UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report No: 50-302/86-35

Licensee: Florida Power Corporation
3201 34th Street, South
St. Petersburg, FL 33733

Docket No: 50-302 Licensee No.: DPR-72

Facility Name: Crystal River 3

Inspection Dates: October 10 - November 6, 1986

Inspectors: Bruce A. Wilson, for — 12/5/86
T. F. Stetka, Senior Resident Inspector — Date Signed

Bruce A. Wilson, for — 12/5/86
J. E. Tedrow, Resident Inspector — Date Signed

Approved by: Bruce A. Wilson, for — 12/5/86
S. A. Elrod, Section Chief — Date Signed
Division of Reactor Projects

SUMMARY

Scope: This routine inspection was conducted by two resident inspectors in the areas of plant operations, security, radiological controls, Licensee Event Reports and Nonconforming Operations Reports, review of IE Information Notices, preparations for refueling, and licensee action on previous inspection items. Numerous facility tours were conducted and facility operations observed. Some of these tours and observations were conducted on backshifts.

Results: One Violation was identified: (Failure to adhere to and maintain plant procedures as required by Technical Specification 6.8.1, paragraphs 5.b.(1)(a), 9, and 10.b).

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

*J. Alberdi, Manager, Nuclear Site Support
*W. Bandhauer, Assistant Nuclear Plant Operations Manager
*P. Breedlove, Nuclear Records Management Supervisor
*J. Colby, Manager, Nuclear Mechanical/Structural Engineering Services
M. Culver, Senior Nuclear Reactor Specialist
*P. Ezzell, Nuclear Compliance Specialist
*D. Fields, Nuclear Shift Supervisor
*A. Friend, Nuclear Staff Engineer
*M. Jacobs, Area Public Information Coordinator
*M. Laycock, Radiological Emergency Planning Specialist
*M. Mann, Nuclear Compliance Specialist
*P. McKee, Director, Nuclear Plant Operations
R. Murgatroyd, Nuclear Maintenance Superintendent
*T. Raper, Superintendent Nuclear Projects & Outage Scheduling
*S. Robinson, Nuclear Waste Manager
*V. Roppel, Manager, Nuclear Plant Technical Support
*W. Rossfeld, Nuclear Compliance Manager
*M. Siapno, Health Physics Supervisor
P. Skramstad, Nuclear Chemistry/Radiation Protection Superintendent
*P. Small, Maintenance Department Coordinator
E. Welch, Manager, Nuclear Electrical/I&C Engineering Services
*K. Wilson, Manager, Site Nuclear Licensing
R. Wittman, Nuclear Operations Superintendent

Other licensee employees contacted included office, operations, engineering, maintenance, chemistry/radiation and corporate personnel.

NRC Inspector

*H. Christensen, Project Engineer, Region II

*Attended exit interview

2. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on November 6, 1986. During this meeting, the inspector summarized the scope and findings of the inspection as they are detailed in this report with particular emphasis on the Violation, Unresolved Item (UNR) and Inspector Followup Items (IFI).

The licensee representatives acknowledged the inspector's comments and did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. Licensee Action on Previous Inspection Items

(Closed) IFI 302/86-09-02: The licensee modified the turbine bearing on the steam driven emergency feedwater pump by installing an oil plug. The licensee has revised maintenance procedure MP-162, Maintenance of Emergency Feedwater Pump Turbine Bearings (revision 7 dated October 1, 1986) to include instructions for modifying replacement bearings prior to installation. Licensee action on this item is considered to be complete.

(Closed) IFI 302/86-27-05: The inspectors attended the post maintenance job critique held by the licensee's maintenance department following identification of the valve being installed backwards. From this meeting the licensee determined that several actions would be required to prevent recurrence of this matter. These actions included the verification that all replacement spare Target Rock solenoid valves stored onsite have markings showing the direction of flow through the valve and a revision to the quality control receipt inspection checklist to include a check for markings on each new valve. The inspector reviewed this corrective action and considers licensee action on this item to be complete.

(Closed) IFI 302/86-20-02: In the licensee's response to NRC Inspection Report 50-302/86-20, the licensee committed to specific actions that will be accomplished prior to and during equalizing of reactor building pressure through the Post Accident Hydrogen Purge system. This commitment will prevent future misunderstanding. Action on this item is considered to be complete.

