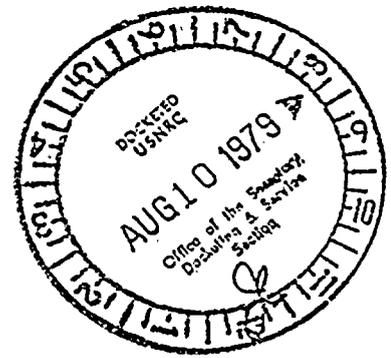


UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Nuclear Generating  
Units 3 and 4)

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

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

NOTICE OF HEARING  
(August 9, 1979)

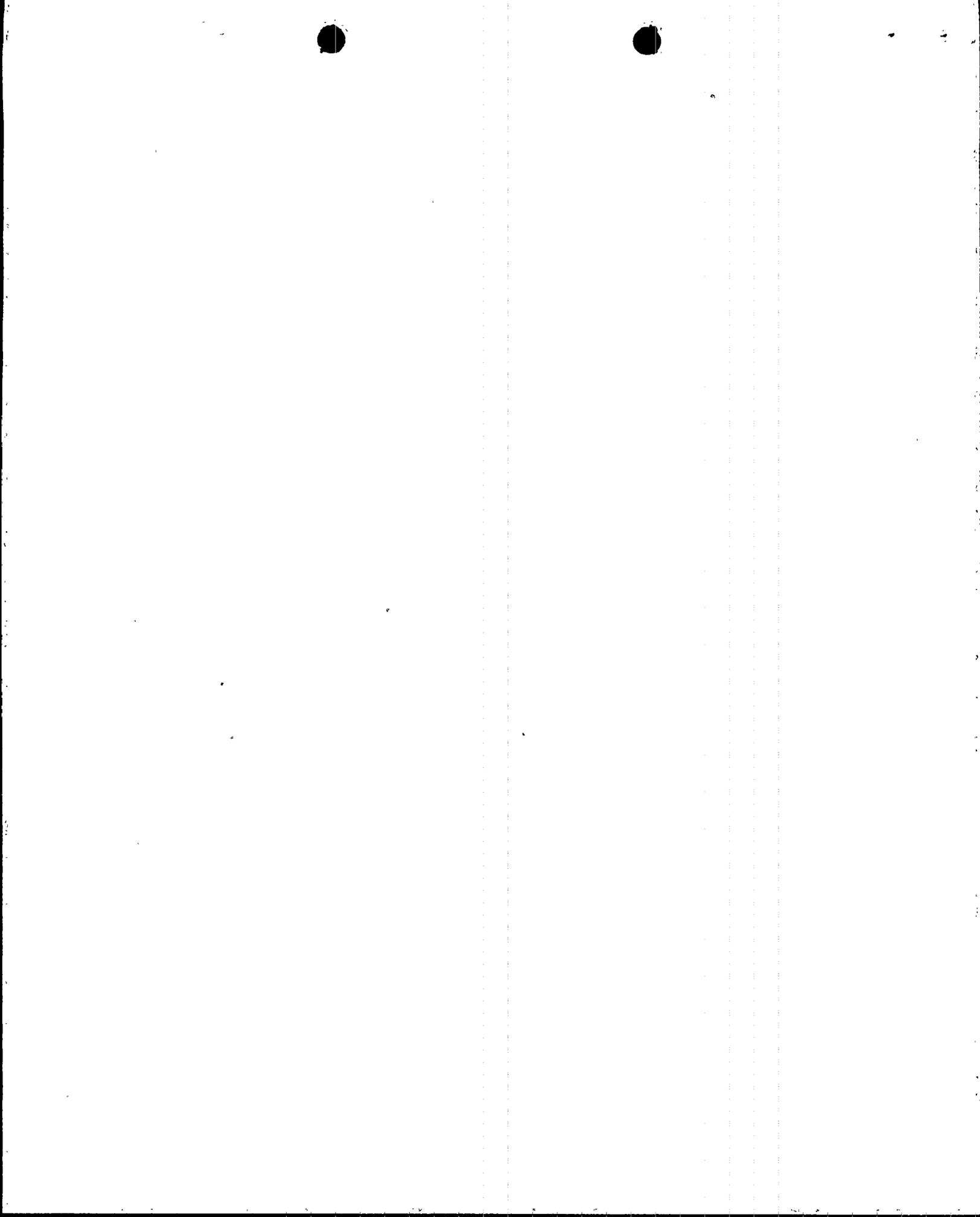
On December 13, 1977, the Nuclear Regulatory Commission noticed an amendment to the facility operating licenses of Florida Power and Light (FPL), Nos. DPR-31 and DPR-41, relative to proposed steam generator repairs at Turkey Point Nuclear Generating Units 3 and 4, located in Dade County, Florida (42 Fed. Reg. 62569). The Notice stated that petitions to intervene should be submitted prior to the expiration of the thirty-day (30) period from the date of the Notice, or January 13, 1978. No petitions to intervene were filed during this period.

On February 9, 1979, more than a year after the expiration of the intervention period, Mark P. Oncavage requested a hearing. An Atomic Safety and Licensing Board was established to rule on the petition and to preside over the proceeding in the event that a hearing was ordered. (44 Fed. Reg. 12120).

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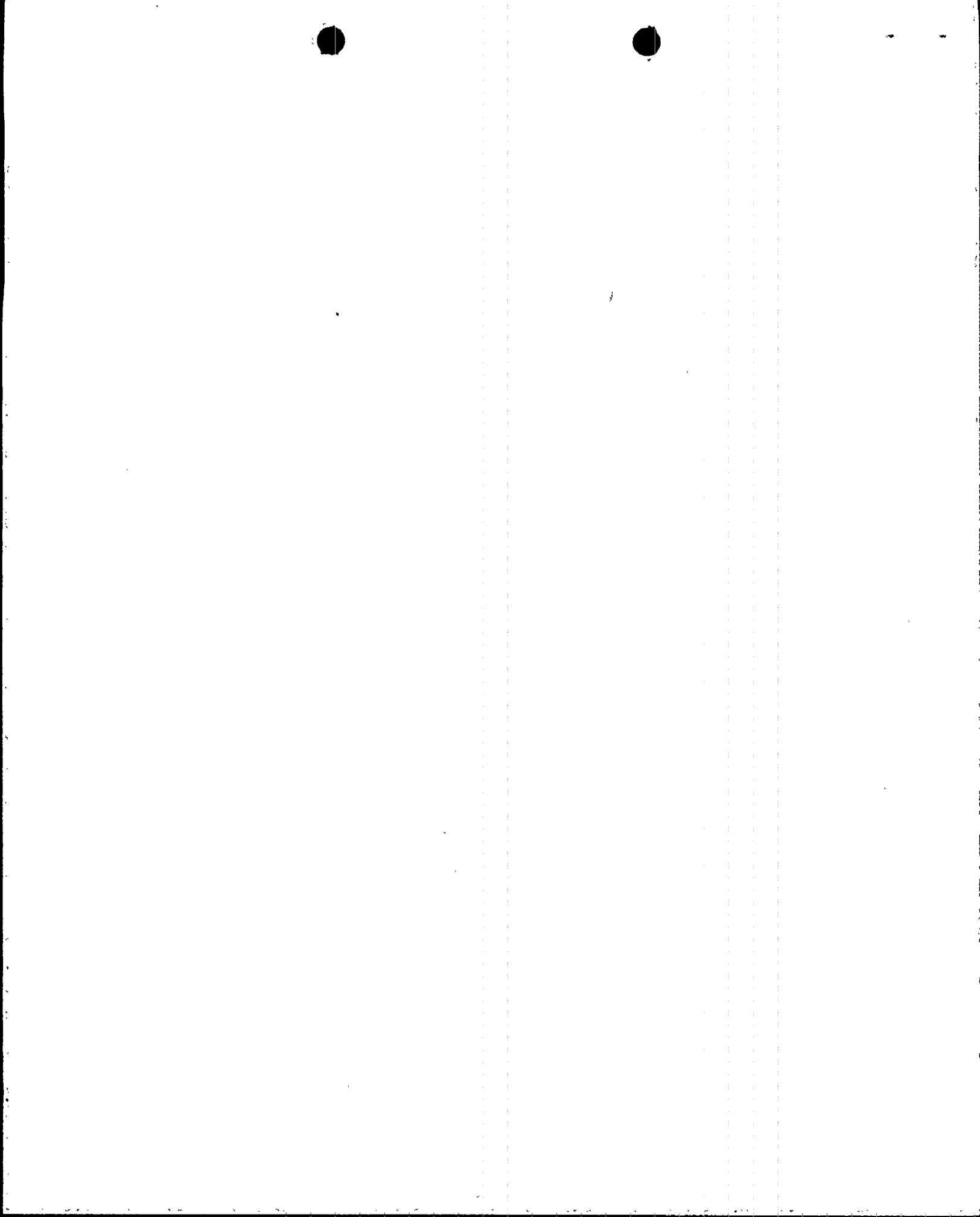
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Following a prehearing conference on May 2, 1979, and in consideration of subsequent events, the Petition Review Board determined on August 3, 1979, that the Petitioner should be granted the status as an Intervenor and issued an Order granting the petition and admitting Mr. Oncavage as a party to the proceeding.

Please take notice that a hearing will be conducted in this proceeding. The Atomic Safety and Licensing Board which has been designated to preside over this proceeding consists of Dr. David B. Hall, Dr. Oscar H. Paris, and Elizabeth S. Bowers, who will serve as Chairman of the Board.

During the course of the proceeding, the Board will hold one or more prehearing conferences. The public is invited to attend any prehearing conferences, as well as the evidentiary hearing. During some or all of these sessions, and in accordance with 10 CFR Section 2.715(a), any person, not a party to the proceeding, will be permitted to make a limited appearance statement, either orally or in writing, stating his or her position on the issues. The number of persons making oral statements will be limited and the time allowed for each oral statement will be limited to five (5) minutes. Persons desiring to make a limited appearance are requested to inform the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Docketing and Service Section. Written statements supplementing or in lieu of oral statements may be of any length and will be accepted at any session of the proceeding or may be mailed to the Secretary of the Commission.



