

U.S. NUCLEAR REGULATORY COMMISSION  
REGION III

Report No. 50-341/88021(DRP)

Docket No. 50-341

License No. NPF-43

Licensee: Detroit Edison Company  
2000 Second Avenue  
Detroit, MI 48226

Facility Name: Fermi 2

Inspection At: Fermi Site, Newport, Michigan

Inspection Conducted: July 16 through August 31, 1988

Inspectors: W. Rogers

T. Silko

S. Stasek

K. Ridgeway

Approved By: R. Cooper, Chief *R. W. Cooper, #*  
Reactor Projects Section 3B

*10/12/88*  
Date

Inspection Summary

Inspection on July 16 to August 31, 1988 (Report No. 50-341/88021(DRP))

Areas Inspected: Action on previous inspection findings; operational safety; maintenance; surveillance; followup of events; LER followup; startup test observation; personnel qualifications; regional requests; and review of allegations.

Results: Two violations were identified (Paragraph 3). One unresolved item was identified (Paragraph 6) and four open items were identified (Paragraphs 3, 4, 7 and 10).

## DETAILS

### 1. Persons Contacted

#### a. Detroit Edison Company

- \*P. Anthony, Licensing
- L. Bregni, Senior Licensing Engineer
- R. Bryer, Safety
- \*S. Catola, Vice President, Nuclear Engineering and Services
- T. Dong, Safety
- C. Gelletly, Nuclear Engineering General Supervisor
- \*D. Gipson, Plant Manager
- \*L. Goodman, Licensing
- D. Grimes, Fluids Systems Engineer
- G. Hunt, MTE Support
- R. Lenart, Nuclear Engineering General Director
- P. McComish, Safety
- R. Matthews, I&C General Superintendent
- T. Meesseman, Training
- \*W. Orser, Vice President, Nuclear Operations
- \*G. Preston, Operations Engineer
- \*T. Riley, Supervisor Compliance
- J. Sabo, Plant Engineer
- M. Sierra, Technical Staff Engineer
- \*R. Stafford, Director NQA and PS
- W. Terrasi, General Supervisor Chemistry
- \*W. Tucker, Operations Superintendent
- J. Wald, Production Quality Assurance Supervisor
- E. Wilds, Lead Engineer Fluids
- L. Wooden, Nuclear Engineering Staff

#### b. U.S. Nuclear Regulatory Commission

- K. Ridgeway, Senior Resident Inspector, LaCrosse
- \*W. Rogers, Senior Resident Inspector
- T. Silko, Inspector
- \*S. Stasek, Resident Inspector

\*Denotes those attending the exit meeting on September 20, 1988.

The inspectors also interviewed others of the licensee's staff during this inspection.

### 2. Followup on Inspector Identified Items (92701)

a. (Closed) Unresolved Item 341/88003-07: Adequacy of locked valve guidelines. In a previous inspection, the inspector questioned why Valves B21-F077A/B, B21-F104A/B/C/D, P44-F400A/B and numerous other valves were not identified in the licensee's locked valve program. The inspector requested that the locked valve guidelines be provided. The guidelines provided were from Procedure 21.000.14,

"Locked Valve Guidelines." This procedure stated that valves without position indication in the control room in ESF systems where misalignment could defeat the safety function of the system or decrease its capacity or state of readiness should be in the program. The valves identified by the inspector met this criteria but were not in the program. This procedure was used to implement a NUREG-0737 item as discussed in the FSAR Section H.II.K.1.5.3. Therefore, this is considered a violation (341/88021-01) of Technical Specification 6.8.1.b for failure to implement Fermi 2 commitments made in response to NUREG-0737 requirements. Presently, the licensee is reviewing ESF systems versus the locked valve criteria.