(Open) IFI 302/86-14-04: The inspector reviewed documentation for the use of Gulf Dieselmotive 471 lubricating oil in the Woodward governor for the Emergency Diesel Generators (EDG). The licensee plans on changing this oil to Mobil 1 to be consistent with that used in the Woodward governor for the emergency feedwater pump. The inspector reviewed the correspondence from the manufacturer which stated that Mobil 1 oil was acceptable for use in the governor of the EDG, however, this correspondence did not address whether the use of Gulf Dieselmotive 471 was acceptable. This item will remain open pending the inspector's review of the acceptability of using Gulf Dieselmotive 471 in the diesel governors.

(Closed) IFI 302/86-14-06: The licensee conducted an investigation in an attempt to determine the reason for the loose bolts on the flange between valves RCV-10 and RCV-11. This investigation, which included a visual inspection of other flanges and a search for any other abnormal conditions in the reactor building (RB), did not identify any further problems. The bolts were subsequently retorqued. To assure that this finding was not the result of personnel tampering, the licensee required supervisors to accompany workers into the RB for the remainder of the outage.

(Closed) IFI 302/85-41-07: Test procedure #3 for modification (MAR) 83-03-04-11 was successfully completed on August 14, 1985. Based upon the completion of this test, the Inadequate Core Cooling instrumentation is now fully operational.

(Closed) UNR 302/85-29-03: The inspector has reviewed the written engineering evaluation concerning the running of both EDG ventilation fans simultaneously during EDG testing. This evaluation determined that the running of the fans together was not detrimental to the fans or the duct work and that while they could be run continuously in this manner, it was desirable to secure one of the fans (since each fan supplies 100% of capacity) during an emergency condition to reduce loading on the EDG. As a result of this evaluation, the licensee has decided to continue to secure one of the fans during testing and will not need to revise any procedures.

(Closed) IFI 302/84-26-05: The licensee has revised the Operations Section Implementation Manual (OSIM) to delineate equipment operability requirements while the reactor is in a defueled condition. This revision meets the intent of IE Information Notice 84-42 and action on this item is considered to be complete.

(Closed) IFI 302/84-12-03: The licensee conducted an investigation and performed extensive testing on EDG-B in an attempt to determine the cause of the start failure. The investigation and testing did not identify any reason for the start failure and subsequent EDG operation has been satisfactory.

(Closed) IFI 302/84-26-04: The licensee has determined the service life of the continuously energized Agastat GP relays to be 4.5 years and has placed the ten affected relays into their their preventative maintenance (PM) program so that they will be replaced every four years. The replacement schedule for the Sylvania AC relays was discussed in the licensee's response to IE Bulletin 84-02 in which the licensee stated that the coils on these relays would be replaced during Refuel VI that is scheduled to begin in September 1987. These actions satisfy the intent of IE Information Notice 84-20.

(Closed) IFI 302/84-19-05: The licensee revised procedures SP-130 on 11/1/84 and SP-358 on 10/17/84 to provide for testing of the annunciators.

(Open) IFI 302/84-30-04: The licensee has written procedure PM-164, Raw Water (RW) Lining Inspection, that will be used in the PM program to provide a visual inspection of the lining of the RW system piping. When this procedure is issued, periodic inspection of this piping will be added to the PM program. This item remains open pending issuance of procedure PM-164 and the addition of this procedure to the PM program.

(Closed) IFI 302/84-22-05: The unconnected fan bearing temperature probes were identified by a Quality Programs Surveillance Report (QPSR) that was written by the licensee. The wires were left loose due to a problem with the documentation and a lack of parts. The parts were obtained, the documentation corrected, and the wires were reconnected.

(Closed) IFI 302/84-26-03: The modifications (MAR) to replace the cyclone separator valves were completed as MAR 84-01-18-03 on the reactor building spray pumps (BSP) (documented in NRC Inspection Report 50-302/85-19) and as MAR 84-01-18-01 on the decay heat removal pumps (DHP). These MARs were walked down by the inspectors to verify proper installation. Action on this item is considered to be complete.

