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Licensee: Wisconsin Electric Power Company, WEPCO

Facility: Point Beach Nuclear Plant, Units 1 & 2

Location: 6612 Nuclear Road  
Two Rivers, WI 54241-9516

Dates: October 20 through November 7, 1997

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## EXECUTIVE SUMMARY

Point Beach Nuclear Plant, Units 1 & 2  
NR 7 Inspection Report Nos. 50-266/97023(DRS), 50-301/97023(DRS)

This inspection was to review the licensee's controls in the area of safety evaluations as well as the effectiveness of licensee controls in identifying, resolving and correcting problems. Selected operational activities, maintenance procedures and safety evaluation training were also reviewed. Finally, the inspection reviewed corrective actions to several of the issues identified during the Operational Safety Team Inspection conducted in late 1996.

### Operations

- Shift turnovers were of good quality, panel walkdowns were of adequate frequency, and control room manning exceeded administrative guidance. (Section O1.1)
- The October 23, 1997, low-temperature overpressure protection (LTOP) actuation event could have been prevented had there been a larger initial margin between nominal reactor coolant pressure and the LTOP actuation setpoint, had a pre-job briefing been performed, and had procedural guidance specifying operator actions to control pressure during the evolution been available. (Section O1.2)
- The licensee made significant improvements in operational procedural guidance and adherence. A repeat problem with danger tag sequencing not being completed in accordance with procedures was identified and was cited. (Section O3.1)
- The industry operating experience feedback program effectively handled the majority of issues that the inspectors reviewed. However, review of two important issues was significantly delayed. In another case, an applicable industry issue was closed without actions during the industry operating experience review. (Section O7.1)
- Quality Assurance audit findings and self-assessments appeared to provide a critical review of the areas assessed. Licensee corrective actions in response to the audit findings were not always timely, and, in some cases, due dates and priorities for actions were not assigned. The inspectors concluded that the corrective action process did not always capture specific issues raised in programmatic quality condition reports, resulting in these issues not being formally addressed. A violation for the failure to perform an operability determination, associated with a valve testing deficiency identified during a quality assurance audit, was identified. (Section O7.2)
- The corrective action system lacked prioritization and there was limited accountability for ensuring that actions were completed. These contributed to the large backlog of open items in the system. (Section O7.3)

## Maintenance

- The licensee failed to use calibrated test equipment, controlled by a measuring and test equipment control program, to measure timed acceptance limits in a technical specification monthly surveillance. (Section M1.1)
- Recent revisions to the maintenance procedures provided sufficient restoration steps for reassembly and post maintenance testing. (Section M3.1)

## Engineering

- The operability determinations reviewed were good and, in some cases, quite detailed. However, this was not true in all cases and a wide quality spectrum was observed. (Section E1.1)
- The licensee's 10 CFR 50.59 procedure contained a comprehensive listing of licensing basis documents which would allow preparation of adequate 50.59 safety evaluations. (Section E2.1)
- The safety evaluations and screenings being performed were of good quality and some were considerably above average. However, one screening failed to identify that the FSAR did not reflect the current plant procedures. (Section E2.2)
- Formal procedural guidance for updating the FSAR had been established, but was imprecisely worded. The procedure assigned primary responsibility for preparing and submitting the periodic update of the FSAR to an individual without any guidance on timeliness. (Section E3.1)
- Recent changes to NP 10.3.1 have resulted in improved procedural guidance for screening and writing 10 CFR 50.59 safety evaluations. The 10 CFR 50.59 procedure effectively assigned responsibility for key areas to assure that 50.59 safety evaluations were effectively prepared, reviewed and approved. Additionally, the necessary procedural guidance existed for maintaining records and formally reporting to the NRC the changes, tests, and experiments made in accordance with 10 CFR 50.59. (Section E3.2)
- Training and qualification of licensee personnel to perform screenings and safety evaluations appeared to meet the licensee's commitments to the NRC following the 1996 OSTI. There was consistency between the training and procedural requirements for preparing safety evaluations and the training evaluation method appeared to be satisfactory for the short term. (Sections E5.1, E5.2 and E5.3)

## Report Details

### I. Operations

#### **O1 Conduct of Operations**

##### **O1.1 Main Control Room Observations**

###### **a. Inspection Scope (93802)**

The inspectors observed main control room activities during shift turnovers, testing, and special evolutions. The inspectors conducted interviews and reviewed station logs to assess operations performance. The inspectors also reviewed a number of operating procedures, as described in the list of documents at the end of this report.

###### **b. Observations and Findings**

During this inspection period, the inspectors observed improved operating practices with minimal differences between the two crews observed. The inspectors observed shift turnovers in the control room. The inspectors observed that the oncoming crew members would perform a routine watch relief in the control room. Then the on-coming crew was gathered outside the control room and were briefed on plant status and work priorities, with all members contributing in the discussion. Following the brief, each crew member would assume his assigned position in the control room or plant. The inspectors noted that the improved shift turnover process was a recent change from a previous practice of performing crew briefs in the control room.

The inspectors observed licensed reactor operators, called control operators (CO), perform frequent walk downs of the control panels. Also, the COs were prompt to respond to any control panel alarm and inform the Duty Operating Supervisor (DOS - licensed senior reactor operator (SRO)). The inspectors observed consistent 3-way communications among licensed operators inside the control room and plant operators outside of the control room.

The inspectors observed that control room manning routinely exceeded administrative guidance as well as regulatory requirements. The control room staffing included 3 COs, a DOS and a Duty Shift Superintendent (DSS - licensed SRO). Also, an additional operating supervisor (SRO) was assigned to the control room staff but was not required to stay in the control room. The inspectors were informed that increased manning had been a recent change to enhance operations performance.

###### **c. Conclusions**

The inspectors concluded that shift turnovers were of good quality, panel walkdowns were of adequate frequency, and control room manning exceeded administrative guidance.

## O1.2 Inadvertent Opening of Low Temperature Overpressure Protection (LTOP) Relief Valve

### a. Inspection Scope (93802)

The inspectors observed preparations for Unit 1 transition from cold shutdown condition to hot shutdown condition. During the inspection period, a Unit 1 reactor coolant pump start resulted in an inadvertent opening of the LTOP relief valve at 415 pounds per square inch (psig). The inspectors reviewed station logs and event recordings, and interviewed licensed operators to assess operations performance.

### b. Observations and Findings

The inspectors were informed that an inadvertent opening of the LTOP relief valve occurred on October 23, 1997, following the start of a reactor coolant pump on Unit 1. The unit operator had been performing a fill and vent evolution in preparation for a plant heatup to hot shutdown condition. The reactor coolant system (RCS) had been placed in a solid condition with pressure being controlled in manual by the operator.

The inspectors noted that RCS pressure had increased to approximately 355 psig during the establishment of solid plant conditions, but was stabilized around 350 psig in preparation to start the reactor coolant pump (RCP). Following RCP start, RCS pressure had increased to LTOP actuation setpoint ( $\leq 425$  psig per Technical Specification (TS) 15.3.15.A.1.a). The CO took manual action to stabilize pressure by placing both the charging pump speed controller and the letdown pressure controller (PCV-135) in manual. This was described in condition report (CR) 97-3488. The licensee also noted that RCS pressure was reduced and stabilized within acceptable limits following the LTOP actuation. The inspectors were informed that the LTOP actuation had occurred at approximately 415 psig and that the pressure differential between the RCS pressure and the relief valve setpoint, just prior to the RCP start, was only approximately 60 psig. During operator interviews, the inspectors determined that a pressure spike of approximately 50 to 60 psig was normally expected following a RCP start while in a solid plant condition. Additionally, the inspectors ascertained that the preferred method to limit any pressure spike was to use only the letdown pressure controller so that finer control of RCS pressure could be achieved. The inspectors ascertained that manually adjusting both the charging pump speed controller and the letdown pressure controller simultaneously was considered unusual and unnecessary to limit the pressure spike by most operators.

The inspectors noted that the following factors contributed to the LTOP actuation event:

- In September of 1996, the licensee requested a TS change to Section 15.3.15 in order to raise both pressurizer power operated relief valves setpoint to  $\leq 440$  psig when the LTOP system was required to be operable. An NRC letter dated January 13, 1997, authorized the change as requested. However, the inspectors identified that, at the time of this event, this approved TS change had not been transmitted to the operating crews, nor had it been incorporated into the relief valve setpoints.

- The inspectors noted that the licensee normally started a RCP with the plant in a solid condition and then heated up to hot shutdown before drawing a bubble in the pressurizer. The inspectors noted that starting a RCP while solid resulted in a large pressure spike, increasing the likelihood of an LTOP actuation. The licensee acknowledged that their method differed from common industry practice and required greater operator control.
- The inspectors noted that some licensed operators had a generic understanding of the RCS pressure response following a RCP start while solid. However, there was not any procedural guidance or written management expectations to ensure adequate operator action to minimize the pressure excursions that might occur.
- The inspectors identified that the SRO had not performed a detailed pre-job brief with the licensed reactor operator; therefore, there was no discussion of expected RCS pressure response to the RCP start and any operator actions to limit the consequences. This was especially significant as a training deficiency regarding the licensed reactor operator's performance on charging and letdown system control and response had recently been identified by the licensee.

c. Conclusions

The inspectors concluded that the October 23, 1997, LTOP actuation event could have been prevented had there been a larger initial margin between nominal RCS pressure and the LTOP actuation setpoint, had a pre-job briefing been performed, and had procedural guidance specifying operator actions to control pressure during the evolution been available.

**O3 Operations Procedures and Documentation**

O3.1 Procedure Adequacy and Implementation

a. Inspection Scope (93802)

The inspectors reviewed the danger tagging procedure, NP-1.9.15, and the implementation process. Included in the review was an evaluation of two safety related systems (emergency diesel generator (EDG) and containment spray systems) and related components which had been taken out of service with danger tags. Additionally, the inspectors reviewed six completed surveillance tests for EDGs G-01 & G-02.

b. Observations and Findings

The inspectors walked down the EDG and accessible portions of the containment spray system. The inspectors noted that all tags were properly placed on EDGs G-01 & G-02 and containment spray pumps P-14A & P-14B, and the tags properly reflected the final condition of the component. The inspectors were able to independently verify the isolation of vital equipment through a review of system prints.

The inspectors identified a discrepancy from procedure NP-1.9.15 during a review of selected danger tag location sheets. The inspectors noted on two different danger tag location sheets (97-753 & 97-800) that the "Tag Sequence" had not been filled in even though the danger tags had been issued recently (October 7 & 18, respectively) and were hanging in place. Contrary to this, procedure NP-1.9.15, Section 6.2.1.i states, in part, that the danger tag location sheet preparer shall fill out the sheet with a danger tag sequence. Additionally, Section 6.3.3.b of NP-1.9.15 requires that the qualified tagger position the equipment or components as specified in the "sequence" column and "required position" column on the danger tag location sheet. A similar deficiency was NRC-identified in Inspection Report 50-266/96018(DRS); 50-301/96018(DRP). The failure to follow the procedure is a violation of 10 CFR Part 50, Appendix B, Criterion V "Instructions, Procedures, and Drawings," that requires the plant to be operated and maintained in accordance with approved procedures (VIO 50-266/97023-01a(DRS); 50-301/97023-01a(DRS)).

