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Florida Power and Light Company  
ATTN: Mr. J. W. Williams, Jr.  
Group Vice President  
Nuclear Energy Department  
P. O. Box 14000  
Juno Beach, FL 33408

Gentlemen:

SUBJECT: TURKEY POINT - DOCKET NOS.: 50-250 AND 50-251 - ENFORCEMENT ACTION  
(EA) 84-41

Thank you for your supplemental response of November 13, 1984, to our Notice of Violation and Proposed Imposition of Civil Penalty, EA 84-41, issued on July 20, 1984, concerning activities conducted at your Turkey Point facility. We have evaluated your response and found that it meets the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

Sincerely,

*1/5/ James P. O'Reilly*

James P. O'Reilly  
Regional Administrator

cc: K. N. Harris, Vice President  
Turkey Point Nuclear Plant  
C. J. Baker, Plant Manager  
Turkey Point Nuclear Plant  
K. N. Jones, Plant QA  
Superintendent

bcc: NRC Resident Inspector  
Document Control Desk  
State of Florida

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August 20, 1984  
L-84-213

Mr. James P. O'Reilly  
Regional Administrator, Region II  
U. S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 2900  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Re: Turkey Point Unit 3 and 4  
Docket Nos. 50-250 and 50-251  
Proposed Civil Penalty EA 84-41  
Inspection Report 84-04/09

Florida Power and Light Company has reviewed the subject notice of violation and proposed imposition of civil penalties. A response to each of the specific items there referred to is enclosed.

In addition, the Turkey Point Plant Performance Enhancement Program which has been the subject of senior level management meetings between representatives of FPL and Region II, has been developed and put into effect to address concerns relating to management control of operations. The program provides overall corrective action designed to reduce the likelihood of the future occurrence of procedural violations of the type cited in the notice of violation.

In accordance with your letter, a check for the full amount of the penalty is enclosed.

There is no proprietary information in the report.

Very truly yours,

J. W. Williams, Jr.  
Group Vice President  
Nuclear Energy Department

JWW/RDH/awt/T21:l

Enclosures

cc: Harold F. Reis, Esquire

8408270384

## ATTACHMENT

Re: Turkey Point Units 3 and 4  
Docket No. 50-250, 50-251  
Proposed Civil Penalty EA 84-41  
IE Inspection Report 84-04/09

### FINDING 1.a:

Technical Specification 3.8.5.a requires the reactor to be shut down and the reactor coolant temperature reduced below 350°F, if one of the required two AFW pumps for single unit power operation is not restored to operability within 72 hours.

Contrary to the above, on or before December 17, 1983, the 72-hour single unit power operation action statement to restore operability of the required AFW pump was exceeded. Auxiliary feedwater pump undocumented post-maintenance testing conducted between December 5, and December 14, 1983, rendered the 'A' and 'C' AFW pumps inoperable by the mispositioning of the governor manual speed knob. This situation existed until January 5, 1984, when the situation was identified by the licensee and the 'A' AFW pump was restored to operability.

### FINDING 1.b.1:

Technical Specification 3.8.4.b requires three operable AFW pumps and associated flow paths for dual unit operation when the reactor coolant is heated above 350°F.

Contrary to the above, on January 4, 1984, Unit 3 was heated above 350°F with Unit 4 at power with only one auxiliary feedwater pump operable, and plant management took no action to reduce temperature to meet the LCO.

### RESPONSE:

- 1) FPL concurs with the findings.
- 2) Between December 5, 1983 and January 3, 1984, there were no indications of the auxiliary feedwater (AFW) pumps being affected by mispositioning of the governor manual speed control knob, thus their operability was never in question in accordance with Technical Specification 3.8.5.a and Technical Specification 3.8.4.b. Based on this, Unit 4 continued at full power operation until January 5, 1984. On January 5, 1984, the mispositioning of AFW governor manual speed control knob was discovered while performing Operating Procedure 7304.1, Auxiliary Feedwater System Periodic Test. Immediate corrective actions were taken to correct the situation.
- 3) The following corrective actions were taken immediately:
  - a) Upon failure of the 'A' AFW pump, troubleshooting revealed the governor manual speed control knob to be mispositioned. The knob was then properly positioned.
  - b) The 'A' AFW pump was then successfully tested and placed back in service.

This event, including corrective actions, was described in Licensee Event Report 250-84-004 submitted to the NRC on February 22, 1984.

- 5) Full compliance was achieved on May 15, 1984.

**FINDING 1.b.2:**

On February 23, 1984, Unit 3 was heated from approximately 400°F to 520°F with the licensee management concurrence with 'B' and 'C' AFW pumps already known to be inoperable, although Unit 4 was in non-power operation above 350°F.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was failure of personnel to identify that a Limiting Condition for Operation (LCO) was entered which required one unit to be cooled down below 350°F with less than 3 auxiliary feedwater (AFW) pumps operable in accordance with Technical Specification (TS) 3.8.4.b.
- 3) A temporary system alteration was reviewed and approved to isolate the 'B' AFW pump dp cell 2402. Following isolation of the dp cell, the 'B' AFW pump was tested satisfactorily and placed back in service. An On the Spot Change was issued to Operating Procedure 7304.1, Auxiliary Feedwater System Periodic Test, and the 'C' AFW pump was tested satisfactorily. A subsequent review by plant management of this event revealed that an immediate cooldown to below 350°F on Unit 3 should have been initiated as per TS 3.8.4.b. During the management review, the AFW pumps were placed back in service.
- 4) To preclude recurrence, a revision has been submitted to Technical Specification 3.8 to clarify the requirements for AFW System operability during unit heatup. The specification has been written to describe the system by means of operable trains and to provide specific action if requirements are not met during unit heatup.
- 5) Full compliance was achieved on June 15, 1984.