(Closed) IFI 302/83-07-02: The licensee's investigation into the operation failure of valve MUV-41 indicated that the event was caused by a failure of the gears that drive the motor operator's limit switches. The gears were replaced and subsequent valve operation has been satisfactory.

(Closed) IFI 302/85-37-03: The licensee has conducted an extensive investigation into the excessive start times and start failures on EDG-A. This investigation indicated a number of items that contributed to the failures including fuel oil leaks, fuel oil pump problems, foreign material (dirt) on the fuel racks, and use of an oil in the Woodward governor (see IFI 302/86-14-04) that may have resulted in sluggish operation. These items have been corrected and the licensee is also considering installation of MARs that will further improve diesel reliability. The corrective actions taken to date have been effective and have resulted in reliable starting of the diesel.

(Closed) IFI 302/85-05-03: Problems with the calibrations completed on RMA-1 and RMA-2 high ranges were resolved through correspondence with the vendor. As a result of this correspondence, appropriate procedures were revised to reflect the new tolerances.

(Closed) IFI 302/85-41-06: MAR 85-09-09-01, which added the ability to periodically test the containment hydrogen monitoring system, was completed on 11/13/85. Procedures SP-160A and SP-160B, which were written to implement the periodic testing, have been issued and implemented. The inspectors have field verified the modification and observed use of the new procedures.

(Closed) Deviation 302/85-44-01: By letter dated August 20, 1986, regarding the Notice of Violation for NRC Inspection Report 50-302/86-22, the licensee was informed that after evaluation by the NRC, it was determined that the Deviation did occur. This correspondence further stated that the actions taken by the licensee were considered to be appropriate and that no further response to the Deviation was required.

(Closed) IFI 302/86-23-11: The licensee's consulting engineer completed their evaluations and determined that the turbine driven emergency feedwater pump's (EFP-2) design nozzle loadings did exceed the manufacturer's recommendations. This problem occurred because the manufacturer did not specify any nozzle loading recommendations in the past. These excessive loadings did not cause any pump failure and the licensee has redesigned and installed new pump supports to assure that nozzle loading conditions remain within the manufacturer's recommendations.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. A new unresolved item is identified in paragraph 6.b.(3) of this report.

5. Review of Plant Operations

The plant remained in power operation (Mode 1) for the duration of this inspection period.

a. Shift Logs and Facility Records

The inspector reviewed records and discussed various entries with operations personnel to verify compliance with the Technical Specifications (TSs) and the licensee's administrative procedures.

The following records were reviewed:

Shift Supervisor's Log; Reactor Operator's Log; Equipment Out-Of-Service Log; Shift Relief Checklist; Auxiliary Building Operator's Log; Active Clearance Log; Daily Operating Surveillance Log; Work Request Log; Short Term Instructions (STIs); and Selected Chemistry/Radiation Protection Logs.

In addition to these record reviews, the inspector independently verified clearance order tagouts.

No violations or deviations were identified.

b. Facility Tours and Observations

Throughout the inspection period, facility tours were conducted to observe operations and maintenance activities in progress. Some operations and maintenance activity observations were conducted during backshifts. Also, during this inspection period, licensee meetings were attended by the inspector to observe planning and management activities.

The facility tours and observations encompassed the following areas: security perimeter fence; control room; emergency diesel generator room; auxiliary building (AB); intermediate building; battery rooms; and, electrical switchgear rooms.

During these tours, the following observations were made:

(1) Monitoring Instrumentation - The following instrumentation was observed to verify that indicated parameters were in accordance with the TS for the current operational mode:

Equipment operating status; area atmospheric and liquid radiation monitors; electrical system lineup; reactor operating parameters; and auxiliary equipment operating parameters.

As a result of these reviews the following items were identified:

(a) During a routine tour of the AB on October 23, 1986, the inspector noticed that a cooling water supply valve (DCV-96) to the "A" Decay Heat Pump (DHP-1A) gear box was only a few turns open. The position of this valve differed from the fully open position of similar valves on other pumps. DHP-1A is one train of the low pressure safety injection water source for the Engineered Safeguards (ES) system.