The inspectors noted that a recent revision to the EDG surveillance test procedures TS-81 & TS-82 made enhancements to the clarity and performance criteria. No observed testing activities were noted during this inspection period. However, the inspectors noted that test results were appropriately documented and reviewed in a timely manner.

c. Conclusions

The inspectors concluded that the licensee had made significant improvements in procedural guidance and adherence. A repeat problem with danger tag sequencing not being completed in accordance with procedures resulted in a violation of plant procedures.

**O7 Quality Assurance in Operations**

**O7.1 Industry Operating Experience Feedback Program**

a. Inspection Scope (40500)

The inspectors reviewed the licensee's program and procedure for operational experience feedback by selecting several industry events, NRC generic letters and information notices, and the Institute of Nuclear Power Operations (INPO) significant operating event reports (SOERs), and assessing the licensee's effectiveness in disseminating information to plant staff and initiating corrective actions as appropriate. The inspectors reviewed the latest revision of the procedure for review of industry operating experience, NP 5.3.2, "Industry Operating Experience Review Program."

b. Observations and Findings

The corrective action program (CAP) under the Quality Assurance (QA) department was a matrix organization with four permanent operating experience coordinator (OEC) positions as well as staff from other departments assigned CAP functions but reporting

to their respective departments' line management. The external OEC was one of the coordinators reporting to the CAP manager. This organization was new, having been formed over the last year, and was not yet fully staffed, which appeared to contribute to a high workload for the existing coordinators.

The inspectors determined that, with two minor exceptions, procedure NP 5.3.2 was generally followed. The two exceptions were as follows: NP 5.3.2 stated that an effectiveness review of the industry operating experience program would be performed every 18 months. This review had not been completed, within the last 18 months. Licensee personnel stated that they were taking credit for a QA audit of the program to satisfy the effectiveness review requirement. The inspectors reviewed the QA audit and noted that the audit focused on program compliance and did not assess the overall effectiveness of the program. Secondly, NP 5.3.2 stated that a semiannual report on the industry operating experience program performance would be sent to managers. Only one report had been generated in the last year. The licensee stated that neither the effectiveness review or the semiannual report were planned to be completed in the near future due to resource issues.

The inspectors reviewed a number of external industry operating experience issues and the licensee's assessment and corrective actions associated with the issues. The majority of issues were handled in accordance with the procedure and appeared to be appropriately dispositioned. However, the inspectors found two important industry issues in which review and actions were significantly delayed, and a third case was missed by the operating experience review program, as discussed below.

The licensee review of INPO SOER 96-01, "Control Room Supervision, Operational Decision Making, and Teamwork," dated September 27, 1996, was initially delayed due to "higher priority issues in the operating experience review group" as stated in the licensee's corrective action tracking system database (NUTRK). Based upon further entries in the NUTRK system, the inspectors ascertained that the station's response and actions associated with the SOER were delayed due to a lack of operations' personnel involvement. However, in April 1997, CR 97-1043 was generated to document the delays and prompt action was then initiated, including a training session during operator requalification training. However, some actions associated with the issue remained open at the end of the inspection with no priority assigned.

Additionally, during review of a QA audit on Operations, the inspectors noted that an abnormal operating procedure (AOP) 6-A, "Dropped Rod," was not consistent with industry practices. In particular, the AOP did not direct operators to place rod control in manual but rather instructed operators to verify "rods in AUTO and stepping." The procedure had been under review for different deficiencies as a result of the QA audit since May 1997. The Operations Manager was aware of the procedure issue and intended to change the procedure to either place limits on automatic rod motion or to direct operators to place rod control in "manual." However, no procedure revision had been completed six months after the issue initially surfaced. The procedure revision due date had been extended three times and had no priority assigned. The inspectors were concerned in this case with the lack of prompt procedure revision of important

operational procedures, i.e., abnormal operating procedures, upon discovery of potentially nonconservative actions

Approximately one year ago, the external OEC began more formal tracking and review of lower level industry operating experience, such as NRC daily events and items posted on INPO's Nuclear Network and also recently implemented bulletin board postings throughout the plant highlighting events and issues from other facilities. The inspectors viewed these actions as positive initiatives in the station's efforts to improve operating experience feedback. However, in one case the inspectors reviewed, an event reported to the NRC by another pressurized water reactor facility was reviewed and closed by the OEC as not applicable. This event involved a potential training deficiency regarding an FSAR assumed time for operator actions during a steam generator tube rupture event. The NRC later identified that the issue was applicable to Point Beach and, following NRC identification, the licensee started to evaluate the issue. However, the licensee missed an opportunity to self-identify that the event was applicable during the industry operating experience review.

c. Conclusions

The industry operating experience feedback program effectively handled the majority of issues that the inspectors reviewed. However, review of two important issues was significantly delayed. In another case, an applicable industry issue was closed without actions during the industry operating experience review.

O7.2 Self Assessments and Quality Assurance (QA) Audits

a. Inspection Scope (40500)

The inspectors reviewed a number of self assessments and QA audits performed in 1997. The inspectors also reviewed the licensee's corrective actions in response to the audit findings and interviewed both the QA auditors and members of the audited organization.

b. Observations and Findings

Overall, the QA audits and particularly the self assessments appeared to identify significant issues and reflected a critical review of the area assessed. However, licensee corrective actions in response to audit findings appeared to lack appropriate priority and, in one case, were found to be inadequate. The inspectors also identified that a prompt operability determination was not performed for QA-identified relief valve testing issues.

In-Service Testing (IST) Program Audit

The IST program audit identified a number of deficiencies including one QA significant issue with respect to the relief valve program. The overall conclusion was that the IST and relief valve programs were not up to industry standards. A 1996 audit had

previously identified the IST program as a QA significant issue. A total of eight quality condition reports (QCRs) and ten observations were documented.

The licensee's program required that, for QA significant issues, a root cause evaluation be performed. The inspectors observed that although QCR 97-0148 was written on July 17, 1997, the root cause evaluation was not started until mid-October. The licensee was unable to provide any explanation for the delay. The root cause evaluation was not complete at the end of the inspection, and the inspectors noted that no due date was assigned in the licensee's corrective action tracking system. The root cause evaluator told the inspectors that the evaluation was near completion but that it would not address the specific issues identified in the QCR. The inspectors ascertained that the licensee's corrective actions to QA-identified significant issues, such as the IST program deficiencies, was not aggressive. Because of the three month delay in the licensee starting the root cause evaluation, the inspectors were unable to assess the licensee's thoroughness in dispositioning QA findings. However, the repetitiveness of the QA finding, the delayed start of the root cause evaluation, the lack of an assigned completion date, and the failure of the evaluation to address specific issues did not portend a thorough job.

The inspectors followed up on the specific issues raised in the QCR and determined that the system engineer was reviewing the issues, although there was no action item or due date for such a review. The system engineer stated that only a few of the issues were valid; however, the engineer could not provide any documentation to support this conclusion. The engineer stated that he had reviewed the main steam and pressurizer relief valve testing to ensure operability of currently installed valves but he had not reviewed testing results for the other safety-related valves mentioned in the QCR.

QCR 97-0148 stated, "Requirements for testing safety-related relief valves per ASME Section XI, 1986 -OM-1(1981) criteria were not met in all instances." The QCR identified sixteen different specific testing deficiencies. NP 5.3.7, "Operability Determinations," Attachment A, "Management Expectations for Performing a Written Prompt Operability Determination," described types of conditions that should receive a written operability evaluation if the system, structure, or component was to remain in service. Item 2.6, "Errors in testing, testing methodology, instrumentation or data that could invalidate surveillance testing that is used to demonstrate continued operability of SSCs [systems, structures, and components]," appeared to apply to the relief valve testing discrepancies documented in the QCR. Although the QCR stated that test requirements were not met, no operability determination for the affected valves was performed, nor was any other assessment made to ensure that the testing deficiencies did not impact the valves' ability to function. The failure to perform an operability determination in accordance with NP 5.3.7 is considered an example of a violation of 10 CFR Part 50, Appendix B, Criterion V (VIO 50-266/97023-01b(DRS); 50-301/97023-01b(DRS)). An evaluation of the QCR performed on October 26, 1997, following inspector questioning, did not directly address operability but did provide reasonable justification to consider the affected valves operable. However, the

inspectors were concerned that the licensee's corrective action program failed to ensure that QA-identified issues that could affect equipment operability, such as these testing deficiencies, were formally captured and assessed.

Another QCR from the QA audit identified 16 sets of valves that were inappropriately excluded from the IST program. A prompt operability determination was completed for only one set of valves. The IST engineer told the inspectors that the other valve sets did meet all IST requirements and, therefore, no prompt operability determination was required. The engineer stated that this was discussed with the SRO on shift; however, there was no documentation to support either the conclusion reached or the conversation. The lack of a written justification for the other sets of valves was another example of informal resolution of operability questions. Because of the significant deficiencies in the IST program identified by both the licensee and the NRC, the inspectors were concerned about this informal disposition of a QA finding. The inspectors noted that, again, the QCR was being reviewed as a programmatic issue, and the follow up on specific issues was informally addressed.

#### Operations Audit

A QA operations audit concluded that the Operations department was effectively operating Point Beach but was not effective in inducing other departments to address corrective maintenance on equipment and components that affect plant operations. The QA organization documented a number of issues on QCRs, including a problem with use of calibrated measuring and test equipment and equipment isolation and control of danger tags. The inspectors noted that these findings were consistent with NRC inspection findings, such as those in Sections M1.1 and O3.1.

The inspectors reviewed several of the QCRs initiated by the audit documenting longstanding corrective maintenance items on the EDGs, including operator work-arounds. Although specific corrective maintenance in response to the audit findings had not yet been performed, an operator work-around list was generated and maintained by the Operations department to better prioritize equipment issues. The inspectors were satisfied that none of the deficiencies affected the operability of the EDGs.

#### c. Conclusions

Audit findings and self-assessments appeared to provide a critical review of the area assessed. Licensee corrective actions in response to the audit findings were not always timely, and, in some cases, due dates and priorities for actions were not assigned. The inspectors concluded that the corrective action process did not always capture specific issues raised in programmatic QCRs, resulting in these issues not being formally addressed. A violation for the failure to perform an operability determination, associated with a valve testing deficiency identified during a quality assurance audit, was identified.

### O7.3 Corrective Action System

#### a. Inspection Scope (40500)

The inspectors reviewed the NUTRK action items for a sampling of residual heat removal system condition reports and condition reports open for over five years.

#### b. Observations and Findings

The inspectors observed that the licensee had a large number of items in the corrective action system. Discussions with the system manager indicated that the system had over 4000 opened items. Due to the concerns noted in Section O7.2, the inspectors questioned how priorities were assigned. The licensee explained that the system had a formula to calculate what priority should be assigned. However, the inspectors observed that priorities were not assigned on over 60 percent of the action items reviewed.

