

October 1, 1996

50-555/201

MEMORANDUM TO: Frederick Heddon, Director
Project Directorate II-3
Division of Reactor Projects I/II

FROM: Edward J. Butcher, Chief
Probabilistic Safety Assessment Branch
Division of Systems Safety and Analysis

SUBJECT: INTERIM STAFF GUIDANCE ON THE USE OF PRA IN THE 10 CFR 50.59
PROCESS - FOLLOW UP ON RESPONSE TO TIA 95-013

As stated in my July 30, 1996 memorandum to you regarding the St. Lucie TIA (95-013), we have been formulating SPSB staff guidance on the use of PRA and associated methodologies in the 10 CFR 50.59 process.

Attached to this memorandum is our recently completed interim staff guidance on the subject. We have concluded that licensees should not make changes under 10 CFR 50.59 based on the numerical results of a PRA or related probabilistic analysis. The guidance addresses the rule as it currently is, and not what it "could or should" be or what it may become as a result of the recently initiated NRC staff action plan. SPSB will keep abreast of development, and participate in the implementation, of the staff action plan and update our guidance as appropriate.

If you have any questions regarding our policy on review of 10 CFR 50.59 evaluations or our interim staff guidance, please contact John O. Schiffgens at 415-1074 (E-mail: JOS).

Attachment: As stated

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Docket File

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*See previous concurrences.

DOCUMENT NAME: G:\CFR5059.ISG

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ATTACHMENT 1

THE PROBABILISTIC SAFETY ASSESSMENT BRANCH (SPSB) INTERIM STAFF GUIDANCE ON THE USE OF PROBABILISTIC RISK ASSESSMENT (PRA) IN THE 10 CFR 50.59 PROCESS

A. BACKGROUND

Over the past year the Commission has expressed renewed interest in issues related to Title 10, Code of Federal Regulations, Part 50, Section 59 (10 CFR 50.59), as discussed in memorandums to the staff dated October 27 and November 30, 1995. Specifically, the staff was requested to reexamine the adequacy of the regulatory framework that authorizes licensees to make changes to their facilities without prior approval of the NRC and to explore ways of improving the 10 CFR 50.59 process.

In response, the staff reevaluated the process and prepared an action plan to address the matters of concern, as discussed in a memorandum from James M. Taylor, Executive Director for Operations (EDO) to Shirley A. Jackson, Commission Chairman dated April 15, 1996. The action plan addresses consistency of guidance and evaluation of NRC inspection activities with the goal of identifying actions which can be undertaken to improve licensee implementation and NRC oversight of the process. The action plan objectives include staff development of guidance for improving "unreviewed safety question (USQ)" determinations by providing direction on a) the extent to which short and long term compensatory actions may be considered as part of a change under 10 CFR 50.59, b) the extent to which PRA techniques may be useful in evaluating the effects on safety of a change under 10 CFR 50.59, and c) the meaning of "margin of safety" relative to numerical parameters, methods of analysis, calculated results of safety analyses, and licensing limits.

In addition to the staff's April 15 response to the Commission, on April 9, 1996 the staff updated Part 9900: 10 CFR Guidance in the NRC Inspection Manual, "10 CFR 50.59 - Interim Guidance on the Requirements Related to Changes to Facilities, Procedures and Tests (or Experiments)." This interim guidance clarifies current staff practices with respect to 10 CFR 50.59, beyond that which is already contained in NRC Inspection Manual, Part 9900, "10 CFR 50.59 - Changes to Facilities, Procedures and Tests (or Experiments)," dated January 1, 1984. Also, recent guidance to the staff on the scope of 10 CFR 50.59 evaluations is contained in NRC Inspection Manual, Inspection Procedure (IP) 37001, "10 CFR 50.59 Safety Evaluation Program," dated December 29, 1992.

The provisions according to which a licensee may make decisions concerning the need for prior Commission approval before implementing a change in the facility or procedures described in the safety analysis

report, or conducting a test, or experiment not described in the safety analysis report (i.e., before implementing a CTE) are described in 10 CFR 50.59. Specifically, the regulation states, in part, the following:

- "(a)(1) The holder of a license authorizing operation of a production or utilization facility may
 - (i) make changes in the facility as described in the safety analysis report,
 - (ii) make changes in the procedures as described in the safety analysis report, and
 - (iii) conduct tests or experiments not described in the safety analysis report,without prior Commission approval, unless the proposed change, test or experiment involves a change in the technical specifications incorporated in the license or an unresolved safety question.
- (2) A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question
 - (i) if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
 - (ii) if a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be increased; or
 - (iii) if the margin of safety as defined in the basis for any technical specification is reduced." (underlining added)

The NRC has statutory responsibility for licensing and regulating nuclear facilities and materials (which includes, among other things, protecting public health and safety) and for conducting research in support of the licensing and regulatory process. Agency functions are carried out through a) standards setting and rulemaking, b) technical reviews and studies, c) conduct of public hearings, d) issuance of authorizations, permits, and licenses, e) inspection, investigation and enforcement, f) evaluation of operating experience, and g) confirmatory research. These functions are directed toward defining what is necessary to protect public health and safety (i.e., appropriate goals and criteria for safe design, maintenance, and operation of nuclear facilities and use of nuclear materials) and determining what practices are "safe enough" (i.e., satisfy established safety goals and criteria). With regard to 10 CFR 50.59, NRC oversight of licensee use of the provisions of the rule is accomplished by inspection of CTEs and technical review (or audit) of "50.59 safety evaluations" which document the bases for the determination that a CTE does not involve an unreviewed safety question.