The valve position is controlled in accordance with operating procedure OP-404, Decay Heat Removal System. Section 11 of this procedure establishes the ES standby configuration of this system and requires, in Valve Checklist II, that valve DCV-96 be open.

Upon notification of this finding, the licensee re-positioned valve DCV-96 to the full open position and verified the position of cooling water valves to the other pumps. The licensee is presently continuing to investigate this matter.

Although limiting the flow of cooling water to the gear box of this pump did not appear to affect the successful completion of the pump's, periodic surveillance testing, failure to maintain this valve in the required ES standby position is contrary to the requirements of procedure OP-404 and is considered to be a violation of Technical Specification (TS) 6.8.1.

Violation (302/86-35-01): Failure to adhere to the requirements of TS 6.8.1.

(b) During the licensee's valve verification process discussed above, the inspector noticed that the Plant Operations staff did not have adequate information regarding the positioning and verification of "throttled" valves. Procedure OP-404 did not address what the correct valve positions were for throttled valves. The licensee is evaluating this problem and intends to provide criteria in the procedure to enable the staff to make proper throttle settings. The licensee will also check other procedures and add similar criteria as necessary.

Inspector Followup Item (302/86-35-02): Review the licensee's action to provide guidance in operating procedures to establish the correct throttled position of valves.

(c) During a routine tour of the Auxiliary Building (AB) on October 21, the inspector noted an apparent low level in the sight glass on the Woodward governor on EDG-B. The inspector also noted that a yellow maintenance tag had been placed on the sight glass by operations personnel to identify the fact that the lower limit on this oil level could not be determined due to the lack of a low level mark on the sight glass and that EDG-A had such a marking on it's sight glass. Subsequent discussions with licensee personnel indicate that the oil level is appropriate as long as a level is visible in the sight glass (which it was in this case). The licensee acknowledged the observations made by the inspector and intends to replace the sight glass with one that has a low level marking.

Inspector Followup Item (302/86-35-03): Review the licensee's activities to replace the Woodward governor sight glass on EDG-B.

(2) Safety Systems Walkdown - The inspector conducted a walkdown of the Fire Service Water (FS) system to verify that the lineup was in accordance with license requirements for system operability and that the system drawing and procedure correctly reflect "as-built" plant conditions.

No violations or deviations were identified.

(3) Shift Staffing - The inspector verified that operating shift staffing was in accordance with TS requirements and that control room operations were being conducted in an orderly and professional manner. In addition, the inspector observed shift turnovers on various occasions to verify the continuity of plant status, operational problems, and other pertinent plant information during these turnovers.

No violations or deviations were identified.

(4) Plant Housekeeping Conditions - Storage of material and components and cleanliness conditions of various areas throughout the facility were observed to determine whether safety and/or fire hazards existed.

No violations or deviations were identified.

(5) Radiation Areas - Radiation Control Areas (RCAs) were observed to verify proper identification and implementation. These observations included selected licensee conducted surveys, review of step-off pad conditions, disposal of contaminated clothing, and area posting. Area postings were independently verified for accuracy by the inspectors. The inspectors also reviewed selected radiation work permits and observed the use of protective

clothing, respirators, and personnel monitoring devices to assure that the licensee's radiation monitoring policies were being followed.

No violations or deviations were identified.

(6) Security Control - Security controls were observed to verify that security barriers were intact, guard forces were on duty, and access to the Protected Area (PA) was controlled in accordance with the facility security plan. Personnel within the PA were observed to verify proper display of badges and that personnel requiring escort were properly escorted. Personnel within vital areas were observed to ensure proper authorization for the area.

No violations or deviations were identified.

(7) Fire Protection - Fire protection activities, staffing and equipment were observed to verify that fire brigade staffing was appropriate and that fire alarms, extinguishing equipment, actuating controls, fire fighting equipment, emergency equipment, and fire barriers were operable.

No violations or deviations were identified.

