November 30, 2000

Mr. Thomas F. Plunkett
President - Nuclear Division
Florida Power and Light Company
P.O. Box 14000
Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT PLANT, UNIT 3 - RELIEF REQUEST REGARDING SAFETY EVALUATION OF RISK-INFORMED INSERVICE INSPECTION PROGRAM (TAC NO. MA8111)

Dear Mr. Plunkett:

By letters dated January 19, 2000, and July 13, 2000, Florida Power and Light Company (FPL) requested the U.S. Nuclear Regulatory Commission (NRC) staff review and approval of an alternative risk-informed inservice inspection (RI-ISI) program for Turkey Point Unit 3 ISI program for Class 1 piping. The letters included enclosures describing the proposed program. Additional clarifying information was provided in FPL's letters dated August 14 and November 15, 2000.

Turkey Point Unit 3 RI-ISI program was developed in accordance with Westinghouse Owners Group Report WCAP-14572, Revision 1-NP-A, using the Nuclear Energy Institute template methodology. The results of the NRC staff review indicate that FPL's proposed RI-ISI program is an acceptable alternative to the requirements of the American Society of Mechanical Engineers Code Section XI for ISI, and therefore, the licensee's request for relief is authorized, pursuant to 10 CFR 50.55a(a)(3)(i), on the basis that the alternative provides an acceptable level of quality and safety.

The recent event at the V. C. Summer facility in which through-wall cracking was discovered in a 34-inch main coolant loop hot leg to reactor pressure vessel nozzle weld may call into question the conclusions that have been made regarding the frequency of large-bore piping examination. The NRC staff will evaluate the results of the V. C. Summer root cause analysis to determine whether any generic conclusions apply to this evaluation, for example to the frequency of large-bore piping examination. If generic implications are found, the NRC staff will take actions, as appropriate.

This completes our action on TAC No. MA8111. If you have any comments on this matter, please contact Kahtan Jabbour, Turkey Point Project Manager at (301) 415-1496.

Sincerely,

/RA by Robert Martin Acting for/
Richard P. Correia, Chief, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-250

Enclosure: Safety Evaluation

cc: See next page

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RISK-INFORMED INSERVICE INSPECTION PROGRAM

TURKEY POINT PLANT, UNIT 3

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

1.0 INTRODUCTION

Current inservice inspection (ISI) requirements for Turkey Point Unit 3 are contained in the 1989 Edition of Section XI, Division 1 of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, entitled *Rules for Inservice Inspection of Nuclear Power Plant Components* (Code). In a submittal dated January 19, 2000, Florida Power and Light Company (FPL or the licensee), proposed a new inservice inspection (ISI) program entitled *Florida Power and Light Turkey Point Unit 3 Risk-Informed Inservice Inspection Program* (Ref. 1). The risk-informed (RI) ISI program is limited to ASME Class 1 piping only, Categories B-F and B-J. The program was developed in accordance with the Westinghouse Owners Group (WOG) methodology contained in the Nuclear Regulatory Commission (NRC) approved report WCAP-14572, Revision 1-NP-A (WCAP-14572) (Ref. 2). Additional clarifying information was provided in revised submittals dated July 13, 2000 (Ref. 3), August 14, 2000 (Ref. 4), and November 15, 2000 (Ref. 5).

In the proposed RI-ISI program, piping failure potential estimates were determined using WCAP-14572, Revision 1-NP-A, Supplement 1, "Westinghouse Structural Reliability and Risk Assessment (SRRA)" Code which utilizes industry piping failure history, plant-specific piping failure history, and other relevant information. Using the failure potential and supporting insights on piping failure consequences from the licensee's probabilistic risk assessment (PRA), safety ranking of piping segments was established for determination of new inspection locations. The proposed program maintains the fundamental requirements of ASME Code Section XI, such as the examination technology, examination frequency and acceptance criteria. However, the proposed program reduces the required examination locations significantly and is able to demonstrate that an acceptable level of quality and safety is maintained. Thus, the proposed alternative approach is based on the conclusion that it provides an acceptable level of quality and safety and, therefore, is in conformance with Title 10, *Code of Federal Regulations* (10 CFR), Section 50.55a(a)(3)(i).

