



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

Report No. 50-261/82-32

Licensee: Carolina Power and Light Company
411 Fayetteville Street
Raleigh, NC 27602

Facility Name: H. B. Robinson Steam Electric Plant

Docket No. 50-261

License No. DPR-23

Inspection at H. B. Robinson Unit 2 near Hartsville, South Carolina

Inspector:

A. K. Harder for
S. Weise

9/28/82
Date Signed

Approved by:

C. M. Burger
C. Burger, Section Chief, Division of
Project and Resident Programs

10/1/82
Date Signed

SUMMARY

Inspection on August 11 - September 10, 1982

Areas Inspected

This routine, announced inspection involved 164 resident inspector-hours on site in the areas of technical specification compliance, plant tour, operations performance, reportable occurrences, housekeeping, site security, surveillance activities, maintenance activities, quality assurance practices, radiation control activities, outstanding items review, IE Notice Followup, refueling startup testing, and noncompliance followup.

Results

Of the 14 areas inspected, no violations or deviations were identified in 12 areas; one violation was found in two areas. (Paragraphs 5., and 6.b. failure to establish and to implement procedures).

DETAILS

1. Persons Contacted

Licensee Employees

- +*R. B. Starkey, Plant General Manager
- +*J. Curley, Manager Technical Support
- +F. Gilman, Project Specialist, Regulatory Compliance
- *F. Lowery, Unit 2 Operations Supervisor
- *W. Crawford, Manager, Operations and Maintenance
- R. Chambers, Unit 2 Maintenance Supervisor
- +*C. Wright, Specialist, Regulatory Compliance
- *S. Crocker, Manager, Environmental & Radiation Control
- *D. Baur, Project Specialist QA/QC
- *A. McCauley, Principal Engineer Nuclear Safety
- *W. MacCready, Radiation Control Supervisor
- +J. Young, Director Corporate QA/QC

Other licensee employees contacted included technicians, operators, mechanics, security force members, and office personnel.

Other Organizations

R. Muth, Westinghouse

- *Attended exit interview on August 15, 1982
- +Attended exit interview on September 10, 1982

2. Exit Interview

The inspection scope and findings were summarized on August 27 and September 10, 1982 with those persons indicated in paragraph 1 above. The licensee acknowledged the violation presented and has initiated corrective actions.

3. Licensee Action on Previous Inspection Findings

(Closed) Severity Level V Violation 82-07-02. This item concerns valve lineup deficiencies on the Containment Integrated Leak Rate Test. The licensee has initiated a long-term procedural revision program which will include signoffs for each action required. Until these procedures are revised, the licensee has established Standing Order 18 which requires operators to document each step of multiple actions and develop necessary temporary changes to include all necessary actions for safety-related systems. This Standing Order appears adequate until the licensee completes his program for development of a procedure writing standard and upgrades all plant procedures accordingly.

(Closed) Unresolved Item 81-02-05. Boron Injection Tank (BIT) low level alarm. The licensee vented some non-condensable gases out of the tank and the problem has not appeared. The inspector is continuing to follow licensee corrective action on related BIT issues, however, this item appears resolved.

(Closed) Severity Level IV Violation 82-20-09. This item concerned equipment storage procedures. The inspector reviewed the licensee's response letter dated August 20, 1982, and conducted an inspection of storage locations. The inspector identified several cartons of Q-list sulfuric acid which had not received a hold tag as required. The licensee immediately corrected the discrepancy and conducted an inspection of the chemical warehouse. No other discrepancies were noted and corrective action appears adequate.