For further details, see the Licensee's transmittal letter dated September 20, 1977 and the enclosed Steam Generator Repair Report, other material submitted by the Licensee in support of this action, and papers filed concerning the petition for leave to intervene, including the Order ruling upon the intervention petition, dated August 3, 1979, all of which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Local NRC Public Document Room, Environmental and Urban Affairs Library, Florida International University, Miami, Florida. The following documents may be inspected at the above locations: 1) the Safety Evaluation Report prepared by the Commission's Office of Nuclear Reactor Regulation; and 2) any environmental review documents which may be required by the Commission's regulations in 10 CFR Part 51 and all subsequent filings by the Board and the parties.

IT IS SO ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD

*Elizabeth S. Bowers*  
Elizabeth S. Bowers, Chairman

Dated at Bethesda, Maryland  
this 9th day of August 1979.



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



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

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

August 3, 1979

ORDER RULING ON THE  
PETITION OF MARK P. ONCAVAGE

On December 13, 1977 the Nuclear Regulatory Commission noticed an amendment to the facility operating licenses of Florida Power and Light (FPL), Nos. DPR-31 and DPR-41, relative to proposed steam generator repairs at Turkey Point Nuclear Generator Unit Nos. 3 and 4, located in Dade County, Florida. (42 Fed. Reg. 62569). The notice stated that petitions to intervene should be submitted prior to the expiration of the thirty-day (30) period from the date of the Notice, or January 13, 1978. No petitions to intervene were filed during the intervention period.

On February 9, 1979, more than a year after the expiration of the intervention period, Mark P. Oncavage requested a "full hearing." He stated that the FPL letter of September 20, 1977, referenced in the Federal Register notice, did not arrive at the local docket room until January 22, 1979 and that this fact established "good cause" for the late filing. Mr. Oncavage's letter expressed environmental and safety concerns.

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On February 22, 1979 Mr. Oncavage requested that his letter of February 9 be considered a petition to intervene. On February 27, 1979 an Atomic Safety and Licensing Petition Board was appointed to rule on the petition to intervene from Mr. Oncavage. (44 Fed. Reg. 12120).

On March 1, 1979 the NRC Staff responded to the petition, stating it should be denied because the petitioner did not make an adequate showing of the factors to support an out-of-time filing set forth in 10 CFR §2.714(a). Staff said that Mr. Oncavage could have contacted the NRC in a timely fashion if he had been genuinely interested.

On March 9, 1979 FPL responded to the petition, saying that the request for a hearing should be denied because it is untimely, fails to make a substantial showing of good cause for failure to file on time, fails to comply in form and content with basic requirements imposed by the Commission's rules for such requests, and fails to demonstrate any facts to support his standing to intervene. Further, the Licensee said that granting the request for a hearing at this late date would severely prejudice FPL. Attached to the filing were copies of the FPL letter of September 20, 1977, an affidavit of G. D. Whittier relative to a visit to the local library docket room, and an affidavit of H. D. Mantz relative to the scheduling of the steam generator repairs.

Shortly thereafter, in a conference call with the Board, the parties agreed that a prehearing conference would be held in Miami, Florida on May 2, 1979. The Petitioner, also, participated in the conference call.

On March 19, 1979 a revised petition to intervene was filed by Mark P. Oncavage. The petition reiterated environmental, health and safety, and economic concerns. It also responded to the factors justifying the granting of a late petition set forth in 10 CFR §2.714(a). Petitioner stated that the absence of FPL's letter of September 20, 1977 established good cause for his late filing, that there is no other pending proceeding at the State level, that an effort will be made to assist in developing a sound record, that there are no other "existing parties" to represent his interest, and that any delay caused by his intervention would be more than offset by the value of a public hearing. An affidavit of Ms. Renee Daily, local docket librarian, and a motion to commence discovery were attached to the revised petition.

On March 30, 1979 FPL responded to the revised petition. The filing repeated FPL's position that the Petitioner had not met the burden in 10 CFR §2.714(a) for an untimely petition. The Licensee asserted that the initiation of a hearing at this late date would disrupt careful planning and considerable effort and could deny Licensee the ability to commence repairs without delay. FPL further stated that the petition fails to establish "interest" and does not contain an acceptable contention.

On April 6, 1979 the NRC Staff filed its response to the revised petition. It said that the petitioner had not established good cause for the late filing, but agreed with Petitioner that his interest would not be protected outside this proceeding. In addition, Staff said that Petitioner's claim of being able to assist in developing a sound record is unsubstantiated.

With regard to factor three,<sup>1/</sup> Staff said that while its mandate is to protect the interest of the public at large, there is room for the advancement of individualized interests in these proceedings. Staff agreed with Licensee that an evidentiary hearing at this date would have the potential for causing considerable delay in this proceeding. Finally, Staff concluded that Petitioner had at least minimally satisfied the interest requirement and had set forth at least one adequately pleaded contention.

When the Board met prior to the Prehearing Conference, it was learned that only Dr. Hall had received a pleading from the Petitioner dated April 24, 1979, entitled "Petitioner Reply to Licensee Response and NRC Staff Response." The pleading stated that Petitioner's "interest" would be affected and that this was sufficient to develop a sound record "irrespective of any expertise the Petitioner may or may not have."

During the Special Prehearing Conference on May 2, 1979 the Petitioner submitted a new list of contentions to the Board and distributed copies to the parties. Both FPL and the NRC Staff protested that this filing was untimely and, therefore, not permitted by the regulations unless Petitioner was granted leave by the Board based on a balancing of the same factors which must be considered for an untimely petition for leave to intervene.

(Tr. 92, 96).

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<sup>1/</sup> Factor three "(3)" under the 1977 rules was redesignated factor four "(iv)" in a revision of the rules that became effective in 1978.

On May 9, 1979 the Board issued an Order requesting a response from FPL and the NRC Staff as to what the expectations are that the new contentions may contribute to a sound record. FPL responded on May 21, 1979 by stating that the motion to amend is untimely and that the new contentions indicate that the Petitioner still has not become familiar with essential, available information. FPL also pointed out that the presentation of a direct case is unlikely since Petitioner's two "firm" witnesses have expertise in areas not within the areas of the contentions. FPL stated that Petitioner's position at the Prehearing Conference was that an intervenor could present his case through cross-examination after discovery. FPL concluded that the Petitioner's participation would be unlikely to assist in developing a sound record, that the petition and the motion to amend were late, and that the requirements of Section 2.714(a)(1)(iii) and Section 2.714(a)(3) have not been met by the Petitioner.

On May 23, 1979 the NRC Staff responded to the Board's Order of May 9, 1979. The Staff stated that the Petitioner had been too vague in discussing the possibility of his contributing to a sound record so the Staff had no choice but to assume that his participation would not make a contribution. The Staff mentioned that many of the contentions contained references to the Federal Water Pollution Control Act (FWPCA). The Staff said since EPA issued a National Pollutant Discharge Elimination System (NPDES) Permit (No. FL0061562) for the Turkey Point facility on June 14, 1978, pursuant to §402 of FWPCA, those portions of the contentions alleging non-compliance with the FWPCA are inadmissible. The Staff contended that absent

information about the identity and qualifications of witnesses, it did not believe that the contentions demonstrated that the Petitioner could reasonably be expected to assist in the development of the record in this proceeding.

On May 15, 1979 Staff issued the Safety Evaluation Report (SER) for the proposed steam generator repair at Turkey Point. In it Staff concluded: "(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public." (at 4-1).

On May 23, 1979 the Board received a telegram from Dean Bruce S. Rogow, Nova Law School, Ft. Lauderdale stating that he and eight other Florida lawyers were committed to represent Mr. Oncavage if he is permitted to intervene. In addition, Dean Rogow requested seven (7) days after receipt of the filings by FPL and Staff in response to the Board's Order of May 9, 1979, in which to respond to those filings. The contents of the telegram were confirmed by a serviced letter from Dean Rogow dated May 24, 1979. Licensee responding by letter dated May 29, 1979 expressed opposition to Dean Rogow's request for leave to file a pleading "To the extent \*\*\* that the letter and telegram constitute a request for delay of a decision on the petition to intervene or for advance permission to file still another untimely petition \*\*\*."

In the interest of expediting the proceeding, the Board held a conference call with the parties and Petitioner on May 31, 1979. During the call it was agreed that Dean Rogow would be allowed until June 7, 1979 to file a response to the filings that FPL and Staff had submitted in response to the Board's Order of May 9. Further, it was agreed that Licensee would be allowed until June 20, 1979 to respond to Dean Rogow's filing and Staff would be allowed until June 25 to make a response. In addition, a member of the Board advised the parties that he had studied the SER in an effort to obtain answers to certain questions elicited by the list of contentions which Petitioner had submitted during the Prehearing Conference on May 2, 1979, but that he was not satisfied with regard to the adequacy of some of the information in the SER. Consequently, the Board requested Licensee to provide it with copies of the Steam Generator Repair Report (SGRR). Licensee agreed to comply and sent copies of the SGRR to the Board on June 5, 1979.

Dean Rogow submitted his Notice of Appearance on behalf of Petitioner and a filing entitled "Supplemental Submission of Petitioner Mark P. Oncavage" (Supplemental Submission) on June 5, 1979. The Supplemental Submission identified two expert witnesses who are committed to testify on behalf of Petitioner, gave their credentials, and indicated the contentions which their testimony would address. The three major areas to be addressed by these witnesses were identified as "(1) the long term on site storage of steam generator lower assemblies in an earthen floor facility; (2) the occupational radiation exposure; and (3) the release of liquid effluents containing radioactivity into a closed cycle cooling canal"

(Supplemental Submission at 2). These three issues were focused on to show that Petitioner has the ability to contribute to a hearing, but contentions addressing the safety of the present operation of the plant or the potential for a recurrence of a need to make steam generator repairs are not being abandoned. (Id. fn. 1). Petitioner argues that he has complied with the need to provide information regarding witnesses and testimony and has demonstrated the contribution he can make to a sound record (Id. at 7). He says that serious delay in the proceedings can be avoided by a prehearing conference to narrow and define the scope of the hearing, by stipulations, and by submission of written materials without live testimony, and he maintains that any small time savings that would be gained by denying his petition for leave to intervene would be far outweighed by the benefit to be derived from ventilating his contentions (Id. at 8).