The NRC staff reviewed the licensee's proposed alternative of the ISI program for Turkey Point Unit 3, and applicable portions of the WOG risk-informed topical report WCAP-14572, based on guidance stated in NRC documents (Refs. 6, 7, and 8). The staff evaluation is provided below.

ENCLOSURE

2.0 SUMMARY OF PROPOSED APPROACH

The licensee is required to perform ISI of ASME Code Category B-F and B-J piping welds during successive 120-month (ten-year) intervals. Currently, all B-F welds and 25% of all Category B-J piping welds greater than 1-inch nominal diameter are selected for volumetric and/or surface examination based on existing stress analyses and cumulative usage factors. The licensee submitted the application as an RI-ISI "template" application. Template applications are short overview submittals intended to expedite preparation and review of RI-ISI submittals that comply with a pre-approved methodology. The licensee proposed to implement the staff approved RI-ISI methodology delineated in WCAP-14572.

The licensee requested approval of this alternative for implementation during the inspection in the third period of the third interval. According to the information provided in Ref. 4, FPL is currently in the third 10-year interval that started on February 22, 1994, and ends on February 21, 2004. The current period (second period of the interval) started on February 22, 1997, and ends on February 21, 2001.

The implementation of a RI-ISI program for piping would ideally be initiated at the start of a plant's 10-year inservice inspection interval consistent with the requirements of the ASME Code Section XI, Edition and Addenda committed to by the Owner in accordance with 10 CFR 50.55a. However, the implementation may begin at any point in an existing interval as long as the examinations are scheduled and distributed to be consistent with ASME XI requirements, e.g., the minimum examinations completed at the end of the three inspections periods under ASME Code, Section XI, Program B should be 16%, 50%, and 100%, respectively, and the maximum examinations credited at the end of the respective periods should be 34%, 67%, and 100%. In Ref. 4, the licensee stated that the ASME Code minimum and maximum inspections requirements will be met.

It is also the staff's view that the programs for the RI-ISIs and for the balance of the inspections should be on the same interval start and end dates. This can be accomplished by either implementing the RI-ISI at the beginning of the interval or merging RI-ISIs into the program for the balance of the inspections if the RI-ISIs are to begin during an existing ISI interval. One reason for this view is that it eliminates the problem of having different Codes of record for the RI-ISIs and for the balance of the inspections. A potential problem with using two different interval start dates and hence two different Codes of record would be having two sets of repair/replacement rules depending upon which program identified the need for repair (e.g., a weld inspection versus a pressure test). In Ref. 4, the licensee stated that the RI-ISI inspections and the balance of the inspections will be on the same interval start and end dates.

Ref. 4 stated that the RI-ISI program for Class 1 piping will be updated and resubmitted in conjunction with the update to existing ISI program at the expiration of the current 10-year interval and during periodic 10-year updates. Ref. 4 also stated that changes to the RI-ISI program, prior to the 10-year interval, will be resubmitted following the guidance of WCAP-14572, A-Version. During the monitoring process, on a period basis, plant design changes, plant procedure changes, equipment performance changes, and examination results (flaws, or leaks) will be factored into the risk-informed program, as appropriate. If these changes decrease the percentage of examinations required for the 10-year interval under the proposed RI-ISI program, the revised program would then be resubmitted to the NRC for review and approval.

The staff finds that the Turkey Point RI-ISI program meets the ASME XI requirements for minimum and maximum inspections during inspection periods and intervals.

3.0 EVALUATION

The licensee's submittal was reviewed with respect to the methodology and criteria contained in WCAP-14572. Further guidance in defining acceptable methods for implementing a RI-ISI program is also provided in Regulatory Guide (RG) 1.174, RG 1.178, and Standard Review Plan (SRP) Chapter 3.9.8.

3.1 Proposed Changes to ISI Program

Pursuant to 10 CFR 50.55a(a)(3)(i), the licensee has proposed to implement the RI-ISI methodology described in WCAP-14572, as an alternative to the Code examination requirements for ASME Class 1 piping for Turkey Point Unit 3. A general description of the proposed changes to the ISI program was provided in Section 3 of the licensee's submittal.

