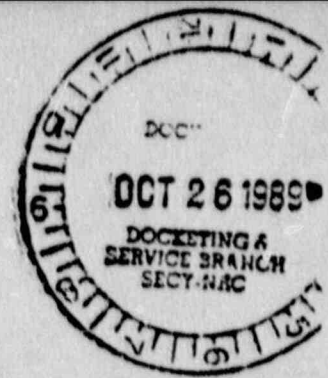


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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

SERVED OCT 27 1989

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

Dockets Nos. 50-250 OLA-4
50-251 OLA-4

(Pressure/Temperature Limits)

PETITION FOR LEAVE TO INTERVENE

1. The Nuclear Energy Accountability Project (NEAP) and Thomas J. Saporito, Jr., (hereinafter "Petitioner"), request leave to intervene in the above-styled amendment proceeding pursuant to U.S. Nuclear Regulatory Commission (NRC) Rules of Practice.

2. NEAP is a corporation with its principle place of business in Jupiter, Florida. NEAP is an environmental organization with specific and primary purposes to operate for the advancement of the environment and for other educational purposes, by the distribution of its funds for such purposes, and particularly for research relative to the environment and the impacts of technology on the environment.

3. Members of NEAP who live, work, and vacation in and otherwise use and enjoy a geographic area within the immediate vicinity of the Turkey Point Nuclear Plants could suffer severe consequences if a serious nuclear accident occurred at these nuclear facilities. Thus, NEAP and its members are significantly and

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adversely affected and otherwise aggrieved by the final agency action on January 10, 1989 granting the pressure/temperature operating license amendments 134 and 128 to the Turkey Point Units 3 and 4 respectively. NEAP is an appropriate party to represent the interests of persons similarly situated or whose interests might otherwise go unrepresented. Some of NEAP's members who may be affected are:

Ms. Arlene Goodwin
1920 North 52 Avenue
Hollywood, Florida 33021

Ms. Astrid Weinkle
1119 Placetas Avenue
Coral Gables, Florida 33146

Mr. Bill Wilson
6900 W 2 Way
Hialeah, Florida 33014

Ms. Nancy Boyd
4225 Bougainvilla Dr. #2
Ft. Lauderdale, Florida 33308

Ms. Judith White Edelson
11340 S.W. 70 Terrace
Miami, Florida 33173

Ms. Roni Monteith
15831 S.W. 100 Court
Miami, Florida 33157

Ms. Maria Firmino
3073 Indiana Street
Coconut Grove, Florida 33133

Ms. Shirley Brezenoff
3765 N.W. 35 Street
Coconut Creek, Florida 33066

4. Thomas J. Saporito, Jr. works in and about the city of Miami, Florida and the aforementioned NEAP members work and live in and about the city of Miami, Florida within approximately 50 miles of the Turkey Point Nuclear Power Plants, and otherwise use and enjoy a geographic area within the immediate vicinity of those plants. The interests of these people and that of their families could be significantly and adversely affected if a serious nuclear accident occurred at the Turkey Point nuclear plants. Thomas J. Saporito, Jr. is the Executive Director of NEAP and an appropriate party to represent the interests of others, such as the aforementioned NEAP members, similarly situated whose interests might otherwise go unrepresented.

5. If the Commission issues an order allowing the pressure/temperature operating license amendments 134 and 128 to remain in the manner granted on January 10, 1989, operation of the Turkey Point Nuclear Units 3 and 4 would:

(a) not provide reasonable assurances that the facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

(b) not provide reasonable assurances (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

(c) not provide reasonable assurances that the issuance of this amendment will not be inimical to the common defense and security or

to the health and safety of the public;

(d) not provide reasonable assurances that operation of the facility could be consistently achieved in a manner which would not significantly increase the probability and development of an accident previously evaluated;

(e) not provide reasonable assurances that operation of the facility could be consistently achieved in a manner which would not significantly increase the probability and development of an accident not previously evaluated;

(f) not provide reasonable assurances that operation of the facility could be consistently achieved in a manner which would not reduce the operating margin of safety of the plants.

6. If permitted to intervene, the Petitioners would address, but not be limited to, the following contentions:

CONTENTION 1

Petitioners contend that the license amendments 134 and 128 constitute a significant nuclear safety concern wherein the requirements of General Design Criterion (GDC) 31 of Appendix A to 10 CFR Part 50 will not be achieved with the pressure/temperature limits and operating parameters established in the amendments.