Additionally, the inspectors noted that the system was set up to "assign" an action item to an individual. That individual then had a month to "receive" the item, before a due date was given. If the individual decided not to receive the item, then someone else would be "assigned," and that individual would have a month to decide whether to receive the item, or reassign it. The inspectors noted one example where an item was entered into the system in September 1996; however, no actions were assigned until July 1997, 10 months later. The inspectors found two 1997 examples where action items went for six months between being generated and being received. The licensee stated that they had recently changed the system such that agreement was reached during a daily meeting as to who would receive the condition report action item before the item was assigned. However, the licensee acknowledged that the computer system still required someone to formally "receive" the item, and that the procedure allowed up to a month before that "receipt" needed to be made.

The inspectors also saw that the corrective action system due dates were determined by the "receiving" party, and some items were closed without ever being assigned due dates. This made it difficult to assess overall timeliness. However, for those actions where due dates were assigned, approximately 31 percent received due date extensions, and approximately 27 percent were overdue, whether or not extensions were requested. In the case of the item discussed above which took 10 months before the action item was assigned, a due date of August 31, 1997, was assigned. At the time of the inspection (October - November 1997), the tracking system showed the item as overdue, but with no actions taken although it had been overdue for two months. The inspectors also identified one case where six extensions were granted, but the item was overdue at the time it was closed. In a third case, an open item was overdue after four extensions.

Inspection Report 50-261/97010(DRS); 50-301/97010(DRS) noted that the corrective action system had approximately 2400 items in it as of September 1997. Therefore, it appeared that the licensee had recently input a large number of issues into the

corrective action program. While this increase was extremely commendable, the inspectors were concerned that the problems identified above could counteract the benefits raised by increased identification of issues.

c. Conclusions

The inspectors concluded that the corrective action system lacked prioritization and that there was limited accountability for ensuring that actions were completed. These contributed to the large backlog of open items in the system.

**O8 Miscellaneous Operations Issues**

- O8.1 (Closed) Violation 50-266/96003-01; 50-301/96003-01: Procedures for Surveillance and Testing of Safety Related Equipment. The issue involved inspectors observing boric acid crystal buildup on drains that operators were supposed to observe for leakage during surveillances. To resolve this issue, the licensee revised the procedures to require cleaning away of any accumulated boric acid prior to the surveillance. The licensee also established acceptance criteria for assessing any observed leakage. The inspectors reviewed the revised procedures and concluded that the actions taken should be sufficient to prevent recurrence. This item is closed.
- O8.2 (Closed) Violation 50-266/96006-02; 50-301/96006-02: Failure to Log a Condition Where Technical Specifications Had Not Been Met. The inoperability of the containment hatch outer door had not been logged in the operator's log causing confusion for subsequent shifts on the door's correct status. The licensee has described this occurrence in a "Lessons Learned" document and made it required reading for Operations. The licensee has briefed Operations staff during Plant Status Update 97-1. Additionally, the licensee has performed a complete rewrite of some procedures and included log maintenance under Attachment 5, "Standards and Expectations for Logs," of OM 1.1, "Conduct of Plant Operations." The inspectors concluded that the licensee had taken appropriate actions. This item is closed.
- O8.3 (Closed) Inspection Follow up Item 50-266/96018-02; 50-301/96018-02: Fire Brigade and Control Room Staffing. At the time this item was opened, the DOG was expected to leave the main control room in response to a plant fire. The DSS was expected to remain in the main control room and act as the fire brigade chief. The DSS and DOS were the only licensed SROs for coverage of a dual unit control room during back shift hours. The inspectors verified that a recent revision to operations manual procedure OM 1.1, "Conduct of Operations," had incorporated management expectations to increase main control room staffing to three SROs and deleted the DSS's responsibility as fire brigade chief, appropriately delegating the responsibility to an individual without control room duties. These changes allowed one of three SROs to respond during a plant fire without jeopardizing plant operations oversight in the main control room. The inspectors concluded that the licensee's corrective actions had been appropriate. This item is closed.

O8.4 ~~(Closed)~~ Violation 50-266/96018-01; 50-301/96018-01: Failure to follow prescribed procedures as outlined in TS 15.6.8.1 (2 examples). In regard to the first example: during observation of control room activities, a unit control operator only once walked down the entire panel over a four hour period. This was contrary to the expectations stated in operations manual procedure OM 3.1. The inspectors verified that a revision to operations manual procedure OM 1.1, "Conduct of Operations," had incorporated management expectations to monitor control panels on a frequent basis which included a comprehensive review of the control panel indications at regular intervals (approximately every 15 minutes). Regarding the second example: during routine testing of emergency diesel generator G-02, an operator failed to perform visual checks of the test ports during a barring evolution (i.e. hand jacking of the engine for one revolution). The inspectors verified that a recent revision of TS test TS-82, "Emergency Diesel Generator G-02 Monthly," had incorporated a management expectation to have the operator check the test ports for discharge following the barring evolution. The inspectors concluded that the licensee's corrective actions had been appropriate. This item is closed.

## II. Maintenance

### **M1 Conduct of Maintenance**

#### **M1.1 Use of an Uncalibrated Stopwatch during Degraded and Loss of Voltage Surveillance**

##### **a. Inspection Scope**

The inspectors observed portions of the monthly technical specification surveillance for 4160/480 Volt relays for degraded and loss of voltage, performed by electrical maintenance technicians and coordinated with the control room. The inspectors reviewed the applicable procedures and interviewed operations, maintenance, and supervisory personnel about current practices for taking timed measurements.

##### **b. Observations and Findings**

While observing 4160/480 Volt degraded and loss of voltage relay monthly surveillances on Unit 2, the inspectors noted that personnel used an uncalibrated stopwatch to measure 4.16 kV bus undervoltage relays 2-274/A05, 2-275/A05, 2-276/A05, 2-27-4/A06(27-4), 2-27-5/A06(27-5) and 2-27-6/A06(27-6) pickup time delay setpoint values.

The licensee considered this instrument surveillance to be a channel functional test, basically intended to observe alarm lights and relay tripped indication. However, the inspectors determined that the procedures, 2RMP 9071-1 and 2RMP 9071-2, specified a setpoint and low and high limits, creating acceptance criteria which had to be satisfied to pass the test. The licensee stated that, for instrumentation surveillances which were channel calibrations, timed measurements, as required by the TS on a refueling outage frequency, used calibrated bench style equipment such as electronic timers or strip

chart recorders. Although not required by TS, the licensee had extended the channel functional check to include a calibration type timing test by specifying the lower and upper timed limits in the monthly surveillance procedure. The failure to meet a surveillance requirement acceptance criteria would require that the system or component be declared inoperable and the appropriate limiting condition for operation be entered. By using an uncalibrated stopwatch the licensee did not have a verifiable means to ensure that the acceptance criteria were met and that the measured equipment was operable. At the time of the inspection, the licensee had few stopwatches in the calibration program and these were generally used for operational tests such as valve stroke timing. The licensee wrote a condition report to evaluate all applications where an uncalibrated stopwatch might be used.

The inspectors also noted a weakness in that procedures 2RMP 9071-1 and 2RMP 9071-2 listed the stopwatch under "Tools" rather than as "Measurement and Test Equipment."

The failure to use a calibrated stopwatch during the performance of these surveillances is considered a violation of 10 CFR Part 50, Appendix B, Criterion XII "Control of Measuring and Test Equipment" (50-301/97023-02(DRS)).

c. Conclusions

The inspectors concluded that the licensee failed use calibrated test equipment, controlled by a measuring and test equipment control program, to measure timed acceptance limits in a technical specification monthly surveillance.

**M3 Maintenance Procedures and Documentation**

M3.1 Review of Maintenance Procedures

a. Inspection Scope (40500)

The inspectors reviewed a number of maintenance procedures to verify that the licensee included appropriate restoration steps following maintenance.

b. Observations and Findings

The inspectors noted that the procedures conformed with TS Section 15.6.8. The procedures contained the steps to perform post maintenance testing (PMT) with blanks for signature and date. In a few instances, the procedures were comprised entirely of PMT requirements. The inspectors found that the maintenance procedure disassembly and restoration reassembly steps were reasonably detailed. The steps included diagrams and pictures of an exploded view of the assembly. There were foreign material exclusion (FME) and cleanliness sign-offs before closure of the equipment was performed. The I&C maintenance procedures' PMT sections were considered to be the "as left" data readings. When a step was not used during the maintenance, the step was required to have "NA" written in the step to prevent confusion.

The most recently approved procedures required verification that the procedure was current and any temporary changes were included. Additionally, the procedures had a section added for work scope, which was to be used to record the controlling work document numbers. The inspectors noted that the addition of a work scope block provided the capability to trace other related work "packages" when the maintenance job was completed and the procedure and other work documents were separated for storage.

The inspectors ascertained that the procedures were classified into three levels for use by the worker as follows: continuous use, reference use or information use. The continuous use procedure was required to be with worker at all times work was being performed. The reference use procedure was required to be within easy access of the workers at the job site. The information use procedures could be left at the shop after the procedure was read. The level was printed on the bottom of each sheet in the procedure as a reminder to the workers. The inspectors noted that all maintenance procedures were appropriately labeled as either continuous or reference. Maintenance workers stated that the recently rewritten maintenance procedures were more comprehensive than the previous procedures.

c. Conclusions

The recent revisions to the maintenance procedures were determined to provide sufficient restoration steps for reassembly and post maintenance testing.

**M8 Miscellaneous Maintenance Issues**

- M8.1 (Closed) Violation 50-266/94013-03: Actions Not Sufficient to Prevent Recurrence of Broken Containment Integrity. The issue involved a repeat failure to prevent containment integrity from being violated during testing of safety injection valves. To resolve this issue, the licensee revised the testing procedures to ensure that testing steps did not result in breaking containment integrity, as well as cautioning the performers on the need to maintain containment integrity. The inspectors verified that the procedures had been revised and that the problem had not recurred. The inspectors concluded that this item was adequately resolved. This item is closed.
- M8.2 (Closed) Inspection Follow up Item 50-266/94013-04: Temporary Change Not Always Generated to Correct Test Procedure Problems. The issue involved a temporary procedure change not being issued, resulting in a repeat occurrence of the above event. The inspection follow up item was for the inspectors to review future licensee event reports to ensure that a similar event did not occur in the future. The inspectors verified that events had not been repeated due to lack of procedure changes. The inspectors noted that the licensee appeared to issue temporary changes appropriately. The inspectors concluded that this item was adequately resolved. This item is closed.
- M8.3 (Closed) Violation 50-266/95015-01; 50-301/95015-01: Reactor Vessel Head Removal Procedure Did Not Contain Foreign Material Exclusion Closure Inspection Signoffs. The

inspectors verified that procedure had been revised to include several hold points to verify cleanliness as required by the FME procedure. This violation is closed.

- M8.4 (Closed) Violation 50-301/96004-06: Failure to Follow Procedure for Temporary Modification for 2MS2016. A blank flange was installed for work on the main steam dump. Other recent performances of this same activity were handled correctly as a temporary modification. The licensee briefed first line supervisors on temporary change issues. The inspectors concluded that the licensee had taken appropriate actions. This item is closed.

