

November 29, 1995

DISTRIBUTION

See attached sheet

Mr. J. H. Goldberg  
President-Nuclear Division  
Florida Power and Light Company  
P.O. Box 14000  
Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT UNITS 3 AND 4 - ISSUANCE OF AMENDMENTS RE: SURVEILLANCE INTERVAL EXTENSIONS FOR REACTOR PROTECTION SYSTEM (RPS) AND ENGINEERED SAFETY FEATURE ACTUATION SYSTEM (ESFAS), AND NUCLEAR INSTRUMENTATION SYSTEM (NIS) (TAC NOS. M93058 AND M93059)

Dear Mr. Goldberg:

The Commission has issued the enclosed Amendment No. 179 to Facility Operating License No. DPR-31 and Amendment No. 173 to Facility Operating License No. DPR-41 for the Turkey Point Plant, Unit Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated July 26, 1995, as supplemented by letter dated October 4, 1995, relating to revising certain surveillance intervals and allowable outage times for the RPS and ESFAS equipment.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by:

Richard P. Croteau, Project Manager  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-250  
and 50-251

Enclosures:

1. Amendment No. 179 to DPR-31
2. Amendment No. 173 to DPR-41
3. Safety Evaluation

cc w/enclosures: See next page

Document Name: G:TURKEY\TP93058.AMD

\* see previous concurrence

|        |                     |                     |                 |               |                    |  |
|--------|---------------------|---------------------|-----------------|---------------|--------------------|--|
| OFFICE | LA:PDII-1 <i>ED</i> | PM:PDII-1 <i>RC</i> | HICB <i>JSW</i> | OGC <i>AS</i> | D:PDII-1 <i>DM</i> |  |
| NAME   | EDunnington         | RCroteau            | JWerniel        | R.Bachman     | DMatthews          |  |
| DATE   | 10/13/95            | 10/13/95            | 10/25/95        | 10/25/95      | 10/30/95           |  |
| COPY   | <u>Yes</u> /No      | <u>Yes</u> /No      | <u>Yes</u> /No  | Yes/No        | Yes/ <u>No</u>     |  |

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CP-1

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Florida Power and Light Company

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DATED: November 29, 1995

AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-31-TURKEY POINT UNIT 3  
AMENDMENT NO. 173 TO FACILITY OPERATING LICENSE NO. DPR-41-TURKEY POINT UNIT 4

Distribution

Docket File

NRC & Local PDRs

PDII-1 Reading

S. Varga, 14/E/4

D. Hagan, T-4A-43

G. Hill, (4) T-5C-3

C. Grimes, 11/F/23

ACRS (4)

OPA

OC/LFDCB

K. Landis, R-II

040012

DFOI



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 179  
License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power and Light Company (the licensee) dated July 26, 1995, as supplemented by letter dated October 4, 1995 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-31 is hereby amended to read as follows:

(B) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 179, are hereby incorporated in the license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 29, 1995



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 173  
License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power and Light Company (the licensee) dated July 26, 1995, as supplemented by letter dated October 4, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-41 is hereby amended to read as follows:

(B) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 173, are hereby incorporated in the license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



David B. Matthews, Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 29, 1995

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 179 FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 173 FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Revise Appendix A as follows:

Remove pages

Insert pages

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3/4 3-34

B 3/4 3-1

B 3/4 3-1

B 3/4 3-1a

B 3/4 3-1a



TABLE 3.3-1 (Continued)

TABLE NOTATION

- \* When the Reactor Trip System breakers are in the closed position and the Control Rod Drive System is capable of rod withdrawal.
- \*\* When the Reactor Trip System breakers are in the open position, one or both of the backup NIS instrumentation channels may be used to satisfy this requirement. For backup NIS testing requirements, see Specification 3/4.3.3.3, ACCIDENT MONITORING.
- \*\*\* Reactor Coolant Pump breaker A is tripped by underfrequency sensor UF-3A1 (UF-4A1) or UF-3B1 (UF-4B1). Reactor Coolant Pump breakers B and C are tripped by underfrequency sensor UF-3A2 (UF-4A2) or UF-3B2 (UF-4B2).
- # Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.
- ## Below the P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.

ACTION STATEMENTS

- ACTION 1 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in HOT STANDBY within the next 6 hours.
- ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
- a. The inoperable channel is placed in the tripped condition within 6 hours,
  - b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.1.1, and
  - c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux Trip Setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored per Specification 4.2.4.2.

TABLE 3.3-1 (Continued)

ACTION STATEMENTS (Continued)

- ACTION 3 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:
- Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint, and
  - Above the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint but below 10% of RATED THERMAL POWER, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above 10% of RATED THERMAL POWER.
- ACTION 4 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, suspend all operations involving positive reactivity changes.
- ACTION 5 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, suspend all operations involving positive reactivity changes and verify compliance with the SHUTDOWN MARGIN requirements of Specification 3.1.1.1 or 3.1.1.2, as applicable, within 1 hour and at least once per 12 hours thereafter.
- ACTION 6 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed until performance of the next required ANALOG CHANNEL OPERATIONAL TEST provided the inoperable channel is placed in the tripped condition within 6 hours.
- ACTION 7 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.
- ACTION 8 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1, provided the other channel is OPERABLE.
- ACTION 9 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or open the Reactor Trip System breakers within the next hour.
- ACTION 10- With one of the diverse trip features (undervoltage or shunt trip attachment) inoperable, restore it to OPERABLE status within 48 hours or declare the breaker inoperable and apply ACTION 8. The breaker shall not be bypassed while one of the diverse trip features is inoperable, except for the time required for performing maintenance to restore the breaker to OPERABLE status.