The Licensee, on the other hand, has responsibility for proposing and implementing the safe design of - and safe maintenance and operation practices for - its facilities, as well as for satisfying NRC

regulations and requirements. The NRC encourages licensees to look beyond the regulations in evaluating the safety of its facilities and operating practices. Hence, licensees are encouraged to develop and implement plant-specific and industry guidelines, to the extent that, at the same time, the guidelines are consistent with NRC regulations and requirements. When appropriate, NRC may endorse industry guidelines as an acceptable method of complying with a particular regulation.

A joint NUMARC/NSAC working group developed a 10 CFR 50.59 guidance document, NSAC-125. Although NSAC-125 may be of some value in performing a 10 CFR 50.59 evaluation, caution must be exercised in its use since, due to its misinterpretation of parts of the rule, it has not been endorsed by the staff. In this regard, it is important to note that the provisions of the rule (which must be satisfied in order to implement CTEs without prior Commission approval) are not concerned, for example, with the magnitude of an increase in the probability of occurrence or the consequences of an accident or with the magnitude of the reduction in safety margin but, rather, with whether the probability of occurrence or the consequences may increase or whether the safety margin is reduced.

B. OBJECTIVE

The objective of this document is to put forth and discuss interim guidance developed by the Probabilistic Safety Assessment Branch (SPSB) concerning interpretation of a specific rule, 10 CFR 50.59, and the role of a particular technology, probabilistic risk assessment (PRA) and associated methodologies, in satisfying the provisions of the rule. The guidance addresses the rule as it currently is, and not what it "could or should" be or what it may become as a result of the NRC staff action plan. SPSB will keep abreast of development, and participate in the implementation, of the staff action plan and update this guidance as appropriate.

C. DISCUSSION

The Rule

Any discussion of 10 CFR 50.59 must begin with the recognition that the implicit premise of the rule is that by satisfying its provisions a licensee's CTE is by definition "safe," hence, no safety analysis needs to be submitted to the NRC for approval and no safety evaluation by the NRC staff is necessary. Consequently, the language of the rule, as well as its intent, is critical.

1. Language

The difficulty with promulgating a rule includes the choice of language to unambiguously convey the intent of the rule and the development of guidance to assure uniform compliance and

enforcement. Insights on key elements of the rule and associated terminology can be obtained from the above mentioned memorandum from EDO Taylor to Chairman Jackson, Part 9900: 10 CFR Guidance in the NRC Inspection Manual, and Inspection Procedure 37001. However, three elements of the rule which have a direct bearing on the use of PRA in the 10 CFR 50.59 process are discussed below.

Probability

As employed in the rule, the meaning of probability needs to be considered in the context of the licensing approach used in the time frame when 10 CFR 50.59 was promulgated and FSARs for current plants were prepared. Until recently, estimates (with a few exceptions) of accident and equipment malfunction probability were qualitative, inferred from deterministic considerations and engineering judgement and not discussed in the FSAR. Although PRA and associated methodologies now provide a means for quantitative calculation of changes in probability associated with changes in SSC, procedures, tests or experiments, quantitative results, in general, can not be used as a basis for regulatory decisions without appropriate standards for the particular application of PRA and adequate guidance for interpretation of results (see also the discussion below under "The Use of PRA," along with other relevant considerations).

Evaluated Previously

As used in 10 CFR 50.59, i.e., as in "probability of occurrence of an accident or malfunction of equipment previously evaluated" - and in - "possibility for an accident or malfunction of a different type than any evaluated previously," the phrase "evaluated previously" (or previously evaluated) has been historically taken to refer to "accident or malfunction of equipment" in the former as it does in the latter, and not to the "probability of occurrence." As noted above, in the past, quantitative estimates of the probability of occurrence of an accident or malfunction of equipment was generally not done. Hence, almost no such information is incorporated in an FSAR and estimates of change must either be qualitative and inferred from deterministic considerations and engineering judgement or, if quantitative, they must be from calculations with recent models of current equipment and configurations, and not from calculations incorporated in analyses "evaluated previously in the safety analysis report." With regard to the latter, however, since neither PRA nor associated methodologies were employed in the FSAR, their application to the assessment of the accident or equipment being evaluated was never reviewed and approved by the staff. Consequently, the validity of the results from such applications is questionable, making the conclusions based on them inappropriate bases for a 50.59 safety evaluation. (See also the discussion below, under "The Use of PRA.")

50.59 Safety Evaluation

Licenses are required to maintain records of changes in the facility and procedures and of tests and experiments carried out under the provisions of Section 10 CFR 50.59. "These records must include a written safety evaluation which provides the bases for the determination that the change, test, or experiment does not involve an unreviewed safety question." The "50.59 safety evaluation" is to be primarily a three step "screening analysis" of the possibility of an adverse safety impact associated with a CTE as opposed to a safety analysis of whether the actual impact of the CTE is acceptable from a public health and safety perspective.