The requirements of GDC-31 of Appendix A, 10 CFR Part 50 require that the reactor coolant pressure boundary be designed with sufficient margin to ensure that, when stressed under operating, maintenance, testing, and postulated accident conditions, (1) the boundary behaves in a non-brittle manner, and (2) the probability of

a rapidly propagating fracture is minimized.

Petitioners assert that the Licensee incorrectly identified the copper content of the Turkey Point reactor vessels weld metals as 0.26 Cu wt% wherein the copper content reactor vessels weld metals is significantly higher. Therefore, the Licensee calculated the revised pressure/temperature limits and operating parameters using non-conservative and incorrect data. This incorrect calculation by the Licensee increases the possibility that when stressed, the reactor vessels will behave in a brittle manner and could result in a fracture and subsequent loss of both reactor vessels integrity.

GDC-31 requires that a sufficient safety margin exist in the establishment of pressure/temperature limits and operating parameters of a light water reactor. Contrary to GDC-31, it would appear that a sufficient safety margin does not exist because the pressure/temperature limits and operating parameters were calculated and established without due consideration for the copper content of the reactor vessel and weld metals of the vessel.

The establishment of the revised pressure/temperature limits and operating parameters embraced within the amendments is therefore non-conservative and the A₁T is unrealistically low. Therefore, the revised pressure/temperature limits and operating parameters are not sufficiently restrictive to ensure that an adequate margin of safety exists to prohibit a brittle fracture of the reactor vessel.

Consequently, reasonable assurances that the boundary (reactor vessel), behaves in a non-brittle manner and that the probability of

a rapidly propagating fracture is minimized, do not exist.

CONTENTION 2

Petitioners contend that the license amendments 134 and 128 constitute a significant nuclear safety concern wherein the requirements of General Design Criterion (GDC) 31 of Appendix A to 10 CFR Part 50 will not be achieved with the pressure/temperature limits and operating parameters established in the amendments.

The requirements of GDC-31 of Appendix A, 10 CFR Part 50 require that the reactor coolant pressure boundary be designed with sufficient margin to ensure that, when stressed under operating, maintenance, testing, and postulated accident conditions, (1) the boundary behaves in a non-brittle manner, and (2) the probability of a rapidly propagating fracture is minimized.

Petitioners assert that the Licensee incorrectly administered their integrated surveillance program as delineated pursuant to 10 CFR 50, Appendix H and therefore the Licensee's determination of the ART embraced within the license amendments is incorrect. The establishment of the revised pressure/temperature limits and operating parameters embraced within the license amendments is therefore non-conservative and the ART is unrealistically low.

Therefore, the revised pressure/temperature limits and operating parameters are not sufficiently restrictive to ensure that an adequate margin of safety exists to prohibit a brittle fracture of the reactor vessel. Consequently, reasonable assurances that the boundary (reactor vessel), behaves in a non-brittle manner and that

the probability of a rapidly propagating fracture is minimized, do not exist.

CONTENTION 3

Petitioners contend that the license amendments 134 and 128 constitute a significant nuclear safety concern wherein the requirements of General Design Criterion (GDC) 31 of Appendix A to 10 CFR Part 50 will not be achieved with the pressure/temperature limits and operating parameters established in the amendments.

The requirements of GDC-31 of Appendix A, 10 CFR Part 50 require that the reactor coolant pressure boundary be designed with sufficient margin to ensure that, when stressed under operating, maintenance, testing, and postulated accident conditions, (1) the boundary behaves in a non-brittle manner, and (2) the probability of a rapidly propagating fracture is minimized.

Petitioners assert that the Turkey Point Units 3 and 4 reactor vessels have sustained sufficient neutron irradiation damage to cause the shift of the RTNDT levels outside the acceptable criteria established in 10 CFR 50, Appendix G Section IV.B.

Therefore, the revised pressure/temperature limits and operating parameters are not sufficiently restrictive to ensure that an adequate margin of safety exists to prohibit a brittle fracture of the reactor vessel. Consequently, reasonable assurances that the boundary (reactor vessel), behaves in a non-brittle manner and that the probability of a rapidly propagating fracture is minimized, do not exist.

