

# REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250  
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251  
 AUTH. NAME: AUTHOR AFFILIATION  
 URRIG, R. E. Florida Power & Light Co.  
 RECIP. NAME: RECIPIENT AFFILIATION  
 EISENHUT, D. G. Division of Operating Reactors

SUBJECT: Forwards info re implementation of TMI Lessons Learned Task Force short-term requirements. Unit 3 scheduled to return to power operation on 800203. Addl implementation info will be forwarded on 800128.

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## NOTES:

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January 31, 1980  
L-80-39

Office of Nuclear Reactor Regulation  
Attention: Mr. Darrell G. Eisenhut, Acting Director  
Division of Operating Reactor  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Eisenhut:

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
NUREG-0578 Short Term Requirements

The attached information is being submitted as requested by your Staff on January 22, 1980.

Turkey Point Unit 3 has implemented Category A requirements (excluding requirement 2.1.7.a) as described in our letters of October 22 and November 21, 1979, and January 11, 1980 (as supplemented by this letter and the information provided herein), and has met the requirements of Mr. Denton's confirmatory letter dated December 27, 1979. Turkey Point Unit 3 is scheduled to return to power operation on February 3, 1980.

Additional documentation requested during the implementation review will be forwarded later as agreed to by your Staff on January 28, 1980.

Very truly yours,

*J. E. De Mistry*  
*gr*

Robert E. Uhrig  
Vice President  
Advanced Systems & Technology

REU/MAS/RK/ah

Attachment

cc: Mr. J. P. O'Reilly, Region II  
Harold F. Reis, Esquire

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### 2.2.2.b TECHNICAL SUPPORT CENTER (TSC)

- 1.a. The interim TSC has been established in a 56' x 24' double wide trailer located at the SW corner of the present I and C Building, which is east and slightly north of the control room and is inside the plant perimeter fence.

There are two 12' x 12' offices located at each end of the TSC with a 32' x 24' open area in the center. The TSC will be equipped with conference tables, chairs, desks, filing cabinets, storage cabinets, bookcases, blackboards, refrigerator, microwave oven, drafting table and supplies.

When the action level is reached for activation of the TSC, the full 32' x 24' center will be made available for use by the support groups. The four offices will be utilized as necessary.

The TSC is equipped with the in-plant phone system (PAX) and the normal Bell telephone system for inside and outside plant use. The TSC will be equipped with the in-plant paging system in the near future.

- 1.b. Emergency Procedure 20105 has been written, reviewed, approved and issued to provide plans for activation of the TSC and subsequent manning and use of the TSC during accidents.
- 1.c. Dedicated communications between the TSC, the Control Room and the NRC are now in service.
- 1.d. The following equipment for monitoring airborne and direct radiation will be available at the TSC prior to Unit 3 startup.

|    |                                                                    |
|----|--------------------------------------------------------------------|
| 20 | 0-1R dosimeters                                                    |
| 2  | Chargers for dosimeters                                            |
| 1  | $\beta$ - $\gamma$ survey instrument                               |
| 1  | RM-14 with 210 ( $\beta$ - $\gamma$ ) and 44-6 ( $\alpha$ ) probes |
| 1  | Radeco High Volume Air Sampler                                     |

- A While the TSC is activated, it will be monitored for airborne contamination. At airborne activity level of one times MPC, personnel in the TSC will wear respiratory protection equipment. At an airborne activity level of ten times MPC, preparations will be made for evacuation and transfer of the TSC to the Control Room. If the ten times MPC levels exist for a period of two hours, the TSC will move to the Control Room.

While the TSC is activated, it will also be continuously monitored for direct radiation and the dose rate and accumulated dose of the personnel in the TSC will be evaluated. If the radiation dose rate in the TSC reaches or exceeds a continuous 100 mR/hr, the personnel in the TSC will evacuate to the Control Room.

- 1.e. The TSC is located in very close proximity to the I and C Building which also houses Document Control. Upon activation of the TSC, Document Control personnel will man the Document Control Center to assist support

personnel in obtaining any technical data needed in the TSC. This meets the recommendations of NUREG 0578. In addition, we are in the process of stocking the TSC with all of the drawings, documents, and technical data listed below:

The following is a list of these documents:

1. Operating Procedures
2. Emergency Plan
3. Technical Specifications
4. FSAR
5. Precautions, Limitations and Setpoints Document
6. Circuit Breaker List
7. Plant Curve Book
8. Tank Book
9. Plant Data Book
10. Training Department Lesson Plans
11. Electrical Wiring Diagrams
12. Training Department P and ID's (5610-T-E series)
13. I and C Hagan Drawings
14. Many mechanical P and ID's (5610-M-series)
15. Valve Index
16. Miscellaneous Training Information
17. System Descriptions (NSSS)

FPL is in the process of evaluating feasible alternatives for providing plant data indication in the TSC. The alternative which presently appears to offer the shortest implementation period is the addition of a CRT which accesses the plant computer. However, it was not feasible to have this operational at this time. FPL will expedite our evaluation and provide our intended plan and associated schedule for implementation by February 25, 1980.

- 1.f. Procedures for performing the accident assessment function from the Control Room have already been developed and are available for use.

The Emergency Plan was developed and has been tested on a regular basis for handling emergencies from the Control Room. The Emergency Plan is written in generic terms so that it is still valid and will still be used and the TSC is discussed in Emergency Procedure 20105.