The first step is to determine whether the CTE involves a structure, system, or component (SSC), or procedure described in the most recently updated FSAR submitted to the NRC in accordance with 50.71(e) and the second is to determine whether the description of the SSC or procedure would be affected by the change. If the conclusion from either step in the analysis is negative the CTE may be implemented under 10 CFR 50.59 because, as is implied by the rule, a change important to safety is not involved. If the conclusion from both steps is positive, the third step, evaluating the CTE against the USQ provisions of the rule, is necessary.

In order to implement a CTE without prior Commission approval, the product of the third step in the "screening analysis" (i.e., the written safety evaluation) must show that the CTE can not reasonably be expected to a) increase "the probability of occurrence or the consequences of an accident or malfunction of equipment ..." or b) create "a possibility for an accident or malfunction of a different type ..." or c) reduce "the margin of safety as defined in the basis for any technical specification."

Essentially, a "50.59 safety evaluation" is to determine whether a "safety analysis," requiring NRC staff review prior to implementation, is needed in order to support making the CTE. The reference point for evaluation of the CTE is the FSAR. FSAR analyses are deterministic and based on the single failure criterion and a host of postulated events. By contrast, a typical analysis utilizing PRA or PRA associated methodologies would employ all current and documented information available on the probability of initiating events and the availability and reliability of the facility systems, system configurations, and procedures, as needed. It is because of this approach that the most important accidents identified by PRA involve more than a single failure. 10 CFR 50.59, however, does not require consideration of accidents involving multiple failures making PRA an inappropriate tool for 50.59 safety evaluations.

2. Intent

Generally, NRC regulations and associated guidance specify what activities are to be considered potentially safety significant and what safety and process requirements are to be met to assure public health and safety. In the case of 10 CFR 50.59, the rule provides regulatory flexibility and reduces unnecessary burden on the NRC staff and licensees by allowing licensees to implement CTEs without first going through the NRC's public assessment and approval process. Such CTEs are to be clearly not detrimental to public health and safety (i.e., "such as to not exceed the bounds of the licensing and design basis of the facility" as described in the updated FSAR or affect the plant technical specifications). The regulation is to make non-safety significant changes less burdensome.

10 CFR 50.59 is not intended to allow potentially safety significant CTEs to be implemented based on "unreviewed safety analyses." That is, the 50.59 safety evaluation should not involve new, unreviewed analytical assumptions or methods (i.e., assumptions and methods not previously reviewed and approved by the NRC). For example, an analysis of an accident or malfunction of equipment previously evaluated with a current, commonly used computer code (i.e., one with NRC approved models and assumptions) that was not used in the "previous evaluation," would probably not constitute an unreviewed safety analysis. By contrast, a PRA analysis with plant and modification specific models and assumptions would constitute an unreviewed safety analysis.

As discussed below, under "The Use of PRA," if new, unreviewed analytical assumptions or methods are necessary to support the CTE, it is likely that the CTE involves a USQ, hence, implementation of the CTE under the provisions of 10 CFR 50.59 is questionable. In this case, either the CTE should not be implemented or, prior to implementation, an analysis to support the safety conclusion should be submitted to the NRC for staff approval according to the provisions of 10 CFR 50.90. It should be emphasized that (a) a determination that a USQ exists does not mean that the proposed CTE is "unsafe," just that it is significant and needs to be reviewed by the NRC prior to implementation, and (b) the purpose of a staff review of a 10 CFR 50.90 submittal for any licensee proposed CTE is to understand the licensee's analysis, to verify that the analysis is acceptable, and to determine whether the conclusions reached are in accordance with NRC regulations and not detrimental to public health and safety.

The Use of PRA

Probabilistic Risk Assessment (PRA) logically and quantitatively relates the performance of parts to the performance of the whole. For example, applied to a nuclear power plant, it may be used to analyze component

and system unavailabilities together with initiating event frequencies to obtain core damage frequencies.

There are at least two ways to utilize the unique features of PRA. One emphasizes the logical process for relating component unavailabilities and reliabilities in order to obtain the probabilities of system failure on demand and gain insights into their impact on core damage, radioactive release, and public health. This results in a better understanding of the plant and its potential vulnerabilities to severe accidents. The other emphasizes the "bottom-line" numerical results of PRA and focuses on changes in some measure of risk as a function of specific modifications to plant configuration, design, or procedures in support of proposed actions. The former is more exploratory (e.g., the PRA calculations incorporated in an individual plant examination, IPE) and the latter more definitive (e.g., the PRA analysis of a proposed allowed outage time change of a limiting condition for operation in a particular technical specification).