- b. (Closed) Unresolved Item 341/87009-02: Testing of main steam isolation valve leakage control system (MSIVLCS) deactivate circuits. The inspector requested NRR review of this circuit as to its applicability under Technical Specification surveillance testing. In a memorandum dated June 12, 1988, NRR responded that the circuit is required to be tested under Technical Specification requirements. The inspector informed the licensee of this position which the licensee acknowledged and showed the inspector a revised surveillance procedure reflecting appropriate circuit testing. The procedure had been revised and performed prior to issuance of the NRR letter. Since the matter was corrected and did not appear to have generic significance, this matter is considered resolved.
- c. (Closed) Unresolved Item 341/87026-05: UFSAR accuracy. The licensee reviewed the Safety Evaluation Logs for 1985, 1986 and 1987 and determined that 87 entries needed further review to determine whether they were incorporated into the UFSAR. Four entries were determined to need incorporation. The inspector determined that these actions were sufficient to resolve the inspector's concerns.
- d. (Closed) Open Item 341/88003-03: Feedwater control system problems. The licensee discovered and repaired a large oil leak and performed troubleshooting/tuning of the control system circuitry. Following these actions the licensee was able to successfully pass feedwater control testing. This matter is considered closed.
- e. (Closed) Unresolved Item 341/88003-04: Independent verification deficiencies. Violations 88012-02 and 10 superseded this matter by elevating independent verification concerns to the violation category. This matter is considered closed based on issuance of these violations.
- f. (Open) Open Item 341/87020-01: EXO-Sensor Action Plan. To resolve reliability concerns reported under a Part 21 report, the licensee implemented an action plan to assure operability of the drywell H2/O2 sensors in the Post Accident Monitoring System. This plan consisted of:

- (1) Performing a function test of the sensors every 31 days.
- (2) Changing out the sensors every six months.
- (3) Reducing sensing line heat trace temperature 20°F to reduce loss of electrolytes.
- (4) Pursuing with the vendor a new membrane made of a different material.

Monthly functional tests conducted during 1988 have shown no problems with the sensors; however, several procedural problems had to be resolved during this period. Deviation Event Report (DER) 88-1237, was issued on June 29, 1988, when the six month changeout of the H2 sensor could not be made since it was on a QC hold because the vendor source surveillance check had not been completed prior to delivery. It was returned to the vendor for the source check, but it was not available at the site in time to meet the scheduled six month replacement. A change in the vendor's ownership in late 1987 has complicated the quality control, and a vendor inspection by DECO when the sensor was returned showed several deficiencies in the new vendors quality program. Corrective actions are underway.

The reduction in sensing line heat tracing temperature has been initiated to decrease the loss of sensor electrolyte. The electrolyte loss for the first sensor exchange in July was not yet available.

Discussions have been held with the vendor on possible new membrane material, but this will be a long term item.

- g. (Closed) Unresolved Item 341/86039-05: Emergency core cooling flow control setpoints. In Inspection Report No. 86039, the inspector documented that the licensee considered the ECCS flowrates in the Technical Specifications as nominal values instead of absolute values. As such the licensee did not account for instrument inaccuracy in assuring the appropriate flowrate was achieved to the reactor vessel for HPCI & RCIC. The inspector requested confirmation from NRR that the Technical Specification values were absolute instead of nominal. In a memorandum dated June 22, 1988, NRR confirmation was received which stated in part "All numbers in the TSs should be considered absolute unless otherwise noted." Therefore, the licensee did not meet Technical Specification Surveillance Requirement 4.5.1.a.3 for having the HPCI flow controller in the correct position or 4.7.4.a.3 for the RCIC flow controller. The difference was 40 gpm for RCIC and 200 gpm for HPCI. This is considered a violation (341/88021-02) of Technical Specifications 4.5.1.a.3 and 4.7.4.a.3. The generic implication of using nominal in lieu of absolute values for establishing controller setpoints is also of concern.

No other violations or deviations were identified in this area.

### 3. Operational Safety Verification (71707)

The inspectors observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the period from July 16 through August 31, 1988. The inspectors verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the reactor building and turbine building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance.

The inspectors, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

The inspectors observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. During the inspection, the inspectors walked down the accessible portions of the standby gas treatment and standby liquid control systems to verify operability by comparing system lineup with plant drawings, as-built configuration or present valve lineup lists; observing equipment conditions that could degrade performance; and verified that instrumentation was properly valved, functioning, and calibrated.

The inspectors also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under Technical Specifications, 10 CFR, and administrative procedures.