Licensee indicated its intention to respond to Petitioner's Supplemental Submission by letter dated June 8, 1979 and filed its response, entitled Licensee's Response to "Supplemental Submission of Petitioner Mark P. Oncavage" (Licensee's Response to Supplemental Submission), on June 20, 1979. FPL still contends that a hearing would be unlikely to assist in developing a sound record, would threaten to delay substantially the issuance of the license amendment, and would deny FPL the flexibility needed for scheduling the steam generator repairs. With regard to the three areas of concern dealt with in the Supplemental Submission, FPL argues that the first, relating to occupational dose, should be disallowed because Petitioner would apparently have this Board impose a man-rem limit for the

repair operation. Licensee claims that the Commission's regulations do not provide for the imposition of man-rem limits upon occupational activities. With regard to the second issue, storage of the radioactive steam generators in an earthen floored facility on-site, Licensee maintains that Petitioner fails to take issue with the technical information contained in the SGRR concerning measures which will be taken to avoid release of radioactive materials from the assemblies. Further, FPL says that Staff has found these measures to be in accordance with ALARA (as low as is reasonably achievable) philosophy. Finally, with regard to the release of radioactive materials from the cooling canals, Licensee argues that radioactive releases from the plant during the repair will be controlled pursuant to the plant's operating licenses and will meet the requirements of 10 CFR Part 20 and Part 50, Appendix I. Licensee concludes that the petition to intervene should be denied because Petitioner has not demonstrated good cause for untimeliness nor established that he is likely to assist in developing a sound record, and because his participation will broaden the issues and delay the proceeding.

The NRC Staff advised the Board of its intention to respond to Petitioner's Supplemental Submission by letter dated June 8, 1979 and filed said response on June 25, 1979. On the basis of Petitioner's identification of "two apparently qualified witnesses" who could testify on matters relating to several contentions advanced by Mr. Oncavage, Staff said it now "believes that Petitioner could reasonably be expected to contribute to the development of a sound record in this proceeding." Staff concluded that on balance the factors which must be considered for a late petition weigh in favor of

granting Petitioner leave to intervene. Further, Staff urges that parties be allowed a limited but reasonable period of time to reach some form of multi-party agreement on the admissibility of the contentions or to file position statements on them, or both.

With this record before us we must now determine whether the untimely petition of Mr. Oncavage should be granted, by balancing the five factors set forth in 10 CFR §2.714(a)(1). In addition, we must determine whether Petitioner has an interest in the proceeding pursuant to 10 CFR §2.714(d) and whether he has set forth at least one cognizable contention and stated the basis for that contention with reasonable specificity, pursuant to 10 CFR §2.714(b). We must also determine whether the list of new contentions submitted out of time on May 2, 1979 should be admitted for consideration pursuant to 10 CFR §2.714(a)(3). We turn now to those tasks.

#### INTEREST AND CONTENTIONS

As we indicated earlier, in addition to determining whether Mr. Oncavage has satisfied the requirements for filing out of time, we must also determine whether he has shown that his interests may be affected by the outcome of this proceeding, whether he has satisfied the requirements for filing untimely amendments to his contentions, and whether he has advanced at least one cognizable contention and set forth the bases for that contention with reasonable specificity. We shall deal first with the matter of interest.

Interest of Petitioner

Mr. Oncavage has told us that he and his wife and two year old son live approximately 15 miles from the Turkey Point Station. He believes that his proximity to the station and the prevailing winds during 8 months of the year would mean that radioactive material which might be released as a result of the repair operation might pose a health hazard to him and his family.

(Revised Petition for Leave to Intervene). In addition, Petitioner owns a sailboat and often cruises the waters of Biscayne Bay near Turkey Point and engages in fishing, crabbing, swimming, skin diving, and underwater photography. He believes that a release of radioactive material as a result of the repair operation might adversely affect his recreational use of this area. (Ibid.)

Licensee argues that Petitioner has failed to set forth with sufficient particularity how radioactive releases might affect his interests and argues that any injury to Petitioner, either directly or through inhibiting his use of recreational facilities, is purely speculative. (Licensee's Answer to Motion of Oncavage, dated March 30, 1979). The NRC Staff, on the other hand, believes that Mr. Oncavage has satisfied the interest requirement as set forth in 10 CFR §2.714. Staff says "Petitioner's residence and considerable recreational activity is in close proximity (within 15 miles) to the plant and expressed concern over the possibility of radiological releases due to the proposed action presents a cognizable interest in the proceeding" (sic). (Staff Response to Revised Petition at 6-7).

The Appeal Board has held that residence within 16 miles is sufficient to establish interest of a petitioner who raises safety questions. Virginia Electric Power Co. (North Anna Power Station, Units 1 and 2), ALAB-146, 6 AEC 631, 634 (1973). In addition, the Commission has ruled that a petitioner who alleges that his opportunity for recreational activity may be diminished by a nuclear facility possesses adequate interest to allow intervention. Philadelphia Electric Company, et al. (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-73-10, 6 AEC 173. With respect to Licensee's argument that any injury to Petitioner is purely speculative, we can look to a recent ruling by the Appeal Board in North Anna. Virginia Electric and Power Company (North Anna Nuclear Power Station, Units 1 and 2), ALAB-522, 9 NRC 54 (1979). There the Appeal Board reversed an order by a Licensing Board which had denied a petition to intervene in a spent fuel pool modification proceeding; the Licensing Board's denial had been based on the failure of the Petitioner to particularize a casual relationship between injury to its interest and the possible outcome of the proceeding. (Id. at 56). The Appeal Board said that "close proximity has always been deemed to be enough, standing alone, to establish the requisite interest," and "the question of whether [Petitioner's] concerns are justified must be left for consideration when the merits of the controversy are reached." (Ibid.).

We conclude that Staff is correct. Mr. Oncavage clearly has satisfied the Commission's requirements with regard to showing an interest pursuant to 10 CFR §2.714(a)(2) and §2.714(d).

Untimely Supplements to Petition to Intervene

The supplements to Petitioner's original petition which were submitted at the Prehearing Conference and later, by Dean Rogow (Supplemental Submission), were untimely pursuant to 10 CFR §2.714(b). According to paragraph (b) additional time for filing a supplement may be granted by a Board upon a balancing of the factors in 10 CFR §2.714(a)(1).<sup>2/</sup> We proceed now to a discussion of our consideration with respect to the admission of these untimely supplements.

Factor (i), the extent to which Petitioner has shown good cause for filing the supplements out-of-time, weighs against admitting the supplements because Petitioner has failed to show any valid reason for their lateness. We observe in this connection, however, that Petitioner was appearing pro se until just before the Special Prehearing Conference, and we do not demand that his early performance adhere rigidly to the Commission's standards. Therefore, we do not weight Factor (i) as heavily as we otherwise might.

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<sup>2/</sup> The semantics of 10 CFR §2.714(b) do not make it clear, in our view, that the provision for granting additional time is applicable to the circumstances of this case. A reading of the Commission's Statement of Consideration for revision of §2.714, however, convinces us that we may apply the rule to this case. (43 Fed. Reg. 17798, April 26, 1978). The relevant language in the Statement of Consideration is as follows:

"Second, §2.714 is revised to specifically provide that late filed contentions (a contention or amended contention which is filed after 15 days prior to the special prehearing conference, \*\*\*) will be considered for admission under the clarified criteria set forth in subparagraph (a)(1)."

Factor (ii), the availability of other means whereby the Petitioner's interest will be protected if the supplements are not admitted, weighs in favor of allowing their admission. There are no other means whereby Petitioner's interest will be protected, and the supplements are essential to the adequacy of his petition.

Factor (iii), the extent to which the supplements may reasonably be expected to assist in developing a sound record, weighs heavily in favor of their admission in the opinion of Dr. Paris. The revised contentions and the bases thereof which are set forth in the supplements advance the issues which are the sine qua non for his belief that participation by Mr. Oncavage can be expected to assist in developing a strong record. Dr. Paris finds that Factor (iii) weighs heavily in favor of admitting the supplements for the same reason that he finds that Factor (iii) weighs heavily in favor of admitting the Petitioner, infra, in his Separate Opinion. Mrs. Bowers gives slight weight for the reasons stated on Factor (iii), infra, in her Separate Opinion.

Factor (iv), the extent to which Petitioner's interests will be represented by existing parties if the supplements are not admitted, weighs in favor of admitting them. The supplements are essential to his petition, and if his petition is denied there will be no hearing and no parties to represent his interests.

Factor (v), the extent to which admitting the supplements will broaden the issues or delay the proceeding, weighs against admitting them.

Factor (v) again weighs lightly, however, because in our opinion the FPL schedule for the repair work is not fixed.

In conclusion, we find that Factor (i) weighs against admitting the supplements and Factor (v) weighs lightly against their admission. Factors (ii) and (iv) weigh in favor of their admission. Factor (iii) also weighs in favor of admission, but we are not in agreement as to the weight it should receive (see our separate opinions, infra). On balance we find that the factors in 10 CFR §2.714(a)(1) which must be considered for the admission of untimely supplements to a petition, pursuant to 10 CFR §2.714(b), weigh in favor of their admission. Consequently, the motions to admit the list of revised contentions submitted on May 2, 1979, and the Supplemental Submission filed on June 5, 1979, are granted.

#### UNTIMELINESS

##### Cause for Failure to File on Time - Factor (i)

At the Special Prehearing Conference on May 2, 1979 the parties and Petitioner were first given an opportunity to present argument with respect to showing good cause for the untimeliness of the petition. Petitioner argued that nothing concerning the proposed steam generator repair was published in local newspapers and that "mere notice in the Federal Register \*\*\* is inadequate notice\*\*\*." (Tr. 17-18). Mr. Oncavage first learned of the proposed repair through personal conversations in January 1979, after which he sought additional information in the public document room at the library of Florida International University in Miami. (Tr. 21-22).