**FINDING 2:**

Technical Specification 6.8.1 requires the licensee to establish, implement, and maintain written procedures that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of Regulatory Guide 1.33, Revision 2.

Contrary to the above, the licensee failed to provide adequate procedures or to control the operation of safety related equipment. The following examples constitute a breakdown in management control of plant operations:



- c) Subsequently, the 'C' AFW pump was then tested in accordance with the procedure and also failed. Again, troubleshooting discovered the governor manual speed control knob to be mispositioned. The knob was then properly positioned.
  - d) The 'C' AFW pump was then successfully tested and placed back in service.
  - e) The 'B' AFW pump was successfully tested with no need to reposition the governor manual speed control knob.
- 4) To preclude recurrence, the following actions were taken:
- a) An additional check was added to the Nuclear Turbine Operator's log to check the knob position once per shift.
  - b) Because inadequate lighting was addressed as an added factor to this incident, lighting has been installed in the auxiliary feedwater pump area.
  - c) A review was made to check that there were no similar devices which could disable other Engineer Safeguards Equipment without indication to the operators. No devices of this type were found that were not already addressed in procedures.
  - d) Extensive training for turbine operators on manual governor speed control of the Auxiliary Feedwater System was conducted.
  - e) Independent verification of the speed control knob was added to Operating Procedure 7304.1, AFW System Periodic Test and 0209.3, Inservice Testing for Auxiliary Feedwater Pumps.
  - f) Increased the efforts of procedures review to identify similar weaknesses.
  - g) Independent verification policy training and real time implementation. This is an ongoing effort as part of the Performance Enhancement Program.
  - h) Increased plant awareness of guidelines on documenting deficiencies discovered during operations and testing. This includes the inspection and testing of similar equipment when malfunctions are discovered.
  - i) Increased plant awareness of procedural and documentation requirements when conducting post maintenance testing of safety related equipment.
  - j) A Task Team was formed to address all areas of the AFW System.

**FINDING 2.a.1:**

On February 23, 1984, system alignment procedures did not exist to specify the positioning of the several trains of air and nitrogen supply valves attendant to each of the AFW flow control valves in accordance with Operating Procedure 7300.3, Auxiliary Feedwater System Operating Instructions.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was the lack of administrative controls to specify the positioning of the instrument air and nitrogen backup to the auxiliary feedwater (AFW) flow control valves.
- 3) A Task Team was immediately formed and all available information relating to the operation of the flow control valves gathered. Field checking of the system revealed several discrepancies in the installed configuration of the Nitrogen Back-up System, alarm setpoints were changed, valves were numbered and temporarily labeled, procedures were updated, functional tests were performed and operator training was conducted within 24 hours for each unit.
- 4) The following actions have been done to prevent recurrence:
  - a) Drawing 5610-M-399 has been updated to reflect changes to the AFW flow control valves from the AFW Task Team effort,
  - b) Operating Procedure 7300.3, Auxiliary Feedwater System - Operating Instructions, has been revised to include air and backup nitrogen valves in the AFW valve line-up list.
  - c) Operating Procedure 7300.2, Auxiliary Feedwater System - Nitrogen Back-up System Operation, has been revised to describe the desired valve manipulations to correctly line up the system.
- 5) Full compliance was achieved on May 7, 1984.

**FINDING 2.a.2:**

The plant work order for controlling the replacement of reactor protection system relays on January 9, 1984, and the procedure referenced, OP 0732 QC Check Replacement of BFD/NBFD Relays in Reactor Protection and Safety Safeguards Systems, did not establish positive control over the sequence of operations. This resulted in a challenge to a reactor safety system and a trip of Unit 3.

**RESPONSE:**

- 1) FPL concurs with the finding.

- 2) The reason for the finding was inadequate controls established by existing procedures for the interfacing of maintenance procedures and operating procedures. The root cause of the reactor trip was operator error while performing Operating Procedure 1004.2.
- 3) Changes were made to Operating Procedure 1004.2, Reactor Protection System - Periodic Test, which provide positive control over the sequence of operator actions when taking a RPS channel out of service. In addition, proper identification tags were placed on the RPS instrumentation. A review of this incident during the requalification sessions for licensed operators was conducted.
- 4) The Performance Enhancement Program has established a review of safety related maintenance procedures to ensure that correct procedure sequencing is adhered to. The Plant Manager has directed that all maintenance procedures be reviewed prior to use to ensure that all requirements are complied with. The Quality Control Supervisor has counseled personnel on procedure requirements and review of safety related plant work orders to ensure that work is properly interfaced in plant operations.
- 5) Full compliance was achieved on June 1, 1984.