The Control Room itself has a small office area which would be available for the functioning of accident assessment personnel.

### 2.1.3a

Direct position indications of the PORV's are presently provided by stem position switches. These switches were supplied with the valves and are qualified consistent with the component or system to which they are attached.

To comply with the requirement for an alarm in conjunction with this indication, a modification will be implemented immediately to add this position alarm to the annunciator. This will be done by paralleling a relay on the valve position indication lights and sending that contact signal to the annunciator. This change will be implemented and operated on Unit #3 before start-up and will be implemented on Unit #4 prior to February 15, 1980.

The above described modification will also be qualified consistent with the existing system. Backup for this alarm is provided by temperature sensors downstream of each relief valve discharge. These sensors detect and alarm for high temperature (indicative of flow in pipe). This temperature alarm system is powered from a vital instrument bus.

#### 2.1.3b Sub Cooling Monitor

Florida Power & Light Company has re-evaluated the design and function of the subcooling meter with respect to the NRC clarification letter of October 30, 1979. We have concluded that:

1. The subcooling meters presently installed at Turkey Point are designed with sufficient redundancy to provide reliable temperature input during postulated accident conditions.
2. The RTD's currently installed can be expected to provide temperature input equal to safety grade instrumentation in a continuous and reliable manner.
3. The pressure sensors are safety grade.

The basis for our conclusions are discussed below.

The subcooling meter is designed to accept multiple inputs to be used in an auctioneering program. The program will select one, highest temperature, input to calculate margin to subcooling. Since Turkey Point is a three (3) loop plant six (6) inputs will be offered for auctioneering; three (3) hot leg RTD's and three (3) cold leg RTD's. Assuming one of the three (3) hot leg RTD's will be most likely chosen, one from each loop, the operator is assured each loop is auctioneered equally. Should failure of one hot leg RTD occur, the subcooling meter will still auctioneer from the remaining two hot leg RTD's, thus assuring that a continuous input source is provided to calculate margin to subcooling. As was evident from the TMI data review, each loop at TMI responded similarly with respect to temperature and pressure. By the nature of the Turkey Point Design (three [3] loop plant) and the auctioneering ability of the subcooling meter, the loss of one loop's hot leg RTD will not diminish the operator's ability to use the subcooling meter as a reliable diagnostic tool to determine degree of subcooling.

The temperature input signals to the subcooling meter (i.e. in-line RTD), although not safety related, are identical to RTD's currently being used for the Reactor Protection System. These RTD's are designed consistent with the safety criteria as outlined in Turkey Point's FSAR.

The staff's requirement to implement this system by 1/1/80 did not provide sufficient time to add spare thermo well penetrations in the RCS piping, or to evaluate the use of dual element RTD's. In addition it is not clear what advantage will be gained by having six (6) hot leg RTD inputs to our subcooling meter design as opposed to the current 3 hot leg and 3 cold leg inputs. We base this on the auctioneering program accepting only one high temperature input to calculate degree of subcooling.

Based on current best estimates for equipment delivery dates and completion of piping analysis to accept extra thermo wells, we believe nine (9) or ten (10) months will be required before we can proceed with any plant modifications in this area. Additionally, we plan to evaluate the feasibility and scheduler constraints of using dual element RTD's in order to determine if this is a better alternative.

#### 2.1.4 Containment Isolation

Enclosure 1 provides FPL's revised penetration classification list which identifies all penetrations as essential or nonessential. FPL has reviewed in detail containment isolation provisions for all penetrations classified as non-essential. The results are summarized in Enclosure 2. We have concluded that the containment isolation system provides adequate protection against unrestricted release of radioactivity from the containment in the event of a postulated accident and is in full compliance with the Turkey Point Units 3 and 4 FSAR.

Automatic Signals

SI Safety Injection Signal (Low Pressurizer Pressure of Hi CB Pressure)  
HCP High-High Containment Pressure  
H.R. Containment High Radiation Signal  
MSI Main Steam Isolation  
All valves actuated by above signals are closed except where noted.

System Designations

ACS Auxiliary Coolant System  
CVCS Chemical and Volume Control System  
RCPS Reactor Coolant and Protection System  
WDS Waste Disposal System  
SIS Safety Injection System  
SS Sampling System  
RCS Reactor Coolant System  
VENT Heating and Ventilation  
CS Containment Spray

| Pene. No. | Item No. | Service                                              | System | Designation   | Isolation Signal | Remarks                                                                                                                                                                    |
|-----------|----------|------------------------------------------------------|--------|---------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| P2        | 1        | Residual Heat Removal Loop Outlet                    | ACS    | Essential     | SI Opens         | Provides core cooling post-LOCA.                                                                                                                                           |
| P1        | 2        | Residual Heat Removal Loop Return Line               | ACS    | Essential     | None             | Isolation provided by two (2) normally closed valves in containment. Provides core cooling post-LOCA (Alternate hot leg injection path initiated 20 hours after accident). |
| P3        | 3        | Reactor Coolant Pumps Cooling Water Supply (6" line) | ACS    | Essential     | HCP              | Seal cooling is essential. Thus either seal injection or component cooling water to the thermal barrier is to be considered essential                                      |
| P4        | 4        | Reactor Coolant Pumps Cooling Water Return (6" line) | ACS    | Essential     | HCP              | See P3                                                                                                                                                                     |
| P43       | 5        | Reactor Coolant Pumps Cooling Water Return (3" line) | ACS    | Essential     | HCP              | See P3                                                                                                                                                                     |
| P12       | 6        | Excess Letdown Heat Exchanger Supply                 | ACS    | Non-Essential | None             | Isolated via checkvalve in containment.                                                                                                                                    |