(8) Surveillance - Surveillance tests were observed to verify that approved procedures were being used; qualified personnel were conducting the tests; tests were adequate to verify equipment operability; calibrated equipment, was utilized; and TS requirements were followed. The following tests were observed and/or data reviewed:

- SP-110, Reactor Protective System Functional Testing;
- SP-113, Power Range Nuclear Instrumentation Calibration;
- SP-130, Engineered Safeguards Monthly Functional Tests;
- SP-312, Heat Balance Calculations;
- SP-317, RC System Water Inventory Balance;
- SP-335, Radiation Monitoring Instrumentation Functional Test;
- SP-443, Master Surveillance Plan; and
- SP-702, Reactor Coolant and Decay Heat Daily Surveillance Program.

No violations or deviations were identified.

(9) Maintenance Activities - The inspector observed maintenance activities to verify that correct equipment clearances were in effect; work requests and fire prevention work permits, as required, were issued and being followed; quality control personnel were available for inspection activities as required; and TS requirements were being followed. Maintenance was observed and work packages were reviewed for the following maintenance activities:

- Repair of operator linkage for valve DHV-7;
- Replacement of the sight glass and tightening of fittings for hydraulic snubber MSH-117 in accordance with procedure MP-177;
- Verification of correct power patching in control rod drive transfer cabinet #3 in accordance with procedure MP-108A;
- Replacement of the oil cooler and oil change for the "B" nuclear services closed cycle cooling water (SW) pump in accordance with procedures MP-122, MP-509, and PM-133; and
- Resetting the Emergency Feedwater Initiation and Control (EFIC) overfill bistables in accordance with procedure SP-146.

No violations or deviations were identified.

(10) Radioactive Waste Controls - Solid waste compacting and selected liquid and gaseous releases were observed to verify that approved procedures were utilized, that appropriate release approvals were obtained, and that required surveys were taken.

No violations or deviations were identified.

(11) Pipe Hangers and Seismic Restraints - Several pipe hangers and seismic restraints (snubbers) on safety-related systems were observed to insure that fluid levels were adequate and no leakage was evident, that restraint settings were appropriate, and that anchoring points were not binding.

No violations or deviations were identified.

6. Review of Licensee Event Reports and Nonconforming Operations Reports

a. Licensee Event Reports (LERs) were reviewed for potential generic impact, to detect trends, and to determine whether corrective actions appeared appropriate. Events, which were reported immediately, were reviewed as they occurred to determine if the TS were satisfied.

LERs 84-23, 86-09, 86-14, and 86-16 were reviewed in accordance with current NRC policy. LERs 86-09, 86-14 and 86-16 are closed.

(Open) LER 84-23 reported a deviation from the administrative controls for Low Temperature Overpressure Protection (LTOP). This LER was initially closed in NRC Inspection Report 50-302/85-25. Subsequent correspondence between the NRC and the licensee indicates that an alarm for the Power Operated Relief Valve (PORV) low pressure setpoint and alarms for the high pressure injection valve power supply breakers need to be installed. The licensee plans to install these alarms during the next refueling outage. This LER is reopened and will remain open until the licensee's action is completed.

b. The inspector reviewed Nonconforming Operations Reports (NCORs) to verify the following: compliance with the TS, corrective actions as identified in the reports or during subsequent reviews have been accomplished or are being pursued for completion, generic items are identified and reported as required by 10 CFR Part 21, and items are reported as required by TS.

All NCORs were reviewed in accordance with the current NRC Policy.

(1) NCORs 86-169 and 86-174 reported that surveillance procedure SP-335, Radiation Monitoring Instrumentation Functional Test, was not adequately performing the channel functional test required by TS 4.3.3.9 on effluent flowrate monitor WD-19-FE and that SP-335 was not adequately testing the containment hydrogen purge system as required by TS 4.6.4.2.a. The licensee has recently revised and performed procedure SP-335 to test the hydrogen purge system. Parts of this test were observed by the inspector and the completed test procedure was reviewed. The licensee is revising procedure SP-335 to incorporate a channel functional test of WD-19-FE. The licensee plans on reporting this matter with an LER. This item is considered to be a licensee identified violation in which adequate corrective action has been taken to prevent recurrence.