TABLE 3.3-1 (Continued)

ACTION STATEMENTS (Continued)

- ACTION 11 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours.
- ACTION 12 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed until performance of the next required ACTUATION LOGIC TEST provided the inoperable channel is placed in the tripped condition within 6 hours.
- ACTION 13 - With the number of OPERABLE channels one less than the Total number of channels, STARTUP and/or POWER OPERATION may proceed provided the inoperable channel is placed in the tripped condition within 6 hours. For subsequent required DIGITAL CHANNEL OPERATIONAL TESTS the inoperable channel may be placed in bypass status for up to 4 hours.

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| FUNCTIONAL UNIT                              | CHANNEL<br>CHECK | CHANNEL<br>CALIBRATION                   | ANALOG<br>CHANNEL<br>OPERATIONAL<br>TEST | TRIP<br>ACTUATING<br>DEVICE<br>OPERATIONAL<br>TEST | ACTUATION<br>LOGIC TEST | MODES FOR<br>WHICH<br>SURVEILLANCE<br>IS REQUIRED |
|--|------------------|--|--|--|-------------------------|---|
|  |                  |  |  |  |                         |   |
| 1. Manual Reactor Trip                       | N.A.             | N.A.                                     | N.A.                                     | R(11)  | N.A.                    | 1,2,3*,4*,5*                                      |
| 2. Power Range, Neutron Flux                 |                  |  |  |  |                         |   |
| a. High Setpoint                             | S                | D(2, 4),<br>M(3, 4),<br>Q(4, 6),<br>R(4) | Q  | N.A.   | N.A.                    | 1, 2  |
| b. Low Setpoint                              | S                | R(4)                                     | S/U(1)                                   | N.A.   | N.A.                    | 1***, 2   |
| 3. Intermediate Range,<br>Neutron Flux       | S                | R(4)                                     | S/U(1)                                   | N.A.   | N.A.                    | 1***, 2   |
| 4. Source Range, Neutron Flux                | S                | R(4)                                     | S/U(1),Q(9)                              | N.A.   | N.A.                    | 2**,3,4,5   |
| 5. Overtemperature $\Delta T$                | S                | R  | Q  | N.A.   | N.A.                    | 1, 2  |
| 6. Overpower $\Delta T$                      | S                | R  | Q  | N.A.   | N.A.                    | 1, 2  |
| 7. Pressurizer Pressure--Low                 | S                | R  | Q  | N.A.   | N.A.                    | 1   |
| 8. Pressurizer Pressure--High                | S                | R  | Q  | N.A.   | N.A.                    | 1, 2  |
| 9. Pressurizer Water Level--High             | S                | R  | Q  | N.A.   | N.A.                    | 1   |
| 10. Reactor Coolant Flow--Low                | S                | R  | Q  | N.A.   | N.A.                    | 1   |
| 11. Steam Generator Water Level--<br>Low-Low | S                | R  | Q  | N.A.   | N.A.                    | 1, 2  |

TURKEY POINT - UNITS 3 &amp; 4

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AMENDMENT NOS. 179 AND 173

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| <u>FUNCTIONAL UNIT</u>   | <u>CHANNEL<br/>CHECK</u> | <u>CHANNEL<br/>CALIBRATION</u> | <u>ANALOG<br/>CHANNEL<br/>OPERATIONAL<br/>TEST</u> | <u>TRIP<br/>ACTUATING<br/>DEVICE<br/>OPERATIONAL<br/>TEST</u> | <u>ACTUATION<br/>LOGIC TEST</u> | <u>MODES FOR<br/>WHICH<br/>SURVEILLANCE<br/>IS REQUIRED</u> |
|--|--------------------------|--------------------------------|--|---|---------------------------------|---|
| 12. Steam Generator Water Level--Low Coincident with Steam/Feedwater Flow Mismatch           | S                        | R                              | Q  | N.A.  | N.A.                            | 1, 2  |
| 13. Undervoltage - 4.16 kV Busses A and B  | N.A.                     | R                              | N.A.   | N.A.  | N.A.                            | 1   |
| 14. Underfrequency - Trip of Reactor Coolant Pump Breakers(s) Open                           | N.A.                     | R                              | N.A.   | N.A.  | N.A.                            | 1   |
| 15. Turbine Trip   |                          |                                |  |   |                                 |   |
| a. Autostop Oil Pressure   | N.A.                     | R                              | N.A.   | S/U(1, 10)  | N.A.                            | 1   |
| b. Turbine Stop Valve Closure  | N.A.                     | R                              | N.A.   | S/U(1, 10)  | N.A.                            | 1   |
| 16. Safety Injection Input from ESF  | N.A.                     | N.A.                           | N.A.   | R   | N.A.                            | 1, 2  |
| 17. Reactor Trip System Interlocks   |                          |                                |  |   |                                 |   |
| a. Intermediate Range Neutron Flux, P-6  | N.A.                     | R(4)                           | R  | N.A.  | N.A.                            | 2**   |
| b. Low Power Reactor Trips Block, P-7 (includes P-10 input and Turbine First Stage Pressure) | N.A.                     | R(4)                           | R  | N.A.  | N.A.                            | 1   |
| c. Power Range Neutron Flux, P-8   | N.A.                     | R(4)                           | R  | N.A.  | N.A.                            | 1   |

