



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 1217
ATLANTA, GEORGIA 30303

Report No.: 50-302/77-17

Docket No.: 50-302

License No.: DPR-72

Licensee: Florida Power Corporation
3201 34th Street, South
P. O. Box 14042
St. Petersburg, Florida 33733

Facility Name: Crystal River 3

Inspection at: Crystal River Site, Crystal River, Florida

Inspection conducted: September 20-23, 1977

Inspector: R. H. Wessman

Reviewed by:

H. C. Dance
H. C. Dance, Chief

Reactor Projects Section No. 1

Reactor Operations and Nuclear Support Branch

11/1/77
Date

Inspection Summary

Inspection on September 20-23, 1977 (Report No. 50-302/77-17)

Areas Inspected: Routine unannounced inspection to followup on Licensee Reportable Events; followup on IE Circulars; and to conduct a facility tour. The inspection involved 26 inspector-hours on site by one NRC inspector.

Results: Of the three areas inspected, two items of noncompliance were identified in one area (Deficiency - failure to meet reporting requirements - Details I, paragraph 5; Deficiency - failure to follow alarm response procedures - Details I, paragraph 6).

8002280 770

DETAILS I

Prepared by: R. H. Wessman
R. H. Wessman, Reactor Inspector
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

10/31/77
Date

Dates of Inspection: September 20-23, 1977

Reviewed by: H. C. Dance
H. C. Dance, Chief
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

11/1/77
Date

1. Persons ContactedFlorida Power Corporation (FPC)

- *G. P. Beatty, Jr., Nuclear Plant Manager
- *W. R. Nichols, Operations Supervisor
- *P. F. Mckee, Assistant Nuclear Plant Manager
- *G. F. Westafer, Technical Support Engineer
- *J. R. Wright, Chemical/Radiation Protection Engineer
- *J. Cooper, Compliance Auditor
- *C. G. Goering, Compliance Auditor
- G. L. Clarr, Compliance Auditor
- F. W. Pluebell, Electrical Supervisor

*Denotes those present at the exit interview.

2. Licensee Action on Previous Inspection Findings

Not inspected.

3. Unresolved Items

No new unresolved items.

4. Exit Interview

A meeting was held by R. H. Wessman with G. P. Beatty, Jr. on September 23, 1977. Items discussed included the noncompliance items (paragraphs 5 and 6 of these details) and other areas inspected. The licensee was also informed that R. H. Wessman would be the Principal NRC Inspector for this facility.

5. Failure to Meet Reporting Requirements

The inspector reviewed portions of LER 77-103E concerning an unplanned release that occurred on September 3, 1977. At 0716 on that date, while venting the makeup tank to the low pressure waste gas header, the loop seal on the miscellaneous waste evaporator was blown allowing a release. This event is reportable within 24 hours of occurrence as required by Environmental Technical Specification 5.6.2.A. Contrary to this Technical Specification, the NRC Region II Office was not notified until 1200 on September 4, 1977. This noncompliance item is considered a deficiency.

6. Failure to Follow Alarm Response Procedures

The inspector reviewed with the licensee the circumstances relating to an unmonitored gas release that occurred on September 18, 1977, during the conduct of a Reactor Building purge. (This release was reported to the NRC as Licensee Event Report 77-116E). As required by Technical Specifications, releases made during the conduct of a reactor building purge are monitored continuously by detector RM-A1. The licensee's procedure AP-103, Radiation Monitoring System Alarms, provides operator actions in the event of a monitoring system failure. In accordance with Section 2.0 of AP-103, the operator is required to immediately terminate the reactor building purge in the event of a failure of RM-A1.

At 0509 on September 18, 1977, while in the progress of conducting a reactor building purge, a RM-A1 hi/low flow alarm was received in the control room and recorded on the alarm typer. This alarm is indicative of a failure of RM-A1. The reactor building purge was not terminated until 0800 on that date. This action is contrary to Technical Specification 6.8.1 which requires that ". . . written procedures shall be established, implemented, and maintained . . ." This noncompliance item is considered a deficiency.