|     |    |                                                                                                                                       |                  |               |      |                                                                                                                                                                                     |
|-----|----|---------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| P13 | 7  | Excess Letdown<br>Heat Exchanger<br>Cooling Wtr<br>Return                                                                             | ACS              | Non-Essential | SI   |                                                                                                                                                                                     |
| P21 | 8  | Normal Contain-<br>ment Cooling<br>Water Supply                                                                                       | ACS              | Non-Essential | SI   |                                                                                                                                                                                     |
| P22 | 9  | Normal Contain-<br>ment Cooler Cooling<br>Water Return                                                                                | ACS              | Non-Essential | SI   |                                                                                                                                                                                     |
| P14 | 10 | Letdown Line                                                                                                                          | CVCS             | Non-Essential | SI   |                                                                                                                                                                                     |
| P15 | 11 | Charging Line                                                                                                                         | CVCS             | Non-Essential | None | Isolated via checkvalve in con-<br>tainment.                                                                                                                                        |
| P24 | 12 | Charging Pump<br>Seal Water to<br>Reactor Coolant<br>Pump No. A.                                                                      | CVCS             | Non-Essential | None | Isolated via checkvalve in con-<br>tainment.                                                                                                                                        |
| P24 | 13 | Charging Pump<br>Seal Water to<br>Reactor Coolant<br>Pump No. B                                                                       | CVCS             | Non-Essential | None | Isolated via check valve in con-<br>tainment.                                                                                                                                       |
| P24 | 14 | Charging Pump<br>Seal water to<br>Reactor Coolant<br>Pump No. C.                                                                      | CVCS             | Non-Essential | None | Isolated via check valve in con-<br>tainment                                                                                                                                        |
| P25 | 15 | Excess Letdown<br>Reactor Coolant<br>Pump Seal Water<br>Return.<br>Reactor Coolant<br>Pump-Seal Water<br>Leakoff<br>(One penetration) | CVCS<br><br>CVCS | Non-Essential | SI   | Seal cooling is essential. Thus<br>either seal injection or component<br>cooling water to the thermal barrier<br>is to be considered essential. See<br>penetrations P3, P4 and P43. |

|      |    |                                                                      |     |               |              |                                                                                                                                  |
|------|----|----------------------------------------------------------------------|-----|---------------|--------------|----------------------------------------------------------------------------------------------------------------------------------|
| P10  | 16 | Reactor Coolant<br>Drain Tank Vent                                   | WDS | Non-Essential | SI           |                                                                                                                                  |
| P52  | 17 | Reactor Coolant<br>Drain Tank Pumps<br>Discharge to<br>Hold Up Tanks | WDS | Non-Essential | SI           |                                                                                                                                  |
| P31  | 18 | Reactor Coolant<br>Drain Tank Line<br>To H <sub>2</sub> Analyzer     | WDS | Non-Essential | SI           |                                                                                                                                  |
| P17  | 19 | Safety Injection<br>Test and Purge<br>Line                           | SIS | Non-Essential | None         | Isolated via locked closed valve out-<br>side containment and<br>and check valves in containment.                                |
| P18  | 20 | High Head<br>Safety Injection<br>Line (Hot Legs)                     | SIS | Essential     | SI<br>Opens  | Provides core cooling Post-LOCA<br>(initiated 20 hours after accident)<br>valves administratively kept closed<br>until required. |
| P19A | 21 | Containment Spray<br>(one penetration)                               | CS  | Essential     | HCP<br>Opens | Used for containment cooling                                                                                                     |
| P19B | 22 | Containment Spray<br>(Another pene-<br>tration)                      | CS  | Essential     | HCP<br>Opens | Used for containment cooling                                                                                                     |
| P54  | 23 | Containment Sump<br>Recirculation Line<br>(one penetration)          | SIS | Essential     | None         | Provides core cooling Post-LOCA                                                                                                  |
| P54  | 24 | Containment Sump<br>Recirculation Line<br>(another pene-<br>tration) | SIS | Essential     | None         | Provides core cooling Post-LOCA                                                                                                  |
| P8   | 25 | Pressurizer<br>Steam Space<br>Sample                                 | SS  | Non-Essential | SI           |                                                                                                                                  |
| P9   | 26 | Pressurizer<br>Liquid Space<br>Sample                                | SS  | Non-Essential | SI           |                                                                                                                                  |