TURKEY POINT - UNITS 3 &amp; 4

3/4 3-9

AMENDMENT NOS. 179 AND 173

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| <u>FUNCTIONAL UNIT</u>                            | <u>CHANNEL<br/>CHECK</u> | <u>CHANNEL<br/>CALIBRATION</u> | <u>ANALOG<br/>CHANNEL<br/>OPERATIONAL<br/>TEST</u> | <u>TRIP<br/>ACTUATING<br/>DEVICE<br/>OPERATIONAL<br/>TEST</u> | <u>ACTUATION<br/>LOGIC TEST</u> | <u>MODES FOR<br/>WHICH<br/>SURVEILLANCE<br/>IS REQUIRED</u> |
|---|--------------------------|--------------------------------|--|---|---------------------------------|---|
| 17. Reactor Trip System Interlocks (Continued)    |                          |                                |  |   |                                 |   |
| d. Power Range<br>Neutron Flux, P-10              | N.A.                     | R(4)                           | R  | N.A.  | N.A.                            | 1, 2  |
| 18. Reactor Coolant Pump<br>Breaker Position Trip | N.A.                     | N.A.                           | N.A.   | R   | N.A.                            | 1   |
| 19. Reactor Trip Breaker                          | N.A.                     | N.A.                           | N.A.   | M(7, 11)  | N.A.                            | 1, 2, 3*, 4*, 5*  |
| 20. Automatic Trip and Inter-<br>lock Logic       | N.A.                     | N.A.                           | N.A.   | N.A.  | M(7,14)                         | 1, 2, 3*, 4*, 5*  |
| 21. Reactor Trip Bypass<br>Breaker                | N.A.                     | N.A.                           | N.A.   | M(13),R(15)   | N.A.                            | 1, 2, 3*, 4*, 5*  |

TURKEY POINT - UNITS 3 &amp; 4

3/4 3-10

AMENDMENT NOS. 179 AND 173

TABLE 4.3-1 (Continued)

TABLE NOTATIONS

- \* When the Reactor Trip System breakers are closed and the Control Rod Drive System is capable of rod withdrawal.
- \*\* Below P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.
- \*\*\* Below P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.
- (1) If not performed in previous 31 days.
- (2) Comparison of calorimetric to excore power indication above 15% of RATED THERMAL POWER. Adjust excore channel gains consistent with calorimetric power if absolute difference is greater than 2%. The provisions of Specification 4.0.4 are not applicable to entry into MODE 2 or 1.
- (3) Single point comparison of incore to excore AXIAL FLUX DIFFERENCE above 15% of RATED THERMAL POWER. Recalibrate if the absolute difference is greater than or equal to 3%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (4) Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (5) This table Notation number is not used.
- (6) Incore-Excore Calibration, above 75% of RATED THERMAL POWER (RTP). If the quarterly surveillance requirement coincides with sustained operation between 30% and 75% of RTP, calibration shall be performed at this lower power level. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (7) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (8) DELETED
- (9) Quarterly surveillance in MODES 3\*, 4\*, and 5\* shall also include verification that permissive P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window. Quarterly surveillance shall include verification of the High Flux at Shut-down Alarm Setpoint of 1/2 decade above the existing count rate.
- (10) Setpoint verification is not applicable.
- (11) The TRIP ACTUATING DEVICE OPERATIONAL TEST shall include independent verification of the OPERABILITY of the undervoltage and shunt trip attachment of the Reactor Trip Breakers.

TABLE 3.3-2 (Continued)

TABLE NOTATION

- # Trip function may be blocked in this MODE below the Pressurizer Pressure Interlock Setpoint of 2000 psig.
- ## Channels are for particulate radioactivity and for gaseous radioactivity.
- ### Auxiliary feedwater manual initiation is included in Specification 3.7.1.2.
- #### Steam Generator overfill protection is not part of the Engineered Safety Features Actuation System (ESFAS), and is added to the Technical Specifications only in accordance with NRC Generic Letter 89-19.
- \* Trip function may be blocked in this MODE below the Tavg--Low Interlock Setpoint.
- \*\* Only during CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION STATEMENTS

- ACTION 14 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 12 hours and in COLD SHUTDOWN within the following 30 hours; however, one channel may be bypassed for up to 8 hours for surveillance testing per Specification 4.3.2.1, provided the other channel is OPERABLE.
- ACTION 15 - With the number of OPERABLE channels one less than the Total Number of Channels, operation may proceed until performance of the next required ANALOG CHANNEL OPERATIONAL TEST or TRIP ACTUATING DEVICE OPERATIONAL TEST provided the inoperable channel is placed in the tripped condition within 6 hours.
- ACTION 16 - With less than the Minimum Channels OPERABLE requirement, comply with the ACTION statement requirements of Specification 3.3.3.1 Item 1a of Table 3.3-4.
- ACTION 17 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.