7. Review of Licensee Event Reports (LER's) Related to Surveillance Actions

The inspector reviewed various LER's related to surveillance actions to confirm licensee analyses of the occurrences and determine implementation of corrective actions. The following LER's were reviewed and closed:

77-42 - Missed ES System Surveillance

77-58 - Missed Surveillance on Motor-Driven Emergency Feed Pump

- 77-66 - Missed Nuclear Services Closed Cycle Cooling System Surveillance
- 77-68 - Missed I-131 Surveillance after Reactor Trip
- 77-82 - Missed Radiation Monitor Surveillance
- 77-84 - Failure to Enter Action Statement as a Result of a Battery Surveillance
- 77-98 - Missed RPS Channel "A" Surveillance

The inspector reviewed the licensee's program for control of surveillance activities and changes made as a result of these LER's. The following programmatic aspects are noted:

- a. Several surveillance actions were missed due to scheduled revisions to incorporate surveillance requirements of Section XI of the ASME Boiler and Pressure Vessel Code. The schedule has been reviewed to incorporate omissions.
- b. Several Surveillance actions were affected by changes to the master surveillance schedule. The schedule has been revised to incorporate omissions.
- c. A compliance auditor has been charged with daily monitoring of surveillance activities.
- d. The licensee's program to assure execution of "special situation" surveillances (those surveillances triggered by a change in a plant parameter or mode change) is under review.
- e. The inspector clarified LER entries concerning the "failure data" and violation code.

8. Review of Licensee Event Reports (LER's) Related To Plant Cooldown Rates

The inspector reviewed two LER's related to occurrences of an excess cooldown rate to confirm licensee analyses of the occurrences and determine implementation of corrective actions. The following LER's were reviewed:

- 77-20 - Excess Cooldown After Loss of Power to the Integrated Control System (Closed in IE Report 50-302/77-6)

77-29 - Excess Cooldown During RCS Shutdown From Outside Control

The inspector verified equipment maintenance records and confirmed procedure revisions to EP-113 (Plant Shutdown From Outside Control) and OP-209 (Plant Cooldown) generated as a result of LER 77-29. This LER is closed.

9. Review of Licensee Event Reports (LER's) Related to Meeting ACTION Statements

The inspector reviewed two LER's related to meeting Technical Specification ACTION statements to confirm licensee analyses of the occurrences and determine implementation of corrective actions. The following LER's were reviewed and closed:

77-62 - Exceeded 8-Hour Limit to Be Below 60% Power Upon Loss of Absolute Rod Position Indication

77-100 - Exceeded 12-Hour Limit to Be at Hot Shutdown Upon Core Flood Tank Inoperability

LER-77-62 corrective action was implemented via instructions given to operations personnel by the Operations Supervisor. LER 77-100 corrective action committed to the issue of a graph of conservative attainable cooldown rate by October 1, 1977. This graph has been issued and was reviewed by the inspector.

10. Review of Licensee Event Reports (LER's) Related to The Reactor Building Purge Monitor

The inspector reviewed various LER's related to difficulties with the reactor building purge monitor to confirm licensee analyses of the occurrences and determine implementation of corrective actions. The following LER's were reviewed:

77-27 - RM-A1 Vacuum Pump Inoperable

77-74 - RM-A1 Inoperable During Reactor Building Purge (Closed in IE Report 50-302/77-14)

77-105E - Commenced Reactor Building Purge with RM-A1 Inoperative

77-116E - Conducted Reactor Building Purge with RM-A1 inoperative

LER's 77-27, 105E, and 116E remain open pending further NRC review and implementation of licensee corrective actions. The following comments apply:

- a. The corrective action for LER 77-27 stated that a request is to be initiated to bring Appendix A Technical Specifications in conformance with Appendix B. This request for a Technical Specifications change has not been received by the NRC, according to Region II records.
- b. The changes to the reactor building purge section of OP-417, Containment Operating Procedure, as committed in the Corrective Action of LER 77-74E, were verified by the inspector. However a similar change to the containment equalization section of OP-417 had not been made. The licensee committed to implement this change by October 15, 1977.
- c. The licensee has generated an engineering design change request to trip the reactor building purge upon failure of the building purge monitor (RM-A1). This change is under corporate office review.