(2) NCOR 86-167 reported conflicting statements between the Final Safety Analysis Report (FSAR) and TS regarding the necessary volume of water needed in the condensate storage tank (CST) to cooldown the plant from normal operating temperature. TS 3.7.1.3 requires 150,000 gallons of water to be maintained in the CST while section 10.2.1.2 of the FSAR states that 112,000 gallons is required to support cooldown. The licensee has performed calculations which indicate that approximately 400,000 gallons of water would be necessary to cooldown the plant. The licensee is preparing a submittal to the NRC which will correct all conflicting information and to clearly establish the minimum volume of water needed in the CST.

Inspector Followup Item (302/86-35-04): Review the licensee's submittal to the NRC regarding the minimum volume of water required to be maintained in the CST.

(3) NCOR 86-176 reported the unauthorized release of radioactive material outside of the RCA on October 27. The first item found was a piece of scaffolding that was located in a scrap pile. Following this discovery, the licensee conducted additional surveys of various scrap piles to determine if other material had been released. As a result of these surveys the licensee found two more contaminated items (a chainfall and a submersible pump) in the scrap piles.

The licensee has completed a complete survey of the scrap piles and is planning the following corrective actions:

- Perform a complete survey of all areas within the PA;
- Build barriers outside of the Hot Shop and the reactor building equipment hatch area that will clearly identify the contaminated and clean areas;
- Provide instruction to the guard force personnel to be especially observant of materials leaving the contaminated areas; and
- Assign a senior Health Physics (HP) person to study the problem of equipment control.

This item is considered to be Unresolved pending completion of the licensee's plans and review of this issue by NRC Region II Health Physics inspectors.

Unresolved Item (302/86-35-05): Licensee complete the corrective actions proposed to prevent the unauthorized release of radioactive materials outside of the RCA and NRC review.

(4) NCOR 86-171 reported exceeding the maximum emergency feedwater (EFW) design flow of 1175 gallons per minute (gpm) to the "B" Once Through Steam Generator (OTSG) during a transient that occurred on June 20, 1986. Details of this transient were reported in LER 86-008 on July 17, 1986.

During this transient, the B OTSG experienced an EFW flow rate of approximately 1700 gpm. The higher than designed flow rate was discovered by the licensee during subsequent licensing reviews on the emergency feedwater system. Preliminary investigation that was based on the Rancho Seco Nuclear plant by the OTSG vendor Babcock and Wilcox (B&W), indicate that the high flow rate was not

detrimental to the OTSG. B&W is presently performing an analysis that is unique to the Crystal River plant to assure that the OTSG was not degraded by the event.

Inspector Followup Item (302/86-35-06): Review the final B&W analysis concerning the high EFW flowrate to the "B" OTSG.

7. Review of 10 CFR Part 21 Evaluations

The following evaluation reports were reviewed by the inspector to verify compliance with 10 CFR Part 21:

- A July 23, 1983 evaluation of NCOR 83-14 (and associated LER 83-22) regarding degraded seawater system (RW) piping liners;

- A January 30, 1985 evaluation of NCOR 84-199 regarding a design error on the cyclone separator valves in the reactor building spray and decay heat removal systems;

- An October 8, 1986 evaluation of the use of Velan valve stem replacement parts; and,

- An August 26, 1986 evaluation of NCOR 86-34 on the failure of the "A" reactor coolant pump shaft.

No violations or deviations were identified.

8. Review of IE Information Notices (IN)

The inspector reviewed the licensee's activities with respect to the following IN's:

- IN 83-84: Cracked and Broken Piston Rods in Brown Bovery Electric Type 5HK Breakers; and,

- IN 86-07: Lack of Detailed Instruction and Inadequate Observance of Precautions During Maintenance and Testing of Diesel Generator Woodward Governors.

As a result of this review, the licensee's activities with respect to these INs are considered to be complete and no violations or deviations were identified.

9. Preparations for Refueling

The licensee conducted a visual inspection of selected spent fuel bundles in preparation for their reuse during the next refuel outage that is scheduled to begin in September 1987. The inspectors observed these inspection activities and, in preparation of these observations, reviewed the following procedures:

- FP-601, Fuel Handling Equipment Operations; and

- FP-602, Irradiated Fuel Assembly Inspection.