3.2 Engineering Analysis

In accordance with the guidance provided in RGs 1.174 and 1.178, an engineering analysis of the proposed changes is required using a combination of traditional engineering analysis and supporting insights from the PRA. The licensee described how the engineering analyses conducted for the Turkey Point Unit 3 RI-ISI program ensures that proposed changes are consistent with the principles of defense-in-depth and that adequate safety margins will be maintained. This is accomplished by evaluating a location's susceptibility to a particular degradation mechanism and then performing an independent assessment of the consequence of a failure at that location.

Turkey Point Unit 3 RI-ISI program is limited to ASME Class 1 piping only. The licensee stated in its submittal that other non-related portions of the ASME Section XI Code ISI program will be unaffected by this program. Piping systems defined by the scope of the RI-ISI program were divided into piping segments. Pipe segments are defined as lengths of pipe whose failure leads to the same consequence, are separated by flow splits and locations of pipe size changes, include piping to a point at which a pipe break could be isolated. The licensee has met SRP 3.9.8 guideline to confirm that a systematic process was used to identify and group pipe systems into segments with common failure consequences.

The Turkey Point Unit 3 submittal states that failure potential estimates were generated utilizing industry failure history, plant-specific failure history and other relevant information using the guidance provided in WCAP-14572. The failure mechanisms identified for Turkey Point Unit 3 include fatigue, striping/stratification, and vibratory fatigue. FPL performed the evaluation to determine failure estimates using the Westinghouse SRRA software and the engineering team members used the relevant information and industry experience to select the final failure probability estimates.

The licensee has met the SRP guideline that the failure potential is determined based on appropriate design and operational information and the methodology and results were reviewed and approved by the plant expert panel.

The licensee developed the consequence of each segment break based on the direct and indirect effects of the segment failure. All the Class 1 piping is inside the containment. The licensee reviewed the Updated Final Safety Analysis Report and supporting documentation and determined that all safety-related equipment in the containment are adequately protected against the indirect effects of pipe failures and therefore only the direct effects are used to determine the consequence. The licensee's individual plant examination (IPE) analysis identified some equipment inside containment that could potentially be affected by severe environments. In the submittal, the licensee stated that the IPE assumption was conservative and, in fact, the equipment is designed to meet the most adverse accident conditions to which they may be subjected. The licensee reported no deviations from the consequence characterization methodology approved by the staff in WCAP-14572 and their analyses are therefore acceptable.

3.3 Probabilistic Risk Assessment

The licensee used the 1997 version of its Level 1 and 2 PRA to support the RI-ISI submittal. The current estimates of core damage frequency (CDF) and large early release frequency (LERF) are 6.09E-5/yr and 1.00E-5/yr respectively. The PRA is an updated version of the original IPE submitted to the NRC on June 25, 1991. The approved WCAP-14572 topical report requires that functions relied upon to mitigate external events and fires, and to mitigate transients during operation modes outside the scope of the PRA be systematically included in the categorization. Turkey Point did not report a deviation in this area and, therefore, the use of a PRA derived from an internal events, full power operation IPE is acceptable.

The more extensive of the two levels of NRC IPE reviews was applied to the Turkey Point IPE. The review included an on-site visit by an NRC review team. The staff evaluation report dated October 15, 1992, concluded that Turkey Point's IPE satisfied the intent of Generic Letter 88-20 but identified two failure scenarios that were not modeled in the IPE. The RI-ISI submittal includes a reasonable explanation as to why the lack of modeling of these two scenarios has no impact on the final categorization of Class 1 piping segments. Since the IPE, the Reliability and Risk Assessment Group (RRAG) has updated the Turkey point PRA models and methods to ensure that risk analyses performed in support of plant operation reflect the current plant configuration and performance. The updates to the models are documented and reviewed in accordance with the FPL Engineering Departments Quality Instructions and the RRAG procedures. The continuous use and well-documented maintenance of the PRA provide further opportunities to identify inaccuracies in the PRA models or assumptions.