|      |    |                                                                 |           |               |            |                                                         |
|------|----|-----------------------------------------------------------------|-----------|---------------|------------|---------------------------------------------------------|
| P20  | 27 | Hot Leg Reactor<br>Coolant System<br>Sample                     | SS        | Non-Essential | SI         |                                                         |
| P32  | 28 | Containment<br>Air Sample                                       | SS        | Non-Essential | SI         |                                                         |
| P33  | 29 | Containment<br>Air Sample                                       | SS        | Non-Essential | SI         |                                                         |
| P5   | 30 | Pressurizer<br>Relief Tank<br>Gas<br>Analyzer Line              | RCS       | Non-Essential | SI         |                                                         |
| P6   | 31 | Pressurizer<br>Tank Nitrogen<br>Supply                          | RCS       | Non-Essential | None       | Isolated via check valve in containment                 |
| P7   | 32 | Pressurizer<br>Relief<br>Tank Make-up<br>Demin. Water<br>Supply | RCS       | Non-Essential | SI         |                                                         |
| P35  | 33 | Containment<br>Purge (Supply)                                   | Vent      | Non-Essential | SI, HR     |                                                         |
| P36  | 34 | Containment<br>Purge (Exhaust)                                  | Vent      | Non-Essential | SI, HR     |                                                         |
| P62  | 35 | Containment<br>Pressure<br>Instrumentation                      | Vent      | Essential     | None       | Instrument lines. Sealed instrument<br>provides barrier |
| P26A | 36 | Main Steam<br>(ONE)                                             | Secondary | Non-Essential | SI,<br>MSI |                                                         |
| P26B | 37 | Main Steam<br>(TWO)                                             | Secondary | Non-Essential | SI,<br>MSI |                                                         |
| P26C | 38 | Main Steam<br>(THREE)                                           | Secondary | Non-Essential | SI,<br>MSI |                                                         |

|      |     |                                             |           |               |      |                                                                                                                             |
|------|-----|---------------------------------------------|-----------|---------------|------|-----------------------------------------------------------------------------------------------------------------------------|
| P27A | 39  | Feedwater<br>(ONE)                          | Secondary | Non-Essential | SI   |                                                                                                                             |
| P27A | 39A | Aux. Feed-<br>water<br>(ONE)                | Secondary | Essential     | None |                                                                                                                             |
| P27B | 40  | Feedwater<br>(TWO)                          | Secondary | Non-Essential | SI   |                                                                                                                             |
| P27B | 40A | Aux. Feed-<br>water (TWO)                   | Secondary | Essential     | None |                                                                                                                             |
| P27C | 41  | Feedwater<br>(THREE)                        | Secondary | Non-Essential | SI   |                                                                                                                             |
| P27C | 41A | Aux. Feed-<br>water<br>(THREE)              | Secondary | Essential     | None |                                                                                                                             |
| P28A | 42  | Steam Gen.<br>Blowdown<br>(ONE)             | Secondary | Non-Essential | SI   |                                                                                                                             |
| P64A | 42A | Steam Gen.<br>Blowdown/<br>Sample (ONE)     | Secondary | Non-Essential | SI   | Used to sample steam generators following a small-break LOCA to establish possible steam generator tube leakage or rupture. |
| P28B | 43  | Steam Gen.<br>Blowdown<br>(TWO)             | Secondary | Non-Essential | SI   |                                                                                                                             |
| P64B | 43A | Steam Gen.<br>Blowdown<br>Sample<br>(TWO)   | Secondary | Non-Essential | SI   | See P64A                                                                                                                    |
| P28C | 44  | Steam Gen.<br>Blowdown<br>(THREE)           | Secondary | Non-Essential | SI   |                                                                                                                             |
| P64C | 44A | Steam Gen.<br>Blowdown<br>Sample<br>(THREE) | Secondary | Non-Essential | SI   | See P64A                                                                                                                    |

|     |    |                                            |            |               |          |                                          |
|-----|----|--------------------------------------------|------------|---------------|----------|------------------------------------------|
| P29 | 45 | Instrument Air (Supply)                    | Secondary  | Non-Essential | None     | Isolated via check valve in containment  |
| P30 | 46 | Service Air (Supply)                       | Secondary  | Non-Essential | None     | Isolated via check valve in containment  |
|     | 47 | Fuel Transfer Tube                         | Re-fueling | Non-Essential | None     | Isolated via blind flange in containment |
| P44 | 48 | Emergency Containment Cooling Water Supply | ACS        | Essential     | SI Opens |                                          |
| P44 | 49 | Emergency Containment Cooling Water Supply | ACS        | Essential     | SI Opens |                                          |
| P44 | 50 | Emergency Containment Cooling Water Supply | ACS        | Essential     | SI Opens |                                          |
| P45 | 51 | Emergency Containment Cooling Water Return | ACS        | Essential     | SI Opens |                                          |
| P45 | 52 | Emergency Containment Cooling Water Return | ACS        | Essential     | SI Opens |                                          |

|     |    |                                            |           |               |          |                                                                                         |
|-----|----|--------------------------------------------|-----------|---------------|----------|-----------------------------------------------------------------------------------------|
| P45 | 53 | Emergency Containment Cooling Water Return | ACS       | Essential     | SI Opens |                                                                                         |
| P11 | 54 | Low Head Safety Injection (Redundant Line) | SIS       | Essential     | None     | Alternate low head safety injection                                                     |
| P37 | 55 | Pressurizer Deadweight Tester              | RCS       | Non-Essential | None     | Isolated via closed valve outside containment and instrument barrier inside containment |
| P42 | 56 | N <sub>2</sub> Supply to Accumulators      | SIS       | Non-Essential | SI       | Isolated via normally closed valves in containment and outside containment              |
| P47 | 57 | Demineralized Water Supply                 | Secondary | Non-Essential | None     | Isolated via normally closed valve in containment and check valve outside containment.  |
| P55 | 58 | Accumulator Sample Lines                   | SS        | Non-Essential | SI       |                                                                                         |
| P58 | 59 | High Head Safety Injection (Cold Leg)      | SIS       | Essential     | None     |                                                                                         |
| P59 | 60 | High Head Safety Injection (Cold Leg)      | SIS       | Essential     | None     |                                                                                         |
| P60 | 61 | High Head Safety Injection (Cold Leg)      | SIS       | Essential     | None     |                                                                                         |
| P23 | 62 | Containment Sump Discharge                 | WDS       | Non-Essential | SI       |                                                                                         |
| P63 | 63 | Instrument Air Bleed                       | Secondary | Non-Essential | SI, HR   |                                                                                         |