(Closed) Severity Level V Violation 81-12-02. This item concerned requalification training program deficiencies in the areas of lesson plans and modifications. The inspector reviewed licensee response dated June 5, 1981, reactor operator (RO) and senior reactor operator (SRO) replacement training lessons plans and outlines, and recent examination questions. CP&L's contractor has supplied lesson plans, training aids, and reference materials for the RO replacement training and is generating such materials for SRO replacement training. Completion of the SRO material is scheduled for March 1, 1983. Requalification training lesson plans have been developed specifically by CP&L training to utilize those from the RO program. The inspector's review of these lesson plans determined that significant improvement has been achieved in lesson plan quality and that the areas of mitigating core damage, plant modifications, and feedback of operating experiences are receiving increased emphasis. The licensee has devoted considerable manpower and expense in the training area and has long range goals for added improvement. The inspector found the corrective actions well developed, well implemented, and far exceeding the scope of the violation.

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. New unresolved items identified during this inspection are discussed in paragraph 11.c.

5. Plant Tour

- a. The inspector conducted plant tours periodically during the inspection interval to verify that monitoring equipment was recording as required, equipment was properly tagged, operations personnel were aware of plant conditions, and plant housekeeping efforts were adequate. The inspector determined that appropriate radiation controls were properly established, excess equipment or material was stored properly, and combustible material was disposed of expeditiously. During tours, the inspector looked for the existence of unusual fluid leaks, piping

vibrations, pipe hanger and seismic restraint abnormal settings, various valve and breaker positions, equipment clearance tags and component status, adequacy of firefighting equipment, and instrument calibration dates. Some tours were conducted on backshifts. The inspector performed major flowpath valve lineup verifications and system status checks on the following systems:

- (1) Service water system.
 - (2) Selected containment isolation valves.
 - (3) Steam driven auxiliary feedwater system.
 - (4) A Diesel Generator air start, fuel oil, lube oil, cooling water, and service water sub-systems.
- b. During a tour of the containment spray system on August 25, 1982, the inspector found the following normally locked open valves open but not locked: 'A' spray pump eductor discharge (SI-892F), 'B' spray pump eductor inlet and discharge (SI-892 G and H), and eductor feed isolation (SI 892A). The chains had been draped over the valves and locked, but could be easily undraped so as not to hold the valve handle. This flowpath is necessary for sodium hydroxide addition to the containment spray water for iodine removal. The licensee took immediate action to correctly lock the valves. These valves are required to be locked open by FSAR Section 6.3 and Operating Procedure-42A. Failure to implement this procedure is a violation. (82-32-01)
- c. During a tour of the emergency diesel generator (EDG) rooms on August 31, 1982, the inspector noted that 'B' EDG air compressor was secured and the starting air system for the EDG's cross-connected. A review of auxiliary operators' logs indicated that this condition had existed frequently since July 26, 1982. This long term cross-connection of starting air due to compressor problems is not a good practice since a single failure in the air start piping can render both diesels inoperable. The inspector conducted a review of the maintenance history on 'B' EDG air compressor and determined that since November 1981, the compressor has had a history of electrical and mechanical problems which have resulted in the compressor being frequently secured. During the same period, 'A' EDG air compressor has had similar problems but at a lower frequency. A detailed review of 'B' air compressor work requests indicated that problems with the compressor control and protective features were repetitive, and frequently new work requests were written outlining problems supposedly fixed only hours or days before. Failure to implement adequate corrective action as required by plant administrative and maintenance policies is a violation. (82-32-02).

6. Technical Specification Compliance

- a. During this reporting interval, the inspector verified compliance with selected limiting conditions for operation (LCO's) and reviewed results of selected surveillance tests. These verifications were accomplished by direct observation of monitoring instrumentation, valve positions, switch positions, and review of completed logs and records. The licensee's compliance with selected LCO action statements were reviewed as they happened.
- b. The inspector reviewed Periodic Test (PT) 12.2, Radiation Monitoring System, for technical adequacy and proper performance. This PT is performed biweekly to satisfy the monthly functional test requirements of Technical Specification Table 4.1-1 Item 19. The inspector reviewed a sampling of PT 12.2's performed during 1982. The following deficiencies were noted:

- (1) Radiation monitor readings are recorded for local, control room, and recorder indication for comparison under background and maximum source level conditions. No acceptance criteria exists for initiation of maintenance. Readings on the following monitors were noted that differed by at least a factor of ten with no corrective action taken: Plant vent radioactive gas monitor (R-14), Liquid waste effluent monitor (R-18), Steam generator blowdown monitor (R-19), and Containment fan cooling monitor (R-16).
- (2) The high alarm setpoints are recorded but are not required to be compared with the current setpoint recorded on the radiation monitor setpoint log and change record. The following setpoint discrepancies were noted:

<u>Date</u>	<u>Monitor</u>	<u>Expected Setpoint</u>	<u>As-found</u>
1/15/82	R-11	1.8 K cpm	13 K cpm
1/15/82	R-15	6 K cpm	400 K cpm
3/11/82	R-12	125 cpm	65 K cpm
4/23/82	R-20	5.1 K cpm	60 K cpm

The containment air particulate monitor (R-11), containment gaseous activity monitor (R-12), condenser air ejector gas monitor (R-15), and lower fuel handling building monitor (R-20) high alarm features perform automatic safety functions affecting effluent flow and containment ventilation isolation. The above uncorrected as-found conditions are nonconservative with respect to those functions.

- (3) Several process monitors (R-11, R-12, R-20) have high and low air flow alarms which are tested but have no acceptance criteria. These alarms are to warn of inadequate or excessive flow through the monitor.

- (4) Process monitor readings are recorded for the check source position, range switch test position, and high voltage position. These readings have no acceptance criteria. High voltage variations can affect detector response.
- (5) PT documentation discrepancies such as checking off steps vice initialing, recording similar readings in different units, values not recorded, and a data sheet not filled out on post-maintenance testing were noted.
- (6) Condenser air ejector gas diversion valves were labeled under the old valve number system vice the current system. (V6-80 and 81 vice 1436 A and B).
- (7) Supervisory reviews did not identify the above discrepancies. Through discussions with the licensee and review of other tests and logs, the inspector determined that other documentation overlaps portions of the PT 12.2 testing. For this reason, it appears that the radiation monitoring system operability has been maintained. However, due to the disjointed nature of these other tests and records and the fact that PT 12.2 is the designated auditable record, this lack of acceptance criteria and failure to initiate corrective action reflects inadequate surveillance practices.

Items (1) through (4) above constitute a violation for failure to establish and implement an adequate surveillance procedure. (82-32-03). Items (5), (6), and 7 constitute an open item (82-32-04) requiring additional inspector review to determine relevance to other surveillances.

7. Plant Operations Review

- a. The inspector, periodically during the inspection interval, reviewed shift logs and operations records, including data sheets, instrument traces, and records of equipment malfunctions. This review included control room logs, auxiliary logs, operating orders, standing orders, jumper logs, and equipment tagout records. The inspector routinely observed operator alertness and demeanor during plant tours. During abnormal events, operator performance and response actions were observed and evaluated. The inspector conducted random off-hours inspections during the reporting interval to assure that operations and security remained at an acceptable level. Shift turnovers were observed to verify that they were conducted in accordance with approved licensee procedures.
- b. On August 15, 1982, shortly after pulling the shutdown banks control rods following a reactor trip, rod L-11 dropped into the core. The reactor was subcritical at hot shutdown conditions. Operators earlier had received an urgent failure alarm on rod drive cabinet 1BD, had replaced a blown stationary gripper fuse on L-11, and had tested the

shutdown bank rod drive operability. The shutdown banks were driven in and licensee investigation begun. A defect was found in the L-11 stationary gripper coil, and the plant was returned to cold shutdown to facilitate coil housing replacement. The L-11 coil was replaced, H-10 rod position indication was repaired, and a checkout of all rod control drive mechanisms and position indication was conducted. Plant heatup commenced on August 18.