**FINDING 2.a.3:**

The licensee failed to adequately check and correct the non-inking of the post-accident trend recorder pens, in accordance with AP 0103.2 duties and responsibilities of operators and shift technicians on shift and maintenance of operating logs and records, including specifically PR-4-6306B, containment pressure low, which had not been inking from 6 p.m. on January 17 to approximately 10 a.m. on January 18, 1984. The operator initialed that the recorders were checked at 9 p.m. on January 17, 1984, and at 1 a.m., 5 a.m., and 9 a.m. on January 18, 1984.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was an oversight on the part of the operators on shift.
- 3) Specific instructions were given to the individual operators involved to assure their understanding of the consequences of their actions with regards to procedural compliance. Operations personnel were counseled on the importance of procedural compliance and management action in the form of additional training sessions and memorandums to all personnel were taken to assure adequate compliance to procedures. A verbatim compliance policy was established and is now part of Administrative Procedure 0103.2, Responsibilities of Operators and Shift Technicians on Shift and Maintenance of Operating Logs and Records.

- 4) To preclude recurrence, the Quality Control inspectors on shift periodically monitor the marking of control room recorders. The marking pens of the recorders in question were determined to be unreliable and have been replaced with improved marking pens.
- 5) Full compliance was achieved on August 17, 1984.

**FINDING 2.a.4:**

On December 12, 1983, an unreviewed safety question evaluation was not initiated in accordance with AP 0103.3, Control and Use of Temporary Systems, nor were compensatory measures taken, although changes occurred to the facility as described in the FSAR when the automatic fill for the diesel generator day tank was disabled for maintenance.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was lack of administrative controls for controlling Temporary System Alterations (TSA) on non-electrical systems.
- 3) The hand loader to CV-2046A was removed immediately.
- 4) Development and implementation of Administrative Procedure 0103.3, Control and Use of Temporary System Alterations, has been completed to provide instructions for the control and record keeping requirements necessary to assure that TSAs are properly evaluated to allow safe plant operations. This procedure interfaces and complements existing plant controls and procedures concerning the removal and maintenance of plant equipment. Plant personnel were trained on the purpose and correct application of this procedure.
- 5) Full compliance was achieved on March 1, 1984.

**FINDING 2.a.5:**

The licensee failed to establish a procedure or instruction to control documents which were placed in the 'Tank Book'. The 'Tank Book' was placed in the control room for use by plant operators and affected the operation of safety related equipment.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that this tank book was established to provide information only to operators and was not recognized to be a controlled document.
- 3) The tank book was removed from the control room.



- 4) Those documents which affect quality were included in the Plant Curve Book as controlled documents. Administrative Procedure 0103.36, Control of Operator Aides, was revised to provide instructions for the posting, control, and removal of operator aides and describe the required authorization documentation and review to ensure operator aides are current, complete, and necessary.
- 5) Full compliance was achieved on June 14, 1984.

**FINDING 2.a.6:**

Post reactor trip reviews in accordance with AP 0103.16, Duties and Responsibilities of the STA, and ONOP 0208.1, Shutdown Resulting from Reactor Trip or Turbine Trip, were inadequately performed in the following instances:

- (a) On January 8, 1984, the post trip reviews for the 7:35 a.m. trip of Unit 3 did not discuss safety injection. However, Licensee Event Report (LER) 50-250/84-02 stated that engineering safety feature actuations occurred.
- (b) The post trip review for the February 12, 1984, trip of Unit 4, reported in LER 50-251/84-01 did not consider the relevant switchyard breaker interlock failure between breakers 4AC01 and 4AC16 in determining the root cause.
- (c) The post trip reviews for the February 16, 1984, trips of Units 3 and 4, listed only 4AC01 protection relay actuation and 4AC01 protection relay failed, respectively.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was inadequate procedural guidance while conducting post trip reviews.
- 3) For the February 16, 1984 Unit 3 and 4 reactor trips, the post trip reviews were evaluated by plant management to assure adequacy prior to unit start-up. For the January 8, 1984, and February 12, 1984 events, there were no immediate corrective actions taken based on existing procedures at the time of the event.
- 4) The Procedure Upgrade Program reviewed and updated Off-Normal Operating Procedure 0208.1, Shutdown Resulting from Reactor Trip or Turbine Trip, to expand on relevant information for conducting a post trip review. This update included:
  - a) The addition of safety system actuations as one of the criteria for performing the review, and
  - b) Review and concurrence by plant management prior to unit restart.

Personnel required to perform post trip reviews have been made aware of the procedure change. Additional training was given to personnel required to perform post trip reviews.

- 5) Full compliance was achieved on May 31, 1984.

**FINDING 2.a.7:**

On February 24, 1984, maintenance work was performed on equipment affecting safety related plant operations without a detailed PWO, an applicable procedure, or the control room being informed when 'B' AFW pump dp cell was reinstalled.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was lack of adequate administrative controls for controlling temporary system alterations.
- 3) Maintenance personnel were counseled on the importance of keeping the control room operators advised of any work in progress on systems that affect plant operation.
- 4) Development and implementation of Administrative Procedure 0103.3, Control and Use of Temporary System Alterations, has been completed to provide instructions for the control and record keeping requirements necessary to assure that TSAs are properly evaluated to allow safe plant operations. This procedure interfaces and complements existing plant controls and procedures concerning the removal and maintenance of plant equipment. Plant personnel were trained on the purpose and correct execution of this procedure.
- 5) Full compliance was achieved on March 1, 1984.