The staff did not review the PRA analysis to assess the accuracy of the quantitative estimates. Quantitative results of the PRA are used, in combination with a quantitative characterization of the pipe segment failure likelihood, to support the assignment of segments into broad safety significance categories reflecting the relative importance of pipe segment failures on CDF and LERF. Inaccuracies in the models or assumptions large enough to invalidate the broad categorizations developed to support RI-ISI should have been identified in the licensee or the staff reviews. Minor errors or inappropriate assumptions will only affect the consequence categorization of a few segments and will not invalidate the general results or conclusions. The staff finds that the quality of the Turkey Point PRA is sufficient to support this submittal.

During the review of the initial submittal, the staff noted that the estimated risk arising from the failure of Class 1 piping was dominated by socket welds in 15, 3/4-inch and 1-inch diameter, pipe segments representing the primary reactor coolant pump (RCP) seal by-pass and pressure transmitter lines. Most previous RI-ISI submittals excluded such piping from the analysis and those that included some 1-inch pipe segments did not find them to dominate risk. The WCAP-14572 methodology is a relative risk ranking methodology and the dominance of a small number of segments causes all the other segments to be ranked less significant. Responding to early staff concerns that only 7% of the B-F and B-J Class 1 butt welds were to be volumetrically inspected, FPL modified its methodology and used the relative risk information to select additional B-F or B-J butt welds in large diameter piping for volumetric inspections until a total of about 10% of this population of welds is selected for inspection.

The licensee reported no deviations from the WCAP-14572 methodology associated with the risk ranking of the pipe segments and the subsequent change in risk calculations. The submittal included estimates on the change in CDF and LERF associated with replacing the current ASME Section XI Class 1 piping weld inspection locations and inspections with the proposed RI-ISI locations and inspections. The change in CDF is estimated to be -1E-7/yr with and without operator action. The change in LERF is estimated to be zero (i.e., less than the third significant digit) with operator action and -1E-8/yr without operator action. Turkey Point did not submit estimates for the other risk criteria in Section 4.4.2 of the WCAP-14572, but did not report any deviation from these criteria. The staff recognizes that these risk estimates include the dominant contribution from the 15 1-inch or smaller diameter segments discussed above. However, the licensee has modified the methodology to use the relative risk ranking to select additional B-F or B-J butt welds for volumetric inspection up to about 10% of the population of these type of welds. Selection of additional welds to inspect will decrease the risk due to pipe failure in the FPL RI-ISI program and previous RI-ISI program requests have consistently estimated an acceptable change in risk when 10% of the B-F and B-J butt welds are selected for inspection using an approved RI-ISI methodology. Therefore the staff concludes that any increase in risk associated with the implementation of the RI-ISI program is small and is consistent with the intent of the Commission's Policy Statement and therefore is consistent with RG 1.178.

3.4 Integrated Decision Making

As described in the Turkey Point Unit 3 submittal, an integrated approach is utilized in defining the proposed RI-ISI program by considering in concert the traditional engineering analysis, risk evaluation, and the implementation and performance monitoring of piping under the program. This is in compliance with the guidelines of RG 1.178.

The selection of pipe segments to be inspected is described in Section 3.8 of the submittal using the results of the risk category rankings and other operational considerations. Table 5-1 of the submittal provides a summary table comparing the number of inspections required under the existing ASME Section XI inservice inspection program with the alternative risk-informed inservice inspection program for high safety significant (HSS) segments. During the review of the initial submittal, the staff noted that of the 18 segments placed in the HSS and high failure importance Category 1, all locations in one segment were placed in Category 1A and all locations in all the other segments were placed in Category 1B. The methodology described in

the WOG topical report requires that 100% of the locations exposed to degradation mechanisms in HSS segments with high failure importance (the Category 1A locations) be examined during each interval. An acceptable statistical evaluation procedure is used to identify the number of examinations from the remaining locations in these segments that are not exposed to degradation mechanisms (the Category 1B locations). This apparent deviation from the WCAP-14572 methodology is caused by the relatively high risk assigned to the socket welds in the 15, small bore RCP seal by-pass and pressure transmitter segments and the high failure importance estimated by the licensee without assigning a degradation mechanism to be used to differentiate between Category 1A and 1B.