### III. Engineering

#### **E1 Conduct of Engineering**

##### E1.1 Review of Operability Determinations (40500)

###### a. Inspection Scope

The inspector reviewed approximately 40 recent operability determinations for scope, content, and conclusions. The specific operability determinations reviewed are included in the List of Documents Reviewed, at the end of this inspection report. The inspector also reviewed NP 5.3.7 "Operability Determinations."

###### b. Observations and Findings

The inspectors did not find any operability determinations that appeared to reach an incorrect conclusion. The overall quality of the operability determinations was good, and, in some cases, the inspectors noted the operability determinations to be quite detailed. However, the inspectors had the following observations:

- Operability determinations were not stand-alone documents. The associated condition report listed the condition being evaluated and documented the conclusion (whether the SSC was operable or inoperable.) Without the condition report, it was not possible to determine what condition was being evaluated, and, in some cases, it was difficult to ascertain the conclusion. The ability to determine the conclusion reached was aggravated by the format of the prompt operability determination: Question 6 on the form stated "Basis for Declaring the SSC Operable." This gave the impression that there was only one possible response to an operability determination - that the SSC was operable. The inspector reviewed two operability determinations where the prompt operability determination appeared to provide actions that needed to be taken to ensure operability, rather than describing why the SSC was operable. In both of these cases (CRs 97-1918 and 97-2848) the inspectors determined that the condition report described the SSC as inoperable.

- In one example (CR 97-2802), the inspectors were unable to determine the basis for the licensee's conclusion, since the operability determination stated that the maximum neutron source term exceeded that in the cask certificates of compliance. The inspectors discussed the operability determination with the responsible engineers and learned that the licensee had concluded that the casks were operable, because only two assemblies (representing 4 percent and 33 percent of the respective cask loading) exceeded the limit. Since the average neutron source limit for each cask was below the limit and radiation readings taken at the time of loading did not show excessive neutron doses, the licensee concluded that the casks were operable. Based on this additional information, the inspectors agreed with the licensee's conclusion.
- The inspectors identified a case where nine walkdown condition reports were generated and operability determinations were completed within a very short time frame (all nine operability determinations were signed off within a few minutes of each other). The inspectors found that four of the nine evaluations were duplicates of the other five. The inspectors questioned the need for the multiple evaluations and the overall quality of the evaluations, given the short time taken to evaluate the issues. The inspectors were concerned that the involved individuals did not have an appropriate appreciation for when separate operability determinations were necessary and when issues could appropriately be combined. This concern was heightened by the apparent lack of time spent in generating the written determinations. The inspectors did not have any concerns with the final conclusions reached on any of the evaluations, but were concerned over the apparent process issues. In conversations with licensee management, the licensee stated that these issues were reviewed and that they had determined that separate operability determinations were appropriate; however, the licensee was unable to justify why half the evaluations were duplicates of the others.
- The inspectors noted that the Operability Determination procedure, NP 5.3.7, stated that a log of operability determinations would be kept in the control room. In actual practice, the log was kept in the work control center, adjacent to the control room, and only logged those items which were considered "operable but degraded," rather than listing all operability determinations done. To obtain a log of operability determinations completed, the inspectors had to contact an individual in the licensing group. The licensee stated that they were aware of this procedural discrepancy. The licensee was in the process of revising NP 5.3.7, and stated that this problem, along with several other discrepancies, would be addressed.

c. Conclusion

The inspectors concluded that the operability determinations reviewed were good, and, in some cases, quite detailed. However, this was not true in all cases and a wide quality spectrum was observed.

## E2 Engineering Support of Facilities and Equipment

### E2.1 Utilization of Design Information in 10 CFR 50.59 Safety Evaluations

#### a. Inspection Scope

The inspectors reviewed and evaluated the effectiveness of the licensee's process to ensure that design information necessary for preparing adequate 10 CFR 50.59 safety evaluations was available to licensee personnel that prepared the safety evaluations.

#### b. Observations and Findings

The inspectors noted that the licensee's procedure, NP 10.3.1 defined the current licensing basis (CLB) to include the final safety analysis report (FSAR), the facility operating license and TS, the fire protection evaluation report, NRC safety evaluation reports, and regulatory commitments. This list was considered to be a comprehensive compilation of documents that encompassed the licensing basis. However, the design bases documents (DBDs) were not specified as part of the CLB, although the inspectors deemed that the DBDs would be a valuable tool for performing design information search and evaluation.

The inspectors noted that the CLB and DBDs were available for review as part of the licensee's electronic database and could be accessed. The inspectors observed a demonstration of the electronic database and noted that, to obtain the most meaningful data, some skill in defining the keyword searches was required since nomenclature was not necessarily consistently used in documents developed over the history of the plant. However, overall plant information was available on the computer.

#### c. Conclusions

The inspectors concluded that the licensee's 10 CFR 50.59 procedure contained a comprehensive listing of licensing basis documents which would allow preparation of adequate 50.59 safety evaluations.

### E2.2 Safety Evaluation Review

#### a. Inspection Scope (37001)

The inspectors reviewed a sampling of 11 screenings and 11 safety evaluations performed in accordance with 10 CFR 50.59 since July 1997.

#### b. Observations and Findings

Overall, the inspectors considered the quality of the screenings and safety evaluations to be good. The inspectors did not identify any screenings where safety evaluations were required, nor did the inspectors find any unidentified unreviewed safety questions (USQ).

The inspectors identified two safety evaluations where the quality was considerably above average. These safety evaluations did a meticulous review of the design bases of the systems and thoroughly evaluated the impact of the change. The preparers answered each of the questions posed in 10 CFR 50.59 in sufficient detail to ensure that an USQ did not exist. For each question, ample information was provided to enable an independent reviewer to reach the same conclusion.

However, the inspectors did identify a case where the FSAR should have been updated, but hadn't been. Screening 97-1352 made a change to the procedure for releasing liquid radioactive discharges from the chemical volume and control system (CVCS) holdup tanks. In reviewing the screening, the inspectors identified that the FSAR section 11.1 discussed discharging radioactive releases from the CVCS. The FSAR stated that all routine liquid radioactive releases were made from waste disposal system waste condensate/distillate tanks or from CVCS monitor tanks. Instead, the licensee was releasing directly from the holdup tanks. The inspectors determined that the licensee altered the release method in 1988, due to their no longer recycling borated water. At that time, a full safety evaluation was performed, which concluded that discharging directly from the "B" holdup tank was acceptable, as the discharge path was monitored and contained automatic isolation valves. However, the licensee failed to ensure that the FSAR was revised to reflect the new release path.

The inspectors determined that, although the 97-1352 screening was titled as a complete rewrite of the procedure, the screening preparer had narrowly focused on the specific changes being made and had not looked at the actual FSAR description of how the discharge was performed. Therefore, the screening preparer did not write a condition report or otherwise identify that the FSAR had not been updated. Violation 50-266/96002-05(DRP); 50-301/96002-05(DRP) previously identified that changes to the plant, systems and parameters were not routinely updated into the FSAR. The failure to identify during the 1997 screening review that the FSAR was incorrect is an example of the failure to affect long term corrective actions for a previously identified programmatic weakness with the performance of updating the FSAR. This is considered an example of a 10 CFR Part 50, Appendix B, Criterion XVI "Corrective Actions" violation (VIO 50-266/97023-03a(DRS); 50-301/97023-03a(DRS)).

c. Conclusions

The inspectors concluded that the safety evaluations and screenings being performed were of good quality and some were considerably above average. However, one screening failed to identify that the FSAR did not reflect the current plant procedures.

### E3 Engineering Procedures and Documentation

#### E3.1 Programmatic Review of the FSAR including the Update Program and Responsibilities

##### a. Inspection Scope (37001)

The inspectors evaluated the effectiveness of the licensee's formal procedural guidance established in assigning responsibility for preparing and submitting the periodic update of the FSAR. Additionally, the inspectors reviewed and evaluated the effectiveness of the process by which licensee was updating its FSAR and reviewed selected changes in the facility and procedures made in accordance with 10 CFR 50.59.

##### b. Observations and Findings

The inspectors noted instances of imprecise wording for the procedure guidance as developed from the regulation. Procedure NP 5.2.6, "FSAR Updates," Section 1.3 stated "The NRC 10 CFR 50.71(c) requires that revisions be filed no less frequently than annually ..." and Section 4.2 states "As required by 50 CFR 71(e) ... the FSAR is updated on at least an annual basis to include all changes necessary to reflect information and analyses submitted to the NRC since the last update of the FSAR." However, 10 CFR 50.71(e) actually required that subsequent revisions be filed either annually or 6 months after each refueling outage provided the interval between successive updates did not exceed 24 months. Further, procedure NP 5.2.6 was not clear on how the submittal of changes under 50.59, which were not otherwise submitted, was assured, in accordance with 10 CFR 50.71(e)(2). The inspectors determined that, although not referenced in procedure NP 5.2.6, the licensee did make a 50.59 annual submittal under the 50.59 program using another procedure, NP 10.3.1. As the submittal appeared to be properly made, the inspectors considered this to be a procedural weakness. In another example, NP 5.2.6, Section 4.12 stated, "The revision package shall be sent to the NRC, in accordance with 10 CFR 50.4." Although not incorrect, the procedure would be more accurate to state "... in accordance with 10 CFR 50.71(e)."

The inspectors noted instances where the licensee's program appeared to have failed to ensure that the FSAR would be updated. For example, the licensee failed to prepare a FSAR change request (FCR) for FSAR Tables 8.2-1 and 8.2-2, diesel generator load values for conditions following a loss of coolant accident. Engineering Calculation N-91-016, Rev. 2, which had been reviewed and accepted in June 1997, changed important accident condition load values in these tables. The inspectors determined that one of the reasons for a FCR not being generated was a lack of specific procedural requirement as to an acceptable time frame to generate the FCR. In this case, the inspectors determined that the responsible engineer knew that the FSAR required updating, and had a personal action item to eventually ensure the update occurred. However, there was no corrective action tracking item or other formal tracking mechanism to ensure that the update was completed on a schedule commensurate with the next FSAR update. The inspectors considered the lack of procedural guidance on tracking of known changes needed to the FSAR a programmatic weakness.

c. Conclusions

The inspectors identified that formal procedural guidance had been established, but was imprecisely worded. The procedure assigned primary responsibility for preparing and submitting the periodic update of the FSAR to an individual without any guidance on timeliness.