CONTENTION 4

Petitioners contend that the license amendments 134 and 128 constitute a significant nuclear safety concern wherein the requirements of General Design Criterion (GDC) 31 of Appendix A to 10 CFR Part 50 will not be achieved with the pressure/temperature limits and operating parameters established in the amendments.

The requirements of GDC-31 of Appendix A, 10 CFR Part 50 require that the reactor coolant pressure boundary be designed with sufficient margin to ensure that, when stressed under operating, maintenance, testing, and postulated accident conditions, (1) the boundary behaves in a non-brittle manner, and (2) the probability of a rapidly propagating fracture is minimized.

Petitioners assert that the Turkey Point Units 3 and 4 reactor vessels have sustained sufficient neutron irradiation damage to cause the Charpy upper-shelf energy (USE), to fall below 50 ft-lb throughout the life of the vessels as required by 10 CFR 50, Appendix G.

Therefore, the revised pressure/temperature limits and operating parameters are not sufficiently restrictive to ensure that an adequate margin of safety exists to prohibit a brittle fracture of the reactor vessel. Consequently, reasonable assurances that the boundary (reactor vessel), behaves in a non-brittle manner and that the probability of a rapidly propagating fracture is minimized, do not exist.

CONTENTION 5

Petitioners contend that the license amendments 134 and 128 constitute a significant nuclear safety concern wherein the requirements of General Design Criterion (GDC) 31 of Appendix A to 10 CFR Part 50 will not be achieved with the pressure/temperature limits and operating parameters established in the amendments.

The requirements of GDC-31 of Appendix A, 10 CFR Part 50 require that the reactor coolant pressure boundary be designed with sufficient margin to ensure that, when stressed under operating, maintenance, testing, and postulated accident conditions, (1) the boundary behaves in a non-brittle manner, and (2) the probability of a rapidly propagating fracture is minimized.

Petitioners assert that the Turkey Point Unit 3 data are incomplete and not sufficient to predict the pressure/temperature limits for Turkey Point Unit 4. Additional factors such as strain rate and load-history dependent damage accumulation should be considered. While the pressure/temperature limits depend on the combined effects of material properties, operating temperature and neutron irradiation change in strain rate and can significantly affect the fracture toughness and shift in RT_{NDT} . This influence has not been taken into account in determining the pressure/temperature limits.

BASES FOR CONTENTION 1

Pursuant to NRC Regulatory Guide 1.99 (Task ME 305-4), Regulatory Guides are issued to describe and make available to the public methods acceptable to the NRC staff of implementing specific parts of the Commission's regulations, to delineate techniques used by the staff in evaluating specific problems or postulated accidents, or to provide guidance to applicants. Regulatory Guides are not substitutes for regulations, and compliance with them is not required. Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the findings requisite to the issuance or continuance of a permit or license by the Commission.

The Licensee relied on Regulatory Guide 1.99 Rev. 2 Section 2.1 to establish the revised pressure/temperature limits and operating parameters embraced within license amendments 134 and 128. Regulatory Guide 1.99, Rev. 2 Section 2.1 is not the appropriate and most conservative method available to the Licensee to determine pressure/temperature limits and operating parameters for Turkey Point because it does not incorporate appropriate consideration for reactor vessel and weld metal properties such as (copper content) in the calculation of the Adjusted Reference Temperature (ART) in the manner which the Licensee calculated the ART.

The Licensee identified a copper content of 0.26 Cu wt% as the weld metal property of the reactor vessels and therefore apparently relied on this information in their determination of the RTNDT shift

values for Unit 3 capsule T₃ of 155 degrees F, Unit 3 capsule V₄ of 180 degrees F, and Unit 4 capsule T₄ of 225 degrees F. The Licensee then utilized these RTWD shift values in the calculation of the ART of the license amendments for Turkey Point Units 3 and 4, thereby amplifying the degree of error throughout their calculations.

Petitioners assert that a nexus exists herein to Intervenor's, (Center for Nuclear Responsibility and Joette Lorion), Contention 2 in this proceeding wherein Petitioners agree with Intervenor's position that the Licensee's integrated surveillance program is not credible. Petitioners assert, in applying the above described nexus, that the Licensee's calculation of the ART defined in the amendments is non-conservative and that the Licensee should have evaluated a set of surveillance capsules germane to each unit or utilized other methods, such as Regulatory Guide 1.99, Revision 1 Position C, or another method acceptable to the NRC in the calculation of the ART.

