



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report Nos. 50-250/82-14 and 50-251/82-18

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33101

Facility Name: Turkey Point Unit 3

Docket Nos. 50-250 and 50-251

License No. DPR-31 and DPR-41

Inspection at Turkey Point site near Florida City, Florida

Inspector: E. Brooks
E. Brooks

4-15-82
Date Signed

Accompanying Personnel: J. Agles, Resident Inspector

Approved by: F. Jape
F. Jape, Chief, Test Program Section
Division of Engineering and Technical
Programs

4/15/82
Date Signed

SUMMARY

Inspection on March 27-29, 1982

Areas Inspected

This routine, announced inspection involved 23 inspector-hours on site in the areas of containment integrated leakage rate testing.

Results

Within the scope of this inspection, no violations or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Employees

*J. Hays, Plant Manager
B. Abrishami, Plant Engineer
R. Gouldy, Plant Engineer

Other Organizations

Stone and Webster

K. Kuechler
R. Parry
H. Kunkel
J. Busa
N. Desmond
R. Samson

NRC Resident Inspector

*R. Vogt-Lowell
*J. Agles

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on March 29, 1982, with those persons indicated in paragraph 1 above. The method and procedure for performing the CILRT is the same for Units 3 and 4. Licensee Management acknowledged the inspection findings without significant comment.

3. Licensee Action on Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Containment Integrated Leakage Rate Testing (CILRT)

During the period from March 27-29, the inspector witnessed performance of the CILRT for Unit 3 of the Turkey Point Nuclear Plant. Containment pressurization was initiated at 2130 hours on March 27, 1982. During containment pressurization, leakage via the personnel inner airlock resulted in pressure buildup in the airlock. Pressure in the airlock was recorded at 2 psig while the containment pressure was at 12 psig. Entry into the

airlock was made in an attempt to locate and seal the leak. Leakage was discovered occurring through a shaft seal on the airlock inner door. Grease was injected into the seal in an attempt to stop leakage. The repair was ineffective and leakage continued. A test rig was connected to the airlock and the leakage was permitted to flow from the airlock through the test rig in order to measure the leakage rate, which was determined to be approximately 8000 SCCM. Containment pressurization continued until 0435 hours on March 28, 1982 at which time the pressure was 68.6 psia and the compressors were stopped, isolated from the containment and vented to atmosphere.

The integrated leakage rate test including a stabilization period was initiated at 0700 hours on March 28, 1982 and continued until 0730 hours on March 29, 1982. Following are the test results based on the absolute test method mass point analysis:

Calculated leak rate	0.0993	%/day
Upper 95% confidence level	0.1069	%/day
Maximum allowable leakage rate	0.25	%/day
75% of maximum allowable leakage rate	0.1875	%/day

The acceptance criteria for the CILRT requires that the upper bound of the leakage rate calculated at 95% confidence level plus any required local leakage rate additions shall be less than 75% of maximum allowable leakage rate.

Subsequent to completion of the test described above the licensee agreed to conduct a local leakage rate test of the personnel airlock prior to depressurizing the containment and to add any measured leakage to the upper 95% confidence level. The need for this additional test occurred as a result of the attempted repair of the inner door leak, and to confirm that the outer door which subsequently became the containment boundary could withstand peak containment pressure with leakage less than that which would have caused the containment integrated leak rate to exceed 0.1875 %/day. The results of the airlock leak test indicated total airlock leakage to the atmosphere to be 0.0104%/day. By adding this leakage to the upper 95% confidence level, i.e., $0.1069 + 0.0104$ equals 0.1174 and does not exceed 0.1875%/day and is therefore acceptable. The results of the CILRT including the adjustment for local leakage rate testing will be submitted in a test report to the Commission.