11. Review of Licensee Event Reports (LER's)

The inspector reviewed various LER's to confirm licensee analyses of the occurrences and determine implementation of corrective actions. LER's were reviewed and inspection activities are summarized as follows:

a. LER 77-77, Chemical Addition Pumps Inoperable

The inspector reviewed Work Request 3612 and verified installation of the pump vent valves. This LER is closed.

b. LER 77-85, Reactor Building Charcoal Filter Efficiency Low

The inspector verified the documentation generated concerning the replacement filter installation and retest executed on August 11, 1977. This LER is closed.

c. LER 77-86, Battery Specific Gravity Low

This LER is closed without comment.

d. LER 77-94, 3B Emergency Diesel Generator Failed to Start

The inspector reviewed a procedural change to SP-354, Emergency Diesel Fuel Oil Quality and Diesel Generator Monthly Test, which calls for a reset of local diesel trips. Also confirmed was the status of Plant Modification MAR 77-7-33. This modification, currently in engineering review, will provide control room annunciation of the inability of the diesel generators to perform any parameter of the starting sequence. This LER is closed.

e. LER 77-97, High Pressure Injection Valve (MUV-25) Inoperative

The inspector reviewed the licensee's program for corrective action. The licensee is checking all ES valve motor control centers for mechanical binding of the reversing interlocks in a manner similar to that reported in this LER. Additionally these interlocks are being cleaned, adjusted, and lubricated as necessary. The licensee has completed about 1/3 of the approximately 100 valve motor control centers scheduled for inspection. This LER is closed.

f. LER 77-99, Exceeded Primary Containment Average Air Temperature

This LER occurred as a result of an industrial cooling water supply valve being left closed. The inspector reviewed a procedural change to SP-344, Nuclear Service Cooling Water System Operability, which ensures that upon completion of SP-344 the cooling water supply valves will be verified in the open position. This LER is closed.

g. LER 77-107E, Gas Release From Makeup Tank During Hydrogen Header Maintenance

The inspector reviewed the work request, clearances, and maintenance controls relating to the hydrogen header maintenance action. This LER remains open pending NRC review of the health physics aspects of the event.

h. LER 77-104, Four RCS Flow Instruments Exceeded Calibration Tolerances

The inspector reviewed calibration data sheets for the differential pressure transmitters associated with this LER. This LER is closed.

12. Facility Tours

The inspector toured portions of the Crystal River 3 facility daily between the dates of September 20 and September 23, inclusive. The inspector noted various housekeeping and cleanliness items to licensee representatives, including the following:

- Compared to other recently licensed facilities, Crystal River has a large number of areas for which surface contamination requires specific health physics controls.
- Compared to other recently licensed facilities, Crystal River has many minor water leaks in auxiliary systems.
- Cleanup is not always executed immediately after some maintenance actions (examples are: entry room on 119-foot level outside containment access door, weld repair on decay heat closed cycle cooler, gage replacement on waste transfer pumps).
- Although most auxiliary building hallways, rooms, and galleries are clean, numerous chips and worn spots in floor paint allow any spilled contaminated liquids to soak into the concrete.

13. Review of IE Circulars

The inspector reviewed applicable IE Circulars with licensee personnel to ascertain that they had been received on site and reviewed by cognizant supervisory personnel. The following IE Circulars have been received by Crystal River 3:

<u>Circular No.</u>	<u>Subject</u>
77-01	Malfunctions of Limitorque Valve Operators
77-03	Fire Inside a Motor Control Center
77-04	Inadequate Lock Assemblies
77-05	Liquid Entrapment in Valve Bonnets
77-06	Effects of Hydraulic Fluid on Electrical Cable

77-08	Failure of Feedwater Sample Probe
77-10	Vacuum Conditions Resulting in Damage to Liquid Process Tanks

(IE Circulars 77-02, 77-07, and 77-09 are not applicable to Crystal River). The inspector suggested that IE Circulars be given appropriate supervisory routing (even if not applicable to an individuals discipline) as an aide in professional development.