Petitioners assert, in applying the above described nexus, that the Licensee's calculation of the ART defined in the amendments is non-conservative and that the Licensee should remove and test the plant specific surveillance capsules for each unit 3 and 4, and utilize the copper content germane to those specific capsules in the calculation of the ART for each unit individually.

As evidenced in the Pacific Northwest Laboratory (PNL) Review of Pressurized Thermal Shock, NUREG CR 2837, conservative estimates of embrittlement of the welds should be made by assuming the worst possible weld chemistry and maximum credible nickel and copper

content for a reactor unit. The Licensee's assumption of the reactor vessels weld metal copper content of 0.26 contradicts earlier Turkey Point documents which evidence that the reactor vessels weld metal copper content is significantly greater than 0.26 indicated by the Licensee.

The PNL report evidences that lowering the copper content by a few hundredths of a percent can lower the RT_{NDT} by 10-15 degrees. Therefore, this PNL report further evidences that reasonable assurances that the boundary (reactor vessel), behaves in a non-brittle manner and that the probability of a rapidly propagating fracture is minimized, do not exist.

Regulatory Guide 1.99 Rev. 2 states in part that "...the parameters in the chemistry factor should be the elements copper and nickel...".

BASIS FOR CONTENTION 2

Pursuant to 10 CFR 50, Appendix H Section C, an integrated surveillance program may be considered for a set of reactors that have similar design and operating features. The representative materials chosen for surveillance from each reactor in the set may be irradiated in one or more of the reactors, but there must be an adequate dosimetry program for each reactor. No reduction in the requirements for number of materials to be irradiated, specimen types, or number of specimens per reactor is permitted, but the amount of testing may be reduced if the initial results agree with predictions. Integrated surveillance programs must be approved by

the Director, Office of Nuclear Reactor Regulation, on a case-by-case basis. Criteria for approval include the following considerations:

1. The design and operating features of the reactors in the set must be sufficiently similar to permit accurate comparisons of the predicted amount of radiation damage as a function of total power output.

2. There must be adequate arrangement for data sharing between plants.

3. There must be a contingency plan to assure that the surveillance program for each reactor will not be jeopardized by operation at reduced power level or by an extended outage of another reactor from which data are expected.

4. There must be substantial advantages to be gained, such as reduced power outages or reduced personnel exposure to radiation, as a direct result of not requiring surveillance capsules in all reactors in the set.

Petitioners assert that the above regulation clearly indicates that the purpose and therefore the administration of an integrated surveillance program, is to permit the Licensee to monitor and evaluate the surveillance capsules of one reactor vessel realizing the properties of those surveillance capsules to be representative of conditions germane to both reactor vessels. The Licensee removed two surveillance capsules from Unit 3 and one surveillance capsule from Unit 4 in calculating the ART germane to the license amendments

for both units.

Thus, the Licensee incorrectly calculated the ART established in the license amendments by utilizing surveillance capsule data from both units instead of a single unit. To demonstrate the significant error in the Licensee's ART calculations, Petitioners proffer the following (example) calculation of the ART utilizing two data points of which the first is taken from Unit 3 surveillance capsule V₃ and the second taken from Unit 4 surveillance capsule T₄.

Pulled Surveillance Capsule Data:

| | | |
|------------------------|------------------------------------|---|
| Capsule V ₃ | Fluence = 1.229 X 10 ¹⁸ | RT _{NDT} Shift = 180 degrees F |
| Capsule T ₄ | Fluence = 6.05 X 10 ¹⁸ | RT _{NDT} Shift = 225 degrees F |

Determination of ART with surveillance data - R.G. 1.99 Rev. 2

Determine CF by sum of the squares method per 2.1 of the R.G.

$$ff = f(0.28 - 0.10 \log f)$$

$$CF = \frac{\sqrt{\text{shift RT}_{NDT} (ff)}}{\sqrt{(ff)^2}}$$

$$ff_{V_3} = 1.229(0.28 - 0.10 \log 1.229) = 1.058$$

$$ff_{T_4} = 0.605(0.28 - 0.10 \log 0.605) = 0.859$$

$$CF = \frac{180 (1.058) + 225 (0.859)}{(1.058)^2 + (0.859)^2}$$

CF = 206.6 the calculated chemistry factor

Calculate ART (Surface 20 EFPY)

$$\begin{aligned} &= \text{Initial RT}_{NDT} + \text{Shift RT}_{NDT} + \text{Margin} \\ &= +10 \text{ degrees} + (206.6) 2.022(0.28 - 0.10 \log 2.022) + 28 \text{ degrees} \\ &= +10 \text{ degrees} + (206.6)(1.192) + 28 \text{ degrees} \\ &= +10 \text{ degrees} + (246.27) + 28 \text{ degrees} \\ &= \underline{284.27 \text{ degrees}} \end{aligned}$$