When the WCAP-14572 relative ranking method is used, segments with dominant contributions to risk are ranked as HSS and segments with other degradation mechanisms, having relatively small contributions, are ranked as LSS [low safety significant]. The staff was aware that a relative ranking evaluation could be dominated by a small subset of high failure rate segments and stated in the WCAP-14572 SER that,

> ". . . although a reduction in the number of welds inspected is anticipated, it is expected that there will be reasonable assurance that the program will provide a substantive ongoing assessment of piping condition."

All Class 1 welds are to be tested with a VT-2 pressure test. The dominance of the risk from the small diameter piping and the exclusive use of socket welds in the small diameter piping, resulted in most of the HSS welds "selected" for inspection to be socket welds that will receive the VT-2 inspection regardless of their safety-significance. The staff expressed the concern that a substantive ongoing assessment of piping condition is not ensured when the selection process is dominated by a small population of socket welds for which surface and volumetric inspection techniques are not effective. Responding to the staff concern, FPL modified their methodology and used the relative risk information to select additional B-F or B-J butt welds for volumetric inspections until a total of about 10 percent of this population of welds is selected for inspection. These additional locations effectively eliminate any relative bias due to the small diameter piping in the final selection and the staff finds that resolution of the issues related to the analysis and evaluation of the socket welds and the small diameter piping is not needed to approve the proposed program.

The WOG report describes targeted examination volumes (typically associated with welds) and methods of examination based on the type(s) of degradation expected. The staff has reviewed these guidelines and has determined that, if implemented as described, the RI-ISI examinations should result in improved detection of service-related discontinuities over those currently required by ASME Section XI.

FPL's submittal indicates that all small diameter socket welded connections will be examined visually with a VT-2 exam. The WCAP specifies that, for some postulated degradation mechanisms in HSS segments, socket welds should be examined with volumetric or surface inspections. The staff accepts this deviation to the approved WCAP on the following basis. Industry experience has shown that failures of small diameter connections, especially small diameter socket-welded connections are predominantly due to vibratory fatigue. For this type of connection, failure follows quickly once a crack initiates because almost the entire life of the component is expended during the initiation phase. The staff believes that socket weld locations susceptible to external chloride stress corrosion cracking (ECSCC) or other outside

diameter (OD) initiated degradation mechanisms should be examined by surface examination methods. FPL stated in Ref. 5 that the Turkey Point Class 1 socket welds do not meet the susceptibility criteria for ECSCC and no other OD initiated degradation mechanism has been identified for socket welds. Based on this, the staff believes that surface examination requirements for small diameter socket welded connections would impose an undue burden without a commensurate increase in plant safety and hence visual examination is an acceptable alternative for Turkey Point socket welds.

The staff finds the location selection process to be acceptable after the modification of the methodology whereby the number of B-J or B-F butt welds to be inspected is increased until about 10% of this total population is selected for volumetric inspection. The modified selection process yields a risk informed selection of locations for inspection and is generally consistent with the process approved for the WCAP-14572 and takes into account defense-in-depth.

The objective of ISI required by ASME Section XI is to identify conditions (i.e., flaw indications) that are precursors to leaks and ruptures in the pressure boundary that may impact plant safety. Therefore, the RI-ISI Program must meet this objective to be found acceptable for use. Further, since the risk-informed program is based on inspection for cause, element selection should target specific degradation mechanisms.

Section 4 of WCAP-14572 provides guidelines for the areas and/or volumes to be inspected as well as the examination method, acceptance standard, and evaluation standard for each degradation mechanism. Based on review of the cited portion of the WCAP-14572, the staff concludes that the examination methods are appropriate since they are selected based on specific degradation mechanisms, pipe sizes and materials of concern.

