Hon. A.K. Simpson, U.S. Senate, from N.J. Palladino, NRC, April 22, 1983. Rather, the Staff had prenoticed applications involving expansion of spent fuel storage capacity "as a matter of discretion" in light of possible public interest. SECY-83-337, Study on Significant Hazards, August 15, 1983, at 2.

Furthermore, in issuing its interim final rule on standards for determining whether an amendment involves significant hazards considerations, the Commission stated that it was "not prepared to say that reracking of spent fuel storage pool will necessarily involve a significant hazards consideration" and determined that the matter needed further study. 48 Fed. Reg. 14864, 14869. The Commission directed the Staff to prepare a report (which became SECY-83-337) for the Commission's use in revisiting the rule. While the Commission indicated that it did not expect that reracks accomplished by proven technology would involve significant hazards, the Commission stated that during the interim, a finding on a significant hazards consideration for each reracking application would be made on a case-by-case basis. 48 Fed. Reg. 14864, 14869. In promulgating the final rule, the Commission accepted the Staff's judgment that certain rerackings do not involve significant hazards considerations and added example (x) to the list of examples of actions not likely to involve a significant hazard. 51 Fed. Reg. 7744, 7755.

certain alternatives to onsite storage have not been considered. Amended Petition at 3. The Staff objects to the admission of this contention because the bases alleged are not adequately specific and because the basis, in part, reflects an issue beyond the scope of this amendment proceeding.

Petitioner alleges that the proposed rerack requires preparation of an EIS but provides no arguable basis within the scope of this proceeding for concluding that the expansion will cause significant environmental impact. The implication that releases during normal and accident conditions in the storage area will cause significant environmental consequences is speculative and not supported by any of the bases. Petitioner has not identified a scenario for a total or partial loss of spent fuel water, which are beyond design basis events for the pool, nor do they specify why such speculative releases are environmentally significant. In addition, consideration of the environmental risks of severe accidents is not required by NEPA. Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 696-97 (1985), citing, San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1301 (D.C. Cir. 1984), vacated in part and reh'g en banc granted on other grounds, 760 F.2d 1320 (1985). Furthermore, Petitioner's second basis, which asserts there is a need to examine the effects of permanent waste disposal, is clearly outside the scope of the current

amendment since such permanent storage is not being authorized by the instant amendment. 8/

As for alternatives to spent fuel storage capacity expansion, the Final Generic Environmental Statement on Handling and Storage of Spent Light Water Power Reactor Fuel, NUREG-0575, August 1979, analyzed such alternatives and concluded that the environmental impact of expanded onsite fuel storage is negligible. Petitioner offers no basis for challenging the applicability of that generic finding to the St. Lucie facility.

Consequently, proposed Contention 2 should be rejected for lack of a basis for the claim that an EIS is necessary. 9/

8/ The assertion that long-term waste storage will have significant environmental impacts also challenges the Commission's findings on the effects of extended storage, Rulemaking On The Storage and Disposal of Nuclear Waste (Waste Confidence Rulemaking), CLI-84-15, 20 NRC 288 (1984). There the Commission concluded that spent fuel could be stored on site for at least 30 years beyond the expiration of a reactor operating license without significant environmental consequences. 20 NRC at 293. This generic determination was codified by the adoption of a rule providing that a discussion of the environmental impacts of post-operating license, at-reactor storage is not required in any EIS, environmental assessment or other analysis in connection with the issuance or amendment of an operating license. "Requirements for Licensee Actions Regarding the Disposition of Spent Fuel Upon Expiration of Reactor Operating License," 49 Fed. Reg. 34688, 34694 (1984); 10 C.F.R. §§ 51.23(b), 51.30(b).