Calculate ART 1/4T @ 20 EPY

$$\begin{aligned} &= +10 \text{ degrees} + \text{shift RT}_{NDT} (1/4T) + \text{Margin} \\ &= +10 \text{ degrees} + (206.6)(1.26)^{0.28-0.10(\log 1.26)} + 28 \text{ degrees} \\ &= +10 \text{ degrees} + (206.6)(1.06) + 28 \text{ degrees} \\ &= +10 \text{ degrees} + (219) + 28 \text{ degrees} \\ &= \underline{257.00 \text{ degrees}} \end{aligned}$$

Calculate ART 3/4T @ 20 EPY

$$\begin{aligned} &= +10 \text{ degrees} + \text{shift RT}_{NDT} (3/4T) + \text{Margin} \\ &= +10 \text{ degrees} + (206.6)(0.487)^{0.28-0.10(\log 0.487)} + 28 \text{ degrees} \\ &= +10 \text{ degrees} + (206.6)(0.7995) + 28 \text{ degrees} \\ &= +10 \text{ degrees} + (165.17) + 28 \text{ degrees} \\ &= \underline{203.17 \text{ degrees}} \end{aligned}$$

Petitioners' ART Data at 20 EPY for Turkey Point Units 3 and 4

ART surface = 284.27 degrees
ART 1/4T = 257.00 degrees
ART 3/4T = 203.17 degrees

Licensee's ART Calculations for Turkey Point Units 3 and 4

ART surface = 277.00 degrees
ART 1/4T = 251.00 degrees
ART 3/4T = 198.00 degrees

BASIS FOR CONTENTION 3

Pursuant to 10 CFR 50, Appendix G Section IV.B., Reactor vessels for which the predicted value of upper-shelf energy at end of life is below 50 ft-lb or for which the predicted value of adjusted reference temperature at end of life exceeds 200 degrees F (93 degrees C) must be designed to permit a thermal annealing treatment at a sufficiently high temperature to recover material toughness properties of ferritic materials of the reactor vessel beltline.

Contrary to the above, the Turkey Point Units 3 and 4 have exceeded the 200 degree F criteria of 10 CFR 50, Appendix G Section IV.B. The Licensee's own calculations of the RT_{NDT} shift evidence this fact. Therefore, the Licensee should be required to justify continued operation, including the performing of a plant-specific safety analysis and thermally anneal both Unit 3 and Unit 4 to recover material toughness properties of ferritic materials of the reactor vessels beltline.

BASIS FOR CONTENTION 4

Section IV.A.1 of Appendix G, 10 CFR 50 requires, in part, that the Charpy upper-shelf energy (USE) for all reactor vessel beltline materials be above 50 ft-lb throughout the life of the vessel, unless it is demonstrated in a manner approved by the Director, Office of Nuclear Reactor Regulation, that lower values of USE will provide margins of safety against fracture equivalent to those required by Appendix G of the ASME Code.

Section V.C.3 of Appendix G, 10 CFR 50 requires that the licensee perform analysis to demonstrate the existence of equivalent margins of safety when the Charpy USE is predicted to be less than 50 ft-lb. In letters to the Office of Nuclear Reactor Regulation, dated May 3, 1984 and March 25, 1986, the licensee provided analyses, which are intended to demonstrate that at 40 EFPY, which corresponds to a neutron fluence of 2.88×10^{19} n/cm² (E > 1 MeV) at the vessel's inside surface, the fracture toughness of each of the reactor vessels meets the safety margins of Appendix G of the ASME

Code.

In NUREG-0744, Rev. 1 dated July 1982, the NRC Staff provided guidance for performing the analysis required by Section V.C.3 of Appendix G, 10 CFR 50. The recommended procedure to be followed is based on the J-Integral Elastic Plastic Fracture Mechanics (EPFM) method. In this method, the material fracture resistance is measured using the parameters J, the intensity of the plastic stress-strain field surrounding the crack tip, and T, the tearing modulus. These parameters must be determined by testing of neutron irradiated material which is equivalent to the material in the reactor vessel beltline.