The power of PRA is that it provides an integrated perspective for evaluating the strengths and weaknesses (i.e., assessing the risk significance) of plant design, available equipment configurations, and operating procedures. In addition, PRA provides a mechanism for focusing dialog between the licensee and the NRC staff on the most important details of issues being analyzed. In this regard, it should be noted that a) in some cases the variety of assumptions and models employed by expert analysts to describe complex systems and system interactions can yield considerably different results, and b) guidance for the appropriate use of PRA in nuclear regulation is being developed by the staff and is, in some aspects, application specific. Consequently, it is inappropriate to accept PRA results without their basis, i.e., without understanding how the results were generated. For the foreseeable future, essentially all use of PRA in regulatory applications will require NRC staff review, in particular, those applications which emphasize numerical results. Specifically, with regard to the use of PRA in the 10 CFR 50.59 process:

- a) The first question is, "Can the results of PRA analyses be useful in 10 CFR 50.59 evaluations?" The rule allows licensees to implement CTEs at their facilities unless they involve a change in technical specifications or a USQ. Since PRA would have nothing to contribute to deciding whether a proposed CTE involves a change in existing technical specifications, applying PRA in 10 CFR 50.59 evaluations would be exclusively associated with USQ determinations.

The applicability of PRA to USQ criterion 50.59(a)(2)(i) hinges on the proper interpretation of this section of the rule. Provided the phrase "if the CTE may increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated ..." is interpreted as it historically has been,

in a qualitative sense, PRA related methodologies could have limited applicability in 10 CFR 50.59 evaluations, if appropriately utilized (i.e., as discussed below).

With regard to 50.59(a)(2)(ii), the possibility that the CTE may create an accident or malfunction (of a different type than any evaluated previously in the updated FSAR) must first be determined before it can be addressed with PRA and associated methodologies. That is, the CTE must fail to satisfy this provision of the rule before PRA can be used to analyze the malfunction or accident of a different type to obtain its probability or frequency of occurrence.

With regard to 50.59(a)(2)(iii), PRA is currently outside the scope of safety margin definition methodology (which is deterministic), hence, irrelevant to 50.59(a)(2)(iii).

- b) The next question then becomes, "How may PRA be utilized in making 50.59(a)(2)(i) USQ determinations?" There is a problem with utilizing PRA in the definitive or quantitative sense for such purposes (in addition to the "evaluated previously" and limited scope problems discussed in section 1 under "The Rule"). The reason being that, in a properly structured PRA, equipment, procedures, tests, and experiments that "can not" significantly contribute to risk are typically screened out of the analysis or are subsumed into "supercomponents" or subsystems for which the total probability of failure is available or is estimated without explicitly modeling all its component parts (e.g., as is done for diesel generators). Hence, quantitatively, if CTEs are specifically included in the PRA analysis, they contribute some amount (although sometimes relatively small) to the mathematical probability of failure and it can be concluded that any such CTE with a higher failure probability than existed before will "increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety" without performing the PRA analysis.

Although use "in the definitive or quantitative sense" may be the "natural or correct" way of utilizing PRA in a safety analysis submitted for review (i.e., in connection with a 10 CFR 50.90 submittal), a 10 CFR 50.59 written evaluation should not be such an analysis. It should be a screening analysis concerned with whether there may be an increase not with how large it may be. Therefore, for this reason, together with that presented in the previous paragraph, as well as those discussed under "The Rule" (above), the staff has concluded that it is not appropriate for a licensee to base 10 CFR 50.59 evaluations on the numerical results of a PRA analyses.

- c) It may be argued, however, that utilizing PRA in an exploratory sense (i.e., to gain insights) is appropriate in screening analyses (i.e., to decide, in a more qualitative sense, on whether there is reasonable expectation of an increase in likelihood). Such calculations de-emphasize numerical results, with their associated implications of certitude, and often lead to results and safety conclusions which, once revealed, stand on their own, i.e., are relatively independent of the PRA model that revealed them and associated plant data.

To the extent that they stand on their own, i.e., are self explanatory, insights from PRA calculations may be appropriately incorporated in 10 CFR 50.59 evaluations. The important point here is that "whether the methodology used to gain understanding or insights leading to the 10 CFR 50.59 conclusions is reviewed and approved by the staff or not" is immaterial provided the conclusions are not dependent on, or a function of, the methodology. For example, analyses with PRA methodology a) may show that the proposed CTE negatively impacts some paths leading to successful equipment or safety system performance, but positively impacts others, so that the net effect is that it is not reasonable to expect an increase in the likelihood of (i.e., there is no discernable impact on the) "occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated ..." or b) they may reveal alternate reliable means of achieving success with other minor changes in design or equipment or equipment configurations or procedures that would result in a CTE permissible under 10 CFR 50.59 (i.e., changes for which it is not reasonable to expect an increase in the likelihood of "occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated ..." or one that would actually decrease it). It may be possible to justify such conclusions without reference to the PRA analysis or its methodological details or numerical results, even though PRA analyses were used to reach them.

D. CONCLUSIONS

As noted above, if a new analysis involving assumptions and models not previously reviewed and approved by the staff is necessary to support a proposed CTE, implementation of the CTE under the provisions of 10 CFR 50.59 is questionable and a USQ likely exists. In this case, either the CTE should not be implemented or, prior to implementation, the analysis required to support the safety conclusion should be submitted to the staff for review according to the provisions of 10 CFR 50.90.