E3.2 Safety Evaluation Program Responsibilities and Procedural Guidance

a. Inspection Scope

The inspectors evaluated the formal procedural guidance implementing the requirements of 10 CFR 50.59 for proposed changes, tests and experiments (CTEs). Additionally, the inspectors reviewed the responsibilities that the licensee's 50.59 procedure assigned to individuals, including assessing and documenting whether a change to the plant TS or an USQ was involved, procedural guidance for maintaining 50.59 records of CTEs and for formally reporting to the NRC the CTEs made in accordance with 50.59.

b. Observations and Findings

The licensee staff had conducted a thorough review of the program and had recently recommended changes based on that review. In May 1997, the licensee issued a detailed rewrite of procedure, NP 10.3.1 "Authorization of Changes, Tests, and Experiments," and revised the procedure again in September 1997. The inspectors noted that NP 10.3.1 had expanded attachments which provided more details and a clearer definition of safety evaluation expectations, prescreening applicability guidance, screening guidance, and safety evaluation preparation guidance. Formal training was given to staff designated to perform screenings and staff assigned to perform both screenings and safety evaluations. The training acquainted the staff with industry practices, higher expectations in proposed industry standards and in the changes to the NP 10.3.1 procedure with emphasis on historically weak areas, such as what constituted an USQ or TS change. This is described in more detail in Section E5.1.

The inspectors noted that the licensee's 10 CFR 50.59 procedure effectively assigned responsibility for key areas including applicability, review and approval of 10 CFR 50.59 applicability determinations, preparation of safety evaluations for CTEs that required them, review and approval of safety evaluations as required by the TS and the NRC-approved operational quality assurance program, formally reporting to the NRC CTEs made in accordance with 10 CFR 50.59, and maintaining records of CTEs made in accordance with 10 CFR 50.59.

The inspectors noted that the existing procedure stated the requirements for maintaining records within the existing files in accordance with applicable records retention requirements. The inspectors successfully retrieved a number of records to confirm the retrieval capability.

c. Conclusions

The inspectors concluded that recent changes to NP 10.3.1 have resulted in improved procedural guidance for screening and writing 10 CFR 50.59 safety evaluations. The inspectors concluded the 10 CFR 50.59 procedure effectively assigned responsibility for key areas to assure that 50.59 safety evaluations were effectively prepared, reviewed and approved. Additionally, the inspectors concluded the necessary procedural guidance existed for maintaining records of CTEs and for formally reporting to the NRC the CTEs made in accordance with 10 CFR 50.39.

**E5 Engineering Staff Training and Qualification**

E5.1 Review of Engineering Training on Preparation of Safety Evaluations

a. Inspection Scope

The inspectors reviewed the licensee's training and qualification program requirements for licensee personnel that prepared, reviewed, or approved safety evaluations.

b. Findings and Observations

The review showed that the safety evaluation training was provided to the plant staff in a two day session with the usual class size of approximately 20 students. Training was provided by an outside contractor, who also wrote the training manual used in the course. The students were provided a copy of the training manual at the completion of the course and were encouraged to use it as a reference. The students were taught how to differentiate between CLB design information and FSAR/ 10 CFR 50.2 design basis criteria. The lesson plans emphasized the fact that the evaluation was performed to identify any USQs. The training emphasized that some changes required prior NRC review; but that did not necessarily mean that the change should not be made.

During the course the students had workshop sessions for writing and reviewing 50.59/72.48 screenings and safety evaluations. The examples used for practice were situations that may have occurred at the site or from other sources. The students practiced using the CLB electronic database. Satisfactory completion of the course required passing a written examination and performing on-the-job screenings and evaluations on actual plant conditions under the instruction of a qualified screening and safety evaluation evaluator.

The licensee did not have a formal method for controlling what discipline performed the evaluation. The system that was being used was the evaluator determined if he was qualified to perform the evaluation, and if not, passed the task to one that was qualified.

The inspectors ascertained that most of the plant engineering and licensing staff have been trained and qualified to perform safety evaluation screenings and safety evaluations. A portion of the operations group had been trained and qualified, with more scheduled for a future class.

c. Conclusions

The training and qualification of licensee personnel to perform screenings and safety evaluations appeared to be comprehensive and met the licensee's commitments to the NRC following the operational safety team inspection conducted in late 1996.

E5.2 Consistency Between Plant Safety Evaluation Procedures and Training

The inspectors reviewed the training materials to ensure they were consistent with the licensee's current procedural guidance for preparing safety evaluations. The inspectors confirmed that lesson plans referred to the course book, and the most recent revision of NP 10.3.1. The lesson plans emphasized that NP 10.3.1 provided controls for the preparation of screenings and safety evaluations at Point Beach. The inspectors concluded that there was consistency between the training and procedural requirements for preparing safety evaluations.

E5.3 Training Effectiveness

The inspectors reviewed the licensee's process for assessing training effectiveness and determined that the licensee did not have a formal method for evaluating 50.59/72.48 training. Instead the licensee used the quality of the evaluations that had been written as a quality control check on the training effectiveness. The licensee considered the recently performed screenings and safety evaluations to be of high quality. The inspectors concluded that the currently in-use training evaluation method appeared satisfactory as of the time of the inspection.

**E8 Miscellaneous Engineering Issues**

- E8.1 (Closed) Violation 50-266/94016-01; 50-301/94016-01: Foreign Materials Exclusion Controls/ Failure to Include Assumptions and Inputs. The issue involved two examples of a procedural violation. The first issue dealt with a FME inspection being conducted by a worker, rather than a supervisor. To resolve this issue, the licensee reiterated the expectations for FME closeout inspections. However, these corrective actions were not entirely effective, as evidenced by repeat violations in 1995 and 1996. While the corrective actions to the 1996 violation were still underway, the actions were identical to those addressing violation 50-266/96008-02. Therefore, these actions will be tracked by 50-266/96008-02. The second issue dealt with calculations not containing assumptions or design inputs. The licensee revised their calculation program to specifically require documentation of design inputs and assumptions. The licensee also confirmed that design inputs and assumptions were in the calculations cited in the violation, although not clearly defined. During the inspection, the inspectors reviewed EDG calculation N-91-01E "Diesel Generator Loading Analysis," and verified that design inputs and

assumptions were clearly documented, in accordance with the calculation procedure. Based on the procedural controls and the example reviewed, the inspectors concluded that this issue was resolved. This item is closed.

- E8.2 (Closed) Inspection Follow up Item 50-266/95004-07; 50-301/95004-07: Mitigating Actions for Grid Instability Concerns. The issue involved the control room receiving a draft copy of proposed actions to be taken in response to various grid instability situations. In response to the item, the licensee pulled the draft information from the control room. The licensee also made some changes to an operating procedure, although it still remained more limiting than the draft information. The system engineer and operating personnel stated that future plans to resolve this issue included replacement of the original plant voltage regulators, which should result in less plant perturbations due to grid instabilities. The licensee had also identified that the FSAR section on grid instabilities needed clarifying, based upon an action item in the nuclear tracking system. The inspectors determined that, although the FSAR changes were known for several years, the responsible individuals had not yet submitted a FSAR update form to the FSAR coordinator nor had constraints been placed in the corrective action tracking system to ensure the change was incorporated. The inspectors discussed the issue with the responsible engineer, who stated that the FSAR coordinator would send out a memo requesting FSAR changes just prior to each update, and that he planned on responding to that memo; however, he acknowledged that he had missed previous opportunities to update the FSAR, due to this being a "low priority item." Violation 50-266/96002-05(DRP); 50-301/96002-05(DRP) previously identified that changes to the plant, systems and parameters were not routinely updated into the FSAR. This was another example of the failure to affect long term corrective actions for a previously identified programmatic weakness with the performance of updating the FSAR. (VIO 50-266/97023-03b(DRS); 50-301/97023-03b(DRS)). The inspection follow up item is closed.
- E8.3 (Closed) Inspection Follow up Item 50-266/96002-03; 50-301/96002-03: Under Severe Cold Weather 345 kV Breakers Lost Compressed Air Pressure Needed for Arc Quenching. Cold weather differential shrinking of the materials used in the air tank, gasket and access cover, resulted in cover leaks and loss of air pressure. In February 1996, three breakers lost sufficient air pressure to change state and remained locked in the closed position. This condition reduced electrical coordination and limited flexibility to respond to external difficulties on the grid. The licensee implemented a work-around by bringing in additional air compressors. To remedy this issue, the licensee replaced, or was in the process of replacing, the six most important 345 kV breakers with another design which suppressed the arc using sulfur hexafluoride (SF<sub>6</sub>) rather than compressed air. By utilizing the air compressors which formerly supplied the six breakers now using SF<sub>6</sub>, the remaining old style General Electric breakers will have dual air compressors lessening their vulnerability. Additionally, the licensee revised abnormal operating procedure AOP-13C, "Severe Weather Conditions" to provide a more detailed response. The inspectors concluded that these actions effectively addressed the issue. This item is closed.

- E8.4 (Closed) Violation 50-301/96004-05: Failure to Perform Safety Evaluation for 2MS2016 Temporary Modification. When performing a maintenance activity involving installing a blank flange while the steam dump valve was being repaired, the safety screening improperly concluded that a 10 CFR 50.59 was not required. Other recent performances of this same activity were handled correctly with a safety evaluation. The licensee has briefed the Maintenance Department on 10 CFR 50.59 and temporary change issues. Additionally, the licensee has conducted training for all safety screeners and safety evaluators in early 1997 to upgrade the skill level and understanding of the requirements of 10 CFR 50.59. The inspectors concluded that the licensee had taken appropriate actions. This item is closed.
- E8.5 (Closed) Violation 50-266/96012-07; 50-301/96012-07: Repositioning of the Boric Acid Storage Tank to Safety Injection Pump Valve 1SI-826A Without a Safety Evaluation. The issue involved a change to the plant which revised a FSAR drawing. Following issuance of the violation, the licensee prepared a safety evaluation, which determined that no unreviewed safety questions existed. Additionally, the licensee has conducted training for all safety screeners and safety evaluators in early 1997 to upgrade the skill level and understanding of the requirements of 10 CFR 50.59. The inspectors reviewed the safety evaluation and found it acceptable. This item is closed.
- E8.6 (Closed) Violation 50-266/96018-20; 50-301/96018-20: No Licensee Event Report (LER) for Missed Leakage Tests. The issue involved an LER not being issued for a reportable event. To resolve this issue, the licensee revised procedure NP 5.3.1 "Condition Reporting System" to require that an action item be specifically generated to remind licensing personnel that an LER was required. The inspectors verified that the procedure was revised. This item is closed.

#### IV. Plant Support

##### **R8 Miscellaneous Radiation Protection Issues**

- R8.1 (Closed) Violation 50-266/96003-05: Unauthorized Entry into Posted High Radiation Area. The Unit 1 Containment was posted as a high radiation area in anticipation of changing radiological conditions due to the imminent reactor head lift. A within-plant announcement declared the containment access restriction, but the worker apparently did not hear the message. The worker entered the containment with several authorized workers while the radiation boundary rope was temporarily raised and apparently did not read the high radiation posting attached to the rope. A health physics (HP) technician soon discovered the worker was not signed on to the appropriate radiation work permit and did not have the required dosimetry. To resolve this issue of worker awareness of entry into high radiation area boundaries, the licensee added temporary swing gates and containment third doors. Additionally, electronic bulletin boards at the normal entrance to the radiologically controlled area and bulletin boards at the HP station provided information on radiological condition or posting changes. The inspectors concluded that the licensee had taken appropriate actions. This item is closed.