It was then that he discovered that FPL's letter to the NRC, dated September 20, 1977, was missing from the public document room. A copy of the letter was requested by the library and was received on January 22, 1979 (Affidavit of Renee Daily dated March 16, 1979). Petitioner argued that having this "crucial document" missing from the public document room for 13 months constituted good cause for his untimely filing of petition to intervene (Oncafrage revised Petition dated March 18, 1979).

Staff indicated that press releases usually are not issued in connection with applications for license amendments. (Tr. 18-19). But both Staff and Licensee pointed out that failure to read the Federal Register does not constitute legal grounds for a showing of good cause for untimeliness. (Tr. 24, 29). On this ground they argue that the good cause factor weighs against Petitioner. (Tr. 24, 30-31).

We have some sympathy for Petitioner's argument that the Federal Register is, from the point of view of many private citizens, an "obscure publication" (Tr. 18); as the Board observed during the Prehearing Conference, the "Federal Register is hardly a best seller." (Tr. 19). Be that as it may, however, we are bound by the law in reaching our decisions. The law required that the Nuclear Regulatory Commission publish once in the Federal Register notice of its intention to act on an application for an amendment to an operating license (The Atomic Energy Act of 1954, as amended, Sec. 189). The Appeal Board noted, in Jamesport, that "The Federal Register Act expressly provides that such publication constitutes notice to 'all persons residing

within the States of the Union.' 44 U.S.C. 1508." Long  
Island Lighting Company (Jamesport Nuclear Power Station, Units 1 and 2)  
ALAB-292, 2 NRC 631 (1975). Moreover, many years ago the U. S. Supreme Court  
ruled that publication in the Federal Register gives legal notice to all  
citizens (Federal Crop Insurance Corp. v. Merrill, 332 US 380-388, 1947).  
For this reason we must conclude that Mr. Oncavage was provided legal notice  
of the proposed steam generator repair.

Were there other factors which made it impossible for Mr. Oncavage  
to file on time? We think not. He was in residence in Miami, Florida in  
December 1977 when the Federal Register notice was published. (Tr. 42).  
He also was residing in Miami in the spring of 1977, when articles concerning  
the proposed steam generator repair at Turkey Point were published in the  
MIAMI HERALD. (Tr. 31, 33).

Moreover, in connection with his studies as an environmental  
sciences student at Florida International University, Mr. Oncavage has been  
using the Public Document Room in the University's library since 1976.  
(Tr. 22). Although the letter from FPL to NRC dated September 20, 1977  
apparently was not filed properly in the Document Room until January 1979, the  
Steam Generator Repair Report was properly filed there in October 1977 and  
revisions to the report were filed subsequently in a timely fashion (Affi-  
davit of G. D. Whittier dated March 8, 1979; Tr. 26). Presumably Mr. Oncavage  
was using the document room after these documents had been filed there, but  
he either failed to study them or to react to them until January 1979 when

he was "simply informed by someone that there is a problem with the FFL steam generators, \*\*\*" (Tr. 22). Considering the facts that the Repair Report was readily accessible to Mr. Oncavage and there was newspaper coverage about the proposed repairs in the spring of 1977, we believe that his failure to act in a timely fashion resulted either from a lack of timely concern or a failure to be sufficiently alert. Neither explanation, in our view, provides an adequate excuse for his tardiness. We find, therefore, that Petitioner has not shown good cause for failure to file on time; this factor weighs against granting him leave to intervene.

Availability of Other Means Whereby Petitioner's Interest Will Be Protected - Factor (ii)

Counsel for Petitioner argued that "there is certainly no other forum available to this Petitioner to voice his concerns and participate in the adjudicatory process, because State and local governments are preempted from performing functions that are exclusively those of the Nuclear Regulatory Commission." (Tr. 46). Licensee argued that a hearing was not necessary to protect the interests of the Petitioner; in the opinion of Licensee the SGRR adequately accommodates Petitioner's interests by providing information which answers the questions he raised in his petition. (Tr. 53). The NRC Staff, on the other hand, took the position that it was not apparent that there would be other means, such as State proceedings, by which Petitioner's radiological safety and environmental interests could be protected (Staff Response to Revised Petition dated April 6, 1979, at 4; Tr. 58-59).

We agree with Petitioner and Staff. Apparently there is no other forum in which Petitioner could protect his interests. In view of these considerations, we find that the second factor weighs in favor of Petitioner.

OPINION OF ELIZABETH S. BOWERS:

Extent to Which Petitioner's Participation May Reasonably Be Expected to Assist in Developing a Sound Record - Factor (iii)

These comments are not meant to be in any way derogatory to Petitioner, his counsel or his proposed witnesses. Time constraints and lack of specialized experience are often controlling factors.

It is a serious determination to weigh whether a petition should be accepted in a situation which would otherwise not require a hearing. The determination is important to the Petitioner, FPL and the NRC Staff and the Board.

My colleagues, Dr. Paris and Dr. Hall, have each written separate opinions on Factor (iii). As a member of a petition review board, I am very concerned about an untimely Petitioner's ability to develop a "sound record." I do not share Dr. Paris' opinion that this factor should weigh heavily in the Petitioner's favor. Dr. Paris has taken essentially non-specific "bare bones" contentions and has enhanced them with rather elaborate scenarios by delving into documents which are also available to Petitioner. He has put meat on the bones. Recognizing that the Petitioner is not required to plead the evidence in drafting the contentions, I think more is required than

asking a series of questions without stating "the bases for each contention set forth with reasonable specificity." (2 CFR 2.714(b)). This is the responsibility of the Petitioner.

It is my opinion that Dr. Paris' labor has advanced information which, if fully ventilated in an evidentiary hearing, would result in a more detailed record than that existing at the present time and this would perhaps be in the public interest.

Considering the present situation, I would lean slightly toward the petitioner in this matter on the assumption that Dr. Paris' comments should be of value to the petitioner if he is able to proceed with relevant direct testimony and cross-examination.

The separate opinion of Dr. Oscar H. Paris on Factor (iii) is attached to this Order. Also, see dissenting opinion of Dr. David B. Hall. This concludes separate opinion of Elizabeth S. Bowers.

\* \* \* \* \*

The Extent to Which the Petitioner's Interest Will be Represented  
By Existing Parties - Factor (iv)

With regard to factor four, the extent to which Petitioner's interest will be represented by existing parties, Petitioner takes the position that his interest will not be protected if his petition is denied because there are no existing parties nor other petitions for leave to intervene (Revised Petition to Intervene at 12). Licensee, on the other hand, takes the view that this factor is not relevant in this case because no hearing is being conducted and other parties do not exist (Licensee's Response to Supplemental Submission at 18). Staff noted that Mr. Oncavage failed to explain why his interest, as well as that of the general public, will not be effectively served by the NRC, which has the statutory responsibility for ensuring the public health and safety and protection of the environment. Nevertheless, Staff recognized that there is room for the advancement of individualized interests in these proceedings, and concluded that the fourth factor weighs in favor of Petitioner. (Staff Response to Revised Petition at 5).

The basic question to be answered here, as we see it, is whether the fourth factor is applicable in a case in which no hearing will be held if the late petitioner is denied leave to intervene. If it is applicable, then logic leads inescapably to the conclusion reached by Petitioner and Staff: Petitioner's interest will not be protected by other parties and therefore the factor weighs in his favor. If the fourth factor is not applicable, on the other hand, then it should receive zero weight.

Unfortunately, NRC practice has failed to provide a clear-cut answer to the question of whether the fourth factor is applicable when there are no intervening parties and no petitioners other than the latecomer. Different licensing boards have decided this question in different ways based on the total circumstance in each case. In St. Lucie and Turkey Point the Licensing Board decided that the fourth factor was not directly applicable, but nevertheless it went on to note that without the petitioner's admission there would be no other party to protect petitioner's interest. Florida Power & Light Co., (St. Lucie Plants, Units 1 and 2 and Turkey Point, Units 3 and 4); LBP-77-23, 5 NRC 789, 800, April 5, 1977; In Virgil C. Summer the Licensing Board acknowledged uncertainty as to the applicability of factor number (iv), but it said that if the factor were applicable it would be given zero weight because of the particular circumstances of that case (South Carolina Electric and Gas Co., et al., Virgil C. Summer Nuclear Station, Unit 1, LBP-78-6, 7 NRC 209, 213-214, February 3, 1978). In Kewaunee, on the other hand, the Board concluded that petitioner's interest would not be represented absent a hearing and decided that the fourth factor weighed in favor of admitting them as intervenors. (Wisconsin Public Service Corp., et al., Kewaunee Nuclear Power Plant, LBP-78-24, 8 NRC 78, 84, July 12, 1978).

We are instructed to balance Factors (i) through (v), in addition to those set forth in subsection (d) of §2.714. We are not told to consider only applicable factors; we are instructed to consider them all. We believe that the Commission intended that all of the five factors should be balanced

in every case involving an untimely petition. In the circumstances where denial of a late petition would result in no hearing and no parties to protect the petitioner's interests, the question, "To what extent will Petitioner's interest be represented by existing parties?" must be answered, "None".

The foregoing reasoning leads us to agree with Staff. Absent a hearing at least some of Petitioner's interests will be protected by no one. We find, therefore, that the fourth factor weighs in his favor.

The Extent to Which Petitioner's Participation Will Broaden the Issues or Delay the Proceeding - Factor (v)

The fifth, and last, factor to be considered for an untimely petition for leave to intervene is the extent to which the Petitioner's participation will broaden the issues or delay the proceeding. Petitioner acknowledged that his participation would "create additional issues" but argued that "the benefit derived from hearing opposing contentions far outweighs any small time savings gained by exclusion of Mr. Oncavage." (Supplemental Submission at 8). In addition, Petitioner suggested several procedures which could serve to expedite a hearing should one be ordered; we interpret these suggestions as offers to proceed in this manner if the petition is granted. (Ibid.).