During these reviews:

- a. A discussion was held between the inspector and the licensee regarding HPCI and RCIC oil sampling. At the time of the discussion, if an oil sample showed a high particle count, instructions would be provided to operations for a method of cleaning the oil, but guidance was not offered as to whether the system should be declared inoperative. Procedure 71.000.15, Attachment 2, "Oil Change Data Sheet," was revised such that if the results of the oil sample show a particle count greater than that specified in the "out of specification" range, the system is to be declared inoperative per Technical Specifications by the NSS, until such time that oil purity has been restored to at least the "requiring purification" range. The inspector has no further questions in this area.
- b. The inspector discussed with the licensee the placing of the HPCI and RCIC pumps physically inoperative when the external purifier (non-seismic) is added to the system. The licensee is considering declaring the system administratively inoperative rather than physically removing the system from service and declaring the

system inoperative when the external purifier is in use. The inspector concurs that administratively declaring the system out of service, rather than physically removing the system from service is a more prudent action and will increase the availability of the system to perform its intended safety functions. The inspector has no further questions in this area.

- c. The inspector noted during walkdowns in the control room, that area lighting levels varied significantly shift to shift. When questioned about the variance, operators stated that no standard was currently provided and, therefore each shift adjusted the level of lighting to that which seemed most appropriate and comfortable. Some shifts preferred subdued lighting levels to allow for easier identification of indicating light status on the panels while others preferred more light to better read equipment tags and indicators/recorders. Also, the operators indicated that due to the design and/or placement of the temperature controller(s) in the CCHVAC system, area temperature levels become uncomfortably low at times and that by adjusting lighting levels, an alternate method of temperature control could be achieved. The inspector then questioned licensee management whether this situation was in accordance with the guidance in NUREG-0700 or with the licensee's Detailed Control Room Design Review (DCRDR) conducted previously. In response, an evaluation of control room lighting was initiated, illumination limits were established and operators were instructed on maintaining lighting within the appropriate limits. The evaluation was conducted by engineering and new limits communicated to the operators via a plant night order. This will remain an open item pending inspector review of the newly specified limits and of the results of the licensee's DCRDR relative to this concern (341/880021-03 (DRP)).
- d. At 0020 hours, July 23, 1988, with the reactor at approximately 90 percent power, a power reduction/shutdown was initiated due to increasing Drywell (D/W) unidentified leakage. At 0106 hours, calculated D/W unidentified leakage exceeded the Technical Specification limit of 5.0 gpm (actual 5.4) and at 0505 hours, in accordance with the licensee's approved Emergency Plan, an Unusual Event was declared. At 1516 hours, the reactor was manually scrammed from 10 percent power. The licensee subsequently determined the source of the leakage as the RCIC Inboard Steam Supply Isolation Valve and the RWCU vessel drain line valve (G33-F100). The inspector observed various stages of the reactor S/D and verified licensee actions as being in accordance with Technical Specifications.

During the reactor shutdown, the inspector discussed the following issues with the licensee:

- (1) Drywell de-inerting via the Torus-to-Drywell vacuum Breakers. While at approximately 10 percent power, the licensee planned to enter the D/W and investigate the source of the leakage. Failure to de-inert the D/W due to an inoperable T4803-F602 "D/W Exhaust Inboard Isolation Valve," rendered D/W access while in Modes 1 and 2 impossible.

Due to the inoperative F602, Primary Containment was inerted on May 17, 1988, via the process of opening the D/W to torus vacuum breakers (refer to Inspection Report No. 50-341-88012) and adding nitrogen to the torus free air space. Inerting the Drywell via this flow path is discussed in a note to Technical Specification 3.6.4.1 which allows "the suppression chamber Drywell vacuum breakers be manually opened for inerting containment," but does not state the appropriateness of this flow path to de-inert. The Office of Nuclear Reactor Regulation (NRR) was contacted for an interpretation of this note. NRR's interpretation was that under the current 3.6.4.1 Technical Specification, the Drywell-to-Torus vacuum breakers will not be used during the de-inerting process. This interpretation was discussed with, and acknowledged by the licensee.

- (2) Requirement for Containment Airborne Particulate Monitoring. During the reactor S/D, the inspector questioned an apparent discrepancy between the UFSAR Appendix A, Technical Specifications, and Regulatory Guide 1.45 regarding airborne particulate monitoring of the primary containment atmosphere. The UFSAR states that in accordance with Regulatory Position 3 of Regulatory Guide 1.45, containment monitored parameters include, but are not limited to, sump level, sump level flow, and airborne particulate rates. In actuality, no on-line containment particulate monitor exists. Further investigation determined that a July 1981 Fermi Safety Evaluation Report (SER), NUREG-0998, discussed on Pages 5-18 and 5-19 the subject of leakage monitoring. The SER acknowledged that monitoring of airborne particulate is not performed, but that other systems being used are sufficient to meet the intent of Regulatory Guide 1.45. The other systems used to monitor for leakage are (1) sump level and flow monitoring, (2) a supplementary Drywell sump level monitor, and (3) airborne gaseous radioactivity monitoring.