TABLE 3.3-2 (Continued)

TABLE NOTATION (Continued)

- ACTION 18 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the inoperable channel is placed in the tripped condition within 6 hours.
- ACTION 19 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.
- ACTION 20 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel may be bypassed for up to 8 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.
- ACTION 21 - With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or declare the associated valve inoperable and take the ACTION required by Specification 3.7.1.5.
- ACTION 22 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 8 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.
- ACTION 23 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, comply with Specification 3.0.3.
- ACTION 24 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, within 1 hour isolate the control room Emergency Ventilation System and initiate operation of the Control Room Emergency Ventilation System in the recirculation mode.
- ACTION 25 - With the number of OPERABLE channels one less than the Total number of channels, STARTUP and/or POWER OPERATION may proceed provided the inoperable channel is placed in the tripped condition within 6 hours. For subsequent required DIGITAL CHANNEL OPERATIONAL TESTS the inoperable channel may be placed in bypass status for up to 4 hours.

TABLE 4.3-2

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

| <u>CHANNEL<br/>FUNCTIONAL UNIT</u>  | <u>CHANNEL<br/>CHECK</u> | <u>CHANNEL<br/>CALIBRATION</u> | <u>ANALOG<br/>CHANNEL<br/>OPERATIONAL<br/>TEST</u> | <u>TRIP<br/>ACTUATING<br/>DEVICE<br/>OPERATIONAL<br/>TEST</u> | <u>ACTUATION<br/>LOGIC TEST#</u> | <u>MODES<br/>FOR WHICH<br/>SURVEILLANCE<br/>IS REQUIRED</u> |
|---|--------------------------|--------------------------------|--|---|----------------------------------|---|
| 1. Safety Injection (Reactor Trip, Turbine Trip, Feedwater Isolation, Control Room Ventilation Isolation, Start Diesel Generators, Containment Phase A Isolation (except Manual SI), Containment Cooling Fans, Containment Filter Fans, Start Sequencer, Component Cooling Water, Start Auxiliary Feedwater and Intake Cooling Water) |                          |                                |  |   |                                  |   |
| a. Manual Initiation  | N.A.                     | N.A.                           | N.A.   | R   | N.A.                             | 1, 2, 3   |
| b. Automatic Actuation Logic and Actuation Relays   | N.A.                     | N.A.                           | N.A.   | N.A.  | M(1)                             | 1, 2, 3(3)  |
| c. Containment Pressure--High   | N.A.                     | R                              | N.A.   | N.A.  | M(1)                             | 1, 2, 3   |
| d. Pressurizer Pressure--Low  | S                        | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3(3)  |
| e. High Differential Pressure Between the Steam Line Header and any Steam Line  | S                        | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3(3)  |
| f. Steam Line Flow--High Coincident with:<br>Steam Generator Pressure--Low<br>or<br>Tavg--Low   | S<br><br>S<br><br>S      | R<br><br>R<br><br>R            | Q(5)<br><br>Q(5)<br><br>Q(5)                       | N.A.<br><br>N.A.<br><br>N.A.                                  | N.A.<br><br>N.A.<br><br>N.A.     | 1, 2, 3(3)<br><br>1, 2, 3(3)<br><br>1, 2, 3(3)              |

TURKEY POINT - UNITS 3 &amp; 4

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AMENDMENT NOS. 179 AND 173

TABLE 4.3-2 (Continued)  
ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

| <u>CHANNEL<br/>FUNCTIONAL UNIT</u>                      | <u>CHANNEL<br/>CHECK</u>  | <u>CHANNEL<br/>CALIBRATION</u> | <u>ANALOG<br/>CHANNEL<br/>OPERATIONAL<br/>TEST</u> | <u>TRIP<br/>ACTUATING<br/>DEVICE<br/>OPERATIONAL<br/>TEST</u> | <u>ACTUATION<br/>LOGIC TEST#</u> | <u>MODES<br/>FOR WHICH<br/>SURVEILLANCE<br/>IS REQUIRED</u> |
|---|---|--------------------------------|--|---|----------------------------------|---|
| 4. Steam Line Isolation (Continued)                     |   |                                |  |   |                                  |   |
| c. Containment Pressure--<br>High-High                  | N.A.  | R                              | N.A.   | R   | M(1)                             | 1, 2, 3   |
| Coincident with:<br>Containment Pressure--<br>High      | N.A.  | R                              | N.A.   | R   | M(1)                             | 1, 2, 3   |
| d. Steam Line Flow--High                                | S(3)  | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3   |
| Coincident with:<br>Steam Generator<br>Pressure--Low    | S(3)  | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3   |
| or<br>Tavg--Low   | S(3)  | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3   |
| 5. Feedwater Isolation                                  |   |                                |  |   |                                  |   |
| a. Automatic Actuation<br>Logic and Actuation<br>Relays | N.A.  | N.A.                           | N.A.   | N.A.  | R                                | 1, 2  |
| b. Safety Injection                                     | See Item 1. above for all Safety Injection Surveillance Requirements. |                                |  |   |                                  |   |
| c. Steam Generator Water<br>Level--High-High            | S   | R                              | Q  | N.A.  | N.A.                             | 1, 2  |
| 6. Auxiliary Feedwater (2)                              |   |                                |  |   |                                  |   |
| a. Automatic Actuation<br>Logic and Actuation<br>Relays | N.A.  | N.A.                           | N.A.   | N.A.  | R                                | 1, 2, 3   |
| b. Steam Generator<br>Water Level--Low-Low              | S   | R                              | Q  | N.A.  | N.A.                             | 1, 2, 3   |