Licensee argued that initiating a hearing at this late date would disrupt its "careful planning and effort and could deny Licensee the ability to commence repairs without delay." (Licensee's Response to Untimely Request for Hearing, dated March 9, 1979, at 9-10). Such a delay would result in

increased costs to Licensee and potential for decreased system reliability. (Ibid.; also, see Affidavit of H. D. Mantz, dated March 8, 1979). Although originally FPL planned to repair Unit 4 beginning in October 1978, it has changed its plans and does not expect to start that repair before the fall of 1979. (SER at 1-1). In response to questions from the Board during the Special Prehearing Conference, Licensee indicated its plans for initiating the work are indefinite. (Tr. 77-79). Mr. Coll stated, "We do not know at this time when it will be required to make the repairs," and went on to explain that the company's objective is "to be ready to perform the repairs when it becomes necessary or economically desirable to do so." (Tr. 78). According to Project Manager Mantz,

\*\*\* the exact date of initiation of the repair program will depend upon FPL's analysis of the extent of degradation of the existing steam generators, maintenance schedules and unplanned repair outages, refueling schedules, the availability of alternate oil fired generation, and other factors. (Mantz Affidavit at 3).

The NRC Staff, which originally opposed the admission of Petitioner, said that the commencement of an evidentiary hearing at this stage has "the real potential for considerable delay." (Staff Response to Revised Petition at 6). Later, when it concluded that Petitioner has set forth adequate justification for his untimeliness, Staff recommended certain actions which could be taken to prevent unnecessary delay, should we grant leave to intervene. (Staff Response to Supplemental Submission at 3).

It will be useful at this point to summarize the history of this case. The Licensee submitted its repair plan to the Commission in September 1977, at which time it planned to start the repair of Unit 4 in October 1978. (SER at 1-1). The Commission published the notice of amendment in December 1977. Subsequently, FPL pushed its schedule back at least 12 months; when the SER was issued in 1979 Licensee had deferred initiating repair of Unit 4 to the fall of 1979 or later. (Ibid.). In May 1979 we were told at the Prehearing Conference that FPL still did not know when it would be necessary or economical to initiate the repair program. (Tr. 78). Finally, the NRC Staff issued the SER on May 15, 1979 and the EIA on June 29, 1979.

In view of this history, of what significance is the 13-month delay attributable to the tardiness of Mr. Oncavage in filing his petition? To begin with, we note that if Petitioner had filed on time and had been admitted in 1978, we still could not have gone to hearing until some time after Staff had issued the EIA. Potomac Electric Power Company (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-277, 1 NRC 539, 546 (1975); also see New England Power Company, et al. (NEP, Units 1 and 2), LBP-78-9, 7 NRC 271, 292-294 (1978). The late issuance of the EIA resulted from Staff's uncertainty about whether an EIA or an Environmental Impact Statement (EIS) should be issued (Tr. 79-82). Be that as it may, by early 1979 FPL was already 12 months behind its original schedule through its own doing. Viewed in light of this circumstance, and considering the fact that a hearing could not have been held until an appropriate period of discovery had elapsed following issuance of the EIA, Petitioner's delay of 13 months wanes. If

Petitioner had been timely and had been admitted in 1978, as of this writing the parties probably would still be engaged in discovery.

What prejudice would accrue to Licensee if the petition of Mr. Oncavage were granted? Licensee has told us of the possible consequences of a delay in the repair work. Because it is unable to predict when the repair must be initiated, however, it is not at all clear that a hearing at this late date would, in fact, delay the work itself. Licensee has said, further, that its careful planning and effort would be disrupted by a hearing but it is silent with regard to the injury such disruption would cause. We presume that it would include the expense and trouble of a hearing, conditions which might be imposed by us as a result of a hearing, and the risk that we might deny its request for an amendment. Against this concern, of course, must weigh the interests of the general public.

In conclusion, we believe that the Petitioner's participation would "create additional issues" and would delay the proceeding. The broadening of issues, in our view, could be in the public interest for the reasons we indicate in our separate opinions on Factor (iii). With respect to the delay of the proceedings, we believe that the effective delay of granting the petition would amount to a few months, at most. Finally, it is far from apparent that Licensee would suffer any injury from a hearing other than the inconvenience of having to modify its plans, and we consider that less important than the public interest that could be served by ventilating some of the issues raised by the Petitioner. We find, therefore, that the fifth factor weighs against Petitioner, because

his participation will broaden the issues and delay the proceeding. We believe, however, that in the circumstances of this case, Factor (v) weighs lightly.

Balance of the Five Factors

We have found that Factor (i) weighs against the Petitioner; he has failed to show good cause for his untimeliness. Factor (ii), on the other hand, weighs in favor; there is no other forum in which his interests will be protected. Factor (iii) in Dr. Paris' opinion weighs heavily in favor of the Petitioner since he believes his participation can reasonably be expected to assist in developing a sound record with regard to important issues which have been inadequately addressed, overlooked or ignored by FPL or the Staff or both. Mrs. Bowers believes that Factor (iii) weighs slightly in Petitioner's favor for the reasons stated, supra. Factor (iv) weighs in his favor, too; without his intervention there would be no hearing, no augmented record, and no parties to protect his interests. Finally, Factor (v) weighs against Petitioner, but in the circumstances of this case we do not weigh it heavily; his participation will broaden the issues and delay the proceeding, but a hearing on the issues would now be in the best interests of the public and the delay attributable to Petitioner's failure to file on time is of much less significance than might appear at first glance. This evaluation leads us to agree with Staff (NRC Staff Response to Supplemental Submission). On balance, the factors which must be considered for an untimely petition under 10 CFR §2.714(1) weigh in favor of our granting his petition.

STANDING

To qualify for standing Petitioner must, in addition to making a showing of interest and justifying his untimely petition, advance at least one cognizable contention and set forth the basis for that contention with reasonable specificity. Of the nineteen contentions listed in the submission dated May 2, 1979, we find that numbers 5, 6, 7, 12, and 18, when considered together with the bases set forth in the Supplemental Submission of June 5, 1979, are acceptable for litigation.<sup>3/</sup> Contention 18 questions the adequacy of the method proposed for storing the steam generator assemblies with regard to protecting the assemblies from storm floods. Contentions 5 and 12 question whether the occupational exposure during the repair, especially of transient workers, can be kept ALARA. Contentions 6 and 7 question whether the liquid effluent that will be discharged as a result of the repair will meet the requirements of Parts 20, 50, 51 and NEPA. In addition, Staff believes that Contention 2, which asserts that an environmental impact statement should be issued in connection with the repair, is acceptable, and we agree. Finally, we do not at this time rule on any of the other contentions. Whether any of them are acceptable remains to be determined in our role as the Licensing Board appointed to hear this case.

Having recognized that Petitioner's interest may be affected by the outcome of this proceeding and having accepted some of his contentions, we find that Mr. Oncavage has standing as an intervenor. Both the Intervenor

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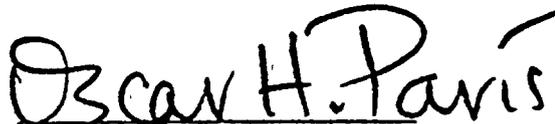
<sup>3/</sup> Mrs. Bowers is of the opinion that this situation has occurred primarily because of Dr. Paris' consideration of the contentions.

and Staff have suggested that the parties should meet to try to reach agreement on the other contentions, in the hope of reaching agreement on admissibility or entering into a stipulation. The parties should also try to agree on a realistic discovery schedule.

We urge the parties to meet as promptly as possible and request the Staff to keep the Licensing Board informed on progress.

IT IS SO ORDERED.

THE ATOMIC SAFETY AND  
LICENSING BOARD

  
Oscar H. Paris, Member

  
Elizabeth S. Bowers, Chairman

Dated at Bethesda, Maryland  
this 3rd day of August 1979.

The separate opinion concerning Factor (iii) of Dr. Paris and the dissenting opinion of Dr. Hall are attached and are a part of the Board's Order.

OPINION OF DR. PARIS:

I am in agreement with the Chairman on all matters except the weight to be given Factor (iii), the extent to which Petitioner's participation in this proceeding may reasonably be expected to assist in developing a sound record. I weigh that factor heavily in striking a balance of the five factors to be considered for an untimely petition, because I believe that the Petitioner has advanced some important issues and set forth their bases with sufficient specificity to significantly challenge the record in this case. Ms. Bowers, on the other hand, believes that Petitioner's contentions are 'bare bones' on which I have put the meat.

It is certainly true that the filings of Mr. Oncavage have been far less than perfect. Nevertheless, in my view he did succeed in advancing certain issues, especially the one concerning the proposed method for storing the steam generator assemblies, that strike one forcefully with their importance. Therefore, in dealing with the efforts of Mr. Oncavage, I have been mindful of a recent teaching of the Appeal Board in South Texas:

It is neither congressional nor Commission policy to exclude parties because the niceties of pleading were imperfectly observed. Sounder practice is to decide issues on their merits, not be avoid them on technicalities. [Houston Lighting & Power Co., et al. (South Texas Project, Units 1 & 2), ALAB-549, Slip Op. at 11 (May 18, 1979)].

To my mind the importance and immediacy of some of the issues raised by Mr. Oncavage override the deficiencies of his pleadings.

Be that as it may, I am less concerned now about his ability to assist in developing a sound record than I was prior to the Special Prehearing Conference. While he came to us as a rank amateur, he has, I believe, demonstrated an ability and willingness to adapt to our procedural requirements.

In discussing the reasons that I assign a heavy weight to Factor (iii), I have, indeed, fleshed out some of the Petitioner's contentions; I cannot argue with the Chairman on that score. My detailed discussion of some of the contentions was originally developed in an effort to show my fellow Board members the importance of some of the issues raised by Mr. Oncavage. I am including those details in this separate opinion because

\*\*\*it [is] the general duty of licensing boards to insure that initial decisions and miscellaneous memoranda and orders contain a sufficient exposition of any ruling on a contested issue of law or fact to enable the parties, and [the Appeal] Board on its own review, readily to apprehend the foundation for the ruling. [Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-104, 6 AEC 179, fn. 2 (1973)].