3.5 Implementation and Monitoring

Implementation and performance monitoring strategies require careful consideration by the licensee, and are addressed in Element 3 of RG 1.178 and SRP 3.9.8. The objective of Element 3 is to assess performance of the affected piping systems under the proposed RI-ISI program by implementing monitoring strategies that confirm the assumptions and analyses used in the development of the RI-ISI program. To approve an alternative pursuant to 10 CFR 50.55a(a)(3)(i), implementation of the RI-ISI program, including inspection scope, examination methods, and methods of evaluation of examination results, must provide an adequate level of quality and safety.

In the January 19, 2000, submittal, the licensee stated that upon approval of the RI-ISI program, procedures that comply with the WCAP-14572 guidelines will be prepared to implement and monitor the RI-ISI program. The licensee confirmed that the applicable portions of the ASME Code, such as inspection methods, acceptance guidelines, pressure testing, corrective measures, documentation requirements, and quality control requirements would be retained.

The licensee stated in Section 4 of the submittal that the RI-ISI program is a living program and its implementation will require feedback of new relevant information to ensure the appropriate identification of HSS piping locations. The submittal also states that as a minimum, risk ranking of piping segments will be reviewed and adjusted on an ASME-period basis and that significant

changes may require more expedited adjustment as directed by NRC bulletin or generic letter requirements, or by industry and plant specific feedback.

The proposed periodic reporting requirements meet existing ASME Code requirements and applicable regulations and, therefore, are considered acceptable. The proposed process for RI-ISI program updates meets the guidelines of RG 1.174 that provide that risk-informed applications must include performance monitoring and feedback provisions; therefore, the process for program updates is considered acceptable.

4.0 CONCLUSIONS

In accordance with 10 CFR 50.55a(a)(3)(i), proposed alternatives to regulatory requirements may be used when authorized by the NRC when the applicant demonstrates that the alternative provides an acceptable level of quality and safety. In this case, the licensee's proposed alternative is to use risk-informed process described in the NRC-approved WOG Report WCAP-14572, Revision 1-NP-A. The staff concludes that the FPL's proposed RI-ISI program as described in WCAP-14572 will provide an acceptable level of quality and safety pursuant to 10 CFR 50.55a for the proposed alternative to the piping ISI requirements with regard to the number of inspections, locations of inspections, and methods of inspection. As discussed above, volumetric or surface examinations of small diameter socket welds required under certain conditions by the WCAP methodology are ineffectual and not required.

The staff finds that the results of the different elements of the engineering analysis are considered in an integrated decision-making process. This integrated process includes using the relative risk information generated to select additional B-F or B-J butt welds for volumetric inspections until a total of about 10 percent of this population of welds is selected for inspection. The selection of these additional locations effectively eliminates the small diameter piping from the final location selections and the staff finds that resolution of the issues related to the analysis and evaluation of the small diameter socket welds is not needed to approve the proposed program. The impact of the proposed change in the ISI program is founded on the adequacy of the engineering analysis and acceptable change in plant risk in accordance with RG 1.174 and 1.178 guidelines.

The Turkey Point Unit 3 methodology also considers implementation and performance monitoring strategies. Inspection strategies ensure that failure mechanisms of concern have been addressed and there is adequate assurance of detecting damage before structural integrity is affected. The risk significance of piping segments is taken into account in defining the inspection scope for the RI-ISI program.

System pressure tests and visual examination of piping structural elements will continue to be performed on all Class 1 systems in accordance with the ASME Code Section XI program. The RI-ISI program applies the same performance measurement strategies as existing ASME Code requirements and, in addition, increases the inspection volumes at weld locations.

Turkey Point Unit 3 methodology provides for conducting an engineering analysis of the proposed changes using a combination of engineering analysis with supporting insights from a

PRA. Defense-in-depth and quality are not degraded in that the methodology provides reasonable confidence that any reduction in existing inspections will not lead to degraded piping performance when compared to existing performance levels. Inspections are focused on locations with active degradation mechanisms as well as selected locations that monitor the performance of system piping.