TURKEY POINT - UNITS 3 & 4

3/4 3-33

AMENDMENT NOS. 179 AND 173

TABLE 4.3-2 (Continued)  
ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

| <u>CHANNEL<br/>FUNCTIONAL UNIT</u>                         | <u>CHANNEL<br/>CHECK</u>  | <u>CHANNEL<br/>CALIBRATION</u> | <u>ANALOG<br/>CHANNEL<br/>OPERATIONAL<br/>TEST</u> | <u>TRIP<br/>ACTUATING<br/>DEVICE<br/>OPERATIONAL<br/>TEST</u> | <u>ACTUATION<br/>LOGIC TEST#</u> | <u>MODES<br/>FOR WHICH<br/>SURVEILLANCE<br/>IS REQUIRED</u> |
|--|---|--------------------------------|--|---|----------------------------------|---|
| 8. Engineering Safety Features Actuation System Interlocks |   |                                |  |   |                                  |   |
| a. Pressurizer Pressure                                    | N.A.  | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3(3)  |
| b. Tavg--Low   | N.A.  | R                              | Q(5)   | N.A.  | N.A.                             | 1, 2, 3(3)  |
| 9. Control Room Ventilation Isolation                      |   |                                |  |   |                                  |   |
| a. Automatic Actuation Logic and Actuation Relays          | N.A.  | N.A.                           | N.A.   | N.A.  | N.A.                             |   |
| b. Safety Injection  | See Item 1. above for all Safety Injection Surveillance Requirements. |                                |  |   |                                  |   |
| c. Containment Radioactivity--High                         | S   | R                              | M  | N.A.  | N.A.                             | (4)   |
| d. Containment Isolation Manual Phase A or Manual Phase B  | N.A.  | N.A.                           | N.A.   | R   | N.A.                             | 1, 2, 3, 4  |
| e. Control Room Air Intake Radiation Level                 | S   | R                              | M  | N.A.  | N.A.                             | All   |

TABLE NOTATIONS

- (1) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (2) Auxiliary feedwater manual initiation is included in Specification 3.7.1.2.
- (3) The provisions of Specification 4.0.4 are not applicable for entering Mode 3, provided that the applicable surveillances are completed within 96 hours from entering Mode 3.
- (4) Applicable in MODES 1, 2, 3, 4 or during CORE ALTERATIONS or movement of irradiated fuel within the containment.
- (5) Test of alarm function not required when alarm locked in.

#At least once per 18 months each Actuation Logic Test shall include energization of each relay and verification of OPERABILITY of each relay.

### 3/4.3 INSTRUMENTATION

#### BASES

#### 3/4.3.1 and 3/4.3.2 REACTOR TRIP SYSTEM AND ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

The OPERABILITY of the Reactor Trip System and the Engineered Safety Features Actuation System instrumentation and interlocks ensures that: (1) the associated ACTION and/or Reactor trip will be initiated when the parameter monitored by each channel or combination thereof reaches its Setpoint (2) the specified coincidence logic is maintained, (3) sufficient redundancy is maintained to permit a channel to be out-of-service for testing or maintenance (due to plant specific design, pulling fuses and using jumpers may be used to place channels in trip), and (4) sufficient system functional capability is available from diverse parameters.

The OPERABILITY of these systems is required to provide the overall reliability, redundancy, and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of each of these systems is consistent with the assumptions used in the safety analyses. The Surveillance Requirements specified for these systems ensure that the overall system functional capability is maintained comparable to the original design standards. The periodic surveillance tests performed at the minimum frequencies are sufficient to demonstrate this capability. Surveillances for the analog RPS/ESFAS Hagan rack instrumentation have been extended to quarterly in accordance with WCAP-10271, "Evaluation of Surveillance Frequencies and Out of Service Times for the Reactor Protection Instrumentation System," and supplements to that report as generically approved by the NRC and documented in their SERs (Letters to the Westinghouse Owner's Group from the NRC dated February 21, 1985, February 22, 1989, and April 30, 1990).

Under some pressure and temperature conditions, certain surveillances for Safety Injection cannot be performed because of the system design. Allowance to change modes is provided under these conditions as long as the surveillances are completed within specified time requirements.

The Engineered Safety Features Actuation System Instrumentation Trip Setpoints specified in Table 3.3-3 are the nominal values at which the bistables are set for each functional unit. The setpoint is considered to be adjusted consistent with the Nominal Trip Setpoint when the "as measured" setpoint is within the band allowed for calibration accuracy.

To accommodate the instrument drift that may occur between operational tests and the accuracy to which setpoints can be measured and calibrated, statistical allowances are provided for in the Nominal Trip Setpoint and Allowable Values in accordance with the setpoint methodology described in WCAPs 12201 and 12745. Surveillance criteria have been determined and are controlled in Plant procedures and in design documents. The surveillance criteria ensure that instruments which are not operating within the assumptions of the setpoint calculations are identified. An instrument channel is considered OPERABLE when

## INSTRUMENTATION

### BASES

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#### REACTOR TRIP SYSTEM AND ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

the surveillance is within the Allowable Value and the channel is capable of being calibrated in accordance with Plant procedures. Sensor and other instrumentation utilized in these channels are expected to be capable of operating within the allowances of these uncertainty magnitudes.

The inability to demonstrate through measurement and/or analytical means, using the methods described in WCAPs 12201 and 12745 ( $TA \geq R+S+Z$ ), that the Reactor Trip function would have occurred within the values specified in the design documentation provides a threshold value for REPORTABLE EVENTS.