PRA techniques are increasingly being used to provide risk insights into the design and operation of nuclear facilities. The acceptability of

PRA results depend not only on the application of the techniques (e.g., assumptions and models) and the quality of the data, but on how the results are interpreted and used in the decision making process. The acceptability of a 10 CFR 50.59 determination, were it to be based on PRA bottom-line numerical results, would likewise depend on how the PRA results were obtained and interpreted. However, if the determination is based on the logic associated with the PRA, it depends on how well the results of the analysis, and the conclusions drawn from them, are justified or substantiated by the design and operation of the plant and the proposed CTE. Furthermore, without adequate substantiation as to whether the findings and the CTE make sense, an estimated probability alone (no matter the magnitude) would lack the assurance needed to implement the CTE under 10 CFR 50.59. In fact, once the results are logically substantiated and characterized, numerical probabilistic results are of little consequence and may actually be a distraction in the decision making process. Accordingly, licensees should not make changes under 10 CFR 50.59 based on the numerical results of a PRA or related probabilistic analysis.

Docket No.
(10 C.F.R. § 2.206)

Mr. Thomas J. Saporito, Jr.


Dear Mr. Saporito:

This letter is to acknowledge receipt of your Petition filed with the executive Director for Operations (EDO) March 7, 1994, requesting that the Nuclear Regulatory Commission take action with regard to the Florida Power and Light Company. Specifically, you request that the NRC: (1) submit an amicus curiae brief to the Department of Labor (DOL) regarding 89-ERA--7/17 concerning your claim that the licensee retaliated against you for engaging in protected activity during his employment at Turkey Point Nuclear Station in violation of 10 C.F.R. 50.7; (2) institute a show cause proceeding pursuant to 10 C.F.R. 2.202 to modify, suspend or revoke the licensee's licenses authorizing the operation of Turkey Point; and (3) institute a show cause proceeding pursuant to 10 C.F.R. 2.202 and order the licensee to provide you with a "make whole" remedy, including but not limited to, immediate reinstatement to your previous position, back wages and front pay with interest, compensatory damages for pain and suffering, and a posting requirement to offset any "chilling effect" your discharge may have had upon other employees at the Turkey Point and St. Lucie Nuclear Stations. Your stated bases for your requests can be summarized as follows: (1) Although the NRC generally defers to the DOL process before taking action against a licensee, in this case the ALJ rendered a decision, enabling the NRC to take the action you request, particularly to offset any "chilling effect" which may have resulted from the licensee's action; (2) under the Memorandum of Understanding (MOU) with DOL, there are times NRC actions are warranted notwithstanding the ongoing DOL process because of the significance of the issues to public health and safety; (3) the record in this case contains evidence which was ignored by the DOL Administrative Law Judge (ALJ), and the NRC should weigh the entire record in determining whether the licensee violated the Energy Reorganization Act (ERA) and 10 C.F.R. 50.7; (4) the ALJ erred in several respects as a matter of law in reaching his decision that you were not discriminated against; (5) the adverse action by the licensee occurred immediately after you were in contact with the NRC and filed complaints under the ERA with DOL; (6) the licensee's actions against you constitute a "hostile work environment" and the NRC is mandated by Congress to ensure that a non-hostile work environment exists at NRC-licensed facilities; (7) the NRC has a duty to ensure that licensee employers maintain a work environment which encourages employees to raise safety issues, which is not the situation at Turkey Point because of the licensee's continuing retaliation against employees who do so; (8) the licensee illegally interrogated you about your protected activity; (9) if the NRC fails to act, it will contradict its own regulations that

the NRC fails to act, it will contradict its own regulations that recognize the right of employees to bypass management and report their concerns directly to the NRC; (10) the NRC has expressly defined "protected activities"; (11) the licensee's request that you be examined by a company doctor was unjustified; (12) the licensee's disparate treatment of you was illegal and must be challenged by the NRC; and (13) the NRC is required to act by virtue of its regulations at 10 C.F.R. 50.9 which provide that the DOL process is an extension of NRC authority.

The NRC is also in receipt of your "Supplement to Petition Filed Under 10 C.F.R. 2.206 Against the Florida Power & Light Company" dated March 13, 1994. The NRC will consider any additional information provided by this supplement in responding to your Petition.

Your Petition has been referred to me pursuant to 10 C.F.R. § 2.206 of the Commission's regulations. As provided by Section 2.206, action will be taken on your request within a reasonable time. I have enclosed for your information a copy of the notice that is being filed with the Office of the Federal Register for publication.

Sincerely,

James Lieberman, Director
Office of Enforcement

Enclosure: As stated

cc: Florida Power and Light Company

U.S. NUCLEAR REGULATORY COMMISSION

Docket No.

FLORIDA POWER AND LIGHT COMPANY
(Turkey Point Nuclear Station)
(St. Lucie Nuclear Station)

RECEIPT OF PETITION FOR DIRECTOR'S DECISION
UNDER 10 C.F.R. § 2.206

Notice is hereby given that by Petition dated March 7, 1994, Thomas J. Saporito, Jr. (Petitioner) has requested that the NRC: take action with regard to the Florida Power and Light Company. Specifically, the Petitioner requests that the NRC: (1) submit an amicus curiae brief to the Department of Labor (DOL) regarding 89-ERA--7/17 concerning the Petitioner's claim that the licensee retaliated against him for engaging in protected activity during his employment at Turkey Point Nuclear Station in violation of 10 C.F.R. 50.7; (2) institute a show cause proceeding pursuant to 10 C.F.R. 2.202 to modify, suspend or revoke the licensee's licenses authorizing the operation of Turkey Point; and (3) institute a show cause proceeding pursuant to 10 C.F.R. 2.202 and order the licensee to provide the Petitioner with a "make whole" remedy, including but not limited to, immediate reinstatement to his previous position, back wages and front pay with interest, compensatory damages for pain and suffering, and a posting requirement to offset any "chilling effect" Petitioner's discharge may have had upon other employees at the Turkey Point and St. Lucie Nuclear Stations. The