The J-T curves used to determine the material elastic plastic fracture resistance were developed from 1.6 T compact toughness (CT) specimens. As a result of specimen size limitations, the amount of J-controlled crack growth is limited to approximately 5 mm. NUREG-0744 describes a method for extrapolating beyond the J-controlled growth limits when small specimens are used to determine the material's fracture resistance. This method was not followed in the licensee's analyses.

To determine the material fracture resistance curve (J_{mat} , T_{mat}) as a function of neutron fluence, the licensee extrapolated HSST data using a relationship observed between J_{mat} and T_{mat} , an empirically derived relationship between J_{mat} and Charpy USE, and the relationship between Charpy USE and neutron fluence reported in Regulatory Guide 1.99, Rev. 1. When the licensee used the

empirically derived relationship between J_{mat} and Charpy USE to determine the Turkey Point material fracture resistance, the licensee assumed that the J_{mat} values from the HSST data corresponded to the Charpy USE values from R.G. 1.99, Rev. 2. This assumption is incorrect and results in a non-conservative value for J at instability. The licensee should have used actual Charpy USE data from the HSST program to determine the relationship between Charpy USE and J_{mat} for the Turkey Point belline materials.

The licensee's calculation of J_{app} at the tip of the 1/4 T postulated flaw included an elastic component, but did not include a plastic component. The stress calculation includes values for the membrane stress from internal pressure, the pressure on the crack surface, the temperature changes during heatup and cooldown and residual weld stress. When these values are summed, the author indicates that the value is low enough to permit the use of only the elastic component for calculating J_{app} . However, when the allowable pressure is doubled, in accordance with the safety margins required by Appendix G, the applied stress is near the irradiated material's yield stress. When the applied stress is near the material's yield stress, the plastic component of J_{app} can be large and should be considered in the analysis. Hence, to demonstrate that the postulated 1/4 T flaw meets the safety margin requirements of Appendix G during Levels A and B service conditions, the plastic component of J_{app} must be added to the elastic component.

Therefore, the Licensee should be required to justify continued

operation, including the performing of a plant-specific safety analysis, a current volumetric examination of 100 percent of the beltline materials that are predicted to be less than 50 ft.-lb., obtain additional evidence of the fracture toughness of the beltline materials after exposure to neutron irradiation from results of supplemental fracture toughness tests, and perform an analysis that conservatively demonstrates, making appropriate allowances for all uncertainties, the existence of equivalent margin of safety for continued operation.

BASIS FOR CONTENTION 5

The supporting argument for measuring fracture toughness from the Charpy V-notch tests is not conclusive because fracture toughness is strain rate dependent and cannot be adequately described by the work done in ft-lb_r. Work done per unit time or ft-lb_r/sec is the relevant quantity in determining damage thresholds. A small increase in strain rate by a factor of 1.1 can lead to almost four times reduction fracture toughness.

The local strain rates in the reactor vessel where defects prevail can be high and cannot be known unless a two-dimensional, if not three-dimensional, non-linear elastic-plastic stress analysis is performed. No confidence can be placed in determining pressure/temperature limits unless the influence of local strain rates on the fracture toughness of reactor vessel materials is accounted for or shown to be otherwise.

Petitioners proffer the above views as those of Dr. George C.

M. Sih, Professor of Mechanics and Director of the Institute of Fracture and Solid Mechanics at the Lehigh University in Bethlehem, Pennsylvania, as stated in a letter to Intervenors dated October 18, 1989.

Therefore, the revised pressure/temperature limits and operating parameters are not sufficiently restrictive to ensure that an adequate margin of safety exists to prohibit a brittle fracture of the reactor vessel. Consequently, reasonable assurances that the boundary (reactor vessel), behaves in a non-brittle manner and that the probability of a rapidly propagating fracture is minimized, do not exist.