The inspector concluded that the above monitoring methods with the stated alternative comply with the intent of Regulatory Guide 1.45. Additionally, pressure, temperature, and humidity measuring devices are also used to indicate the existence of leakage.

The licensee identified to the inspector that a clarification of the UFSAR was previously identified as documented in UFCN 88-068 drafted June 7, 1988. UFCN 88-068 was reviewed by the inspector and it adequately addressed the required clarification and was currently in the normal approval process.

- (3) Weaknesses in the coordination in determining the leakage source. The licensee also recognized that the organizational response to leaks needed improvement in the radiochemistry analysis area and the communication of that analysis to the

NSS and plant management. Numerous procedure changes were enacted to provide clearer direction to personnel taking the samples and what to evaluate the samples for and from what location samples should be extracted. Personnel were briefed on this event to provide a stronger perspective as to what is needed.

No violations or deviations were identified in this area.

4. Monthly Maintenance Observation (62703)

Station maintenance activities on safety-related systems and components listed below were observed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with Technical Specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and fire prevention controls were implemented.

Work requests were reviewed to determine the status of outstanding jobs and to assure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were observed:

- Troubleshoot and repair Drywell Exhaust Inboard Isolation Valve T4803-F602 (WR 022B0517).
- Troubleshoot and repair Drywell Vent/Inboard Isolation Valve T4803-F601 (WR 001B0728).
- Leak repair to RCIC steam supply inboard Isolation Valve E81-F007.
- Troubleshooting of B Recirculation pump discharge Valve B31-F031B failure to close from the Control Room (WR 003B0828).
- Troubleshooting activities into the cause of the scram of 24 control rods (WR 002B0802).

Following completion of maintenance on the RCIC valve, the inspectors verified that the system had been returned to service properly.

While observing post-maintenance testing on the High Pressure Coolant Injection (HPCI) System, the inspector noted the verification of system operability was conducted using certain sections of Operating Procedure 23.202, "High Pressure Coolant Injection System." However, since 23.202 is a system operating procedure and provides no step-by-step signoff of the activities the control room operator needed to do as part of the test, the operator with the concurrence of the Nuclear Assistant Shift Supervisor (NASS) utilized appropriate portions of Surveillance Procedure 24.202.01, "HPCI Pump Operability and Flow Test at 1000 psig and Valve Operability" to document the test performance. The decision to do this was made at the time the test was to be performed and subsequently resulted in the operator working with two procedures simultaneously; 23.202 to conduct the test and 24.202.01 to document the test. The inspector had two concerns with this approach. First, the use of two procedures simultaneously to perform testing could lead to confusion on the part of the operator. Second, due to the lack of specific instructions or preplanning provided by the work package to properly conduct the test, the operator (with the NASS) developed, on the spot, a means of conducting a test by using segments of two existing procedures. The licensee recognizes the potential for error using such an approach to testing and is currently evaluating whether alternate methods may be better suited in the future. This is considered an open item pending completion of licensee actions (341/88021-04(DRP)).

No violations or deviations were identified in this area.

5. Monthly Surveillance Observation (61726)

The inspectors observed surveillance testing on the high pressure cooling system per Procedure 24.202.01, "HPCI Pump Operability and Flow Test at 1000 psig and Valve Operability" required by Technical Specifications and verified that: testing was performed in accordance with adequate procedures, test instrumentation was calibrated, limiting conditions for operation were met, removal and restoration of the affected components were accomplished, test results conformed with Technical Specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspectors also witnessed portions of the following test activities:

24.413.03        Control Room Emergency Filter Monthly Operability Test.

24.404.02        SGTS Filter Monthly Operability Test.

No violations or deviations were identified in this area.