9/ Petitioner also requests that an EIS be issued before issuance of the amendments. See Amended Petition at 12. The Board should reject this request because a pool reracking is not one of the actions for which an EIS is required. See 10 C.F.R. § 51.20. In addition, pursuant to 10 C.F.R. § 51.21, licensing and regulatory actions, which do not require preparation of an EIS, require an environmental assessment unless the action falls within a categorical exclusion set forth in § 51.22. Pursuant to 10 C.F.R. § 51.31,

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Proposed Contention 3 states:

> 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 no (sic) be ALARA, and will not meet with the 10 C.F.R. Part 100 criteria.

Contention 3 alleges that the calculation of radiological consequences resulting from a cask drop accident is not conservative and will not meet Part 100 criteria. In addition, Petitioner alleges that doses from such accidental releases will not be ALARA (as low as is reasonably achievable). As a basis for the contention, Petitioner quotes from a document by Brookhaven National Laboratory Report, "Severe Accidents in Spent Fuel Pool in Support of Generic Issue 82," NUREG/CR-4982, BNL-NUREG-52093 (July 1987) (hereafter "BNL Report"). Amended Petition at 4.

The reference to the ALARA principle, which is found in 10 C.F.R. §§ 20.1(c) and 50.34(a), is inappropriate because ALARA generally applies to routine operation, not accidents. 10 C.F.R. § 50.34a; see e.g. Florida Power and Light Co. (Turkey Point Nuclear Generating Station, Units 3 and 4), LBP-81-14, 13 NRC 677, 702-03, aff'd, ALAB-660, 14 NRC 987 (1981); Turkey Point, LBP-84-36, 22 NRC 590, 597 (1985). The two BNL Report quotes, assuming they are

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> after completion of an environmental assessment, the Staff will determine whether to prepare an environmental impact statement or finding of no significant impact on the proposed action pursuant to 10 C.F.R. § 51.32.

accurately cited [10/] address uncertainties in fission product estimates associated with beyond design basis accidents in the spent fuel pool (i.e., accident resulting in zirconium cladding fires). Because the statement relates to uncertainties in calculating consequences of severe accidents, Petitioner does not provide a basis for applying that observation to analysis of cask drop accidents in general. Thus, the contention raises an issue within the scope of the proceeding and is adequately specific, but it is not supported by a minimally sufficient basis. The Staff opposes the admission of the contention.

Proposed Contention 4 states:

> CONTENTION 4: That the consequences of a cask drop accident or an accident similar in nature and effect are greatly increased due to the presence of a large crane to be built inside the spent fuel pool building in order to facilitate the reracking.

Contention 4 asserts that the consequences of a cask drop accident or "accident similar in nature and effect" are increased by the erection of a large crane in the spent fuel pool building. As a basis for this contention, Petitioner: (1) states that the presence or movement of a crane in the spent fuel pool area is contrary to Licensee's FSAR; (2) states that structural failure of the pool due to a heavy load drop is one of the accident triggering events in the BNL Report; (3) provides BNL Report quotations (at p. xix) which state that the frequency of pool draining due to heavy load drops is "uncertain" because human error

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10/ The Staff could not locate a page for the first quote in the basis; however, the second quote is on page xix of the BNL Report.

probabilities, structural damage potentials and recovery actions are the primary source of uncertainties; and (4) concludes that the presence of the crane inside the spent fuel pool building both "contributes to the potential for a heavy load drop" and may inhibit the ability of the existing crane to operate in any recovery action. Amended Petition at 4-5.

Assuming the phrase "accidents similar in nature" refers to heavy load drops in the pool, Petitioner has raised a litigable issue (i.e., construction accidents or safe handling of heavy loads) within the scope of the proceeding because the temporary construction crane will be used to move racks within the spent fuel pool. See 52 Fed. Reg. 32852, 32853 (August 31, 1987). While the contention may erroneously be premised on the fact that the temporary crane will be in the area during cask handling, the contention is adequately specific and supported by a minimally sufficient basis. Therefore, the Staff does not oppose admission of Contention 4.