There is a small statistical probability that a properly functioning device will drift beyond determined surveillance criteria. Infrequent drift outside the surveillance criteria are expected. Excessive rack or sensor drift that is more than occasional, may be indicative of more serious problems and should warrant further investigations.

The Engineered Safety Features Actuation System senses selected plant parameters and determines whether or not predetermined limits are being exceeded. If they are, the signals are combined into logic matrices sensitive to combinations indicative of various accidents events, and transients. Once the required logic combination is completed, the system sends actuation signals to



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO.179 TO FACILITY OPERATING LICENSE NO. DPR-31  
AND AMENDMENT NO.173 TO FACILITY OPERATING LICENSE NO. DPR-41  
FLORIDA POWER AND LIGHT COMPANY  
TURKEY POINT UNIT NOS. 3 AND 4  
DOCKET NOS. 50-250 AND 50-251

1.0 INTRODUCTION

By letter dated July 26, 1995, as supplemented by letter dated October 4, 1995, Florida Power and Light Company (FPL or the licensee) proposed a change to the Technical Specifications (TS) for Turkey Point Units 3 and 4. The changes requested involved modifying the TS to allow longer surveillance test intervals (STIs) and allowed outage times (AOTs) for the reactor trip system (RTS) and engineered safety features actuation system (ESFAS) instrumentation. This proposed modification to the TS would minimize the potential number of inadvertent ESFAS actuations and reactor trips during surveillance testing, increase operational effectiveness of plant personnel, and allow resources to be used for other tasks such as preventive maintenance. In addition, the increased AOTs would result in fewer human errors since more time would be allowed to perform test and maintenance actions.

2. BACKGROUND

Operating utilities have become increasingly aware of the effects of current STI and maintenance requirements on plant operation. Inadvertent reactor trips have occurred that could be attributed to human errors during performance of these activities. Human errors were found to be directly proportional to the frequency of surveillance tests (STs) and inversely proportional to the time allowed for an inoperable channel to remain in a bypassed condition before repairs could be made. Thus, a greater frequency of STs and shorter AOTs were, in part, responsible for inadvertent trips and challenges to safety systems.

To resolve the above concerns, the Westinghouse Owners Group (WOG) initiated a program to evaluate the effect of such undesirable events and proposed TS changes to increase STIs and AOTs as remedial actions to preclude inadvertent trips and challenges to the safety systems while maintaining the benefits of routine tests and maintenance activities to ensure the reliability of the RTS and ESFAS instruments.

### 3. PREVIOUSLY APPROVED REVISIONS AND ASSOCIATED CONDITIONS

The WOG published results of its study and proposals for remedial actions in 1983 in the original WCAP-10271. This document was later revised several times in response to NRC's comments and the current version of WCAP-10271, Supplement 2, Revision 1, was published on May 12, 1987. The staff reviewed all versions of WCAP-10271 including WOG's responses to staff's questions on these submittals. During this review, the NRC staff engaged the services of Brookhaven National Laboratory (BNL) to evaluate the approach used and the analyses performed in the WOG reports. BNL determined the adequacy of WOG's methodology to establish technical bases for unavailability data, reliability calculations, and proposed STI/AOT extensions. After the NRC staff and BNL staff had completed their review, the NRC issued three safety evaluation reports (SERs): RTS SER on February 21, 1985; ESFAS SER on February 22, 1989; and a supplemental SER (SSER) on April 30, 1990. These SERs approved various TS changes relating to extending STIs, test/maintenance AOTs, and bypass time for instrument channels in RTS, ESFAS, and the logic cabinets for these systems. In the SERs, the NRC staff approved extensions to STIs/AOTs and the time during which the instrument channels could be bypassed. However, the staff stipulated certain conditions that licensees must meet to include these previously approved changes in plant-specific TS. The previously approved changes and associated conditions are addressed below.

#### 3.1 PREVIOUSLY APPROVED CHANGES

As mentioned above, the NRC staff stipulated certain conditions to be met before the approved TS changes to RTS and ESFAS and to the logic cabinets of these systems could be made in any plant-specific TS. The previously approved TS changes are described below and the associated conditions are described in section 3.2 of this report.

3.1.1 SER issued on February 21, 1985 (RTS SER). In this SER the staff approved the following TS changes relating to RTS instruments:

- (1) STI for RTS analog channel operational testing may be increased from once a month to once per quarter.
- (2) The duration for which an inoperable RTS analog channel may be maintained in an untripped condition may be increased from 1 hour to 6 hours.
- (3) The duration for which an inoperable RTS channel may be bypassed to allow testing of another channel in the same function may be increased from 2 hours to 4 hours. Also, the channel test may be done in the bypass mode, leaving the inoperable channel in a tripped condition.
- (4) Testing of RTS analog channels in a bypassed condition instead of a tripped condition will be allowed.



3.1.2 SER issued on February 22, 1989, (ESFAS SER). In this SER, the staff approved the following TS changes relating to ESFAS instruments:

- (1) The STIs for the analog channels may be increased from once a month to once a quarter.
- (2) The AOTs for testing of analog channels may be increased from 2 hours to 4 hours for both relays and solid state systems.
- (3) The AOTs for testing all components may be up to 4 hours in solid state systems.
- (4) In relay systems, the AOTs for testing of the logic trains and master relays could be increased to 8 hours and for the slave relays to 12 hours.
- (5) The AOTs for maintenance on all components may be extended to 12 hours for both relays and solid state systems. All components except the analog channels could be in the bypass mode during maintenance AOT, with an analog channel tripped after spending 6 hours in the bypass mode. Therefore, the maximum duration for which an inoperable ESFAS analog channel could be in untripped condition is 6 hours.
- (6) Staggered testing is not required for analog channels in the ESFAS and this requirement may be removed for analog channels in RTS.