Petitioners Meet the Good Cause Requirements of 10 CFR 2.714 (a)(1)
for Late Intervention

Petitioners, the Nuclear Energy Accountability Project (NEAP) and Thomas J. Saporito, Jr, request that the BOARD grant this intervention because Petitioners have met the following good cause criteria for Petitioners late filing:

(i) Petitioner Thomas J. Saporito, Jr. was unable to file this petition in November 1988 at the time these amendments were requested by the Licensee, because at that time Thomas J. Saporito, Jr. was employed by the Licensee as an Instrument Control Specialist at the Turkey Point nuclear plant. Also, the organization which Thomas J. Saporito, Jr. represents, NEAP, was not incorporated under the laws of Florida in November 1988 and thus, could not have petitioned for leave to intervene.

Furthermore, when Petitioners brought this issue to the attention of the NRC pursuant to 10 CFR 2.206, Petitioners were advised by Thomas Murley, Director of Nuclear Reactor Regulation, that the issue (copper content), was the subject of an Atomic Safety and Licensing Board proceeding and therefore Petitioners' 10 CFR 2.206 request was denied.

Finally, Petitioners were under the impression that the issue (copper content), would be addressed by Intervenors, (Joette Lorion and the Center for Nuclear Responsibility), in Intervenors' pressure/temperature limits amendment proceeding. However, the Intervenors in this proceeding have withdrawn Contention 3, which could have addressed the issue (copper content), in the proceeding.

(ii) There is no other means available whereby Petitioners' interest will be protected if Petitioners are not granted Intervention because:

(a) Thomas Murley has advised Petitioner Thomas J. Saporito, Jr. that he will not address the copper content issue because it is the subject of an ASLB proceeding;

(b) The Intervenors in the ASLB proceeding, which Murley was referring to, have withdrawn the Contention 3 which may have addressed the copper content issue from the proceeding.

(iii) Petitioners' participation may be reasonably expected to assist in developing a sound record because the issues presented herein are relevant and pertinent to Intervenors' Contention 2 which was not withdrawn from the proceeding. Also, Petitioner Thomas J.

Saporito, Jr. would be able to assist the Board and the parties in understanding the complex issues because Petitioner's seven years of experience as an Instrument Control Specialist with the Licensee have given Petitioner a broad knowledge of nuclear power plant operational and technical issues.

(iv) Petitioners' interests will not be represented by the existing parties because as Petitioners stated previously, Intervenor in this proceeding maintain only Contention 2 in this proceeding.

(v) Petitioners believe their participation as a party will not unduly broaden the issues that have already been addressed by the Intervenor but will, rather, compliment them since they are part of the same issue of concern which is accurately calculating the adjusted reference temperature (ART) to set the revised pressure/temperature limits. Petitioners participation will also not unduly delay the proceeding since Petitioners are ready to proceed at once to defend their Petition. Furthermore, since the license amendments in question have already been granted, the late intervention will not cause hardship to the parties.

CONCLUSION

For all the above stated reasons, Petitioners believe they have met the good cause requirements of 10 CFR 2.714 for a late Intervention and ask that this BOARD allow them to intervene in the pressure/temperature limits proceeding.

Additionally, for all the reasons stated above, and because a loss of the reactor vessel integrity would result in a catastrophic accident which would adversely affect public health and the environment as a whole, Petitioners request that their Petition for Leave to Intervene be granted thereby enabling the issues raised, germane to the amendments, to be reviewed and evaluated by the Atomic Safety and Licensing Board in a formal public hearing.

Respectfully submitted,



Thomas J. Saporito, Jr.

Executive Director, NEAP
1202 Sioux Street
Jupiter, Florida 33458
(407) 743-0770

Dated this 22nd day of October, 1989.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

FLORIDA POWER AND LIGHT COMPANY

(Turkey Point Plant, Unit Nos. 3 & 4)

Docket No. (s) 50-250/251-OLA-4

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing NEAP PETITION FOR LEAVE TO INT have been served upon the following persons by U.S. mail, first class, except as otherwise noted and in accordance with the requirements of 10 CFR Sec. 2.712.

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

Administrative Judge
S. Paul Carter, Jr., Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Administrative Judge
Glenn O. Bright
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Administrative Judge
Jerry Harbour
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Janice E. Moore, Esquire
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Patricia Jehle, Esquire
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Harold F. Reis, Esquire
Attorney for FP&L
Newman & Holtzinger, P.C.
1615 L Street, N.W., Suite 1000
Washington, DC 20036

Joette Lorion, Director
Center for Nuclear Responsibility
7210 Red Road, #208
Miami, FL 33143

Dated at Rockville, Md. this
27 day of October 1989


Office of the Secretary of the Commission