Extent to Which Petitioner's Participation may Reasonably be Expected to Assist in Developing a Sound Record

At the Special Prehearing Conference Petitioner argued that "he will be represented by counsel" and that "he probably will be able to present witnesses who have technical expertise and are able to address the issues presented for review before the Licensing Board." (Tr. 47). Licensee said that Petitioner

has failed to show how he or expert witnesses that might be presented by him could assist in developing any record involving the revised contentions (Response of FPL to Board Order of May 9, 1979, dated May 21, 1979, at 10). Licensee also claimed that commitments made to Mr. Oncavage by experts are tenuous and their areas of expertise do not coincide with matters which Petitioner wishes to litigate. (Ibid.). Staff said that, given the status of the record (following the Prehearing Conference), it did not believe that participation by Petitioner could significantly contribute to the development of the record (Staff Response to Board Order of May 9, 1979, dated May 23, 1979, at 1-2). Staff went on to suggest, however, that if Petitioner were to identify and give qualifications of persons committed to testify on his behalf, and to indicate the contentions they would address, it would be able to make an informed evaluation of this matter. (Ibid.).

Petitioner responded to Staff's suggestion in his Supplemental Submission dated June 5, 1979, telling us that Dr. Karl Z. Morgan, Neeley Professor of Nuclear Engineering at Georgia Institute of Technology, is committed to testify with regard to potential public health and safety dangers resulting from the possible escape of radioactive materials from the replaced steam generator lower assemblies, which are to be stored on the site, and also from the cooling canals, into which radioactive effluent resulting from the repair will be discharged. (at 2-4). Dr. Morgan is an internationally known health physicist with more than 300 publications in the field. He is Past

President of the Health Physics Society and the International Radiation Protection Association, an emeritus member of the National Council on Radiation Protection, and a member of the International Commission on Radiological Protection. (Id. at 2). In addition, Dr. Walter Goldberg, Associate Professor in the Department of Biology at Florida International University, is committed to present testimony with regard to possible consequences to marine life and the marine ecosystem of radioactive material which might escape from the stored replaced steam generator assemblies or from the cooling canals. (Id. at 3-4). Dr. Goldberg, who specializes in the study of radioecology of the marine environment, received his Ph.D. in Oceanography and is a member of the Health Physics Society. (Ibid.).

Petitioner implied that additional witnesses would be made available to address meteorological matters but said that names of these witnesses were not yet available. (Id. at fn. 2). At the Prehearing Conference we were told that Dr. Raymond McAllister, Professor of Oceanography at Florida Atlantic University, was also committed to present testimony on behalf of the Petitioner, but Dr. McAllister was not mentioned in the Supplemental Submission of May 5, 1979. (Tr. 51, 67). Apparently Dr. McAllister could present testimony on the effect of hurricanes on water systems of the region. (Tr. 51).

Finally, it is now clear that Petitioner will be represented by counsel. At the Special Prehearing Conference he

was represented by an attorney who appeared for the limited purpose of that conference. (Tr. 5, 55). Subsequently, Dean Rogow served his Notice of Appearance as counsel for Petitioner (see p. 6, supra); in addition, Joel V. Lumer and Richard A. Marshall, Jr., filed Notices of Appearance on June 20 and July 25, 1979, respectively.

In Licensee's Response to Supplemental Petition, FPL argues at length to support its conclusion that "nothing in the Supplemental Submission indicates that the Petitioner is likely to make a contribution to a hearing, should one be conducted." (at 15; also see 2-13). Licensee focuses on the three major areas discussed in the Supplemental Submission: (1) on-site storage of the steam generator lower assemblies in an earthen floored facility, (2) occupational radiation exposure, and (3) release of radioactive effluent into the cooling canal system. (Id. 2-13). I turn now to a consideration of argument on these issues.

(1) On-site Storage of Steam Generator Assemblies

With regard to its plans to store the steam generator assemblies, Licensee argues that Petitioner has failed to indicate why its plans are inadequate, other than to point out that the assemblies will be stored in an earthen floored facility. FPL reviews the information contained in the SGRR and SER, including the facts that the facility will have a watertight roof and the steam generator assemblies will be welded closed so that

"the steam generator itself will perform the function of radio-activity containment." (Id. 9-10). Licensee says that since Petitioner failed to take issue with these measures, we cannot judge that he is likely to make a significant contribution to the record with respect to this matter. (at 10-11).

In the list of contentions submitted by Petitioner at the Prehearing Conference on May 2, 1979, Contention No. 18 questioned whether the "proposed floorless steam generator disposal building" would be in compliance, inter alia, of 10 CFR Parts 50 and 51 and the National Environmental Policy Act (NEPA), but no basis for the contention was set forth. In his Supplemental Submission, however, Petitioner says, "\*\*\*Professor Morgan's testimony will deal with the potential radiation dangers stemming from the method of on-site storage and release of radioactive effluent. That testimony will be elicited after laying a predicate built on meteorological data reflecting unique South Florida dangers caused by the possibility of surging tides and winds accompanying a major hurricane." (Supplemental Submission at 3, footnote omitted). With respect to Dr. Goldberg's testimony, Petitioner says, "obviously the integrity of the stored steam generator seals will be considered, since leakage upon the earthen floor, washed and drained by underground flooding resulting from strong storm activity, could seriously damage Biscayne Bay and inland areas." (Id. at 4). In my view the basis for Contention 18 is adequately set forth in these statements which suggest that the integrity of the proposed storage facility and of the stored assemblies could

be threatened by storm tides.

Moreover, Petitioner referred to "The Licensee's use of the 10.1 foot storm tide during Hurricane Betsy in 1965\*\*\*" in his Supplemental Submission (at p. 3, fn. 2). Licensee responded by pointing out that the historical 10.1 foot storm tide was mentioned in the FSAR, not the SGRR nor SER, and went on to indicate that the design of the plant safety systems is based on a predicted maximum flood stage, resulting from the maximum probable hurricane of 18.3 feet MLW. (Licensee's Response to Supplemental Submission at 13, fn. 9; see Safety Evaluation for the Operating License, dated March 14, 1972, Section 3.4).<sup>1/</sup> With a surge level of 18.3 feet, wave runup to above 22 feet is predicted. (Ibid.). The FSAR indicates that sustained winds exceeding hurricane force (75 mph) can be expected on an average of once every 7 years, and winds greater than 100 mph can be expected once every 25-30 years (FSAR, Section 2.6.6).<sup>2/</sup>

The proposed storage compound for the steam generator lower assemblies will be located in the laydown area at the plant. (SGRR, App. A, "Responses to NRC Questions of 1/9/78" at A-46-1).

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At this stage of the proceeding, when the information on which we must base our opinion is not evidentiary, I believe that we may consider any of the information which is contained in the existing record on Turkey Point, Units 3 and 4.

2/

The chance of hurricane force winds occurring in any given year at Miami is 1 in 6, according to statistics presented in Climates of the States, Vol. I (Gale Research Co., Detroit, 1978; at 217, Table 2). Miami is only 25 miles north of the site.

The elevation of the laydown area is 5.0 feet. (FSAR, Fig. 1.2-1). The storage facility will be constructed of reinforced concrete walls which are designed as radiation shields, and it will have a watertight concrete roof. One end of the compound will be left open, presumably to provide access, and this end is to be closed with interlocking "stop logs." (SGRR, App. D, "Responses to NRC Questions of 12/15/78" at D-1-1 and Fig. D.1-1). The dimensions of the facility will be 110 feet by 60 feet by 17 feet high. (Id., Fig. D.1-1). There is no indication that the storage compound will be watertight to floods or that it will be designed to withstand stresses of storm surge, wave runup, or the impact of floating debris such as logs and broken timbers. Finally, I note that Licensee plans to store the steam generator lower assemblies for approximately 35 years before disposing of them off-site. (SGRR, Section 3.4.4).

The foregoing information causes me to believe it reasonable to expect that the steam generator assembly storage compound with the enclosed radioactive assemblies would be subjected to hurricanes about five times during its functional life, and I would further expect at least one of those storms to have winds in excess of 100 mph. Conceivably such a storm could produce the projected 18.3 foot tidal surge with wave runup to about 22 feet. The scenario generated by these considerations is that the storage compound would be inundated in 13 feet of moving water with waves possibly breaking over its roof. This scenario brings many questions to mind. Would the storage compound be watertight,

or would the assemblies also be immersed in 13 feet of sea water? Would the walls withstand the stress imposed by moving water and wave action? Would the walls withstand the impact of floating debris thrown against them by waves? How bouyant would the sealed steam generators be?<sup>3/</sup> Might they move and consequently impact the wall from within the compound? If the walls should collapse, could the wind driven water move the assemblies away from the compound? The ability of the steam generator storage compound to withstand stresses imposed by hurricanes is not addressed in the SGRR, the SER, or the Environmental Impact Appraisal (EIA).<sup>4/</sup>

Although the SGRR, SER, and EIA do not address the type of severe hurricane-caused accident just postulated, the SGRR and EIA do consider a breach of a steam generator seal while the assemblies are in the storage building (SGRR, Section 3.4.7; EIA, Section 4.4). This issue was raised by Petitioner in his Supplemental Submission where he discussed Professor Goldberg's testimony. (at 4). Presumably such a leak could result from corrosion caused by sea water coming into contact with the assemblies during a storm flood. Moreover, on the basis of the information available to this Board, it appears to me that the assemblies

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A rough calculation, based on the scaled dimensions of the steam generator assemblies illustrated in Figs. 3.2-4 and A.6-3 of the SGRR and the estimated weight of 100 tons for an assembly given on p. 3-1 of the SGRR, yields an estimated specific gravity of about 0.9. If this value is reasonably accurate, the assemblies could float.

4/

NRC Staff issued its Environmental Impact Appraisal (EIA) on June 29, 1979 [negative declaration pursuant to 10 CFR §51.5(c)].

might become wet even absent a flood. They are to be stored on bare earth which almost certainly will contain moisture. In the enclosed compound I would expect the moisture content of the air to be high enough to cause dew point to be reached from time to time as temperature fluctuated. Consequently I would expect moisture to condense on the assemblies. It is common experience to persons who live and work in the vicinity of large bodies of sea water that salt spray in the air causes rapid and extensive corrosion of unprotected metal, even if the metal does not come into direct contact with sea water. Apparently the steam generator storage compound will not be airtight. (See SGRR, D.1-1). It seems reasonable to expect, therefore, that the seal welds of the assemblies may begin to corrode very soon after they are placed in the storage compound and that they could continue to corrode more or less continuously thereafter.<sup>5/</sup> The stored assemblies will be surveyed quarterly. (SER at 2-16). It seems reasonable to postulate, therefore, that a breach of an assembly could occur and go undetected for many days or weeks.