Petitioner's stated bases for his requests can be summarized as follows: (1) Although the NRC generally defers to the DOL process before taking action against a licensee, in this case the ALJ rendered a decision, enabling the NRC to take the action Petitioner requests, particularly to offset any "chilling effect" which may have resulted from the licensee's action; (2) under the Memorandum of Understanding (MOU) with DOL, there are times NRC actions are warranted notwithstanding the ongoing DOL process because of the significance of the issues to public health and safety; (3) the record in this case contains evidence which was ignored by the DOL Administrative Law Judge (ALJ), and the NRC should weigh the entire record in determining whether the licensee violated the Energy Reorganization Act (ERA) and 10 C.F.R. 50.7; (4) the ALJ erred in several respects as a matter of law in reaching his decision that the Petitioner was not discriminated against; (5) the adverse action by the licensee occurred immediately after the Petitioner was in contact with the NRC and filed complaints under the ERA with DOL; (6) the licensee's actions against the Petitioner constitute a "hostile work environment" and the NRC is mandated by Congress to ensure that a non-hostile work environment exists at NRC-licensed facilities; (7) the NRC has a duty to ensure that licensee employers maintain a work environment which encourages employees to raise safety issues, which is not the situation at Turkey Point because of the licensee's continuing retaliation against employees who do so; (8) the licensee illegally interrogated Petitioner about his protected activity; (9) if the NRC fails to act, it will

contradict its own regulations that recognize the right of employees to bypass management and report their concerns directly to the NRC; (10) the NRC has expressly defined "protected activities"; (11) the licensee's request that Petitioner be examined by a company doctor was unjustified; (12) the licensee's disparate treatment of Petitioner was illegal and must be challenged by the NRC; and (13) the NRC is required to act by virtue of its regulations at 10 C.F.R. 50.9 which provide that the DOL process is an extension of NRC authority.

The request is being treated pursuant to 10 C.F.R. § 2.206 of the Commission's regulations. The request has been referred to the Director of Enforcement.

A copy of the Petition is available for inspection at the Commission's Public Document Room at 2120 L Street, N.W., Washington, DC 20555.

FOR THE NUCLEAR REGULATORY COMMISSION

James Lieberman, Director
Office of Enforcement

Dated at Rockville, Maryland

This ____ day of _____ 1994.

PDR

THOMAS J. SAPORITO, JR.

Encl

March 7, 1994

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Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Petition Filed Under 10 C.F.R. 2.206 Against The
Florida Power & Light Company

Dear Sir:

COMES NOW, Thomas J. Saporito, Jr., (hereinafter "Petitioner") pursuant to 10 C.F.R. 2.206, and hereby files his request for specific action by the U.S. Nuclear Regulatory Commission ("NRC") within a reasonable time against the Florida Power & Light Company (hereinafter "Licensee") and operator of the Turkey Point and St. Lucie nuclear stations located in the State of Florida.

Specific Request:

- A. Petitioner requests that the NRC construct and submit an amicus curiae brief to the U.S. Department of Labor ("DOL") pursuant to 10 C.F.R. 50.9; 29 C.F.R. 18.10(d); 29 C.F.R. 18.12; and 10 C.F.R. 50.7 regarding issues of fact in DOL Case Nos. 89-ERA-7/17 (consolidated) concerning the Licensee's retaliatory conduct towards Petitioner during Petitioner's period of employment at the Licensee's Turkey Point nuclear station in 1988 as a direct or indirect result of Petitioner having engaged in "protected activity" under 10 C.F.R. 50.7 and the Energy Reorganization Act of 1974 as amended ("Act"), 42 U.S.C. 5851, Section 210/211.
- B. Petitioner requests that the NRC institute a show cause proceeding pursuant to 10 C.F.R. 2.202 to modify, suspend, or revoke the Licensee's permissive operational licenses authorizing the operation of the Turkey Point nuclear station.

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- C. Petitioner requests that the NRC institute a show cause proceeding pursuant to 10 C.F.R. 2.202 and Order the Licensee to provide the Petitioner with a "make whole" remedy, including but not limited to, immediate reinstatement to his previous job as an instrument control technician at Turkey Point, back wages, front pay, interest on back wages and front pay, compensatory damages for pain and suffering, and a posting requirement to offset any "chilling effect" Petitioner's discharge may have had on other Licensee employees at the Turkey Point and St. Lucie nuclear stations.

Basis and Justification:

1. The NRC generally defers to the DOL and does not take immediate action against a licensee when an aggrieved employee files an employment discrimination complaint with the DOL alleging illegal discharge because the employee engaged in "protected activity". See, copy of NRC letter dated February 16, 1993, from James Lieberman, NRC Director, Office of Enforcement attached hereto. Mr. Lieberman states in his February 16, 1993, letter, in part, that:

"...The NRC generally defers to the Department of Labor (DOL) process before taking action and normally does not take independent action with respect to alleged discrimination for the exercise of a protected activity prior to a decision by a DOL Administrative Law Judge (ALJ) absent a compelling safety reason..." Id at pp.1-2.