R8.2 (Closed) Violation 50-266/96004-02; 50-301/96004-02: Failure to Follow Contamination Control Procedures. A worker passed a wrench from the contaminated area to a HP technician in the uncontaminated area who was not wearing gloves. After wiping the wrench the HP technician passed the wrench to another worker also not wearing gloves who stored the wrench in the potentially contaminated tool box. The wrench was not surveyed or controlled until routinely surveyed as required by procedures. In response to this issue, the licensee discussed the event with HP technicians and the HP support staff. Additionally, the licensee recognized the need for heightened attention and designated "Health Physics - improve radiation workers standards and performance" as item #4 on the Near Term Station Focus List. The inspectors concluded that the licensee had taken reasonable action to resolve this issue. This item is closed.

## **F8 Miscellaneous Fire Protection Issues**

F8.1 (Open) Violation 50-266/94015-01; 50-301/94015-01: Combustible Controls for Hot Work. The issue involved observation of combustible material within 35 feet of grinding activities (a potential fire source). In response, the licensee revised the procedure to provide better control over hot work preparation. The inspectors reviewed the procedure and discussed hot work preparation activities with the responsible fire protection individual. The inspectors noted that the procedure used the words "should" frequently, although "shall" was used in some places. The inspectors questioned various licensee personnel about the intended meaning of these two words. Licensee management replied that the intention was that both words should be treated the same: as a requirement. The responsible individual stated that personnel preparing to perform hot work were supposed to follow the procedure, and, generally did so. Because the procedural controls were somewhat lax, this item will remain open, pending inspector observation of actual hot work preparation.

F8.2 (Closed) Violation 50-266/96007-03; 50-301/96007-03: Inadequate Test Documentation. The issue involved improper performance of a fire damper test. The licensee revised the procedure, PC 75, Parts 6 and 7, "Semi-Annual Diesel Generator Fire Damper and Ventilation Surveillance Test" to require additional operators to ensure that all dampers could be observed, so that an accurate closure time could be obtained. The inspectors reviewed the guidance and concluded that it was acceptable. This issue is closed.

## **V. Management Meetings**

### **X1 Exit Meeting Summary**

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on November 7, 1997. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

## PARTIAL LIST OF PERSONS CONTACTED

### Licensee

#### Wisconsin Electric Power Company (WEPCO)

G. L. Boldt, Special Assistant to the Site Vice President  
J. B. Brander, Senior Project Specialist - Maintenance Services  
A. J. Cayia, Plant Manager  
F. A. Fientje, Regulatory Specialist  
W. B. Fromm, Maintenance Manager  
R. K. Hanneman, Senior Project Engineer, Continuous Safety & Performance Assessment  
F. P. Hennessy, Corrective Action Program Manager  
N. L. Hoefert, Continuous Safety and Performance Assessment Manager  
R. F. Hornak, Senior Project Engineer - Site Engineering  
D. F. Johnson, Regulatory Services & Licensing Manager  
J. E. Knorr, Regulation & Compliance Manager  
C. W. Krause, Project Engineer - Nuclear Engineering  
R. G. Mende, Operations Manager  
S. A. Pfaff, Operating Experience Coordinator  
M. E. Reddemann, Quality Assurance Manager  
J. G. Schweitzer, Site Engineering Manager  
G. R. Sherwood, Maintenance Field Services Manager  
P. J. Smith, Operations Training Coordinator  
J. S. Stanford, Operations Consultant  
J. G. Thorgersen, Senior Project Engineer - Quality Verification

#### Nuclear Regulatory Commission

F. D. Brown, Senior Resident Inspector  
P. L. Loudon, Resident Inspector  
A. C. McMurtry, Senior Resident Inspector

## INSPECTION PROCEDURES USED

IP 37001 10 CFR 50.59 Safety Evaluation Program  
IP 40500 Effectiveness of Licensee Controls in Identifying, Resolving, and Preventing Problems  
IP 93802 Operational Safety Team Inspection (OSTI)

## ITEMS OPENED AND CLOSED

### Opened

50-266/301-97023-01	VIO	Two Examples of Failure to Follow Procedures
50-301-97023-02	VIO	Use of Uncalibrated Stop Watch During Surveillance
50-266/301-97023-03	VIO	Two Examples of Failure to Ensure FSAR Updated

### Closed

50-266-94013-03	VIO	Actions Not Sufficient to Prevent Recurrence of Broken Containment Integrity
50-266-94013-04	IFI	Temporary Change Not Always Generated to Correct Test Procedure Problems
50-266/301-94016-01	VIO	Foreign Materials Exclusion Controls/ Failure to Include Assumptions and Inputs
50-266/301-95004-07	IFI	Mitigating Actions for Grid Instability Concerns
50-266/301-95015-01	VIO	No Foreign Materials Exclusion Requirements or Closure Inspection Sign-off
50-266/301-96002-03	IFI	Severe Weather Conditions
50-266/301-96003-01	VIO	Procedures for Surveillance and Testing of Safety Related Equipment
50-266-96003-05	VIO	Unauthorized Entry into Posted High Radiation Area
50-266/301-96004-02	VIO	Failure to Follow Contamination Control Procedures
50-301-96004-05	VIO	Failure to Perform Safety Evaluation for 2MS2016 Temporary Modification
50-301-96004-06	VIO	Failure to Follow Procedure for Temporary Modification for 2MS2016
50-266/301-96006-02	VIO	Inadequate Control Room Log Entries
50-266/301-96007-03	VIO	Inadequate Test Documentation
50-266/301-96012-07	VIO	Repositioning of the Boric Acid Storage Tank to Safety Injection Pump Valve 1SI-826A Without a Safety Evaluation
50-266/301-96018-01	VIO	Failure to Follow TS 15.6.8.1 Procedures
50-266/301-96018-02	IFI	Fire Brigade and Control Room Staffing
50-266/301-96018-20	VIO	No Licensee Event Report for Missed Leakage Tests

### Discussed

50-266/301-94015-01	VIO	Combustible Controls for Hot Work.
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## LIST OF ACRONYMS USED

AOP	Abnormal Operating Procedure
CAP	Corrective Action Program
CLB	Current Licensing Basis
CO	Control Operator
CR	Condition Report
CTE	Changes, Tests, and Experiments
CVCS	Chemical, Volume and Control System
DBD	Design Basis Document
DOS	Duty Operating Supervisor
DSS	Duty Shift Superintendent
EDG	Emergency Diesel Generator
FCR	FSAR Change Request
FME	Foreign Material Exclusion
FSAR	Final Safety Analysis Report
HP	Health Physics
ICP	Instrumentation and Control Procedures (Licensee Procedure)
INPO	Institute of Nuclear Power Operations
IST	Inservice Testing
IT	Inservice Test (Licensee Procedure)
LED	Licensee Event Report
LTOP	Low-Temperature Overpressure Protection
NUTRK	Nuclear Tracking (Computer Program acronym)
OEC	Operating Experience Coordinator
OP	Operating Procedure (Licensee Procedure)
PC	Periodic Checks (Licensee Procedure)
POD	Prompt Operability Determination
PMT	Post Maintenance Testing
PSIG	Pounds per Square Inch, Gage
QA	Quality Assurance
QCR	Quality Condition Report
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RMP	Routine Maintenance Procedure (Licensee Procedure)
SCR	Safety Evaluation Screenings
SE	Safety Evaluations
SOER	Significant Operating Event Reports
SRO	Senior Reactor Operator
SSC	System, Structure or Component
TS	Technical Specification
VIO	Violation
USQ	Unreviewed Safety Question

## LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document in this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

### Abnormal Operating Procedures

AOP-13C Severe Weather Conditions, Rev. 6

### Administrative Procedures (NPs)

1.9.13 Ignition Control Procedure, Rev.2, 8/29/97  
1.9.15 Danger Tag Procedure, Rev. 3  
5.2.6 FSAR Updates Rev. 2  
5.2.7 Technical Specification and Bases Change Preparation, Review and Approval, Rev. 2  
5.3.1 Condition Reporting System, Rev. 6, 9/24/97  
5.3.2 Industry Operating Experience Review Program, Rev. 4, 7/25/97  
5.3.7 Operability Determinations, Rev. 2, 7/3/97  
7.3.1 Temporary Modifications, Rev. 5  
9.3.3 Spare Parts Equivalency Evaluation, Rev. 1, 8/25/95  
10.3.1 Authorization of Changes, Tests, and Experiments (10 CFR 50.59 and 72.48 Reviews), Rev. 5 and 7  
11.2.4 Self Assessment Guideline, Rev. 0, 1/31/97

### Calculations

N-91-016 Diesel Generator Loading Analysis, Rev. 2, 6/18/97  
NPM-97-0329 Stroke Time Performance Requirements for Valves in the IST Program, 5/22/97

### Condition Reports (CRs)

[Note: Some of these CRs may have prompt operability determinations (PODs); however, the PODs were not reviewed.]

91-0351 Unresolved Q-List Project Seismic Classification, 9/17/91  
92-0261 Operation of Either or Both Units with Degraded Transmission Configurations, 5/19/92  
96-0071 Actual Mechanical Seal Leakage from the RHR, SI, and CS Pumps Does Not Meet the FSAR Requirements, 2/20/96  
96-0072 EOP 1.3 "Transfer to Containment Sump Recirculation" Does Not Allow Actions Assumed in FSAR Containment Integrity Analysis, 2/21/96  
96-0719 Piping Analyses Contain Improper Temperatures, 9/6/96

96-0879 Potential Improper Evaluation of 1(2) RH-715D for Boundary Leakage Tests, 9/20/96

96-0936 Unit 1 RHR Pump Suction RTD Blocked by I-Beam Support, 9/26/96

96-0977 Between Train Leakage Is Not Qualified, 10/4/96

96-1072 Unit 2 RHR Piping Support Has Broken Tack Welds, 10/10/96

96-1109 Component Cooling Water Leak on Unit 2 RHR Heat Exchanger Outlet, 10/10/96

96-1292 NP 3.1.1 Chemical Contamination Control for Corrosive Resistant Alloys, 11/1/96

96-1501 Second Instance of Kerotest Valve Failures, 11/24/96

96-1746 RHR Pump Operated with No Recirc Path, 12/16/96

96-1794 There Is No Plant Procedure for Placing the Alternate Seal Cooling in Operation, 12/19/96