**FINDING 3:**

Technical Specification 6.5.1.6(d) requires the Plant Nuclear Safety Committee (PNSC) to review all proposed changes or modifications to plant systems or equipment that affect nuclear safety.

Technical Specification 6.5.1.7(b) requires the PNSC to render determinations in the written PNSC meeting minutes of items with regard to whether or not each item considered under 6.5.1.6(d) constitutes an unreviewed safety question.

Contrary to the above, the design change incorporating Plant Change/Modifications 82-97, -99, -100, and -101 changing the load configuration of safety related busses as described in the FSAR was not reviewed by the PNSC and, consequently, an unreviewed safety question determination was not documented by the PNSC. This failure contributed to two losses of off-site power on February 12 and 16, 1984.

**RESPONSE:**

- 1) FPL concurs with the finding.

- 2) The reason for the finding was that administrative controls in place at the time required the Plant Nuclear Safety Committee (PNSC) to review Plant Change/Modifications (PC/M) classified as nuclear safety related and the referenced PC/Ms were classified as non-nuclear safety related, QA/QC required.
- 3) Following the reactor trip on February 16, 1984, the PNSC and the Company Nuclear Review Board performed a review on all PC/Ms designed to implement the Auxiliary Power Upgrade modifications. No safety concerns were encountered and, therefore, none of the PC/Ms represented an unreviewed safety question.

This review was conducted prior to restart of both units.

- 4) Administrative controls have been implemented by which the PNSC reviews all PC/Ms regardless of classification.
- 5) Full compliance was achieved on April 26, 1984.

**NOTICE OF DEVIATION:**

Florida Power and Light Company's letter dated December 26, 1980, in response to NRC letter of October 31, 1980, regarding NUREG-0737 implementation status of post-TMI requirements, stated:

"Due to the manpower requirements of our current refueling outage, and the need for interfacing activity with both our nuclear plant, this requirement [operation verification procedure (LC.6)] will be implemented by 3/1/81."

**RESPONSE:**

- 1) FPL concurs with the deviation.
- 2) The reason for the deviation was inadequate implementation of NUREG-0737, Item LC.6 requirements.
- 3) Upon identification of the deficiency, plant management initiated actions to fully implement the requirements of NUREG-0737, Item LC.6.
- 4) An independent verification policy has been established by the issuance and implementation of Administrative Policy 0103.31, Independent Verification.

The Procedure Development Group of the Procedure Upgrade Program will continue to implement this independent verification policy for all new and upgraded procedures.

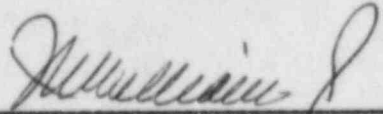
- 5) Full compliance was achieved on April 20, 1984.

STATE OF FLORIDA    )  
                          )  
COUNTY OF DADE     )    ss.

J. W. Williams, Jr., being first duly sworn, deposes and says:

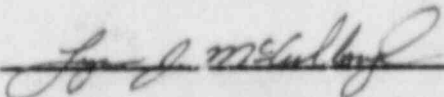
That he is Group Vice President of Florida Power & Light Company, the licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

  
\_\_\_\_\_  
J. W. Williams, Jr.

Subscribed and sworn to before me this

20 day of AUGUST, 1984.

  
\_\_\_\_\_  
NOTARY PUBLIC, in and for the County of  
Dade, State of Florida.

NOTARY PUBLIC STATE OF FLORIDA  
MY COMMISSION EXP. FEB 14, 1988  
BONDED THRU GENERAL INS. UAC.

My commission expires: 2-14-88





November 13, 1984  
L-84-~~320~~  
328

Mr. James P. O'Reilly  
Regional Administrator, Region II  
U. S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 2900  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Re: Turkey Point Unit 3 and 4  
Docket Nos. 50-250 and 50-251  
Proposed Civil Penalty EA 84-41  
Inspection Report 84-04/09

Florida Power and Light Company has reviewed the NRC letter dated September 28, 1984, which included the NRC staff evaluation of FPL's response to Inspection Report 84-04/09. As requested in that letter, a revised response is attached.

In addition, the Turkey Point Plant Performance Enhancement Program which has been the subject of senior level management meetings between representatives of FPL and Region II, has been developed and put into effect to address concerns relating to management control of operations. The program provides overall corrective action designed to reduce the likelihood of the future occurrence of procedural violations of the type cited in the notice of violation.

There is no proprietary information in the report.

Very truly yours,

*J. W. Williams, Jr.*  
for J. W. Williams, Jr.  
Group Vice President  
Nuclear Energy Department

JWW/JA/awt/T21:l

Enclosures

cc: Harold F. Reis, Esquire

~~84-122102-15~~

## ATTACHMENT

Re: Turkey Point Units 3 and 4  
Docket No. 50-250, 50-251  
Proposed Civil Penalty EA 84-41  
IE Inspection Report 84-04/09

### FINDING 1.a:

Technical Specification 3.8.5.a requires the reactor to be shut down and the reactor coolant temperature reduced below 350°F, if one of the required two AFW pumps for single unit power operation is not restored to operability within 72 hours.