3.1.3 SER issued on April 30, 1990, (SSER). The staff's approval of the proposed STI/AOT extensions for the logic cabinets and reactor trip breakers for the RTS system was based on its evaluation of Appendix D to the WCAP-10271, Supplement 2, Revision 1. The RTS and ESFAS share some common instrumentation; therefore, it was necessary to consider STI/AOT extensions for RPS logic cabinets. The staff's conclusions are given below.

- (1) The AOT extensions for the RPS logic cabinets as presented in Appendix D are acceptable. These are 4 hours for testing and 12 hours for maintenance instead of 2 hours and 6 hours respectively.
- (2) The STI/AOT extensions (covered by the ESFAS SER) for ESFAS functions associated with the Safety Injection, Steam Line Isolation, Main Feedwater Isolation, and Auxiliary Feedwater Pump Start Signals are acceptable.
- (3) The STI/AOT extensions proposed in Appendix D are not acceptable for reactor trip breakers because the extensions would reduce availability of these breakers.

### 3.2 ASSOCIATED CONDITIONS FOR APPROVAL

#### 3.2.1 For the RTS SER Changes:

- (1) Performance of testing shall be done on a staggered basis. (This condition was later removed by the ESFAS SER.)
- (2) Procedures should be implemented to evaluate test-failures for common cause effects and additional testing should be performed if necessary.
- (3) Approval of channel testing (items 3.1.1.(3) and (4) above) in a bypassed condition assumes that the plant design allows such testing without lifting any leads or installing temporary jumpers.
- (4) The approved revisions to TS as described above in items 3.1.1(1) through (4), also applies to the reactor coolant pump undervoltage and underfrequency functional units.
- (5) For RTS channels which provide dual inputs to other safety-related systems such as ESFAS, the approval of items 3.1.1(1) through (4) above applies only to RTS functions.
- (6) Increased STI would change the margin for analog channel setpoint; therefore, approval of increased STI is contingent on confirmation by the licensee that their setpoint methodology includes sufficient margin to offset the drift anticipated as a result of less frequent surveillance.

#### 3.2.2 For the ESFAS SER Changes:

- (1) The licensee must confirm the applicability of the generic analyses to the plant.
- (2) The licensee must confirm that any increase in instrument drift due to the extended STIs is properly accounted for in the setpoint calculation methodology.

#### 3.2.3 For SSER changes:

- (1) Acceptance of item 3.1.3.(1) is contingent on including a separate new action statement for modes 1 and 2 for RPS Automatic Trip and Interlock Logic Functional Units. The model Action Statement given below is in the format of Westinghouse Standard Technical Specifications, Revision 4, Table 3.3-1 (the licensee did not request this change).

ACTION 12 - With the number of OPERABLE Channels (analog channels and trip logic) one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 6 hours or be in at least HOT STANDBY within the next 6 hours; however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.1.1, provided the other channel is OPERABLE.

3.2.4 **Expeditious Review:** In the letters transmitting the ESFAS SER and SSER, the staff indicated that a licensee's request for the proposed changes to the plant-specific TS will be expeditiously reviewed by the staff, provided the licensee:

(1) Confirms the applicability of the generic analyses of WCAP-10271, Supplement 2 Revision 0 and Revision 1 to its plant.

(2) Confirms that any increase in instrument drift as a result of the extended STIs has been properly accounted for in setpoint calculation methodology.

(3) Confirms that the proposed TS changes are consistent with those approved by the staff in the SERs.

In the February 21, 1985, and February 22, 1989, SERs, the staff concluded that the increase in core damage frequency (CDF) due to the proposed STI/AOT extensions was small compared to the range of uncertainty in the CDF analysis, the changes constituted an acceptable impact on plant risk, and were, therefore, acceptable.

#### 4. EVALUATION OF PROPOSED REVISIONS

The staff evaluated the licensee's proposed TS changes to verify that they are consistent with previously approved changes and that the licensee has met all the conditions associated with those changes.

##### 4.1 TS Table 3.3-1, Reactor Trip System Instrumentation

Proposed change: Revise ACTION Statements 2a, 6, 12 and 13 to increase the time allowed for a channel to be inoperable or out of service in an untripped condition from 1 hour to 6 hours.

Evaluation: The above change is acceptable because it is consistent with the previously approved change as described in section 3.1.1.(2).

Proposed change: Revise ACTION Statement 2b to increase the time a nuclear instrumentation system (NIS) channel in a functional group may be bypassed to perform testing from 2 to 4 hours.

Evaluation: The above change is acceptable because it is consistent with the previously approved change as described in section 3.1.1.(3).

##### 4.2 TS Table 4.3-1, Reactor Trip System Instrumentation Surveillance Requirements

Proposed change: Revise the surveillance interval for Items 2.a, 4, 7, 8, 10, 11, 12 and Note (9) from monthly to quarterly.

Evaluation: The above change is acceptable because it is consistent with the previously approved change as described in section 3.1.1.(1) of this report.

Proposed change: Revise the surveillance interval for Item 2.b from

monthly to startup, and Item 3 from monthly/startup to startup only.