6. Followup of Events (93702)

During the inspection period, several events occurred, some of which required prompt notification of the NRC pursuant to 10 CFR 50.72. The inspectors pursued the events onsite with licensee and/or other NRC officials. In each case, the inspectors verified that the notification was correct and timely, if appropriate, that the licensee was taking prompt and appropriate actions, that activities were conducted within regulatory requirements and that corrective actions would prevent future recurrence. The specific events are as follows:

50.72 Events

- July 19, 1988 ESF actuation when RPS "B" EPA breaker opened and deenergized RPS Bus "B".
- July 21, 25, 26, 28 and August 4, 1988 Reports on inaccessible or unsatisfactory testing of flanges from West Jersey Manufacturing Company.
- July 23, 1988 Determined unidentified drywell leak based on 30 minute sample of 5.4 gpm. Reduced reactor power; leak based on one hour sample of 5.6 gpm. Unusual event declared.
- July 23, 1988 Reactor placed in shutdown condition by manual scram due to unidentified leakage in drywell.
- July 24, 1988 Terminated unusual event. Preparing to place plant in shutdown cooling.
- July 25, 1988 Retraction of April 9, 1988, event report after being determined not reportable.
- July 27, 1988 FSF actuation when I&C repairman shorted across two terminals and caused an auto initiation of Div 1 EECW.
- July 27, 1988 HPCI E41 F006 valve open circuit grounded preventing operation.
- August 14, 1988 Trip of main turbine generator causing a reactor scram.
- August 21, 1988 Declaration of Unusual Event and initiation of a plant shutdown due to recirculation Pump B discharge valve being inoperable.
- August 22, 1988 ESF actuation when RWCU system pumps tripped on low flow. G33-F001 and G33-F001 valves closed upon receipt of delta flow isolation signal.

- August 28, 1988 Declaration of Unusual Event and initiation of a plant shutdown due to recirculation Pump B discharge valve being inoperable.

On July 25, 1988, via the ENS, the licensee retracted the April 9, 1988, 10 CFR 50.72 event notification on loss of RHR cooling which occurred when the shutdown (S/D) cooling injection valve (E11-F015B) automatically closed. The licensee determined this event was not reportable because the closure signal for the F015B valve did not originate from ESF logic. The inspector discussed with the licensee that although the event was not reportable as an ESF activation, the event is reportable as loss of residual heat removal. The inspector noted under 50.72 (b)(2)(iii)(B), that any event that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat is reportable as a four-hour report. The inspector identified two additional items that raise the significance of this event: (1) the loss of S/D cooling on the "B" loop occurred at a time when the "A" loop of S/D cooling was out-of-service, (2) the loss of S/D cooling occurred for 30-35 minutes prior to being identified by the control room operators. Following the discussions, the licensee agreed to submit an LER on the event.

Following the main turbine trip that occurred on August 14, 1988, the inspector noted that credit was taken for performance of Surveillance Procedure 24.109.001 "Turbine Steam Valves Weekly Test" due to the event. When questioned about the advisability of doing this, licensee management responded that a review was performed at the time and the Technical Specification surveillance requirements which POM 24.109.001 implements were verified as having been met. Additionally, it was stated that this was not the first time this philosophy was implemented and that the licensee intended to continue the practice. The inspector expressed concern that a surveillance procedure may address surveillance requirements/commitments beyond those in Technical Specifications and as such, if credit is to be taken for performance of a surveillance as a result of an operational event, all portions of the procedure need addressing, not just those portions directly relating to Technical Specification surveillance requirements. The inspector reviewed 24.109.001 and, in that case, found no additional requirements beyond those the licensee had verified in accordance with the Technical Specifications. However, the inspectors will continue to review this practice as future examples occur.

#### Deviation Report Events

The inspector reviewed DER 88-1520 which identified that a HPCI discharge valve had not been tested at the required time interval for alert testing. The inspector confirmed through discussion with licensee personnel that the ASME Section XI for valve testing had not been properly implemented for the HPCI discharge valve. The inspector evaluated this violation to 10 CFR 2, Appendix C V.G. and determined:

- a. The violation was identified by the licensee.
- b. The violation did not render the HPCI system incapable of injecting the required water flow into the reactor vessel in the required maximum permissible time frame.
- c. At the end of the inspection period the time frame for LER submittal had not expired.
- d. Corrective actions were still being formulated.
- e. A violation of similar nature had not occurred in the last two years.