Proposed Contention 5 states:

> CONTENTION 5: That FP&L has not provided a site specific radiological analysis of a spent fuel boiling event that proves that off-site dose limits and personal (sic) exposure limits will not be exceeded in allowing the pool to boil with makeup water from only seismic Category 1 sources.

Contention 5 alleges that FPL has not provided a site specific analysis of a spent fuel pool boiling event which demonstrates that onsite and offsite dose limits will not be exceeded (presumably Parts 20 and 100). In support of the contention, Petitioner alleges that the saturation

noble gas and iodine inventories could be "greater" due to fuel failure and increased enrichment. Amended Petition at 5.

The Staff is of the view that the contention raises an issue within the scope of the proceeding, is adequately specific and is supported by a minimally sufficient basis. Consequently the Staff does not oppose the admission of the contention so long as litigation of the contention is limited to the basis provided.

Proposed Contention 6 states:

> 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.

Contention 6 asserts that the Staff's and Licensee's analysis of the effect of increased heat and radiation from the expanded storage capacity and long-term storage on materials integrity is inadequate. As a basis for the contention, Petitioners cite deterioration of fuel cladding, loss of storage rack and pool liner integrity, and deterioration of the concrete pool structure. Amended Petition at 5-6.

While the assertion that the Staff has not adequately considered materials integrity is premature and should be raised promptly after the Staff's safety evaluation is available, Catawba, ALAB-687, 16 NRC 460, 468-69, the Staff does not oppose the admission of Contention 6 provided the reference to "long-term storage" is limited to the storage period authorized by the amendment and the contention is limited to the basis offered. As limited, the contention raises an issue within the scope of

the proceeding, is adequately specific and is supported by a minimally sufficient basis. 11/

Proposed Contention 7 states:

> 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 NPC (sic. FPL) estimates of between 80-130 rem/person will not meet ALARA requirements, in particular those in 10 C.F.R. Part 20.

Contention 7 asserts that there is no assurance that worker health and safety will be protected during the reracking because worker dose will not meet ALARA requirements and the limits of Part 20. There is no basis stated for the contention and it appears the doses cited in the contention relate to Turkey Point because the contention is identical to that admitted in the Turkey Point proceeding and the dose values are not in any St. Lucie submittals. See Licensee's Answer in Opposition To Amended Petition To Intervene, February 1, 1988, at 35-36 (hereafter "Licensee's Answer"). Thus, the contention does not show a nexus to the St. Lucie facility and should be rejected for lack of basis.

Proposed Contention 8 states:

> CONTENTION 8: That the high-density design of the fuel racks will cause higher heat loads and increases in water temperature which could cause a loss-of-cooling accident and/or challenge the reliability and testability of the systems designed for decay heat and other residual heat removal, which could, in turn, cause a major release of radioactivity to the environment.

11/ Licensee refers to the evidentiary presentations of the Staff and Licensee in the Turkey Point pool expansion proceeding on this issue. The decision in that proceeding has not issued.

Contention 8 alleges that the high density storage design of the fuel racks will increase heat and water temperatures such that a loss-of-spent fuel cooling accident may occur and cause a major release to the environment. As a basis for the contention, Petitioner asserts that: (a) NRC has stated that pool water temperatures should be kept below 122°F, but pool water temperatures after normal and full core discharge will rise to 152 and 182°F, respectively, and (b) possible delay in makeup emergency water could cause a zirconium cladding fire. Amended Petition at 6-7.

The Staff is not aware of any NRC document which states that pool water temperatures should be maintained below 122°F and Petitioner does not reference any NRC document which supports its statement. (The Standard Review Plan, NUREG-0800, criteria for normal and full core discharge are below 140°F and boiling, respectively.) Since it appears that the cited temperatures are not relevant to St. Lucie (see Licensee's Answer at 37-38), Basis (a) fails for lack of specificity to St. Lucie. Petitioner alleges that increased heat load and water temperatures will lead to loss of spent fuel cooling and result in zirconium cladding fire.