96-1844 OP-7A&B, IT-03 and IT-04, RHR System, 12/19/96

97-0130 RHR Pump Casing Drain Plug Shows Signs of Boric Acid Buildup, 1/15/97

97-0199 Pressure Indicators Overranged During Test Performance, 1/22/97

97-0217 NP 3.1.1 Duct Tape on Stainless Steel Piping, 1/21/97

97-0246 During Danger Tag Removal, Valves Discovered Mis-positioned, 1/24/97

97-0321 Increased Radiation Doses to Equipment Outside of Containment, 1/30/97

97-0376 RHR Pump Operated at less than Minimum Total Flow, 2/5/97

97-0539 Unanticipated Load Shedding, 2/16/97

97-0649 Potential Leakage Past Check Valve 1SI-867B, 2/26/97

97-0684 CCW Heat Exchanger High Temperature Alarm Received, 3/2/97

97-0685 Service Water Flow Line Up, 2/28/97

97-0741 Danger Tag Missing, 3/5/97

97-0857 RH-720 Failed to Operate as Expected, 3/15/97

97-0878 RHR Pressure Gages Overranged During Test, 3/18/97

97-0921 RHR Recirculation Line Flow Indicator out of Calibration, 3/21/97

97-1076 Potential to Overpressurize a Portion of the RHR System, 4/3/97

97-1117 Received "D-01/D-03 125V DC Bus Under/Over Voltage" Alarm During Performance of TS-81, 4/7/97

97-1141 Unisolated Flow Path, 4/11/97

97-1261 Calculation 95-107 has Numerous Discrepancies

97-1295 RMP-9096 Debris Screen Installation Conditions, 4/21/97

97-1302 Calculation P89-06 "G01 Fuel line Wear Stress Calculation" Has Various Errors

97-1303 Simulator Testing Showed That the EDG Would Be Overloaded During a Simultaneous LOOP/LOCA

97-1341 Emergency Lighting Test Requirements May Not Satisfy Technical Specification Testing Requirements

97-1345 Design Guideline DG-E06 "Design Guide to Evaluate Changes for Effect on Diesel Loading" Does Not Provide Specific Criteria on Determining Which Loads Should Be Evaluated

97-1357 Operability Determination Performed under CR 97-0017 May Not Be Valid

97-1412 There Does Not Appear to Be Any Integrated Functional Testing of EDG Ventilation

97-1446 ECCS Use Described in FSAR Does Not Agree with Procedures, 4/29/97

97-1454 RMP Not Reflecting Manufacturer's Recommended Installation Instructions, 5/2/97

97-1599 Isolation Boundary Was Red Locked Versus Danger Tagged Shut, 5/19/97

97-1699 Control Room Annunciator Supply Breaker Operates Incorrectly, 5/27/97

97-1735 Inadequate Maintenance Procedure, 5/30/97

97-1989 Valve Repositioned Resulting in Loss of Status, 5/12/97  
 97-2212 RHR Operability vs. SW Outlet Valves on CCW Heat Exchanger, 7/20/97  
 97-2310 Component Cooling Water Leak on Unit 2 RHR Heat Exchanger Outlet, 8/8/97  
 97-2351 RHR Pump Seal Leakage, 8/4/97  
 97-2388 RHR Pump Seal Leakage Increases, 8/5/97  
 97-2439 Errors Discovered in CR 97-1918 Operability Determination, 8/7/97  
 97-2588 U2 R22 Restart Commitment Not Adequately Resolving ECC Commitment, 9/1/97  
 97-2629 RHR Pump Has a Seal Leak, 8/3/97  
 97-2661 Poor Radiological Practice with Plastic Bags on Test Connections, 8/29/97  
 97-2895 Started 2P10B RHR Pump with No Discharge Pressure on 2PI-629, 9/16/97  
 97-3290 Work Outside of Scope of Approved Procedure, 10/10/97  
 97-3330 Inadequate Surveillance of Reactor Trip Breakers, 10/13/97  
 97-3341 Inadequate Prompt Operability Determination (POD) for CR 97-3324, 10/15/97

Condition Reports with Associated Prompt Operability Determinations

97-1361 Calculation N-91-016 "Diesel Generator Loading Analysis" Has Several Unclear Assumptions or Bases, 4/23/97; POD, 4/25/97  
 97-1918 Auxiliary Feedwater System Low Pump Suction Pressure Trip Does Not Provide Required Protection to the AFW Pumps, 10/19/97; POD, Rev.0, 7/14/97 and Rev 1, 8/8/97  
 97-2347 Differential Relay Test Curve Calibration at Higher Point, 8/1/97; POD, 8/2/97  
 97-2406 NDE Examination Insufficient, 8/8/97; POD, 8/8/97  
 97-2413 Service Air (SA) Intercooler Pressure Design Requirements, 8/8/97; POD, 8/8/97  
 97-2416 IT-04 Low Head Safety Injector Flow Indicator, 8/10/97  
 97-2440 Upper Condensing Pot Vibrations, 8/11/97; POD, 8/12/97  
 97-2458 STPT 19.1 Procedure Discrepancies, 8/13/97; POD, 8/13/97  
 97-2483 Service Water Hydraulic Model Configuration Error; 8/18/97; POD, 8/15/97  
 97-2493 Morrison Knudsen Welds on U2 Steam Generator Replacement Project, 8/13/97; FOD, 8/14/97  
 97-2522 D-305 Voltages Found Outside of Tolerance, 8/18/97; POD, 8/19/97  
 97-2559 Over Compensated Spring Hanger Rod Realignment, 8/22/97; POD, 8/22/97  
 97-2562 10 CFR Part 21 on Molded Case Circuit Breakers, 8/22/97; POD, 8/23/97  
 97-2664 Common 125V DC Circuits with AFW Low Suction Trip, 8/26/97; POD, Rev 0, 8/29/97, Rev.1, 9/29/97  
 97-2714 Quarterly Callup for 5 Cells of D-06 Battery Found Out-of-Spec, 9/3/97; POD, 9/5/97  
 97-2755 Pilot Cell #44 Specific Gravity for D-305 Battery Found Out-of-Spec, 9/8/97; POD, 9/8/97  
 97-2802 ORIGEN2 Software Fuel Assembly Burnup Values for Dry Fuel Storage, 9/8/97; POD, 9/8/97  
 97-2829 QA Equipment Calibrated with Non-QA Cal Gas, 9/12/97; POD, 9/12/97  
 97-2847 Reconcile dP Testing of MOVs with CMP 2.2.8 Design Basis Calcs, 9/13/97; POD, 9/13/97  
 97-2848 1-CV-112C Operator Housing Cover Hold Down Bolts Loose, 9/12/97; POD, 9/17/97  
 97-2851 Voltage Dips During EDG Transient Safeguards Load Sequencing, 9/11/97; POD, 9/14/97

97-2862 Unit 2 "A" Train RHR Piping Overpressurization during IT-536, 9/15/97; POD, 9/15/97

97-3026 Incorrect NDE Acceptance Criteria Used, 9/23/97; POD, 9/23/97

97-3082 ASME Section XI Preservice Volumetric Exam Requirement, 9/25/97; POD, 9/26/97

97-3084 Appendix R Spare CCW Pump Motor Coupling, 9/25/97; POD, 9/26/97

97-3117 Blockwall Crack 44 Foot Elevation at SFP Northside Walkway, 9/30/97; POD, 9/30/97

97-3118 Crack in Turbine Building Block Wall, 9/30/97; POD, 9/30/97

97-3119 Northwest Corner of Unit 2 Facade Roof Leaking, 9/30/97; POD, 9/30/97

97-3120 Cracks in Blockwall in Gas Compressor Room, 9/30/97; POD, 9/30/97

97-3121 Spalls on Gas Compressor Room Wall, 9/30/97; POD, 9/30/97

97-3122 Steel Channels Corroded, 9/30/97; POD, 9/30/97

97-3123 Concrete Spalls on Circulating Water Pump House, 9/30/97; POD, 9/30/97

97-3124 Unit 2 Containment Liner Scrape, 9/30/97; POD, 9/30/97

97-3125 Concrete Degradation in Unit 2 Tendon Gallery, 9/30/97; POD, 9/30/97

97-3126 Circulating Water Pump House Floor Plates Missing Screws, 9/30/97; POD, 9/30/97

97-3291 1P-4A Operability Questioned Based on Cracking in Pump 1P-4B, 10/9/97; POD, 10/10/97

97-3293 Appendix R Ventilation Equipment Does Not Meet Expected Flow Rates, 10/13/97; POD, 10/10/97

97-3311 Piping Support Problem, 10/9/97; POD, 10/12/97

97-3324 1P-029-T AFP Overspeed Trip Linkage Socket Joint Cracked, 10/13/97; POD, 10/14/97

97-3338 G01 Operation with No Oil Residue on South Bedplate Starting Air Motor, 10/14/97; POD, 10/14/97

97-3391 Overthrust Limits in CMP-2.2 MOV Calc per Limitorque Technical Update #92-01, 10/15/97; POD, 10/15/97

97-3392 Inadequate POD for CR 97-2848, 10/16/97; POD, 10/16/97

97-3399 Relay Uncertainty Values Nonconservative, 10/16/97; POD, 10/17/97

97-3424 Bearing Clamps Securing Control Board Subpanel, 10/17/97; POD, 10/17/97

97-3445 Modifications with Calculation N94-168, 10/17/97; POD, 10/20/97

97-3524 All Portions of Reactor Trip Breaker Surveillance Not Completed, 10/30/97; POD, 10/30/97

#### Control Room Narrative Logs

Volume IX Pages 1708 - 1730 (Covers dates 7/4 - 7/12/97)

Volume XI Pages 2030 - 2054 (Covers dates 7/2 - 7/12/97)

#### Inservice Tests (ITs)

01 High Head Safety Injection Pumps and Valves (Quarterly), Unit 1, Rev. 35, 6/27/97

02 High Head Safety Injection Pumps and Valves (Quarterly), Unit 2, Rev. 39, 7/7/97

03 Low Head Safety Injection Pumps and Valves (Quarterly), Unit 1, Rev. 31, 3/7/97

04 Low Head Safety Injection Pumps and Valves (Quarterly), Unit 2, Rev. 35, 4/7/97

- 05 Containment Spray Pumps and Valves (Quarterly), Unit 1, Rev. 34, 6/27/97
- 06 Containment Spray Pumps and Valves (Quarterly), Unit 2, Rev. 40, 6/27/97
- 40 Safety Injection Valves (Quarterly), Unit 1, Rev. 33, 10/10/97
- 45 Safety Injection Valves (Quarterly), Unit 2, Rev. 32, 10/10/97

Instrumentation and Control (I&C) Procedures (ICPs)