Contrary to the above, on or before December 17, 1983, the 72-hour single unit power operation action statement to restore operability of the required AFW pump was exceeded. Auxiliary feedwater pump undocumented post-maintenance testing conducted between December 5, and December 14, 1983, rendered the 'A' and 'C' AFW pumps inoperable by the mispositioning of the governor manual speed knob. This situation existed until January 5, 1984, when the situation was identified by the licensee and the 'A' AFW pump was restored to operability.

### FINDING 1.b.1:

Technical Specification 3.8.4.b requires three operable AFW pumps and associated flow paths for dual unit operation when the reactor coolant is heated above 350°F.

Contrary to the above, on January 4, 1984, Unit 3 was heated above 350°F with Unit 4 at power with only one auxiliary feedwater pump operable, and plant management took no action to reduce temperature to meet the LCO.

### RESPONSE:

- 1) FPL concurs with the findings.
- 2) Between December 5, 1983 and January 3, 1984, there were no indications of the auxiliary feedwater (AFW) pumps being affected by mispositioning of the governor manual speed control knob, thus their operability was never in question in accordance with Technical Specification 3.8.5.a and Technical Specification 3.8.4.b. Based on this, Unit 4 continued at full power operation until January 5, 1984. On January 5, 1984, the mispositioning of AFW governor manual speed control knob was discovered while performing Operating Procedure 7304.1, Auxiliary Feedwater System Periodic Test. Immediate corrective actions were taken to correct the situation.

Administrative controls were in place to control the removal and maintenance of plant equipment. These included instructions to notify the control room whenever taking a piece of equipment out of service and releasing it back to Operations. During this event, there was a breakdown in communications in that the maintenance and testing performed on the AFW pumps was not documented properly.

- 3) The following corrective actions were taken immediately:
  - a) Upon failure of the 'A' AFW pump, troubleshooting revealed the governor manual speed control knob to be mispositioned. The knob was then properly positioned.
  - b) The 'A' AFW pump was then successfully tested and placed back in service.
  - c) Subsequently, the 'C' AFW pump was then tested in accordance with the procedure and also failed. Again, troubleshooting discovered the governor manual speed control knob to be mispositioned. The knob was then properly positioned.
  - d) The 'C' AFW pump was then successfully tested and placed back in service.
  - e) The 'B' AFW pump was successfully tested with no need to reposition the governor manual speed control knob.
- 4) To preclude recurrence, the following actions were taken:
  - a) An additional check was added to the Nuclear Turbine Operator's log to check the knob position once per shift.
  - b) Because inadequate lighting was addressed as an added factor to this incident, lighting has been installed in the auxiliary feedwater pump area.
  - c) A review was made to check that there were no similar devices which could disable other Engineer Safeguards Equipment without indication to the operators. No devices of this type were found that were not already addressed in procedures.
  - d) Extensive training for turbine operators on manual governor speed control of the Auxiliary Feedwater System was conducted.
  - e) Independent verification of the speed control knob was added to Operating Procedure 7304.1, AFW System Periodic Test and 0209.3, Inservice Testing for Auxiliary Feedwater Pumps.
  - f) Increased the efforts of procedures review to identify similar weaknesses.
  - g) Independent verification policy training and real time implementation. This is an ongoing effort as part of the Performance Enhancement Program.
  - h) Increased plant awareness of guidelines on documenting deficiencies discovered during operations and testing. This includes the inspection and testing of similar equipment when malfunctions are discovered.
  - i) Increased plant awareness of procedural and documentation requirements when conducting post maintenance testing of safety related equipment.
  - j) A Task Team was formed to address all areas of the AFW System.

In order to address the concerns of undocumented maintenance and testing of safety related equipment, the following actions have been taken:

- a) Mechanical Maintenance uses an In-Plant Clearance Order for safety related maintenance activities they perform. Only the Plant Supervisor - Nuclear (PS-N) or the Nuclear Watch Engineer (NWE) can authorize clearances and a log of clearance orders in effect is maintained in Units 3 and 4 control room.
- b) A program is in place to complement existing plant controls and procedures concerning the removal, testing, and maintenance of plant equipment. This program is described in Administrative Procedure (AP) 0103.3, Control and Use of Temporary System Alterations (TSA). This procedure requires PS-N authorization for alterations and restoration of plant equipment. Completed TSA forms are also reviewed by the Plant Nuclear Safety Committee within fourteen days of PS-N approval.
- c) To better enhance the communication between Operations and Maintenance personnel, a new position was created within the Operations Department called the Maintenance Coordinator. Meetings are held daily with maintenance personnel to discuss ongoing and upcoming maintenance activities and their effects on plant operations. This information is relayed to Operations personnel to keep them informed on activities and their impact on plant operations.

This event, including corrective actions, was described in Licensee Event Report 250-84-004 submitted to the NRC on February 22, 1984.