Evaluation: The above change is acceptable since a valid operation test cannot be performed on these channels at power. This issue was described in NRC letter dated July 24, 1985, from Harold R. Denton. During startup is the appropriate test frequency requirement for these channels.

Proposed change: Revise the surveillance interval for Items 17.a, 17.b, 17.c and 17.d from monthly to refueling.

Evaluation: By letter dated July 24, 1985, the staff concluded that since certain operational testing cannot be performed at power, and during startup is the appropriate test frequency. A specified surveillance frequency of "refueling" was approved by this letter. The frequency is based on the known reliability of the interlocks and the multichannel redundancy available, and has been shown to be acceptable through operating experience.

Proposed change: Revise Note (1) from "7 days" to "31 days" and delete Note (8).

Evaluation: The above change is acceptable since the setpoint drift during this interval is properly accounted for in the licensee's setpoint calculation methodology. By letter dated July 24, 1985, the staff concluded that this frequency should be changed to "31 days" since this change would make the frequency of testing during periods when these channels are required to be operable, consistent with the testing frequency for the channels which must be operable at power.

Note (8) stated that certain testing at power involved only a verification that the annunciator window indicated the proper interlock state. The note is no longer necessary since the associated test will not be performed at power. Therefore, this change is acceptable.

#### 4.3 TS Table 3.3-2, Engineered Safety Features Actuation System Instrumentation

Proposed change: Revise ACTION Statement 14 to increase the time to be in HOT STANDBY with the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement from 6 to 12 hours.

Evaluation: The above change is acceptable because it is consistent with the previously approved change as described in section 3.1.2.(5).

Proposed change: Revise ACTION Statements 14, 20 and 22 to increase the allowed outage time for testing of the logic trains from 2 hours to 8 hours.

Evaluation: The above change is acceptable because it is consistent with the previously approved change as described in section 3.1.2.(4) of this report.

Proposed change: Revise ACTION Statements 15, 18 and 25 to increase the time allowed for a channel to be inoperable and out of service in an

untripped condition from 1 hour to 6 hours.

Evaluation: The above change is acceptable because it is consistent with the previously approved change as described in section 3.1.2.(5).

#### 4.4 TS Table 4.3-2, Engineered Safety Features Actuation System Instrumentation Surveillance Requirements

Proposed change: Revise the surveillance interval for Items 1.d, 1.e, 1.f, 4.d, 5.c, 6.b, and 8.a from monthly to quarterly.

Evaluation: The above change is acceptable because it is consistent with previously approved change as described in section 3.1.2.(1) of this report.

### 5. VERIFICATION OF CONDITIONS

Through its submittal, the licensee confirmed that it has met the SER conditions as described below.

(1) Condition 3.2.1.(1): Performance of testing on a staggered basis was stipulated by the RTS SER, but was removed by the ESFAS SER. The licensee stated that FPL does not plan to institute a staggered testing plan at Turkey Point. This is acceptable.

(2) Condition 3.2.1.(2): The licensee stated that existing plant procedures will be enhanced to require the evaluation of a failure of any RPS/ESFAS channel as part of the quarterly test program, in order to determine if that failure could have resulted from a common cause. The plant procedures will require that appropriate remedial action(s), such as additional testing of the other channels in that function, be taken if the failure is determined to have resulted from a plausible common cause mechanism. The intent of the procedure enhancement is to increase the awareness of the potential for common mode failures and to take additional action when a plausible common mode failure(s) is identified. This is acceptable.

(3) Condition 3.2.1.(3): The licensee stated that surveillance testing will continue to be performed by placing the channel in the tripped position prior to testing. The Eagle 21 and NIS instrumentation systems do have design provisions for testing while in a bypass mode. Testing will be conducted without lifting leads or installing temporary jumpers to bypass functions. This is acceptable to the staff.

(4) Condition 3.2.1.(5): The RTS SER states that approval to extend STI and AOT for channels that provide dual inputs to other safety-related systems such as ESFAS only applies to RTS function. Subsequent to stating this condition in the RTS SER, similar extensions were generically approved for the ESFAS analog channels making this condition no longer applicable.

(5) Condition 3.2.2.(1): The ESFAS SER states that the licensee must confirm the applicability of the generic analyses to the plant. The licensee has confirmed the applicability of the generic analyses. This

is acceptable to the staff.

(6) Conditions 3.2.1.(6) and 3.2.2.(2): The RTS SER and the ESFAS SER state that the licensee must confirm that any increase in instrument drift due to the extended STIs is properly accounted for in the setpoint calculation methodology. The licensee stated that the "as-found" versus "as-left" surveillance data for RPS/ESFAS analog rack comparators, which are presently subject to a monthly surveillance interval, were reviewed for Units 3 and 4 for the preceding 18-month period. Based on this review, it was determined that the assumed magnitude of the rack drift conservatively envelopes the actual drift experienced over a 3-month period. The data demonstrated that the basis of the TS setpoint determinations is not adversely affected by extending the surveillance interval from one month to quarterly, that is, quarterly surveillance test intervals would not exceed the allowable instrument drift of these analog devices. This is acceptable to the staff.

## 6.0 CONCLUSION

Based on the above, the staff finds the proposed TS changes as described in the submittal acceptable.

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

## 7.0 STATE CONSULTATION

Based upon the written notice of the proposed amendments, the Florida State official had no comments.

## 8.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (60 FR 54720). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

Principal Contributor: R. Croteau

Date: November 29, 1995