With respect to the Basis (b) assertion that the high-density design of the storage rack will cause heat loads that could cause a loss-of-cooling accident or affect heat removal systems and thereby lead to zirconium cladding fires when cooling water is later injected back into the pool, Petitioner has alleged a scenario similar to one of the initiating events for severe accidents in the BNL Report. See BNL Report at xix.

The Appeal Board, in Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-880, 26 NRC ___ (December 21, 1987), affirmed the rejection of a contention concerning severe accidents in the spent fuel pool, because the proponents did not allege a lack of compliance with any existing safety standard or mention or discuss a credible scenario for a loss of spent fuel cooling. Consequently, the Appeal Board agreed that the contention lacked a basis. Slip op. at 7-9. While the instant Petitioner has done more than mention a scenario similar to one of the initiating scenarios in the BNL Report, the contention does not allege a lack of compliance with any safety standard or provide a credible scenario that addresses why the single failure criterion in General Design Criteria 44, "Cooling Water," will be defeated. Consequently, the contention is not supported by an adequately specific basis.

In addition, the contention offers no basis for the assertion that higher heat loads will "challenge the reliability or testability" of heat removal systems. As a result, the contention lacks adequate basis and the Staff opposes its admission. 12/

12/ The Staff also notes that the Commission has stated that individual licensing proceedings for operating reactors are not appropriate forums for examination of Commission regulatory policies relating to evaluation, control and mitigation of accidents more severe than design basis. Policy Statement on Severe Reactor Accidents Regarding Future Design and Existing Plants, 50 Fed. Reg. 32138, 32144 (August 8, 1985). While the policy statement defines severe accidents as "those in which substantial damage is done to the reactor core," 50 Fed. Reg. 32138, the Commission stated that consideration of safety measures to control or mitigate accidents which go beyond "those required for conformance with the

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Proposed Contention 9 states:

> CONTENTION 9: That the cooling system will be unable to accommodate the increased heat load in the pool resulting from the high-density storage system and a full core discharge in the event of a single failure of any of the pumps or the electrical power supply to the pumps on the shell side of the cooling system and/or in the case of a single failure of the electrical power supply to the pumps on the pool side of the spent fuel pool cooling system. This inability will, therefore, create a greater potential for an accidental release of radioactivity into the environment.

This contention similarly alleges that because the cooling system will be unable to accommodate the increased heat load associated with high density storage and full core discharge if the pumps or power to the pumps fail, there is a greater potential for accidental release of radioactivity. While the contention is not supported by a stated basis, the concern in the contention is adequately specific to put the parties on notice as to issues raised by the contention. Therefore, the Staff does not oppose admission of the contention.

Proposed Contention 10 states:

> CONTENTION 10: That in calculating time to boil after loss of cooling after completion of full core discharge

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> Commission's safety regulations ... should not be addressed in case-related safety hearings." 50 Fed. Reg. 32145. Thus, it would appear that where a petitioner does not allege lack of compliance with Commission regulatory requirements, a contention which asserts that expanded storage is unsafe because of a remote potential for beyond design basis accidents, constitutes a challenge to the regulations and should not be heard in individual licensing proceedings. See Peach Bottom, 8 AEC at 20-21; 10 C.F.R. § 2.758.

with the presence of the proposed 1706 assemblies, FP&L utilized a different set of assumptions than in determining the original figures for time to boil as indicated in the Final Safety Analysis Report for the St. Lucie plant, Unit No. 1. (9.1-49. Table 9.1-3).

Contention 10 alleges that Licensee's analysis of time-to-boil after loss of cooling following a full core discharge used assumptions different from those originally used in its FSAR. While the contention specifically cites an FSAR section, the contention does not state a litigable issue since the contention is a general statement and does not assert that the use of differing assumptions is unacceptable. Even assuming that the contention challenges the adequacy of the time-to-boil analysis, there is no explanation of why use of a different set of assumptions is unacceptable. In addition, the FSAR Table cited, "Design Data For Fuel Pool System Components," does not contain time-to-boil calculations, but lists design parameters for the pumps and heat exchanger. Thus, the contention lacks basis and does not pose a litigable issue. Therefore, the Staff opposes admission of the contention.