- c. On August 15, 1982 with the reactor critical and adding heat, operators attempted to conduct surveillance on the steam driven auxiliary feedwater pump (SDAFWP) and discovered the steam supply valve (MS-154) to the turbine shut. This valve was indicated as open on a valve lineup completed on August 11, 1982. The licensee took action to open the valve and lock it open and initiated an investigation. While the valve did not result in an LCO violation, not having the pump operable violates licensee administrative requirements for auxiliary feedwater pump operability. The inspector reviewed Operating Procedure (OP)-14A Auxiliary Feedwater (AFW) System Valve lineup, OP-17A Main and Reheat Steam valve lineup, and OP-16A Condensate and Feedwater valve lineup. The inspector determined that several main steam and feedwater valves required for proper SDAFWP operation had not been included in the independent verification program:

- (1) Steam supply valves for the SDAFWP MS-V1-8A, B, and C; MS-V1-48A, B, C; and MS-154.
- (2) Feedwater valves FW-6A, B and C which are capable of interrupting SDAFWP AFW flow.
- (3) Various SDAFWP pump seal and steam header drain valves. Similar ancilliary valves in the AFW system require independent verification.

The inspector also reviewed Operating Work Procedures (OWP) for the SDAFWP, the motor operated steam isolation valves, and the motor operated AFW supply valves. These procedures did require independent verification for maintenance related movement of the above valves. The inspector noted that OWPs AFW 7, 8, and 9 erroneously called the steam supply valve MS-184 vice MS-154. This was brought to the attention of the licensee, and was corrected. The licensee took immediate action to revise the appropriate procedures to require independent verification and, in some cases, locking of the valves. This corrective action appeared adequate. The licensee's investigation could not determine how or when the valve was shut.

8. Physical Protection

- a. The inspector verified by observation and interview during the reporting interval that measures taken to assure the physical protection of the facility met current requirements. Areas inspected included the organization of the security force, the establishment and

maintenance of gates, doors and isolation zones in the proper condition, that access control and badging was proper, that search practices were appropriate, and that escorting and communications procedures were followed. The inspector observed six individuals achieve acceptable scores on weapons firing qualification in preparation for the armed guard qualification. The inspector also reviewed several corrected qualification written examinations. No violations or deviations were noted.

- b. On September 9, 1982, the inspector observed a semi-annual test of the security system power supply reliability. Sources of power to vital security equipment were de-energized to verify that required backup supplies maintained system operability. The inspector was satisfied that backup power reliability had been increased by a recent plant modification. This partially resolves unresolved item 82-16-01.

9. Reactor Trips

- a. On August 12, 1982, with the plant hot and critical in the intermediate range, a reactor trip occurred on two of four power range nuclear instruments. N-44 was out of service with its bistables tripped for use as input to the reactivity computer for low power physics testing. An instrumentation and control technician was attempting to return N-44 to service when he mistakenly pulled the fuses on N-43. This resulted in the reactor trip. The licensee declared an unusual event and terminated it upon making the appropriate notifications.
- b. On August 15, 1982, at about 10% reactor power, a reactor trip occurred on 'B' steam generator (S/G) low-low level. The unit had been synchronized with the grid fifteen minutes earlier and power was being increased when problems developed with the 'B' feedwater block valve. Despite attempts to open the valve by motor operator and manually, the motor operator acted to keep the valve shut. Due to feed flow problems and decreasing 'B' S/G level, the turbine governor valves were closed which shrunk S/G level to the trip setpoint. An unusual event was declared and the proper notifications made. Licensee investigation into the feedwater valve problem determined that the valve needed additional stroking and lubrication and limit switch adjustment.
- c. On August 20, 1982 with the reactor critical at normal temperature and pressure, operators were adjusting 'C' steam generator PORV setpoint when the PORV failed open. Setpoint adjustments had been completed on 'A' and 'B' PORVs. The valve opened 100 psig prior to the setpoint value reaching indicated steam header pressure. The control operator tried to shut the PORV from the control board, but the valve did not respond. A safety injection actuation and reactor trip occurred on high differential pressure between the steam header and 'C' steam line. All safety systems responded as required, although several valves erroneously indicated that they were out of position. Operators isolated instrument air to the PORV's and the valve shut. The valve was open about 1-1/2 minutes and caused the primary system parameters