On October 22, while observing the start-up of the refueling bridge (FHCR-3), performed in accordance with Enclosure 7 of FP-601, the inspector noted that the operator failed to close and lock the console doors on the bridge as required by the procedure. When the inspector questioned the operator about this omission, the operator responded that a key was not available, that he had been starting the bridge without locking the cabinet, and that he would notify his supervision of the discrepancy. The operator then continued on with the bridge startup without notifying his supervision of the discrepancy so that appropriate action could be taken.

During subsequent discussions with operations supervisory personnel, it was determined that a key was available and that the operator failed to obtain the key. At this time a key was supplied to the operator and appropriate procedure changes made to insure that the intent of the procedure was clear.

Failure to adhere to the requirements of a procedure is contrary to the requirements of TS 6.8.1 and is considered to be a Violation.

This Violation is considered to be another example of the Violation identified in paragraph 5.b.(1)(a), item (302/86-35-01) of this report.

10. Nonroutine Event Followup

During this inspection period the following nonroutine events occurred:

a. At 7:13 p.m. on November 3 and again at 12:47 p.m. on November 6, plant transients occurred when Main Feedwater Pump (FWP) 1B oversped resulting in overfilling of the "B" OTSG. These transients occurred over a short time period of approximately one minute and did not result in a plant trip.

   The licensee is presently investigating the cause of these random overspeed events and believes that the event may be caused by the governor on FWP-1B since oscillations of this pump's speed had been observed in the past. The licensee's plan is to reduce power in the near future to enable removal of this pump from service and replace the governor.

   Inspector Followup Item (302/86-35-07): Review the licensee's activities to determine the reason for the pump overspeed and effect repair of FWP-1B.

b. At approximately 8:33 p.m. on November 3, the licensee experienced a high radiation event in the AB. This event, which was the result of a release of fission gases into the AB, caused a number of radiation monitoring instruments to go into the warning state (below the alarm point) and gradually caused monitors RMG-5, RMA-2 particulate, and

RMA-3 to go into an alarm status. As a result of these warnings and alarms, the AB was evacuated at approximately 9:05 p.m.

Since venting operations of the make-up tank (MUT) were in progress at the time and operations personnel in the AB were involved in draining down a separator tank on a waste gas (WG) compressor, the operators knew immediately what the cause of the high radiation was and took appropriate actions. The draining operation, which caused the emission of WG from the WG system to the AB, was immediately secured. This event did not result in an unmonitored release to the environment.

Subsequent investigation of this event by the licensee determined that the operator performing the draining operation left the area momentarily at the same time that the venting of the MUT was begun. The venting of the MUT results in the starting of the WG compressor which then blew WG into the AB.

The licensee has determined that no procedure exists to perform the draining operation on the WG compressor separator tank (such procedures do exist for draining/venting other parts of the system). Such a procedure would have required the operator to remain at the tank during the draining operation. The licensee will develop a procedure to direct such draining operations and will add caution statements to their existing procedure for venting the MUT (OP-402) to assure that no other draining or venting operations of the WG system are in progress during MUT venting.

Inspector Followup Item (302/86-35-08): Review the licensee's activities to develop a procedure for draining the separator tank on the WG compressors and to add a caution note for MUT venting in OP-402.

As a result of this event, the inspector reviewed the emergency plan (EM) procedures to verify compliance with these procedures. During this review the inspector noted that procedure EM-202, Duties of the Emergency Coordinator, revision 26 dated February 13, 1986, with an additional change made on August 14, 1986, was inadequate in that it referenced the following cancelled or non-existent procedures:

- AP-102 and AP-112 that were cancelled on July 14, 1983;

- EM-303 and EM-204(c) that were cancelled on February 7, 1986;

- AP-241, AP-242, AP-243, AP-244, AP-245, and AP-251 that were cancelled on May 12, 1986; and

- EM-114 and EM-390 that do not exist.

These cancelled or nonexistent procedures appear in the "Classification of Postulated Accident Table" of procedure EM-202 to direct the emergency coordinator to the appropriate procedures based upon the accident scenario.

Failure to maintain procedure EM-202 is contrary to the requirements of TS 6.8.1 and is considered to be a Violation.

This violation is considered to be another example of the Violation identified in paragraph 5.b.(1)(a), item (302/86-35-01), of this report.