Licensee says that breaching the lower assembly need not be considered because it is highly unlikely that "more than an insignificant amount of radioactivity would be dislodged from a primary side surface" of an assembly (SGRR at 3-22a). It points out that the majority of the radioactivity in an assembly is on

5/

The steam generator assemblies are fabricated from steel which is highly susceptible to corrosive attack by chloride ions in sea water and salt spray.

the surfaces of the primary side in the form of a film of metal oxides which is very adherent and very refractory. (Ibid.). For a leak to occur, not only must an assembly be breached, but this radioactive film must be dislodged. (Ibid.). According to the SGRR, the three mechanisms which could dislodge radioactive material within the assemblies are: (1) thermal shock, (2) chemical/corrosive attack, and (3) mechanical shock. (Ibid.). FPL dismisses thermal shock because temperature changes would occur too slowly to produce it, chemical/corrosive attack because the assemblies will be seal welded, and mechanical shock because they will be surrounded by the walls of the storage compound. (Ibid.). Licensee concludes, therefore, "that there are no radiological accident considerations associated with onsite storage." (Ibid.).

Apparently Staff was unwilling to reach such a conclusion. In the EIA it did analyze the environmental impact of a postulated breach of the seal of one steam generator assembly during storage. (Section 4.4). In the analysis Staff assumed that the radioactive material on the primary side of the assembly would be dried in place so that any that might be dislodged would come loose in flakes or pieces. Staff believes that such dislodged material would tend to remain trapped within the steam generator because of the complexity of the assembly's internals. Any flakes or pieces that might escape would, in Staff's view, tend to remain on the surface of the earthen floor of the compound, so that they "could be removed if necessary." (Id. at 4-13).

For the purpose of its assessment, Staff assumed that only 0.1% of the total activity (1400 Ci) estimated to be in one assembly would escape through a breach. If this amount of activity were released to surface water by flooding, Staff believes that it would be diluted by the flood waters to within the maximum allowable concentration of Co-60 in water.<sup>6/</sup> Further, the contaminated flood water would eventually be carried to Biscayne Bay where it would be diluted still more. If, on the other hand, the released radioactivity entered ground water via the floor of the compound, it would migrate downward until it reached the Biscayne aquifer. (Ibid.). It would then migrate seaward with the hydraulic gradient. Staff says that some of the radioactive material would become fixed by ion exchange as it dispersed through the soil and notes that the radioactivity would be diluted by ground water. (Ibid.).<sup>7/</sup>

I do not agree with Licensee's conclusion that the Board cannot make the judgement that Petitioner's participation in this proceeding will be likely to make a significant contribution to the

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No explanation was offered by Staff for not considering the other corrosion products expected to be on the primary side of the steam generators (see Table 5.2-1 in the SGRR). Presumably it selected Co-60 because it will be the most abundant long-lived radionuclide present.

7/

Only radioactive material in solution could undergo ion exchange, and presumably most of the material released from a steam generator would be insoluble. Fine particles could, of course, become fixed in the soil by adsorption.

record (Licensee's Response to Supplemental Submission at 11). Petitioner has alerted us to the fact that apparently neither Licensee nor Staff has considered the effect of a severe hurricane on the stored steam generator assemblies and suggested that a storm surge could cause radioactive material to be released to the environment from the storage compound. Staff's environmental assessment did address the impact of leakage from one of the stored assemblies, but there will be six assemblies in the compound when repairs have been completed on both units. If more than one assembly leaked, would the total amount of radioactivity released still fall below the maximum allowable release permitted by 10 CFR Part 20? Staff's analysis leaves other, related, questions unanswered, in my opinion. Could sea water or salt spray, or both, cause corrosion of the assemblies to occur more or less continuously after they are placed in the earthen floored compound? If so, could a leak or leaks go undetected for days, weeks, or months, in view of the fact that Licensee proposes to conduct surveillance on a quarterly schedule? Is Co-60 the only radio-nuclide that could be dislodged from the primary surface and leaked from the assemblies? If not, what justification is there for disregarding the others? I believe that these questions should be addressed by Licensee and Staff.

The foregoing consideration has convinced me that the existing record is inadequate. By raising the issue of whether the proposed plan for storing the steam generator assemblies will

provide adequate protection of them from storm tides, Petitioner has, in my view, shown that his participation in this proceeding can reasonably be expected to contribute significantly to the record.

(2) Occupational Radiation Exposure

With regard to Petitioner's contention that Licensee has not shown that it will comply with the ALARA requirement of 10 CFR § 20.1(c), Licensee argues that the ALARA concept "has been used by the NRC as a means of measuring environmental impacts and not as a limit upon an activity or operation." (Licensee Response to Supplemental Submission at 6). To support this argument, Licensee cites Florida Power & Light Company (St. Lucie Nuclear Power Project, Unit No. 2, 5 NRC 1038), in which the Licensing Board reversed its own earlier decision to impose an in-plant occupational guideline dose limit in man-rems/yr as a condition of the construction permit. FPL's argument appears to stand on a statement by the St. Lucie Board saying, "The man-rem estimate is intended as a tool for comparison with other environmental impacts of the FES." (Id. at 1064; see Licensee's Response to Supplemental Submission at 7). The Board, however, went on to provide a detailed explanation of why it found the establishment of a man-rem/yr limit as a condition of the construction permit inappropriate, and concluded that by requiring the Applicant to meet the requirements of Regulatory Guide 8.8, Staff could assure that the Applicant's occupation doses during operation were ALARA. (Id. 1062-1064)..

Thus, the St. Lucie decision must be interpreted in terms of the contents of Regulatory Guide 8.8, "Information Relevant to Ensuring That Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable (ALARA)." There one finds the following statement of policy: "Merely controlling the maximum dose to individuals is not sufficient; the collective dose to the group (measured in man-rem) also must be kept as low as is reasonably achievable" (p. 3; emphasis added). Clearly FPL's claim that only individual dose in rems is used as a measure of occupational exposure for limiting activity, and that the man-rem concept is used only for measuring environmental impacts, is in error (Licensee's Response to Supplemental Submission at 6). Indeed, the Commission's regulatory practice requires the Licensee to take measures to assure that the man-rem dose to the population of workers who carry out the repair be ALARA.<sup>8/</sup> Moreover, I doubt that it is FPL's intention to practice at Turkey Point what it preaches in this proceeding, for the SGRR says, "Personnel exposures will be maintained as low as is reasonably achievable (ALARA) in accordance with 10 CFR § 20.1(c) and the guidance provided by Regulatory Guide 8.8\*\*\*\*" (Section 3.3.5); also, Section 3.3.7 of the SGRR provides a man-rem assessment of the activities

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For the record, I also believe that Licensee erred in telling us that we could not impose a man-rem limit on occupational activities absent an exception granted by the Commission under 10 CFR § 2.758 (see Licensee's Response to Supplemental Submission at 8, fn. 5). An extension of that argument would prohibit Licensing Boards from imposing any condition not explicitly provided for in the regulations.

associated with the proposed repair.

Licensee recognizes only one of the contentions submitted by Petitioner at the May 2, 1979 Prehearing Conference as referring to occupational exposure, namely No. 5, which asks "Whether the steam generator repairs proposed by the utility [will] comply with CFR Part 20 [or] NEPA\*\*\*\*?" (Licensee's Response to Supplemental Submission at 3-4.)<sup>9/</sup> I agree with FPL's interpretation of this contention, but I also read Contention 12 as referring to occupational exposure (Appendix to Transcript of May 2, 1979 Prehearing Conference at 4). That contention asks, "whether the use of transient workers with unknown radiation exposure histories is in compliance with 10 CFR Parts 20, 51 or NEPA?" A basis for this contention is set forth by Petitioner on p. 3 of his Supplemental Submission where he tells us that Staff's acceptance of FPL's estimated 1300 man-rem exposure per unit as tolerable will be challenged by the testimony of Dr. Morgan, who Petitioner says recommends a 500 man-rem limit.

The NRC Generic Estimate of collective occupational whole body dose expected from a steam generator repair is 3380 man-rem.

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Licensee also observes that Contention 1 raises the question of occupational exposure in the context of continued operation of the plant. (Licensee's Response to Supplemental Submission at 4, fn. 2). I agree with Licensee that this matter is outside the scope of this proceeding because it does not deal with an issue related to the proposed steam generator repair.

(SER at 2-9, EIA at 4-2). The difference between FPL's estimate, 1300 man-rem, and the generic estimate results from (1) the use of lower dose rates measured at Turkey Point than those used in the generic estimate and (2) the use by FPL of more dose reducing measures than were considered in the generic estimate. Staff believes that the FPL estimate is more realistic for the Turkey Point steam generator repair than the generic estimate. (EIA at 4-3). Staff reviewed Licensee's documentation of the consideration given to the guidance provided by Regulatory Guide 8.8 and concluded that FPL's effort to maintain occupational doses ALARA are acceptable. (SER at 2-10 and 2-11, EIA at 4-2).

With regard to Petitioner's Contention No. 12, which raises the question of whether the use of transient workers with unknown radiation exposure histories will be in compliance with 10 CFR Part 20, I am prompted to take notice of the publication on June 6, 1979, by the Commission of an amendment to Part 20 which is designed to control the radiation exposure of transient workers. (44 FR 32249). That amendment becomes effective on August 20, 1979. It will require Licensee to obtain information from each prospective employee as to the occupational dose received by the person during the current calendar quarter from sources outside Licensee's control, if there is a chance that the prospective employee may receive a dose in excess of 25% of the standards specified in 10 CFR § 20.101(c).<sup>10/</sup> If a worker has received any

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That threshold dose to the whole body would be 25% of 1-1/4 rem, or about 0.31 rem.

occupational dose during the quarter, then the total occupational dose to the whole body which the prospective employer could permit would be determined by the limits set forth in § 20.101(a) and § 20.101(b). Thus, the maximum total whole body dose that a worker could receive in one calendar quarter would be 3 rems.