This matter is considered unresolved (341/88021-05) contingent upon corrective action review and LER submittal.

No violations or deviations were identified in this area.

7. Licensee Event Reports Followup (92700)

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with Technical Specifications.

- a. (Closed) LER 88002: Main steam line radiation monitor surveillance procedure inadequacy causes MSIV closure. This event which was described in detail in Inspection Report No. 50-341/88003 was caused by accidental shorting of a fuse in the MSIV DC logic while changing another adjacent fuse. The I&C technician who replaced the fuse was not aware that the circuit needed resetting and the MSIV DC half closure trip logic was in effect when a surveillance to check the functioning of the high radiation closure of MSIVs was started the following day. The technician performing this test misinterpreted the step in the procedure to verify that amperage was present on both the DC and AC circuits before proceeding. The actions taken to prevent recurrence of this condition were threefold. First, surveillance procedure 44.101.028 was revised to assure that there is current on both the AC and DC circuits if the MSIVs are open; this has been completed by Revision 22 to the above procedure. In addition, 52 of the MSIV surveillance procedures were revised to remove similar ambiguities. The second corrective action was to place labels on Panels R32S064B and R32S061B to indicate that Circuits 2 and 11 power MSIV logic and to notify the Nuclear Shift Supervisor if they are or have been deenergized. The inspector verified the installation of the labels. The third corrective action was to improve I&C technician training. The "lessons

learned" from this event were reviewed by all I&C personnel; and in addition, after reviewing the I&C training program, it was decided that:

- (1) I&C training course CP-IC-336 would be implemented in August 1988.
- (2) The on-the-job I&C course, CP-IC-331 would be revised to include:
  - (a) emphasizing the initial conditions prior to testing,
  - (b) actions to be taken if initial conditions cannot be met,
  - and (c) action to be taken when one channel inadvertently trips while testing the other channel. This course is to be complete by the end of 1988.
- (3) The I&C repairman qualification program description, PD-IC-720, will be revised to mandate completion of 1 above and applicable portions of 2 above prior to performing surveillances. This change is in the approval chain.

Since the corrective actions appear to be adequate to prevent recurrence of this type of event the LER was closed; however, the completion of the I&C training will remain an open item (341/88021-06) until the changes to the training program have been completed.

- b. (Closed) LER 88003: Setpoints and Head Correction incorrect for Residual Heat Removal (RHR) Interface Valves. During a review to verify pressure monitor setpoints in response to a previous violation (87006-01) and the I&C surveillance procedure improvement program, the pressure alarm setpoints in TS 3.4.3.2-2 RHR Low Pressure Cooling Injection and RHR Shutdown Cooling were found to be higher than the relief valve settings. On January 6, 1988, the licensee proposed an emergency TS change to lower the alarm setpoints and on the same date a TS Temporary Waiver of Compliance was issued by NRR. On January 13, 1988, Amendment No. 14 was issued which changed the setpoint in Tables 3.4.3.2-2. In reviewing the surveillance procedures for functional and calibration checks of these pressure alarms, the inspectors found that the procedures had been revised to include the adjusted setpoint pressures.
- c. (Closed) LER 86027: Vacuum Breaker Valve Failure. Followup to this LER was previously documented in Inspection Report No. 87022. As a result of that review, violation 87022-01 was issued. The violation corrective actions are adequate to complete followup on this LER. Therefore, this LER is closed and the final corrective actions will be inspected in the followup to violation 341/87022-01.
- d. (Closed) LER 85080-01: Failure to place a radiation monitor in service while releasing liquid effluent.

In addition to the review criteria stated above, the LERs were reviewed for potential violations of regulatory requirements. The results of that review identified that a violation of Limiting Conditions for Operation was associated with LER 85080-01. This violation occurred during the same time frame and was of the same type as the violations identified in Inspection Report No. 50-341/85040. As indicated in Paragraph 9.d. of Inspection Report No. 50-341/86019, the escalated enforcement actions of Inspection Report No. 50-341/85040 adequately address this violation and no citation will be given.

No other violations or deviations were identified in this area.

8. Startup Test Observation (72302)

The inspectors reviewed portions of startup test procedures, toured the areas containing system equipment, interviewed personnel, and observed test activities. While observing startup tests the inspector verified that the established testing prerequisites were met, testing was performed in accordance with adequate procedures, limiting conditions for operation were met, test personnel were knowledgeable of the test, data was accurately taken, and special test equipment required by the procedure was calibrated and in service.