- 02.003B-1 Reactor Protection System Logic Train B Monthly Surveillance Test, Rev.12, 9/22/97
- 02.008 Nuclear Instrumentation Power Range Axial Offset Calibration Rev. 2, 7/8/97
- 02.008-1 Nuclear Instrumentation Power Range Channels Axial Offset Initial Calibration, Rev. 7, 9/25/97
- 02.018-2 Reactor Trip Breaker and Turbine Trip Circuit Trains A&B Shutdown Surveillance Test, Rev. 1, 8/02/97
- 02.020 Post-Refuel Pre-Startup Reactor Protection System and Engineered Safety Features Analog Surveillance Test, Rev. 1, 9/30/97
- 04.002-1 Reactor Coolant Flow Transmitters Outage Calibration, 5/13/97
- 04.003-1 Pressurizer and Pressurizer Relief Tank Level Transmitters Outage Calibration, Rev. 4, 9/29/97
- 04.003-5 Auxiliary Feedwater Flow Instruments Outage Calibration Rev. 2, 5/13/97
- 04.004-3 SI Accumulator Pressure Transmitter Outage Calibration Rev. 2, 5/13/97
- 04.004-6 Overpressure Mitigation Pressure Transmitters Outage Calibration (LTOP) Rev. 3, 9/22/97
- 04.006-3 Aux. Feedwater Flow and Pressure Instrument Outage Calibrations, Rev. 2, 5/12/97
- 04.023-1 Reactor Vessel Level Outage Calibration, Rev. 2, 5/13/97
- 05.063 RCP A&B Seal Water and Letdown Flow Instruments Outage Calibration, Rev. 0, 9/30/97
- 06.021 Chemical and Volume Control (Non-Outage), Rev. 18, 8/05/97
- 06.021C Chemical and Volume Control System (Non-Outage, Common Equipment), Rev. 18, 5/19/97
- 06.017 Safety Injection System (Non-Outage) with temp. change, Rev.18, 9/29/97
- 06.066A Train A RHR Heat Exchanger Valve and Controller Calibration, 9/29/97
- 06.066B Train B RHR Heat Exchanger Valve and Controller Calibration, 9/30/97
- 09.013 Replacement of Safeguards or Protection Relays, 9/29/97
- 10.002 Removal of Safeguards of Protection Sensor from Service, Rev. 23, 7/15/97
- 10.022A Unit 1 I&C Involvement in ORT 3A: Safety Injection Actuation with Loss of Engineered Safeguards AC, Unit 1, Rev. 2, 9/29/97
- 13.008 Auxiliary Feedwater System, Rev. 1, 9/30/97

Operating Experience Reports

Semi-annual Operating Experience Report Program Status, 2/18/97

Licensee review of the following Industry Operating Experience documents:

- GL 97-04 Assurance of Sufficient Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal Pumps

- IN 97-31 Failures of Reactor Coolant Pump Thermal Barriers and Check Valves in Foreign Plants
- IN 97-040 Potential Nitrogen Accumulation Resulting from Back leakage from Safety Injection Tanks
- IN 97-41 Potentially Undersized EDG Oil Coolers
- CPS0002 Mounting Screws for Secondary Contact Blocks for Class 1E 480 VAC ABB Circuit Breakers
- STP97002 Fire During Steam Leak Sealing Process
- SEN 167 Recurring Event, Loss of Reactor Coolant System Inventory Resulting from Nitrogen Accumulation
- SER 96-15 Unrecognized Reactivity Mismanagement While Performing a Reactor Shutdown
- SER 97-011 High Pressure Injection Pumps Unavailable for Emergency Core Cooling Operation

Operating Procedures (OPs)

- 1A Cold Shutdown to Hot Shutdown, Rev. 59
- 2A Normal Plant Operation, Revs. 23, 24, 25 & 26, 4/28/95, 9/7/95, 10/13/95 & 5/9/97
- 4A Filling and Venting the RCS, Rev. 44

Operations Checklist Procedures

- CL-10B Service Water Safeguards Lineup, Rev. 35
- CL-11A G-02 Diesel Generator Checklist, Rev. 17

Operations Manual

- OM1.1 Conduct of Operations, Rev. 8

QA Audit Reports

- A-P-96-03 Quality Assurance Audit Report - Corrective Action and Operating Experience, 3/27/96
- A-P-97-05 Quality Assurance Audit Report - Corrective Action and Operating Experience, 7/18/97
- A-P-97-21 Quality Assurance Audit Report - Operations, 6/4/97
- A-P-97-07 Quality Assurance Audit Report - Configuration Management and Licensing Basis, 9/5/97
- A-P-97-13 Quality Assurance Audit Report - In-Service Test (IST) Evaluation and Implementation, 8/26/97

Quality Condition Reports (QCRs)

- 97-0065 Control Switch for the Backup Control Room Recirc Fan Was in the off Position Instead of its Required Auto Position, 5/5/97
- 97-0067 Flow Rate Through Charcoal Filters Questioned, 6/11/97
- 97-0076 OM 1.1 Requirements Are Not Being Followed During Simulator Training, 5/6/97
- 97-0084 Untimely Corrective Maintenance Associated with the EDG RPM Indicator, 7/2/97

97-0085 Audit of Operability Determination Process, 5/13/97  
 97-0086 EDG Corrective Maintenance Concern, 7/2/97  
 97-0118 NP 5.4.1 Does Not Adequately Address Expectations for Timely Disposition of Actions in the Open Item Tracking System  
 97-0119 NP 5.3.2 Does Not Reflect Current Practices  
 97-0120 OE Evaluations Are Not Always Completed Within Prescribed Time  
 97-0121 OE Close out Packages Are Not Being Forwarded to NIMS  
 97-0127 Corrective Actions Are Not Being Assigned Due Dates in a Timely Manner  
 97-0128 Condition Report Identified Without Documented SRO Screening  
 97-0129 Timeliness of CR Screenings  
 97-0148 [Relief] Valves May Not Be Tested As Required, 7/18/97  
 97-0150 AFW IST Process Does Not Address AFW Pump Speed, 7/15/97  
 97-0153 IST Technical Review Concern, 7/18/97  
 97-0154 IST Program Missing Some Valves With Safety Functions, 7/17/97  
 97-0155 Root Cause Recommended Corrective Actions Not Documented Correctly  
 97-0181 Hydrostatic Test Not Properly Documented, 8/19/97

Periodic Checks (PCS)

75, Part 6 Semi-Annual G-01 Diesel Generator Fire Damper and Ventilation Surveillance Test, Rev. 1, 1/30/97  
 75, Part 7 Semi-Annual G-02 Diesel Generator Fire Damper and Ventilation Surveillance Test, Rev. 1, 1/30/97

Routine Maintenance Procedures (RMPs)

26 Reactor Trip and Bypass Breaker Maintenance, Rev. 15, 5/28/97  
 143 Maintenance of 2SI-830A 2T-34 Relief Valve Unit 2, Rev. 2, 4/9/97  
 152 Installation and Removal of Penetration 67 Foam Assembly for Steam Generator Eddy Current Cables, Rev. 3, 4/9/97  
 175 ICV-209, Letdown Relief Valve Testing and Repair, Rev. 1, 4/09/97  
 178 Maintenance of 1CV-257 VCT Relief Valve, Rev. 2, 4/09/97  
 9006-2 CCW Pump Mechanical Seal (John Crane) Overhaul, Rev. 3, 8/07/97  
 9043-13 Emergency Diesel Generator G-01 Two Year Mechanical Inspection, Rev. 0, 2/7/96  
 9043-14 Emergency Diesel Generator G-01/G-02 6 and 12 Year Electrical & Mechanical Inspection, Rev. 1, 10/3/97  
 9043-23 Emergency Diesel Generator G-02 Two Year Mechanical Inspection, Rev. 0, 9/16/97  
 9043-27 Emergency Diesel Generator G-02 Post Maintenance Testing, Rev. 1, 9/22/97  
 9071-1 A05 4160/480 Degraded and Loss of Voltage Relay Monthly Surveillance, Rev. 10  
 9071-2 A06 4160/480 Degraded and Loss of Voltage Relay Monthly Surveillance, Rev. 10  
 9302-1 A-01 Annual Time Delay Relay Calibration and RCP Bus Stripping Surveillance, Rev. 4, 10/10/97  
 9358 Auxiliary Feedwater Pump Motor Maintenance, Rev. 0, 5/24/97

### Safety Evaluation Screenings (SCRs)

- 97-1066 Unit 1 HP Crossunder Piping Replacement, 9/9/97
- 97-1077 ARB 1C03 1D 3-2 and 3-3 on Unit 1 and ARB 2C03 2D 3-9 and 3-10 on Unit 2, 9/8/97
- 97-1079 Replacement of SKF 7230 GM ABEC3 Service Water Pump Motor Upper Thrust Bearings with SKF 230 N2MA for Point Bearing, 8/22/97
- 97-1118 OP-3B Shutdown Margin Calculation, 6/10/97
- 97-1124 Temporary Change to IT-515B LPRM Program Test of Safety Injection Test Line (Unit 2)
- 97-1145 Removal of Spare Breakers from DC Panels, 9/22/97
- 97-1159 Verification of AFW Low Suction Pressure Time Delays, 7/11/97
- 97-1217 Temporary Change to 1 RMP 9056-2 Calibration and Testing of Safety-Related Protective Relays A06, 9/30/97
- 97-1241 Rev. 8 to Safety Injection Checklist Unit 1, CL 7A and 7B, 10/31/97
- 97-1242 PC-39 Part 2, Steam Trap Inspection, 8/21/97
- 97-1243 PC-77 Part 4, Minor Annual Auto Dry-Pipe Fire Protection System Valve Test, 10/2/97
- 97-1352 OP IOE "Discharge of BCVCS HUT" Complete Rewrite, 10/1/97

### Safety Evaluations (SEs)

- 95 -058 -01 Revise Turbine Load Limit (When Crossover Steam Dump is Inoperable), 10/11/95
- 97-137 Revision to EOP-0 (MAJOR), "Reactor Trip or Safety Injection," Unit 1, Rev. 21, Unit 2, Rev. 22, 7/15/97
- 97-146 Temporary Resolution of Overpressurization of RHR Gate Valves 1RH-700, 701, & 720 & Piping Between 1RH-700 and 1RH-701, 7/24/97
- 97-147 Temporary Modification to Heating Boilers Condensate Supply, 7/29/97
- 97-151 Conduct of OP-1A Heatup to 350 Deg F with 2P-10A Inoperable, 8/8/97
- 97-151-01 Conduct of OP-1A Heatup to 350 Deg F with 2P-10A Inoperable, Rev.1, 8/9/97
- 97-153 Installation of Hydrogen Monitoring Systems for MSB Monitoring, 8/8/97
- 97-154 EOPSTPT K.13 & K.15 Criteria for Securing Last SI Pump, 8/7/97
- 97-158 Weld Closed Containment Penetrations P12b and P30a, 9/22/97
- 97-164 DCN to Show BS-331 Open Rather than Shut, 9/11/97
- 97-165 MR 95-024 Unit 1 Safety Injection (SI) Accumulator Level Injection Modification, 9/11/97
- 97-167 Rebuild SI Test Line Relief Valve 1/2SI-887
- 97-170 Unit 1 & 2 HDTP's [Heater Drain Tank Pumps] Mechanical Seal Replacement and Seal Coolant/ Flush Injection Line Installation, 9/19/97
- 97-175 Replacement of Unit 1/2 Charging Pump Discharge Valves, 9/26/97

### Self-Assessments

- NPM 97-0275 Self Assessment of NPBU Operability Determination Process, 5/12/97
- SAE/FSE- WEP-0122 Point Beach Unit 1 and 2 Emergency Diesel Generator Safety System Functional Assessment, 6/27/97

Technical Specification Test Procedure

TS-82          Emergency Diesel Generator G-02 Monthly, Rev. 49

Training Lesson Plans

2538          10CFR50.59/72.48 Screenings, Rev.1, 5/12/97

2539          10CFR50.59/72.48 Safety Evaluations, Rev. 1, 5/12/97