- 5) Full compliance was achieved on July 1, 1984.

**FINDING 1.b.2:**

On February 23, 1984, Unit 3 was heated from approximately 400°F to 520°F with the licensee management concurrence with 'B' and 'C' AFW pumps already known to be inoperable, although Unit 4 was in non-power operation above 350°F.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was failure of personnel to identify that a Limiting Condition for Operation (LCO) was entered which required one unit to be cooled down below 350°F with less than 3 auxiliary feedwater (AFW) pumps operable in accordance with Technical Specification (TS) 3.8.4.b.

Administrative controls were in place to control the removal and maintenance of plant equipment. These included instructions to notify the control room whenever taking a piece of equipment out of service and releasing it back to Operations. During this event, there was a breakdown in communications between Operations and Maintenance personnel in that the maintenance performed on the AFW pumps was not documented properly.



- 3) a) A temporary system alteration was reviewed and approved to isolate the 'B' AFW pump dp cell 2402. Following isolation of the dp cell, the 'B' AFW pump was tested satisfactorily and placed back in service. An On the Spot Change was issued to Operating Procedure 7304.1, Auxiliary Feedwater System Periodic Test, and the 'C' AFW pump was tested satisfactorily. A subsequent review by plant management of this event revealed that an immediate cooldown to below 350°F on Unit 3 should have been initiated as per TS 3.3.4.b. During the management review, the AFW pumps were placed back in service.
  - b) Mechanical Maintenance uses an In-Plant Clearance Order for safety related maintenance activities they perform. Only the Plant Supervisor - Nuclear (PSN) or the Nuclear Watch Engineer (NWE) can authorize clearances and a log of clearance orders in effect is maintained in Units 3 and 4 control room.
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  - d) To better enhance the communication between Operations and Maintenance personnel, a new position was created within the Operations Department called the Maintenance Coordinator. Meetings are held daily with maintenance personnel to discuss on-going and upcoming maintenance activities and their effects on plant operations. This information is relayed to Operations personnel to keep them informed on activities and their impact on plant operations.
- 4) a) To preclude recurrence, a revision has been submitted to Technical Specification 3.8 to clarify the requirements for AFW System operability during unit heatup. The specification has been written to describe the system by means of operable trains and to provide specific action if requirements are not met during unit heatup.
  - b) In the area of component or system troubleshooting, the Plant Work Order (PWO) procedure will include general instructions to be followed when troubleshooting.
- 5) Full compliance for item 4(b) will involve procedure changes, appropriate training and implementation. These actions will be completed by March 1, 1985.

**FINDING 2:**

Technical Specification 6.8.1 requires the licensee to establish, implement, and maintain written procedures that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of Regulatory Guide 1.33, Revision 2.

Contrary to the above, the licensee failed to provide adequate procedures or to control the operation of safety related equipment. The following examples constitute a breakdown in management control of plant operations:

**FINDING 2.a.1:**

On February 23, 1984, system alignment procedures did not exist to specify the positioning of the several trains of air and nitrogen supply valves attendant to each of the AFW flow control valves in accordance with Operating Procedure 7300.3, Auxiliary Feedwater System Operating Instructions.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was the lack of administrative controls to specify the positioning of the instrument air and nitrogen backup to the auxiliary feedwater (AFW) flow control valves.
- 3) A Task Team was immediately formed and all available information relating to the operation of the flow control valves gathered. Field checking of the system revealed several discrepancies in the installed configuration of the Nitrogen Back-up System, alarm setpoints were changed, valves were numbered and temporarily labeled, procedures were updated, functional tests were performed and operator training was conducted within 24 hours for each unit.
- 4) The following actions have been done to prevent recurrence:
  - a) Drawing 5610-M-399 has been updated to reflect changes to the AFW flow control valves from the AFW Task Team effort,
  - b) Operating Procedure 7300.3, Auxiliary Feedwater System - Operating Instructions, has been revised to include air and backup nitrogen valves in the AFW valve line-up list.
  - c) Operating Procedure 7300.2, Auxiliary Feedwater System - Nitrogen Back-up System Operation, has been revised to describe the desired valve manipulations to correctly line up the system.
- 5) Full compliance was achieved on May 7, 1984.

**FINDING 2.a.2:**

The plant work order for controlling the replacement of reactor protection system relays on January 9, 1984, and the procedure referenced, OP 0732 QC Check Replacement of BFD/NBFD Relays in Reactor Protection and Safety Safeguards Systems, did not establish positive control over the sequence of operations. This resulted in a challenge to a reactor safety system and a trip of Unit 3.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was inadequate controls established by existing procedures for the interfacing of maintenance procedures and operating procedures. The root cause of the reactor trip was operator error while performing Operating Procedure 1004.2.
- 3) Changes were made to Operating Procedure 1004.2, Reactor Protection System - Periodic Test, which provide positive control over the sequence of operator actions when taking a RPS channel out of service. In addition, proper identification tags were placed on the RPS instrumentation. A review of this incident during the requalification sessions for licensed operators was conducted.
- 4) The Performance Enhancement Program has established a review of safety related maintenance procedures to ensure that correct procedure sequencing is adhered to. The Plant Manager has directed that all maintenance procedures be reviewed prior to use to ensure that all requirements are complied with. The Quality Control Supervisor has counseled personnel on procedure requirements and review of safety related plant work orders to ensure that work is properly interfaced in plant operations.
- 5) Full compliance was achieved on June 1, 1984.