The inspector observed the performance of the following startup tests:

- STUT 03B.023 Feedwater System Level Setpoint Changes.
- STUT 06B.030 Recirculation System One and Two Pump Trips.
- STUT 06C.016 Selected Process Temperatures - Recirculation Pump Trip Data.
- STUT 04B.019 Core Performance - Process Computer Determination.
- STUT 04A.030 Recirculation System - System Performance.

During performance of STUT 06B.030 on August 21, 1988, attempts to close reactor recirculation Pump B discharge valve (B31-F0B1B) were unsuccessful and the licensee commenced a reactor shutdown in accordance with Technical Specifications and entered the Emergency Plan. Subsequently, troubleshooting of the motor operator revealed three loose terminations to the valve's torque switch. The terminations were tightened, the valve tested and found to stroke properly, and the unit returned to power.

On August 28, 1988, test conditions were reestablished to complete STUT 06B.030. Again, when B31-F031B was directed to close from the control room, the valve failed to stroke. The reactor was shutdown, troubleshooting of the motor operator was conducted, and torque switch settings found to be incorrect. Two NRC Region III inspectors were subsequently dispatched to the site to review licensee corrective actions (Reference Inspection Report No. 341/88025(DRS)).

The inspector also reviewed the completed results of STUT 06B.019, Core Performance - Process Computer Determination, and determined that the test was satisfactory.

No violations or deviations were identified.

9. Personnel Qualifications

During the inspection period, the licensee changed the "Engineer in Charge." The new individual is holding this position until a permanent replacement is acquired. The interim individual's qualifications were reviewed against the applicable ANSI 18.1 standard revision and found to meet the qualification requirements.

No violations or deviations were identified.

10. Regional Requests

During the inspection period, the inspector continued to pursue the regional request dated September 24, 1987, dealing with preventive maintenance activities associated with the GE AKF-2-25 circuit breakers, previously discussed in Inspection Report No. 341/88006.

Deviation Event Report DER No. 88-0290 was issued to address the concerns noted in the above report that were contrary to the recommendations in NRC Information Notice 87-12 and GESIL 448.

- a. The breaker inspections were scheduled for every other refueling instead of annually or every refueling.
- b. There were no plans to disassemble and overhaul the breaker at five year intervals.

The inspectors found that Maintenance Instruction MI-M037, Rev 2, Recirculation Pump Generator Field Breaker (GE Type AKF) General Maintenance, had been approved March 14, 1988. This procedure deals with the cleaning, inspection, lubrication, adjustment and operational checks of the AKF type breakers. The revision included the SIL recommendations concerning approved lubricants. The other recommended actions of the SIL above had not been addressed so this will be carried as an Open Item (341/88021-07).

11. Review of Allegations

(Closed) Allegation No. RII-88-A-0022: Concerns regarding the process for updating the Updated Final Safety Analysis Report (UFSAR). On February 16, 1988, the Senior Resident Inspector was contacted by an anonymous allegor who provided four allegations regarding the UFSAR updating process as outlined below:

Allegation 1: There was no review or approval by Licensing of changes to the FSAR when it was updated the first time.

Allegation 2: Anyone can change the UFSAR based on filling out a form. These forms receive no review before incorporation into the UFSAR.

Allegation 3: The form specified in interfacing Procedure 11.000.121 is not the correct form to be used. A lady in Licensing informed the allegor not to use that form but to use another form not approved that has been made up by Licensing.

Allegation 4: The allegor was told by a supervisor not to write a DER on this situation and that the supervisor did not want any DERs associated with the UFSAR update activities. The allegor indicated that if the allegor wrote a DER there would be adverse personnel action taken against him/her.

The NRR Project Manager conducted a review of the FSAR change files and the program, including directives and procedures, implemented by the licensee to implement FSAR changes. Discussions were conducted with the cognizant Licensing personnel.