to decrease to 2070 psig and 504°F. No safety injection flow occurred due to the plant pressure. An unusual event was declared and the NRC notified. The feedback linkage to the PORV positioner was found disconnected with the retaining screw missing. A check of the PORV feedback linkages determined that the fastener could loosen and that the retaining screw was shorter than desired. The licensee replaced the retaining screws with longer screws and installed a locknut as a fastener to prevent future linkage failure. The following day, after reactor startup, a second attempt to set the PORV setpoint resulted in the valve lifting early. Air to the controller was isolated, shutting the valve. Technicians determined that the span on the controller had drifted out of tolerance. The controller was recalibrated and returned to service later that day, and the setpoint properly set. The valve position indication for three containment isolation valves were also repaired. Through discussions with licensee personnel, the inspector determined that the proper locknuts were probably received with the valves and positioners from the manufacturer. Apparently, during installation of the valves in 1980, the correct locknuts were lost and incorrect nuts substituted by construction personnel.

- d. On August 21, 1982, with the reactor at about 20% power, a reactor and turbine trip occurred on high level in 'C' steam generator when 'C' feedwater regulating valve (FRV) stuck partially open and the feedwater block valve could not be closed quickly enough. An unusual event was declared and the NRC notified. All FRV's were inspected, had their stems lubricated, and were stroked with no flow through the valves. No problems were encountered and the unit was restarted after about an hour and a half. About four and a half hours later at about 20% power, 'C' FRV stuck about 1/4 open and the block valve was not shut in time to prevent the reactor and turbine trip which occurred on high 'C' steam generator level. An unusual event was declared and the NRC notified. The licensee contacted the valve vendor, who recommended that the spring tension be adjusted for additional closing force. All three FRV's were so adjusted and the plant returned to power operation. During power operation at about 28% power, 'B' and 'C' FRV's were placed in automatic and operated properly. 'A' FRV, however, experienced binding problems at 1/5th open and would not shut if placed in automatic control. Plant power was held constant until August 22, when the plant was taken off-line to investigate the 'A' FRV problems. The licensee now believes that foreign material was responsible for the valve binding problems. The FRV plugs and cages were replaced during the refueling outage with a new ported flow design for smoother operation. The tolerances in the valve are sufficiently close that they are more susceptible to foreign material binding. The licensee dismantled and inspected 'A' and 'C' FRV's and observed several scuffs where foreign material may have lodged. The valves were reassembled, and the plant returned to power operation August 23. The inspector will continue to monitor FRV performance and review licensee efforts to improve feed system cleanliness.

- e. On September 5, 1982, with the reactor operating at 93% power, a loss of feedwater flow occurred when all three feed regulating valves (FRV) failed shut. The reactor and turbine tripped on 'B' steam generator low level coincident with steam flow-feedwater flow mismatch. An unusual event was declared, and the NRC was notified. All safety systems responded as required. The cause of the FRV failure was identified as a short on the 'A' train feedwater isolation solenoid on 'C' FRV. This short blew the fuses for the common power supply, resulting in isolation of instrument air to each FRV. The solenoid was replaced and the reactor returned to power operation.
- f. On September 9, 1982 at 90% power, the plant experienced a loss of 'B' condensate pump causing a low suction pressure trip of 'B' Main Feed Pump. Operators attempted to rapidly reduce turbine load to within the capabilities of one feed pump, but the reactor tripped at about 70% power when steam dump actuation caused a low-low level in 'C' steam generator. All safety systems responded as required. The cause of the condensate pump trip was a faulty hotwell level switch in the pump trip circuitry. An unusual event was declared and the NRC was notified.