**FINDING 2.a.3:**

The licensee failed to adequately check and correct the non-inking of the post-accident trend recorder pens, in accordance with AP 0103.2 duties and responsibilities of operators and shift technicians on shift and maintenance of operating logs and records, including specifically PR-4-6306B, containment pressure low, which had not been inking from 6 p.m. on January 17 to approximately 10 a.m. on January 18, 1984. The operator initialed that the recorders were checked at 9 p.m. on January 17, 1984, and at 1 a.m., 5 a.m., and 9 a.m. on January 18, 1984.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was an oversight on the part of the operators on shift.

- 3) Specific instructions were given to the individual operators involved to assure their understanding of the consequences of their actions with regards to procedural compliance. Operations personnel were counseled on the importance of procedural compliance and management action in the form of additional training sessions and memorandums to all personnel were taken to assure adequate compliance to procedures. A verbatim compliance policy was established and is now part of Administrative Procedure 0103.2, Responsibilities of Operators and Shift Technicians on Shift and Maintenance of Operating Logs and Records.
- 4) To preclude recurrence, the Quality Control inspectors on shift periodically monitor the marking of control room recorders. The marking pens of the recorders in question were determined to be unreliable and have been replaced with improved marking pens.
- 5) Full compliance was achieved on August 17, 1984.

**FINDING 2.a.4:**

On December 12, 1983, an unreviewed safety question evaluation was not initiated in accordance with AP 0103.3, Control and Use of Temporary Systems, nor were compensatory measures taken, although changes occurred to the facility as described in the FSAR when the automatic fill for the diesel generator day tank was disabled for maintenance.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was lack of administrative controls for controlling Temporary System Alterations (TSA) on non-electrical systems.
- 3) The hand loader to CV-2046A was removed immediately.
- 4) Development and implementation of Administrative Procedure 0103.3, Control and Use of Temporary System Alterations, has been completed to provide instructions for the control and record keeping requirements necessary to assure that TSAs are properly evaluated to allow safe plant operations. This procedure interfaces and complements existing plant controls and procedures concerning the removal and maintenance of plant equipment. Plant personnel were trained on the purpose and correct application of this procedure.
- 5) Full compliance was achieved on March 1, 1984.

**FINDING 2.a.5:**

The licensee failed to establish a procedure or instruction to control documents which were placed in the 'Tank Book'. The 'Tank Book' was placed in the control room for use by plant operators and affected the operation of safety related equipment.



**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that this tank book was established to provide information only to operators and was not recognized to be a controlled document.
- 3) The tank book was removed from the control room.
- 4) Those documents which affect quality were included in the Plant Curve Book as controlled documents. Administrative Procedure 0103.36, Control of Operator Aides, was revised to provide instructions for the posting, control, and removal of operator aides and describe the required authorization documentation and review to ensure operator aides are current, complete, and necessary.
- 5) Full compliance was achieved on June 14, 1984.

**FINDING 2.a.6:**

Post reactor trip reviews in accordance with AP 0103.16, Duties and Responsibilities of the STA, and ONOP 0208.1, Shutdown Resulting from Reactor Trip or Turbine Trip, were inadequately performed in the following instances:

- (a) On January 8, 1984, the post trip reviews for the 7:35 a.m. trip of Unit 3 did not discuss safety injection. However, Licensee Event Report (LER) 50-250/84-02 stated that engineering safety feature actuations occurred.
- (b) The post trip review for the February 12, 1984, trip of Unit 4, reported in LER 50-251/84-01 did not consider the relevant switchyard breaker interlock failure between breakers 4AC01 and 4AC16 in determining the root cause.
- (c) The post trip reviews for the February 16, 1984, trips of Units 3 and 4, listed only 4AC01 protection relay actuation and 4AC01 protection relay failed, respectively.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was inadequate procedural guidance while conducting post trip reviews.
- 3) For the February 16, 1984 Unit 3 and 4 reactor trips, the post trip reviews were evaluated by plant management to assure adequacy prior to unit start-up. For the January 8, 1984, and February 12, 1984 events, there were no immediate corrective actions taken based on existing procedures at the time of the event.
- 4) The Procedure Upgrade Program reviewed and updated Off-Normal Operating Procedure 0208.1, Shutdown Resulting from Reactor Trip or Turbine Trip, to expand on relevant information for conducting a post trip review. This update included:

- a) The addition of safety system actuations as one of the criteria for performing the review, and
- b) Review and concurrence by plant management prior to unit restart.

Personnel required to perform post trip reviews have been made aware of the procedure change. Additional training was given to personnel required to perform post trip reviews.

- 5) Full compliance was achieved on May 31, 1984.