## TURKEY POINT UNITS 3 AND 4.

## CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No. | SERVICE                                                    | SYSTEM | CONTAINMENT ISOLATION |                                                                                                  | REMARKS                                                                                                                                                                  |
|--------------|------------------------------------------------------------|--------|-----------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                                                            |        | IN CONTAINMENT        | OUTSIDE CONTAINMENT                                                                              |                                                                                                                                                                          |
| P12          | EXCESS LETDOWN<br>HEAT EXCHANGER<br>SUPPLY                 | ACS    | CHECK VALVE 738       | MANUAL VALVE 737A<br>NORMALLY OPEN                                                               | LINE CONNECTS TO A CLOSED SYSTEM OUTSIDE<br>CONTAINMENT. SYSTEM IS ALSO A CLOSED<br>SYSTEM INSIDE CONTAINMENT. CONTAINMENT<br>ISOLATION CRITERIA FOR FSAR SECTION<br>6.6 |
| P13          | EXCESS LETDOWN<br>HEAT EXCHANGER<br>COOLING WTR.<br>RETURN | ACS    | NONE                  | AUTOMATIC ISOLATION<br>VALVE 739 <sup>SI CLOSING</sup> AND<br>MANUAL VALVE 737B<br>NORMALLY OPEN | SEE P. 12 ABOVE                                                                                                                                                          |
| P21          | NORMAL CONTAINMENT<br>COOLING WTR. SUPPLY                  | ACS    | NONE                  | AUTOMATIC ISOLATION<br>VALVE 1417-SI CLOSING                                                     | SEE P. 12 ABOVE                                                                                                                                                          |
| P22          | NORMAL CONTAINMENT<br>COOLING WTR. RETURN                  | ACS    | NONE                  | AUTOMATIC ISOLATION<br>VALVE 1418-SI CLOSING                                                     | SEE P. 12 ABOVE                                                                                                                                                          |

CHKD. BY

DATE

FLORIDA POWER &amp; LIGHT COMPANY

PROJECT NO.

BY

DATE

SHEET NO.

OF



ENCLOSURE 2  
 TURKEY POINT UNITS 3 AND 4  
 CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No | SERVICE                                                | SYSTEM | CONTAINMENT ISOLATION                                                     |                                                                                                     | REMARKS                                                                                                                                                                                                |
|-------------|--------------------------------------------------------|--------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                                                        |        | IN CONTAINMENT                                                            | OUTSIDE CONTAINMENT                                                                                 |                                                                                                                                                                                                        |
| P15         | CHARGING LINE                                          | CVCS   | CHECKVALVE 312C                                                           | MANUAL VALVE 333<br>NORMALLY CLOSED AND<br>IN PARALLEL REMOTE<br>MANUAL VALVE 121<br>NORMALLY OPEN. | ADDITIONAL ISOLATION FROM REACTOR COOLANT SYSTEM<br>IS PROVIDED BY CHECKVALVES 312A, 312B AND 313.<br>SYSTEM OUTSIDE CONTAINMENT IS CLOSED.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6. |
| P14         | LETDOWN LINE                                           | CVCS   | AUTOMATIC ISOLATION<br>VALVES IN PARALLEL<br>200A, B AND C -<br>SI CLOSES | AUTOMATIC ISOLATION<br>VALVE 204-SI<br>CLOSES                                                       | SYSTEM OUTSIDE CONTAINMENT IS CLOSED.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6.                                                                                                       |
| P24         | CHARGING PUMP<br>SEAL WATER INJECTION<br>TO R.C PUMP A | CVCS   | TWO CHECKVALVES<br>298 D AND 298 A                                        | MANUAL VALVE 297A -<br>NORMALLY OPEN                                                                | SYSTEM OUTSIDE CONTAINMENT IS CLOSED.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6.                                                                                                       |
| P24         | CHARGING PUMP<br>SEAL WATER INJECTION<br>TO R.C PUMP B | CVCS   | TWO CHECKVALVES<br>298 B AND 298 E                                        | MANUAL VALVE 297B -<br>NORMALLY OPEN                                                                | SEE P24 ABOVE                                                                                                                                                                                          |

CHKD. BY

DATE

FLORIDA POWER & LIGHT COMPANY

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## TURKEY POINT UNITS 3 AND 4

## CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No. | SERVICE                                                            | SYSTEM | CONTAINMENT ISOLATION                    |                                                                                                   | REMARKS                                                                                                            |
|--------------|--------------------------------------------------------------------|--------|------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
|              |                                                                    |        | IN CONTAINMENT                           | OUTSIDE CONTAINMENT                                                                               |                                                                                                                    |
| P24          | CHARGING PUMP<br>SEAL WATER INJECTION<br>TO R.C. PUMP C            | CVCS   | TWO CHECKVALVES<br>298C AND 298F         | MANUAL VALVE 297C<br>NORMALLY OPEN.                                                               | SEE P24 ABOVE                                                                                                      |
| P25          | EXCESS LETDOWN<br>R.C. PUMP SEAL WTR.<br>RETURN AND LEAKOFFS       | CVCS   | FOUR REMOTE-MANUAL<br>VALVES IN PARALLEL | AUTOMATIC ISOLATION<br>VALVE MOV-381-SI<br>CLOSES                                                 | SYSTEM OUTSIDE CONTAINMENT IS CLOSED.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6.                   |
| P10          | REACTOR COOLANT<br>DRAIN TANK VENT                                 | WDS    | NONE                                     | TWO AUTOMATIC<br>ISOLATION VALVES IN<br>SERIES. 4658A AND<br>4658B-SI CLOSES.<br>NORMALLY CLOSED. | SYSTEM DISCHARGES TO CLOSED SYSTEM<br>OUTSIDE CONTAINMENT. CONTAINMENT<br>ISOLATION CRITERIA PER FSAR SECTION 6.6  |
| P52          | REACTOR COOLANT<br>DRAIN TANK PUMP<br>DISCHARGE TO HOLDUP<br>TANKS | WDS    | NONE                                     | TWO AUTOMATIC<br>ISOLATION VALVES IN<br>SERIES 4668A AND<br>4668B-SI CLOSES.<br>NORMALLY CLOSED   | SYSTEM DISCHARGES TO CLOSED SYSTEM<br>OUTSIDE CONTAINMENT. CONTAINMENT<br>ISOLATION CRITERIA PER FSAR SECTION 6.6. |

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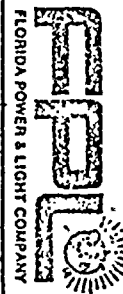
FLORIDA POWER &amp; LIGHT COMPANY

PROJECT NO.

SHEET NO. OF

BY

DATE



## TURKEY POINT UNITS 3 AND 4

## CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No. | SERVICE                                              | SYSTEM | CONTAINMENT ISOLATION                                                                            |                                                                                                   | REMARKS                                                                                                                                                                                                                                                                                                                                                 |
|--------------|------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                                                      |        | IN CONTAINMENT                                                                                   | OUTSIDE CONTAINMENT                                                                               |                                                                                                                                                                                                                                                                                                                                                         |
| P31          | REACTOR COOLANT<br>DRAW TANK VENT TO<br>GAS ANALYZER | WDS    | NONE                                                                                             | TWO AUTOMATIC<br>ISOLATION VALVES IN<br>SERIES 4659A AND<br>4659B - SI CLOSES.<br>NORMALLY CLOSED | CONTAINMENT ISOLATION CRITERIA PER<br>FSAR SECTION 6.6. $\frac{3}{8}$ " SAMPLE LINE.                                                                                                                                                                                                                                                                    |
| P17          | SAFETY INJECTION<br>TEST AND PURGE LINE              | SI     | NONE                                                                                             | ONE MANUAL LOCKED<br>CLOSED VALVE 895V                                                            | ADDITIONAL ISOLATION PROVIDED BY NORMALLY CLOSED<br>(REMOTE-MANUAL) VALVES IN CONTAINMENT AS<br>FOLLOWS: 850A, B, C, D, E AND F AND CHECKVALVE<br>889. THESE VALVES ARE IN PARALLEL. CONTAINMENT<br>ISOLATION CRITERIA PER FSAR SECTION 6.6.<br>$\frac{3}{4}$ " TEST LINE. ADDITIONAL CHECKVALVES IN CONTAINMENT<br>PREVENT BACKFLOW OF REACTOR COOLANT |
| P8           | PRESSURIZED STEAM<br>SPACE SAMPLE                    | SS     | MANUALLY OPERATED,<br>NORMALLY OPEN VALVE<br>95D. REMOTE-MANUAL,<br>NORMALLY CLOSED VALVE<br>95I | AUTOMATIC ISOLATION VALVE<br>956A - SI CLOSES - AND<br>ONE MANUAL, NORMALLY<br>CLOSED VALVE 989A. | REMOTE-MANUAL VALVE 95I AND MANUAL VALVE 989A<br>ARE OPEN ONLY WHILE TAKING SAMPLES.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6. $\frac{3}{8}$ " SAMPLE LINE.<br>WHILE SAMPLE IS BEING TAKEN SYSTEM IS<br>OPERATED IN A CLOSED LOOP VIA<br>THE VOLUME CONTROL TANK                                                                       |

CHKD. BY

DATE

FLORIDA POWER &amp; LIGHT COMPANY

PROJECT NO.