10. Independent Inspection

- a. During review of liquid waste releases, the inspector noted that tank level curves were used to determine the number of gallons released during a batch release. Through further review of release forms the inspector also noted that tank level quantity was generally higher than flow integrator quantity. Through discussions with the licensee, the inspector learned that a comparison program was established between October 1976 and June 1979 to determine comparability and to use for trend analysis. The inspector reviewed a June 14, 1979 memo which concluded that waste tank curves gave quantities from 6% to 16% greater than flow integrator readings. Because of this study, in October 1979 the liquid waste release accountability procedure (HP-14) was revised to require a plot of integrator and tank curve gallons and required a calibration of the instruments if a discrepancy greater than 10% existed. When the new procedure for liquid waste releases (ES-3) was implemented in 1980, this requirement was eliminated. The inspector has three concerns from this review:
 - (1) Procedure ES-3 Revision 7 requires use of tank level gallons regardless of whether it is conservative with respect to integrator readings. The largest quantity should be used in the calculation unless the instrument is known to be out of calibration.
 - (2) The licensee has not placed criteria in ES-3 to require corrective maintenance when the indicated gallons released from the two methods show significant differences.
 - (3) The study conducted indicated that the monitor tanks' level indication yielded 16% higher release values than by integrator.

Based on a review of licensee effluent accountability reports, the inspector concluded that effluents have not been significantly underestimated, and generally appear conservatively high, additional procedural guidance is warranted to ensure conservatism and address instrument operability. These items will remain open pending licensee corrective action. (82-32-05).

- b. During a plant tour on September 1, 1982 the inspector noted wide variation in readings on the containment dewpoint recorder. Specifically, two of the six humidity monitors had readings which were invalid low. For a containment temperature of 120°F, four monitors read from 171-176°F, and two monitors read 114°F and 138°F respectively. Auxiliary operators log these readings every shift. A review of shift logs revealed that one low reading has existed since March, and the other since August 12, 1982. This humidity detection instrumentation is discussed in FSAR Section 5.2.5 and Technical Specification Section 3.1 as a backup system to the containment particulate and gas radiation monitors for reactor coolant system leakage detection. Despite logging and Shift Foreman reviews of the data on a shiftly basis, no work request was initiated to repair the equipment. This was brought to the licensee's attention for corrective action. (FI 82-32-06).

11. Refueling Startup Testing (72700)

The inspector reviewed and witnessed performance of the following licensee procedures:

PT-R-6.0, Refueling Startup Procedures
 PT-R-9.1, Operational Alignment of Nuclear Instrumentation (NIS)
 PT-R-9.2, Operational Alignment of Process Temperature Instrumentation
 PT-R-9.3, Thermal Power Measurement
 PT-R-9.4, Power Distribution Maps
 PT 1.8, NIS Power Range Axial Offset Calibration
 PT 1.7, Power Range Calculation
 FF-4, Flux Mapping Procedures
 FF-7, F (DELTA I) Calibration Procedure

These procedures were used to perform the startup testing discussed below.

- a. Core Power Distribution Limits (61702). The inspector reviewed testing procedures and data for distribution limits at 70%, 90%, and 93% power. Under the present temperature average program, reactor power is limited by governor valve position. For the above power levels, the inspector verified that the licensed distribution limits and the acceptance criteria for further power escalation were met. The licensee uses the INCORE computer program to process the incore data. Quadrant power tilts were also verified within limits.