In Case Nos. 89-ERA-7/17 (consolidated), the ALJ rendered a decision in June of 1989. Therefore, the NRC can take action as requested above in this petition against Florida Power & Light Company. Moreover, the NRC should take action against the Licensee as requested in this petition to offset any "chilling effect" which may have been instilled at the Licensee's facilities as a direct or indirect result of

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Petitioner's discharge from the Turkey Point nuclear station in December of 1988.

2. The NRC and DOL have a long standing Memorandum of Understanding ("MOU") which provides for the cooperation of these two government agencies to work together on DOL discrimination complainants as in Case Nos. 89-ERA-7/17 (consolidated). See, 47 FR 54585; December 3, 1982. Thus, while the NRC actions in discrimination cases are normally held in abeyance pending the DOL process, there are times, because of the significance of the issues to public health and safety, that NRC actions are warranted notwithstanding the ongoing DOL process.
3. NRC action in complying with the requests set out above in this petition against the Licensee are warranted for the following reasons:
 - (a) On June 30, 1989, the DOL ALJ issued a Recommended Decision and Order ("RDO") in Case Nos. 89-ERA-7/17 (consolidated) recommending that the case be dismissed. The ALJ's RDO was opposed by Petitioner through his counsel in a March 2, 1994, Reply Brief to the DOL Secretary of Labor ("SOL"). See, copy of Complainant's Reply Brief ("CRB") dated March 2, 1994, and attached hereto.
 - (b) The entire record in Case Nos. 89-ERA-7/17 (consolidated) contains evidence which was completely ignored by the ALJ. The NRC should weigh the entire record in this case in determining whether the Licensee violated the ERA and 10 C.F.R. 50.7 in discharging Petitioner from the Turkey Point nuclear station in December of 1988. See, CRB at p.1.
 - (c) In Case Nos. 89-ERA-7/17 (consolidated), the parties and the ALJ agreed on the six elements that complainant was required to prove in order to establish a prima facie case. The ALJ's conclusion that complainant failed "to show that

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DeMiranda and other NRC officials, during these months.

Odom's questioning of Petitioner on November 23, 1988; FPL's placing of Petitioner on restricted status; demeaning job assignments; and Odom's attempted interrogation of Petitioner on November 30, 1988; related directly to Petitioner's protected activity and shortly followed Petitioner's contacts with the NRC and his filing ERA complaints with the DOL. See, CRB at p.7-8.

- (g) The Licensee's actions taken against Petitioner in 1988 as described above constitute a "hostile work environment" under the law. All of the harassment incidents and adverse actions that occurred between May and December, 1988, more than satisfy a prima facie case of "hostile work environment." Mitchell v. APS/ANPP, Case No. 91-ERA-9, slip op. of ALJ, at 36-37 (July 2, 1992). See, CRB at p.8.
- (h) The NRC is mandated by Congress to ensure that a non-hostile work environment exists at facilities licensed to operate by the NRC. The NRC simply cannot tolerate a "hostile work environment" at the FPL Turkey Point nuclear station. Indeed, in Case No. 91-ERA-9 and in Case No. 89-ERA-19, Sarah C. Thomas v. APS/ANPP, the NRC took enforcement action because the licensee allowed a hostile work environment to exist at the Palo Verde Nuclear Generating Station. The NRC's enforcement action taken against Arizona Public Service Company stated, in part, that:

"...Both situations are significant because discrimination may create a chilling effect which could discourage individuals from raising safety issues. Such an environment cannot be tolerated if licensees are to fulfill their responsibility to protect the public health and safety. Thus, licensee management must avoid actions that

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discriminate against individuals for raising safety concerns, and must promptly and effectively remedy actions that constitute discrimination...Therefore, to emphasize the importance of maintaining an environment in which employees are free to provide information or raise safety concerns without fear of retaliation or discrimination, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations & Research, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in accordance with the "General statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 10 CFR Part 2, Appendix C..."

- (i) The NRC is required to take the actions requested in this petition. The NRC has a mandated duty and responsibility to ensure that licensee employers maintain a work environment which encourages employees to raise safety issues. See, e.g., 55 Fed. Reg. 10397, 10402 (Mar. 11, 1990). See also, *Ellison v Brady*, 924 F.2d 872 (9th Cir. 1991). Licensee employees have been dissuaded from raising safety issues concerning operations at Turkey Point to the NRC because of FPL's continuing retaliation against employees who do so. Since Petitioner's termination from Turkey Point in December of 1988, numerous other employees have filed DOL complaints under the ERA against FPL complaining of retaliation for raising safety issues about Turkey Point. (i.e. Richard Robaines and Terry Dysert and others).

(j) The Licensee's interrogations of Petitioner about his protected activity in 1988 were illegal conduct under the law and NRC regulations under Title 10 of the Code of Federal Regulations. In Case No. 89-ERA-7/17 (consolidated), is

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uncontested that on two occasions petitioner refused to tell Odom, an FPL vice president, safety concerns that everyone involved knew had already been reported by Petitioner to the NRC. (i.e. DeMiranda and Jenkins and other NRC officials). As a matter of law, an employee's refusal to tell an employer about safety concerns communicated to the NRC cannot be considered insubordination. See, CRB at p.10.