SHEET NO. OF

TURKEY POINT UNITS 3 AND 4  
CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No | SERVICE                                     | SYSTEM | CONTAINMENT ISOLATION                                                                                                                              |                                                                                                  | REMARKS                                                                                                                                                                                                                                                                                         |
|-------------|---------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                                             |        | IN CONTAINMENT                                                                                                                                     | OUTSIDE CONTAINMENT                                                                              |                                                                                                                                                                                                                                                                                                 |
| P9          | PRESSURIZED LIQUID<br>SPACE SAMPLE          | SS     | MANUALLY OPERATED,<br>NORMALLY OPEN VALVE.<br>952. REMOTE-MANUAL<br>NORMALLY CLOSED VALVE.<br>953                                                  | AUTOMATIC ISOLATION VALVE<br>956B -SI CLOSES- AND<br>ONE MANUAL, NORMALLY<br>CLOSED VALVE 989 B. | REMOTE-MANUAL VALVE 952 AND MANUAL VALVE 989B<br>ARE OPEN ONLY WHILE TAKING SAMPLES.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6. 3/8" SAMPLE LINE.<br>WHILE SAMPLE IS BEING TAKEN SYSTEM IS OPERATED<br>IN A CLOSED LOOP VIA THE VOLUME CONTROL<br>TANK.                         |
| P20         | HOT LEG REACTOR<br>COOLANT SYSTEM<br>SAMPLE | SS     | MANUALLY OPERATED,<br>NORMALLY OPEN VALVES<br>954 A AND 954 B (PARALLEL).<br>REMOTE-MANUAL<br>NORMALLY CLOSED VALVES<br>955 A AND 955 B (PARALLEL) | AUTOMATIC ISOLATION VALVE<br>956C -SI CLOSES- AND<br>ONE MANUAL, NORMALLY<br>CLOSED VALVE 989C   | REMOTE-MANUAL VALVES 955A AND B, AND MANUAL VALVE<br>989C ARE OPEN ONLY WHILE TAKING SAMPLES.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6. 3/8" SAMPLE LINE.<br>WHILE SAMPLE IS BEING TAKEN SYSTEM IS<br>OPERATED IN A CLOSED LOOP VIA THE VOLUME<br>CONTROL TANK.                |
| P32         | CONTAINMENT AIR<br>SAMPLE RETURN            | SS     | CHECK VALVE                                                                                                                                        | AUTOMATIC ISOLATION<br>VALVE SV-2912 -SI<br>CLOSES                                               | CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6. 1" SAMPLE LINE.                                                                                                                                                                                                                         |
| P33         | CONTAINMENT AIR<br>SAMPLE OUT               | SS     | NONE                                                                                                                                               | AUTOMATIC ISOLATION<br>VALVES SV-2913 AND<br>2911 -SI CLOSES- VALVES<br>IN SERIES.               | WHILE SAMPLE IS BEING TAKEN, SYSTEM IS OPERATED<br>IN A CLOSED LOOP VIA THE SAMPLE RETURN LINE.<br>ADDITIONAL ISOLATION PROVIDED BY REMOTE-MANUAL<br>VALVE SV-3701 WHICH IS OUTSIDE CONTAINMENT AND<br>NORMALLY CLOSED. CONTAINMENT ISOLATION CRITERIA<br>PER FSAR SECTION 6.6. 1" SAMPLE LINE. |

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DATE

FLORIDA POWER &amp; LIGHT COMPANY

PROJECT NO.

BY

DATE

SHEET NO.

OF



SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

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DATE

FLORIDA POWER &amp; LIGHT COMPANY

PROJECT NO.

BY

DATE

SHEET NO.

OF

ENCLOSURE 2  
TURKEY POINT UNITS 3 AND 4

Sh. 7 OF 11

CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No. | SERVICE                                                   | SYSTEM | CONTAINMENT ISOLATION                                                                            |                                                                                | REMARKS                                                                                                                                                             |
|--------------|-----------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                                                           |        | IN CONTAINMENT                                                                                   | OUTSIDE CONTAINMENT                                                            |                                                                                                                                                                     |
| P5           | PRESSURIZER RELIEF<br>TANK GAS ANALYZER<br>LINE.          | RCS    | NONE                                                                                             | REMOTE-MANUAL VALVE<br>552 AND AUTOMATIC<br>ISOLATION VALVE 516-<br>SI CLOSES. | CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6: 3/8" SAMPLE LINE.                                                                                           |
| P6           | PRESSURIZER RELIEF<br>TANK N <sub>2</sub> SUPPLY.         | RCS    | CHECK VALVE 518                                                                                  | MANUAL VALVE 550<br>NORMALLY CLOSED                                            | ADDITIONAL ISOLATION PROVIDED BY PRESSURE<br>CONTROL VALVE OUTSIDE CONTAINMENT. CONTAINMENT<br>ISOLATION CRITERIA PER FSAR SECTION 6.6.<br>3/4" N <sub>2</sub> LINE |
| P7           | PRESSURIZER RELIEF<br>TANK MAKE-UP<br>DEMIN. WATER SUPPLY | RCS    | CHECK VALVES 520,<br>506 A, B, C IN PARALLEL<br>AND REMOTE-MANUAL<br>VALVE 519 B, 522 A,<br>B, C | AUTOMATIC ISOLATION<br>VALVE 519 A - SI<br>CLOSES                              | CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6                                                                                                              |
| P35          | CONTAINMENT PURGE<br>SUPPLY                               | VENT   | AUTOMATIC ISOLATION<br>VALVE 2601 - SI<br>CLOSES, HPL CLOSES                                     | AUTOMATIC ISOLATION<br>VALVE 2600 - SI<br>CLOSES, HPL CLOSES                   | CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6                                                                                                              |

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PROJECT NO. \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
FLORIDA POWER & LIGHT COMPANY



## CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No          | SERVICE                      | SYSTEM    | CONTAINMENT                                                 | ISOLATION                                                                                                 | REMARKS                                                                                    |
|----------------------|------------------------------|-----------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
|                      |                              |           | IN CONTAINMENT                                              | OUTSIDE CONTAINMENT                                                                                       |                                                                                            |
| P36                  | CONTAINMENT PURGE<br>EXHAUST | VENT      | AUTOMATIC ISOLATION<br>VALVE 2603 - SI<br>CLOSES, HR CLOSES | AUTOMATIC ISOLATION<br>VALVE 2602 - SI<br>CLOSES, HR CLOSES                                               | CONTAINMENT ISOLATION CRITERIA PER<br>FSAR SECTION 6.6                                     |
| P26A<br>P26B<br>P26B | MAIN STEAM                   | SECONDARY | NONE                                                        | AUTOMATIC ISOLATION<br>VALVES MOV- 1400,<br>1401, 1402 AND FOV-<br>2604, 2605, 2606 -<br>SI AND MSI CLOSE | SYSTEM IS CLOSED IN CONTAINMENT.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6 |
| P27A<br>P27B<br>P27C | FEEDWATER                    | SECONDARY | NONE                                                        | AUTOMATIC ISOLATION<br>VALVES FCV- 478, 488,<br>498 AND FCV- 479,<br>489 AND 499. SI<br>CLOSES            | SYSTEM IS CLOSED IN CONTAINMENT.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6 |

ENCLOSURE 2  
TURKEY POINT UNITS 3 AND 4

CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No.                                 | SERVICE                                            | SYSTEM    | CONTAINMENT ISOLATION |                                                                                                                                                          | REMARKS                                                                                      |
|----------------------------------------------|----------------------------------------------------|-----------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
|                                              |                                                    |           | IN CONTAINMENT        | OUTSIDE CONTAINMENT                                                                                                                                      |                                                                                              |
| P28A<br>P28B<br>P29B<br>P64A<br>P64B<br>P64C | STEAM GENERATOR<br>BLOWDOWN AND<br>BLOWDOWN SAMPLE | SECONDARY | NONE                  | AUTOMATIC ISOLATION<br>VALVES 1410, 1411, 1412,<br>1425, 1426 AND 1427.<br>SI CLOSURES. MANUAL<br>ISOLATION VALVES 127,<br>227, 327, 338, 238<br>AND 138 | SYSTEM IS CLOSED IN CONTAINMENT.<br>CONTAINMENT ISOLATION CRITERIA PER<br>FSAR SECTION 6.6.  |
| P29                                          | INSTRUMENT AIR<br>SUPPLY                           | SECONDARY | CHECK VALVE           | REMOTE MANUAL<br>ISOLATION VALVE                                                                                                                         | SYSTEM IS CLOSED IN CONTAINMENT.<br>CONTAINMENT ISOLATION CRITERIA: PER<br>FSAR SECTION 6.6. |
| P30                                          | SERVICE AIR SUPPLY                                 | SECONDARY | CHECK VALVE           | TWO LOCKED CLOSED<br>ISOLATION VALVES                                                                                                                    | CONTAINMENT ISOLATION CRITERIA: PER<br>FSAR SECTION 6.6.                                     |
| P37                                          | PRESSURIZED DEAD<br>WEIGHT TESTER                  | RCS       | NONE                  | LOCKED CLOSED VALVE<br>570                                                                                                                               | SYSTEM IS CLOSED IN CONTAINMENT.<br>CONTAINMENT ISOLATION CRITERIA: PER<br>FSAR SECTION 6.6. |



ENCLOSURE 2

TURKEY POINT UNITS 3 AND 4

CONTAINMENT ISOLATION PROVISIONS FOR PENETRATIONS DESIGNATED NON-ESSENTIAL

| PENET<br>No | SERVICE                                  | SYSTEM    | CONTAINMENT ISOLATION                                                     |                                                          | REMARKS                                                                                                                                                                                                                             |
|-------------|------------------------------------------|-----------|---------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                                          |           | IN CONTAINMENT                                                            | OUTSIDE CONTAINMENT                                      |                                                                                                                                                                                                                                     |
| P42         | N <sub>2</sub> SUPPLY TO<br>ACCUMULATORS | SIS       | NONE                                                                      | AUTOMATIC ISOLATION<br>VALVE B55 - SI<br>CLOSES          | ADDITIONAL ISOLATION PROVIDED BY REMOTE-<br>MANUAL, NORMALLY CLOSED VALVES: B53A,<br>B AND C AND 936 IN CONTAINMENT.<br>CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6. 1" N <sub>2</sub> SUPPLY LINE                       |
| P47         | DEMINERALIZED<br>WATER SUPPLY            | SECONDARY | ONE LOCKED<br>CLOSED MANUAL VALVE<br>10-00L                               | CHECKVALVE                                               | CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6                                                                                                                                                                              |
| P55         | ACCUMULATOR<br>SAMPLE LINES              | SS        | NORMALLY CLOSED<br>REMOTE MANUAL<br>VALVES 955C, D AND E<br>(IN PARALLEL) | AUTOMATIC ISOLATION<br>VALVE 956D                        | REMOTE MANUAL VALVES 955C, D AND E ARE OPEN<br>ONLY WHILE TAKING SAMPLES. CONTAINMENT<br>ISOLATION CRITERIA PER FSAR SECTION 6.6. WHEN<br>SAMPLE IS BEING TAKEN SYSTEM IS OPERATED IN A CLOSED<br>LOOP VIA THE VOLUME CONTROL TANK. |
| P23         | CONTAINMENT SUMP<br>DISCHARGE            | WDS       | NONE                                                                      | AUTOMATIC ISOLATION<br>VALVES 2821 AND 2822<br>IN SERIES | CONTAINMENT ISOLATION CRITERIA PER FSAR<br>SECTION 6.6                                                                                                                                                                              |

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