The inspector identified one concern, in that the site reactor engineering staff were not involved in the changes to core evaluation computer codes. These changes and evaluations are done by the Corporate Fuels Department. Because these codes are used to verify Technical Specification requirements, the site staff should be kept current of any changes and the attendant safety evaluations. Review of Corporate controls over analysis code changes will be conducted during a future inspection.

b. Incore/Excore Detector Calibration (61705)

The inspector observed portions of the data collection at 70% power and verified that the procedures addressed precautions and xenon oscillations. The inspector reviewed the data and results from the FDELTAI computer code, verified that the calibration data was provided to the instrumentation and control department, and that calibrations were performed in accordance with maintenance procedure NP2-1. The inspector reviewed the observed versus expected detector currents at 93% power and noted that detector N44 was outside the acceptance criteria of PT 1.8. This was discussed with the site nuclear engineer and appears to be caused by detector nonlinearity with increasing power. The licensee's present plans are to determine the full power current based on detector linearity above 70% power and perform a recalibration of the instrument. Westinghouse is also evaluating the detector data. This item will remain open pending long term resolution. (82-32-07).

c. Core Thermal Power Evaluation (61706)

The inspector reviewed the licensee's calorimetric procedures for technical adequacy. The inspector noted that the procedure did not specifically consider the heat loss due to steam generator blowdown, however, the licensee's assumption that steam mass flowrate equals feed mass flowrate conservatively accounts for blowdown. The inspector performed independent calculations to confirm selected licensee results and verified that instruments had been calibrated. Power level instruments were set to correspond with calorimetric data. The inspector asked the licensee to provide the basis for the heat added constant used in Periodic Tests 1.7 and R-9.3. The inspector found differing values which were determined during hot functional testing in the plant files. The present value was incorporated into the procedure May 21, 1971 without any record of a formal procedure change. The licensee has been unable to provide the basis for the value, and until it is determined, this item is unresolved. (82-32-08).

d. Shutdown Margin Determination (61707)

The inspector reviewed the facility shutdown margin for the plant in the hot shutdown condition. Licensee Technical Specifications do not require periodic shutdown margin determination. The inspector verified that adequate shutdown margin was maintained for core reactivity

changes since the most recent criticality. Shutdown margin met Technical Specification requirements.

e. Target Axial Flux Difference Calculation (61711)

The inspector reviewed the licensee's procedures and results. The data at 93% power indicated that the N44 detector currents did not meet the acceptance criteria of PT 1.8. The licensee decided to input the target values for detectors N41, N42, and N43 while continuing to investigate N44. Further corrective action for N44 is discussed under paragraph b. above. Operators are currently using the three acceptable detectors for axial offset determination.

12. Licensee Event Report (LER) Followup

The inspector reviewed the following LER's to verify that the report details met license requirements, identified the cause of the event, described appropriate corrective actions, adequately assessed the event, and addressed any generic implications. Corrective action and appropriate licensee review of the below listed events was verified. When licensee identified violations were noted, they were reviewed in accordance with the enforcement policy. The inspector had no further comments.

LER	Event
80-19	Canopy seal weld defects
80-21	Containment spray seismic supports
82-08	Failure of delta flux summator
82-10	Control rod drive mechanism leak

13. Review of IE Notices

The inspector verified that IE Notice 82-15 had been received onsite and reviewed by cognizant licensee personnel.

14. Outstanding Items Review

(Closed) Open item 81-27-37. The inspector conducted a review of the planners' work request indexes for outstanding safety-related maintenance. While the indexes were not always current, the work had generally been completed. The inspector identified no outstanding 1981 safety-related maintenance of concern. Additionally, the licensee revised Maintenance Procedure MPI-1 to require a quarterly review of overdue safety-related work requests.

(Closed) Open item 82-11-03. The licensee has implemented Periodic Tests 48.2 and 48.3 and has incorporated dedicated shutdown instrumentation into the calibration program. About half the instruments have been calibrated, with the remainder covered by outstanding work requests.

(Closed) Inspector followup item 81-05-02. This item concerned the nitrogen supply to the Isolation Valve Seal Water system from an auxiliary building nitrogen header. The deficiency was determined to be a plugged nitrogen line which was found and replaced during the refueling outage. The supply line was tested satisfactorily and will be placed in service at the completion of the modification package turnover.