Proposed Contention 11 states:

CONTENTION 11: That the proposed use of high-density storage racks designed and fabricated by the Joseph Cats Corporation is utilization of an essentially new and unproven technology.

This contention presumably asserts that use of Boraflex panels at the plant is unsafe. As a basis for the contention, Petitioner cites NRC Information Notice No. 87-43 statements that there is a "... potentially significant problem pertaining to gaps" and that "separation of the neutron absorbing material used in high-density fuel storage racks might compromise safety." Petitioner also cites an October 1987 NRC

request for information from Licensee in order to assess the integrity of Boraflex. Amended Petition at 8.

While the use of poison material such as Boraflex in fuel racks may not be properly called "new technology," the contention is adequately specific and supported by a minimally sufficient basis. Therefore, the Staff does not oppose admission of this contention.

Proposed Contention 12 states:

> CONTENTION 12: That the presence of degraded Boraflex specimens or absorber sheets on the floor of the pool will pose an increased hazard in promoting the propagation of cladding fire to low power bundles and thus promote a far larger spent fuel pool accident.

Contention 12 alleges that the presence of Boraflex on the floor poses an increased hazard in promoting cladding fires to low power bundles and could lead to a larger pool accident. As a basis for the contention, Petitioner cites pages 63-64 of the BNL Report, which state that cladding fire "propagation to low power bundles by thermal radiation is highly unlikely, but with a substantial amount of fuel and cladding debris on the pool floor, the coolability of even low power bundles is uncertain." Petitioner also refers to a Staff request for information concerning the presence of degraded Boraflex specimens in the pool. Amended Petition at 8.

The contention, again, asserts a beyond design basis accident will occur at St. Lucie. However, (1) Petitioner offers no basis for the assumption that Boraflex specimens will fall out of the racks and onto the pool floor and (2) the contention does not allege noncompliance with a safety standard or offer a credible scenario to support the occurrence of

zirconium cladding fires in the spent fuel pool. See Contention 8, supra. Therefore, the Staff opposes the admission of Contention 12 because it is not supported by an adequately specific basis.

Proposed Contention 13 states:

> CONTENTION 13: That 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.

Contention 13 alleges that the effects of a hurricane, tornado, or other natural disasters, on the spent fuel facility or its contents have not been analyzed. In its basis, Petitioner asserts that (a) a tornado or wind driven missile could damage the spent fuel racks, (b) a hurricane-induced tidal wave could spread spent fuel radioactivity into the surrounding environment, and (c) possible washover on the island could erode the soil supporting the foundation of, and cause loss of integrity to, the spent fuel pool structure. Amended Petition at 9.

Contrary to Petitioners' assertion, the effects of wind, tornado (including tornado-borne, external missiles) and hurricane flooding on the spent fuel storage building were evaluated at the operating license stage. Safety Evaluation of St. Lucie No. 1, November 8, 1974, §§ 3.3, 3.4, 3.5; SE Supp. 1, March 9, 1975, at § 3.5; SE Supp. 2, March 1, 1976, at § 3.5. The contention provides no basis for reevaluating the effects of hurricanes and tornadoes as a result of this amendment. Consequently, this contention does not raise an issue within the scope of this proceeding and should be rejected for lack of basis.

Proposed Contention 14 states:

> CONTENTION 14: That FP&L has not properly considered or evaluated the radiological consequences to the environment and surrounding, human population of an accident in the spent fuel pool.

As a basis for this contention, Petitioner: (1) states that BNL Report identifies three factors that had not been included in earlier risk assessments (BNL Report at xvii); (2) provides BNL Report quotes addressing the uncertainties in the study of severe accidents; (3) asserts that the accident analysis should address the burning of the total number of assemblies authorized to be stored in the pool under the amendments; and (4) asserts that the radiological consequences are underestimated because the Licensee's population projection for the area is inadequate. Amended Petition at 9-10.