The time period within which the steam generator repair is to be carried out, 6 to 9 months, and the foregoing requirements of 10 CFR Part 20 will make it necessary for Licensee to hire a large number of workers to complete the repair. (See SER at 1-1). If, to be conservative, one assumes that one unit can be repaired in 6 months and that the total group exposure will be 1300 man-rems, Licensee would have to be able to hire a minimum of 217 workers, all of whom report to work with (1) zero exposure during the calendar quarter in which the repair job is initiated and (2) an accumulated occupational whole body dose which is at least 6 rems less than the limit calculated according to the formula set forth in § 20.101(b)(2).<sup>11/</sup> Licensee has estimated that the repair will require about 300 workers (SGRR at 6-1, Section 6.3). Presumably this estimate did not account for the recent amendment to Part 20 which controls the total occupational dose of transient workers and therefore the total number of workers that will be required could be greater than 300. Will it be possible for Licensee to recruit the number of skilled workers required for the

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This section of Part 20 sets the limit for accumulated whole body dose at  $5(N-18)$ , where "N" equals the individual's age in years.

job so as to be assured of complying with the standards set forth in 10 CFR § 20.101? I believe that this question should be addressed by Licensee and Staff.

Is the estimated group exposure, 1300 man-rem, ALARA pursuant to 10 CFR § 20.1(c)?<sup>12/</sup> Staff believes that it is. (SER at 2-10 and 2-11). Petitioner has indicated his disagreement (Supplemental Submission at 3). Is this issue litigable, and, if so, has Petitioner shown that it can be reasonably expected that his participation will contribute significantly to the record? First, I note that any decisions with regard to whether occupational exposure is ALARA, whether Staff's, Petitioner's, or this Board's, must be reached subjectively. There are no guidelines for evaluating occupational exposure such as the guidelines for evaluating radiation exposure to the general public that are set forth in 10 CFR Part 50. In Prairie Island and Vermont Yankee (Northern States Power Co. and Vermont Yankee Nuclear Power Corp., ALAB-455, 7 NRC 41, 57-59) the Appeal Board looked at this problem and in conclusion said,

In sum, whatever might be the merit of simply carrying over the Appendix I monetary values into Part 20, it cannot be done unless and until the Commission sanctions it. Our point here, once again, is that, whether or not that course is followed, there appears to be manifest

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Licensee believes that the group exposure could range from 650 to 1450 man-rem per unit, because of uncertainties with regard to man-hour requirements and radiation fields. (SGRR, Section 3.3.7.1).

justification for providing utilities, the Staff, the concerned public, and the adjudicatory boards with considerably more guidance than is now contained in Part 20 with respect to how the ALARA standard should be applied for the purposes of occupational exposure. (Id. at 59).

Given the uncertainty which surrounds the issue of applying the ALARA principle to occupational exposure, I believe that the issue deserves litigation. In addition, I believe that the testimony which would be developed in connection with Petitioner's Contention Nos. 5 and 12 can be expected to contribute significantly to the record with regard to whether the radiation exposure of transient workers and the total occupational exposure of the group of workers will comply with the Standards contained in 10 CFR Part 20. I conclude, therefore, that there is reasonable expectation that Petitioner's participation will assist in developing a sound record with regard to occupational exposure.

(3) Release of Radioactive Effluent Into the Cooling System

In Contentions 6 and 7, Petitioner questions whether primary coolant and laundry waste water which must be stored or discharged as a result of the steam generator repair will comply with the requirements of Parts 20, 50, 51, or NEPA (Appendix to Transcript of the May 2, 1979, Prehearing Conference at 3). Further, in the Supplemental Submission Petitioner contends that hurricane tides surging over the cooling canal system could result in the escape of radioactive materials into the surrounding

environment. (at 3-4). Licensee responded by telling us that any liquid effluent released into the canal system will be controlled so as to meet the Turkey Point Technical Specifications under the plant's Operating Licenses. (Licensee's Response to Supplemental Submission at 12). According to the SER, the projected releases due to the repair program are expected to be well within the plant's Technical Specification limits. (at 2-13). Staff added, however, that it had not completed its evaluation of the Appendix I information provided it by Licensee. (Ibid.). To the extent that Staff has not determined whether the current Technical Specifications will be reduced as a result of its review of the Appendix I evaluation, it appears that ventilation of the issues raised by Contentions 6 and 7 would contribute to the soundness of the record. If that situation has changed, this matter could be settled by stipulation or summary dismissal.

I conclude that the record with regard to the release of radioactive material to the cooling canal system is incomplete. Therefore I find that there is reasonable expectation that Petitioner's participation with respect to his Contentions 6 and 7 would assist in developing a sound record.

Conclusion with Regard to Factor (iii)

Based on the foregoing considerations, I conclude that the participation in this proceeding by Mr. Oncavage can reasonably be expected to contribute significantly to the development of a sound record. Accordingly, I find that the third factor weighs heavily in his favor.

Dissent by Dr. David B. Hall

The question before this Board is not should the petitioner be admitted to a hearing, but rather should a hearing be convened to resolve contentions advanced by the petitioner. I submit that an affirmative finding on the latter question requires a stronger showing than has been put forth by Mr. Oncavage.

I believe the request for a hearing by Mark P. Oncavage should be denied. The petition for a hearing is admittedly very late. The sole justification for lateness is that crucial documents were missing from the local Public Document Room. The crucial document to which Petitioner refers is a letter from FPL to NRC transmitting a proposal for replacement of deteriorating steam generator assemblies. Petitioner does not explain the "crucial" nature of the letter nor why it was needed to initiate his petition for a hearing.

Petitioner has not demonstrated to my satisfaction that his participation in a hearing will make a useful contribution to the record. He has not controverted any fact, statement or conclusion made by the Staff in its SER or by the Licensee in its SGRR. In his original (revised) petition to intervene and

in subsequent submissions, Petitioner has posed questions asking for information without claiming that the information sought was not available to him or that there were omissions in the Staff or Licensee documents.

Many of the questions posed by the petitioner as his "list of contentions" have reference to the compliance, or lack thereof, with the Federal Water Pollution Control Act (FWPCA) and, as such, is not within the jurisdiction of the NRC. Other questions imply that an environmental impact statement (EIS) should be prepared for the proposed action. No basis is given by the petitioner for such a requirement. At the time of the prehearing conference, the Staff counsel discussed the status of the environmental evaluation (Tr. 79). Although a determination as to the form of its appraisal was not available at that time, the Staff subsequently (June 29, 1979) published an Environmental Impact Appraisal and a determination that an EIS need not be prepared. This conclusion was challenged by the petitioner in advance during the prehearing conference (Tr. 61, 84). The Staff ambivalently concludes that "... contention 2, which asserts that an environmental impact statement should issue in connection with the proposed action, forms the basis for an acceptable contention ...." I do not agree. There is nothing in the record to support a

conclusion of major impact on the environment within the meaning of 10 CFR 51.5(a)(10).

The supplemental submission of petitioner Mark P. Oncavage informs us that Professor K. Z. Morgan will address the occupational radiation exposure problem created by the proposed repairs. In this submission, Petitioner compares an estimated 1300 man-rem exposure with Professor Morgan's recommendation of 500 man-rem contained in a recent New Scientist article. This is either a careless misquotation or a deliberate distortion. Dr. Morgan, in the cited article, proposes "500 man-rem per 1,000 megawatt (electrical) years" [emphasis added]. Licensee has estimated (and the Staff has accepted the estimate) that the repair of the steam generators will allow the occupational dosage to be reduced from its present experience of 500 man-rem per year to 100 man-rem per year.

Professor Morgan is a well known authority on the effects of low level radiation, but that is not at issue here, nor is the effect of radiation on marine life, the specialty of Professor Goldberg. The regulations in 10 CFR 20 give the Commission standards for protection against the effects of radiation. Licensee has stated its intention to comply with the requirements of the Commission Regulations including the provisions to maintain exposures as low as reasonably achievable (ALARA). Absent a specific challenge, I see no reason to

question the full compliance on the part of the Licensee with the applicable Regulatory Guides and Commission Regulations.

In considering the criteria for granting untimely petitions for intervention, as promulgated in 10 CFR 2.714(a), my analysis of the record before us can be summarized as follows:

(i) Good cause, if any, for failure to file on time. Petitioner has not given any good cause for his untimely filing.

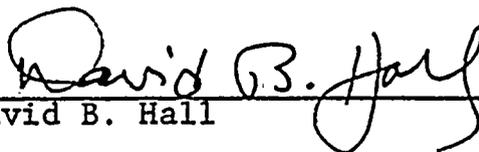
(ii) Availability of other means of protecting interest. Petitioner has no other forum to protect his interests.

(iii) Extent to which petitioner may be expected to assist in developing a sound record. The principal documents comprising the record of this proceeding, viz., the SER, SGRR and EIA, give evidence of the concern on the part of the Licensee and of the Staff for protection of the environment and for limiting occupational exposure in accordance with 10 CFR 20.1(c) (ALARA). It is obvious that the record can be expanded but nothing which has been submitted by the petitioner convinces me that his participation will improve the record. In my opinion, the record as it stands is sufficient to support the conclusion arrived at by the Staff in its Safety Evaluation (p. 4-1).

(iv) Representation of petitioner's interest by existing parties. This is not applicable since there is no hearing yet, thus no parties.

(v) Broadening the issues or delaying the proceeding. If a hearing were granted, the Board would have discretion to admit only those contentions it regards as valid, thus the extent to which the issues are broadened will ultimately rest with the Board. It is possible that a hearing may result in a delay of the Licensee's current schedule but, as of August 1, 1979, that schedule is not known to the Board.

I would deny the late petition to intervene by Mark P. Oncavage as being without substance or merit.

  
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David B. Hall

August 3, 1979







UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION.

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

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

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