For the first FSAR update, Procedure NOIP-11.000.121-NS, "Updated Final Safety Analysis Report and Environmental Report Revisions," Revision 3, issued in 1985, was used to provide input to Licensing on proposed FSAR changes. This procedure contains a form entitled, "UFSAR Change Notice (UFCN)," which provides blocks to describe the change, the basis for the change, and who initiated, reviewed and approved or concurred in the change. The form provides space for several approvals in Block 8; however, a review of the first FSAR update UFCN forms on file indicated that the forms did not always reflect those approvals because the procedure did not mandate that Block 8 must be completed. However, the UFCNs on file did have documents attached to them which indicated who had reviewed and approved the changes reflected on the form. The reviews were conducted by Engineering, Operations, Licensing and the Independent Safety Engineering Group (ISEG). Engineering usually initiated the change proposal, but others were not prohibited from doing so. The QA organization does not review UFCNs. The ISEG reviewed those change packages which contained safety evaluations (SEs) since, procedurally, ISEG reviews all SEs whether associated with an FSAR change or other plant change. The FSAR change initiator does not get involved in the proposed change review process, unless the matter is technically complicated, controversial, or the initiator is questioned by ISEG during the SE review. The proposed FSAR change must be accepted by the initiator's first line supervisor before it is sent to Licensing. The UFCNs received by Licensing are sent to a Subject Matter Expert (SME) who is responsible for reviewing the change for technical adequacy and necessity, and who usually finalizes the SE which ISEG reviews. The SME is the individual assigned responsibility for a specific section of the UFSAR.

NOIP-11.000.121, Revision 4, dated February 1988, is the current procedure in use for making UFSAR changes for the second update. This revision mandates that approvals be reflected in Block 8 of the UFCN. Licensing is now playing a greater role in reviewing and assessing the technical adequacy of proposed changes. For the first update, contractor support

was more extensively used to provide the Licensing overview. A review of FSAR change packages processed for the second update indicates an improvement over the packages on file for the first update.

The FSAR change program and related procedures are undergoing further changes as part of the licensee's efforts to upgrade the quality and accuracy of plant procedures. Directive FMD-RA2, "Licenses, Plans, and Programs," Revision 0, issued in January 1988, establishes requirements for control of amendments to licenses, plans, and programs, and assigns responsibility for implementing those requirements, which includes the annual update of the FSAR. Under the new system, a procedure will be issued, FIP-RA2-01-SQ, "Amendments to the Operating License, UFSAR and NRC Approved Plans and Programs." This will replace Procedure NOIP-11.000.121. Licensing has in place a data table for tracking FSAR changes which will be enhanced to reflect the new system. The licensee expects to have the new programmatic and procedural changes related to the FSAR updates implemented by fourth quarter of CY 1988.

#### NRC Conclusions:

Allegation 1: Licensing does not approve FSAR changes. Licensing coordinates and keeps track of proposed changes and assures that appropriate approvals are obtained before being incorporated in the FSAR. There was no evidence that the changes incorporated in the first FSAR update did not receive appropriate reviews and were not approved. This allegation was not substantiated.

Allegation 2: It is true that anyone can initiate a FSAR change and the UFCN form is used for that purpose. However, the change requires first line supervisor acceptance before it gets into the system. When received by Licensing, it is directed to the SME for review to ensure that the proposed change is acceptable. The fact that anyone can change the FSAR was substantiated; however, the proposed change is reviewed and approved before incorporation as concluded under Allegation 1.

Allegation 3: It is true that the interfacing procedure and UFCN form have undergone a few revisions; however, there was no evidence that any unapproved form or procedure was used in the FSAR updating process. This allegation was not substantiated.

Allegation 4: The NRC did not pursue this allegation in that the allegor was anonymous and did not identify the supervisor involved. The DER procedure in effect on February 2, 1988, was FIP-CA1-01-SQ, Revision 0, "Deviation and Corrective Action Reporting." Paragraph 2.1.1 requires, in part, that procedural noncompliance including violations of procedures having nuclear safety significance,

be documented as a DER. It is noted that the DER originator and his supervisor are required to sign the DER. Issuance of a DER would not have been appropriate in this case in that no procedural noncompliance was identified.

No violations or deviations were identified.

11. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 6.

12. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC, or licensee, or both. Open items disclosed during the inspection are discussed in Paragraphs 3, 4, 7 and 10.

13. Exit Interview (307C3)

The inspectors met with licensee representatives (denoted in Paragraph 1) on September 20, 1988, and informally throughout the inspection period and summarized the scope and findings of the inspection activities. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary. The licensee acknowledged the findings of the inspection.