As stated with respect to Contention 8, supra, Petitioner has not alleged noncompliance with a safety standard or provided a credible accident scenario. Thus, the contention lacks adequate basis for the consideration of zirconium cladding fires and the first three bases listed are not adequately specific. The statement that the estimate of radiological consequences of an accident is based on inaccurate population assumptions raises an issue within the proceeding because it may affect cumulative dose estimates for accidental releases from the spent fuel pool. However, the contention lacks an adequately specific basis for consideration of a beyond design basis accident, the only "accident" referenced by the contention. Thus, the Staff opposes admission of Contention 14.

Proposed Contention 15 states:

> CONTENTION 15: 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 requirements of ANSI-N16-1976 (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.

Contention 15 alleges that the increased storage capacity will not meet ANSI N-16-1975, "Nuclear Criticality Safety in Operations with Fissional Materials Outside Reactors," and will increase the probability for a criticality accident contrary to GDC 62 (Prevention of criticality in fuel storage and handling). As a basis for the contention, Petitioner states that added storage of failed fuel and fuel with increased enrichment will increase the probability that the fuel will go critical and cause a major criticality accident with releases in excess of 10 C.F.R. Part 100 criteria. Amended Petition at 11.

Apart from the vague term "fuel failure" and the unsubstantiated assertion that failed fuel causes criticality, the contention raises an issue within the scope of the proceeding, is adequately specific and is supported by a minimally sufficient basis. The Petitioner's concern that failed fuel will cause criticality should be rejected since the basis does not show a nexus or relationship between the license amendment in question, the storage of failed fuel and the increased likelihood of criticality. Accordingly, the Staff has no objection to the admission of the contention provided that the references to failed fuel causing criticality is deleted in both the contention and basis, and the contention is limited to whether added storage of fuel, and more highly enriched fuel, will cause a criticality accident.

Proposed Contention 16 states:

> CONTENTION 16: That FPL has not responded to concerns as presented by the NRC by outlining a loading schedule for the spent fuel pool detailing how the most recently discharged fuel and/or a full core discharge in order to mitigate potential risks from fires in the spent fuel pools resulting in releases in radioactivity into the environment in excess of Part 100.

Contention 16 alleges that Licensee has not responded to NRC "concerns" by outlining a loading schedule for isolation of recently discharged fuel from other fuel to mitigate potential risks from fires in the spent fuel pools. As a basis for the contention, Petitioner provides quotations from the BNL Report that address reduction of the risks of beyond design basis accidents to support the assertion that a "loading and storage configuration for all discharged fuel and a full core discharge is necessary." Amended Petition at 12.

As stated with respect to Contention 8, supra, Petitioner has not provided an adequately specific basis to support a contention asserting the occurrence of beyond design basis accidents. In addition, the basis makes vague reference to "NRC concerns" about loading schedules but does not provide a citation for such concerns. Consequently, the Staff is of the opinion that the contention should be rejected because it lacks an adequately specific basis.

III. CONCLUSION

For the reasons discussed above, it is the Staff's view that proposed Contentions 1, 2, 3, 7, 9, 10, 12, 13, 14, and 16 are inadmissible and should be rejected. However, Contentions 4, 5, 6, 8,

11, and 15 raise matters within the scope of the proceeding, are supported with adequate bases, and should be admitted for litigation.

Respectfully submitted,

Mitzi A. Young
Counsel for NRC Staff

Dated at Rockville, Maryland
this 4th day of February, 1988

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 50-335-OLA
FLORIDA POWER AND LIGHT COMPANY	)	
	)	(SFP Expansion)
	)	
(St. Lucie Plant, Unit No. 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO AMENDED PETITION TO INTERVENE" 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 4th day of February, 1988:

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