**FINDING 2.a.7:**

On February 24, 1984, maintenance work was performed on equipment affecting safety related plant operations without a detailed PWO, an applicable procedure, or the control room being informed when 'B' AFW pump dp cell was reinstalled.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was lack of adequate administrative controls for controlling temporary system alterations.
- 3) Maintenance personnel were counseled on the importance of keeping the control room operators advised of any work in progress on systems that affect plant operation.
- 4) Development and implementation of Administrative Procedure 0103.3, Control and Use of Temporary System Alterations, has been completed to provide instructions for the control and record keeping requirements necessary to assure that TSAs are properly evaluated to allow safe plant operations. This procedure interfaces and complements existing plant controls and procedures concerning the removal and maintenance of plant equipment. Plant personnel were trained on the purpose and correct execution of this procedure.
- 5) Full compliance was achieved on March 1, 1984.

**FINDING 3:**

Technical Specification 6.5.1.6(d) requires the Plant Nuclear Safety Committee (PNSC) to review all proposed changes or modifications to plant systems or equipment that affect nuclear safety.

Technical Specification 6.5.1.7(b) requires the PNSC to render determinations in the written PNSC meeting minutes of items with regard to whether or not each item considered under 6.5.1.6(d) constitutes an unreviewed safety question.

Contrary to the above, the design change incorporating Plant Change/Modifications 82-97, -99, -100, and -101 changing the load configuration of safety related busses as described in the FSAR was not reviewed by the PNSC and, consequently, an unreviewed safety question determination was not documented by the PNSC. This failure contributed to two losses of off-site power on February 12 and 16, 1984.

**RESPONSE:**

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that administrative controls in place at the time required the Plant Nuclear Safety Committee (PNSC) to review Plant Change/Modifications (PC/M) classified as nuclear safety related and the referenced PC/Ms were classified as non-nuclear safety related, QA/QC required.
- 3) Following the reactor trip on February 16, 1984, the PNSC and the Company Nuclear Review Board performed a review on all PC/Ms designed to implement the Auxiliary Power Upgrade modifications. No safety concerns were encountered and, therefore, none of the PC/Ms represented an unreviewed safety question.

This review was conducted prior to restart of both units.

- 4) Administrative controls have been implemented by which the PNSC reviews all PC/Ms regardless of classification.
- 5) Full compliance was achieved on April 26, 1984.

**NOTICE OF DEVIATION:**

Florida Power and Light Company's letter dated December 26, 1980, in response to NRC letter of October 31, 1980, regarding NUREG-0737 implementation status of post-TMI requirements, stated:

"Due to the manpower requirements of our current refueling outage, and the need for interfacing activity with both our nuclear plant, this requirement [operation verification procedure (LC.6)] will be implemented by 3/1/81."

**RESPONSE:**

- 1) FPL concurs with the deviation.
- 2) The reason for the deviation was inadequate implementation of NUREG-0737, Item LC.6 requirements.
- 3) Upon identification of the deficiency, plant management initiated actions to fully implement the requirements of NUREG-0737, Item LC.6.
- 4) An independent verification policy has been established by the issuance and implementation of Administrative Policy 0103.31, Independent Verification.

The Procedure Development Group of the Procedure Upgrade Program will continue to implement this independent verification policy for all new and upgraded procedures.

- 5) Full compliance was achieved on April 20, 1984.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

SEP 28 1984

Florida Power and Light Company  
ATTN: Mr. J. W. Williams, Jr.  
Group Vice President  
Nuclear Energy Department  
P. O. Box 14000  
Juno Beach, FL 33408

Gentlemen:

SUBJECT: ENFORCEMENT ACTION (EA) 84-41

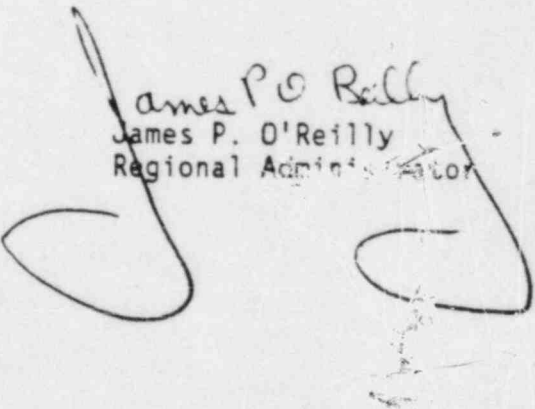
Thank you for your response of August 20, 1984, to our Notice of Violation and Proposed Imposition of Civil Penalty, EA 84-41, issued on July 20, 1984, concerning activities conducted at your Turkey Point facility. We have evaluated your response and found that it does not meet the requirements of 10 CFR 2.201 for the following reasons. In item #2 of the response to findings 1.a and 1.b.1, and in item #3 of the response to finding 1.b.2, you did not address actions to correct the practice of performing undocumented maintenance and surveillance on plant equipment.

In accordance with the requirements of 10 CFR 2.201, please submit a supplemental response within 30 days of the date of this letter addressing the concerns noted above.

The responses directed by this letter are not subject to the clearance procedures of the Office of Management and Budget-issued under the Paperwork Reduction Act of 1980, PL 96-511.

If you have any questions concerning this matter please contact my staff.

Sincerely,

  
James P. O'Reilly  
Regional Administrator

cc: K. N. Harris, Vice President  
Turkey Point Nuclear Plant  
C. J. Baker, Plant Manager  
Turkey Point Nuclear Plant

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