- (k) The ALJ considered Petitioner's conduct to be "insolent", "contemptuous" and "insubordinate" for refusing to be interrogated about his safety concerns by an FPL vice president and for allegedly refusing to be examined by a company doctor after he returned to work from sick leave. The ALJ's conclusion violates precedent of the Secretary which states that:

"...employees engaged in statutorily-protected activity may not be disciplined for insubordination so long as the "activity (claimed to be insubordinate) is lawful and the character of the conduct is not indefensible in its context." The right to engage in statutorily-protected activity permits some leeway for impulsive behavior, which is balanced against the employer's right to maintain order and respect in its business by correcting insubordinate acts. A key inquiry is whether the employee has upset the balance that must be maintained between protected activity and shop discipline. The issue of whether an employee's actions are indefensible under the circumstances turns on the distinctive facts of the case..." See, *Kenneway v. Matlack, Inc.*, Case No. 88-STA-20, slip op. of SOL, at 6-7 (June 15, 1989).

Case No. 89-ERA-7/17 (consolidated) is not a case where the complainant shouted obscenities at management, openly defied work orders or otherwise

actively disrupted the work place. In deed, while FPL management was trying to "get rid" of complainant after May, 1988, by contrast, complainant's immediate supervisor had a positive impression of complainant's work performance and protected activities. Steven Greg Verhoeven testified that complainant was "safety conscious", his safety concerns were "legitimate" and that he was correct "90 per cent" of the time. Additionally, although complainant raised numerous safety concerns his immediate supervisor did not consider them to be disruptive. See, CRB at p.11.

4. The NRC has enacted regulations to ensure that licensees cannot interfere with communications between licensee employees, like Petitioner, and NRC officials. See, e.g., 10 C.F.R. 19. The NRC maintains that employees and NRC inspectors may communicate privately without interference from licensee employers as follows:

- (a) Commission inspectors may consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of Commission regulations and licenses to the extent the inspectors deem necessary for the conduct of an effective and thorough inspection.

- (b) During the course of an inspection any worker may bring privately to the attention of the inspectors, either orally or in writing, any past or present condition which he has reason to believe may have contributed to or caused any violation of the act, the regulations in this chapter, or license condition... 10 C.F.R. 19.15 (emphasis added).

If the NRC fails to challenge FPL's position (i.e. by filing an amicus curia brief in this case), that employees should be "required to disclose...nuclear


safety concerns to the licensee" (see, Respondent's Reply brief at 16), the NRC will contradict its own policies and regulations that expressly recognize the right of employees to bypass management and report their concerns to the NRC directly. NRC Form 3 informs employees that they may contact the NRC directly without first reporting safety concerns to their employers. See, CRB at p.12.

5. The NRC has expressly defined "protected activities" under the ERA and NRC regulations at 10 C.F.R. 50.7(a) to include, but are not limited, to:
 - (i) Providing the Commission information about possible violations of requirements imposed under [the ERA or the Atomic Energy Act];
 - (ii) Requesting the Commission to institute action against his or her employer for the administration or enforcement of these requirements;
 - (iii) Testifying in any Commission proceeding.
6. The interrogation of an employee about safety concerns he or she has communicated to the NRC constitutes discrimination under Section 210 and (now Section 211) of the ERA. See, CRB at p.15-22.
7. The Licensee's request that Petitioner be examined by a company doctor in Case No. 89-ERA-7/17 (consolidated) was not justified and FPL did not prove that Petitioner was insubordinate. See, CRB at p.23-27.
8. The Licensee's disparate treatment of Petitioner was illegal and must be challenged by the NRC. See, CRB at p.28-30.
9. NRC regulations at 10 C.F.R. 50.9 provide that the DOL process is, in fact, an extension of the NRC's authority. Thus, the NRC is required to act on the requests set forth in this petition.

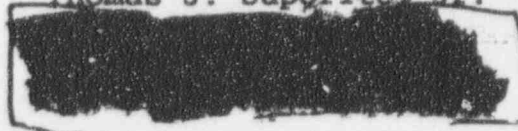
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WHEREFORE, premises considered, the licensee cannot demonstrate to the NRC reasonable assurance that the Licensee did not illegally retaliate against Petition in terminating Petitioner's employment at Turkey Point in December of 1988, for Petitioner having engaged in "protected activity" or that a "chilling effect" does not exist at the Turkey Point and/or the St. Lucie nuclear facilities. Accordingly, it is appropriate for the NRC to consider this petition under 10 C.F.R. 2.206 wherein the Petitioner has set forth the facts that constitute the basis for the request. See, Philadelphia Electric Company (Limerick Generating Station, Units 1 & 2), DD 85-11, 22 NRC 149, 154 (1985).

Respectfully submitted,
For the Environment,



Thomas J. Saperito, Jr.



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cc: Hon. Joseph I. Lieberman
Chairman, subcommittee on Clean Air
and Nuclear Regulation
United States Senate
Committee on Environment and Public Works
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Hon. David Williams
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