The licensee has stated that the ASME XI Code minimum and maximum inspection requirements for Program B will be met and that the RI-ISI inspections and the balance of the inspections will be on the same interval start and end dates. The licensee has also stated that FPL would continue to submit its 10-year interval ISI program including the RI-ISI program every 10 years. The licensee has also stated in Ref. 4 that FPL would submit the revised RI-ISI program prior to the end of the interval if relief requests are required from certain aspects or if there are program changes that require NRC approval similar to the practice under the current ASME XI program. The staff finds that the FPL RI-ISI program meets the ASME XI requirements for minimum and maximum inspections during inspection periods and intervals. The staff also finds that the FPL RI-ISI program meets the 10 CFR 50.55a requirements for submitting relief requests to the NRC.

The recent event at the V. C. Summer facility in which through-wall cracking was discovered in a 34-inch main coolant loop hot leg to reactor pressure vessel nozzle weld may call into question the conclusions that have been made regarding the frequency of large-bore piping examination. The NRC staff will evaluate the results of the V.C. Summer root cause analysis to determine whether any generic conclusions apply to this evaluation, for example to the frequency of large-bore piping examination. If generic implications are found, the NRC staff will take actions, as appropriate.

5.0 REFERENCES

1. Letter, dated January 19, 2000, R. J. Hovey (Vice President, Turkey Point Plant), to NRC, containing *Turkey Point Unit 3 Risk-Informed Inservice Inspection (RI-ISI) Program*.

2. WCAP-14572, Revision 1-NP-A, *Westinghouse Owners Group Application of Risk-Informed Methods to Piping Inservice Inspection Topical Report*, February 1999.

3. Letter, dated July 13, 2000, R. J. Hovey (Vice President, Turkey Point Plant), to NRC, containing Resubmittal of *Turkey Point Unit 3 Risk-Informed Inservice Inspection (RI-ISI) Program*.

4. Letter, dated August 14, 2000, R. J. Hovey (Vice President, Turkey Point Plant), to NRC, containing Response to NRC Request for Additional Information related to *Turkey Point Unit 3 Risk-Informed Inservice Inspection (RI-ISI) Program*.

5. Letter, dated November 15, 2000, R. J. Hovey (Vice President, Turkey Point Plant), to NRC, containing Responses to NRC Questions e-mailed on September 8, 2000, related to *Turkey Point Unit 3 Risk-Informed Inservice Inspection (RI-ISI) Program*.

6. NRC RG 1.174, *An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis*, July 1998.

7. NRC RG 1.178, *An Approach for Plant-Specific Risk-Informed Decision Making: Inservice Inspection of Piping*, September 1998.

8. SRP Chapter 3.9.8, *Standard Review Plan for Trail Use for the Review of Risk-Informed Inservice Inspection of Piping*, NUREG-0800, May 1998.

Principal Contributors: Syed Ali and Stephen Dinsmore, NRR

Date: November 30, 2000

Mr. T. F. Plunkett
Florida Power and Light Company

TURKEY POINT PLANT

cc:
M. S. Ross, Attorney
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

Mr. Robert J. Hovey, Site
Vice President
Turkey Point Nuclear Plant
Florida Power and Light Company
9760 SW. 344th Street
Florida City, FL 33035

County Manager
Miami-Dade County
111 NW 1 Street, 29th Floor
Miami, Florida 33128

Senior Resident Inspector
Turkey Point Nuclear Plant
U.S. Nuclear Regulatory Commission
9762 SW. 344th Street
Florida City, Florida 33035

Mr. William A. Passetti, Chief
Department of Health
Bureau of Radiation Control
2020 Capital Circle, SE, Bin #C21
Tallahassee, Florida 32399-1741

Mr. Joe Myers, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304

Plant Manager
Turkey Point Nuclear Plant
Florida Power and Light Company
9760 SW. 344th Street
Florida City, FL 33035

Mr. Steve Franzone
Licensing Manager
Turkey Point Nuclear Plant
9760 SW. 344th Street
Florida City, FL 33035

Mr. John Gianfrancesco
Manager, Administrative Support
and Special Projects
P.O. Box 14000
Juno Beach, FL 33408-0420

Mr. J.A. Stall
Vice President - Nuclear Engineering
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420