

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-266/90027(DRP); 50-301/90027(DRP)

Docket No. 50-266; 50-301

License No. DPR-24; DPR-27

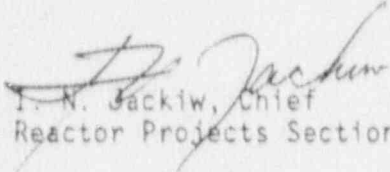
Licensee: Wisconsin Electric Company
231 West Michigan
Milwaukee, WI 53201

Facility Name: Point Beach Units 1 and 2

Inspection At: Two Rivers, Wisconsin

Dates: December 3, 1990, through January 15, 1991

Inspectors: C. L. Vanderniet
J. Gadzala

Approved By:  J. N. Jackiw, Chief
Reactor Projects Section 3A

2/1/91
Date

Inspection Summary

Inspection from December 3, 1990, through January 15, 1991,
(Reports No. 50-266/90027(DRP); No. 50-301/90027(DRP))

Areas Inspected: Routine, unannounced inspection by resident inspectors of outstanding items; operational safety; radiological controls; maintenance and surveillance; emergency preparedness; security; engineering and technical support; and safety assessment/quality verification.

Results: During this inspection period, Unit 1 operated at full power with the exception of requested load following power reductions and a brief power excursion. A technician lifted a lead from a pressure instrument, causing a low pressure feedwater heater to bypass. Reactor power reached a maximum of 101.9% and was reduced by operator action within minutes.

Unit 2 continued to operate at full power with the exception of requested load following power reductions, one inadvertent transient, and one power reduction to repair a condensate pump. The transient was caused by an inadvertent relay actuation which resulted in a loss of condensate and heater discharge flow to the main feedwater pumps. The relay was actuated by an operator blowing into it. Operators were able to control the resultant transient and avert a reactor trip from occurring.

One unresolved item was identified regarding the inadequate implementation of the licensee's open item escalation procedure. One deviation from the FSAR was also cited regarding the implementation of the in-plant Quality Assurance organization.

Issues addressed in this inspection report include:

Blizzard (paragraph 3.e) - A blizzard swept through the area on December 2, leaving approximately 150 plant personnel stranded at the plant through the night of December 3. The plant maintained two full shift crews onsite as a precautionary measure. Procedure AOP-13C, "Severe Weather Conditions" was implemented and no concerns were raised.

Elevated Airborne Radioactivity Levels (paragraph 4.a) - An evacuation of the primary auxiliary building (PAB) resulted from a rise in airborne radioactivity levels. Two gaseous leaks in the letdown gas stripper resulted in a buildup of noble gases in the PAB when the ventilation system was secured for maintenance. Thirteen personnel evacuated from the area displayed various degrees of contamination, however, no regulatory limits were exceeded. Ventilation was restored and the PAB atmosphere was ventilated through high efficiency filters to restore airborne levels to normal. The leaks were subsequently repaired.

Maintenance Practice Weaknesses (paragraph 5.a) - Weaknesses in maintenance planning and procedural adherence were observed on two jobs. No hydrostatic test requirements were determined before a technician started to install a piece of replacement piping in the condensate system. The replacement component was not the correct type and a second part had to be fabricated. This second piece was properly tested. Technicians removing a drain trap from the auxiliary feedwater system did not follow the safety precautions in their procedure. The licensee plans to increase emphasis in this area.

Inadequate Compensatory Measures (paragraph 7.a) - Malfunctioning security equipment along a portion of the plant perimeter was improperly compensated for a brief period. Appropriate compensatory measures were subsequently taken and a search of the site revealed no abnormalities.

Inadequately Administered Security Examination (paragraph 7.b) - The August 1990 examination given to graduating security officers was improperly administered. Some students had access to reference material that may have skewed test results. After interviews with individuals involved, disciplinary action was taken. A reexamination is planned for all remaining security guards to further verify that all personnel possess the minimum knowledge levels for their jobs.

DETAILS

1. Persons Contacted (71707) (30702)

- *G. J. Maxfield, Plant Manager
- T. J. Koehler, General Superintendent, Maintenance
- J. C. Reisenbuechler, Superintendent, Operations
- J. G. Schweitzer, Superintendent, Maintenance
- N. L. Hoefert, Superintendent, Instrument & Controls
- W. J. Herrman, Superintendent, Technical Services
- T. L. Fredrichs, Superintendent, Chemistry
- J. J. Bevelacqua, Superintendent, Health Physics
- M. L. Mervine, Superintendent, Training
- *R. D. Seizert, Superintendent, Regulatory & Support Services
- *G. M. Krieser, Manager, Quality Assurance

Other licensee employees were also contacted including members of the technical and engineering staffs, and reactor and auxiliary operators.

*Denotes the personnel attending the management exit interview for summation of preliminary findings.

2. Licensee Action on Previous Inspection Findings (92701) (92702)

- a. (Closed) Deviation (266/90018-02; 301/90018-02): Non-conformance to Design Basis Criteria for Electrical Cable Tray Fill

The Electrical Distribution System Functional Inspection (EDSFI) identified a deviation to the design basis criteria for electrical cable tray fill criterion and cable ampacity criterion. The licensee conducted a cable data base search and identified an additional 210 cable trays with a cable fill greater than 30%. The majority of the installations which exceeded 30% fill were original plant installation. The licensee has subsequently issued interim guidance to all design engineers to limit cable tray fill to 30%. The licensee committed to evaluate each of the 210 existing cases of cable fill greater than 30%, to issue formal guidance on allowable cable tray fill, and to revise the Final Safety Analysis Report (FSAR) to resolve an inconsistency between the cable fill criteria in Section Nos. 7 and 8. This information was presented to the NRC at the Enforcement Conference (EA 90-159) held on October 4, 1990.

Based on the above, the NRC determined that adequate corrective action has been taken to resolve this deviation. Since this was an original design issue of low safety significance, no deviation nor citation will be issued. This item is closed.

- b. (Closed) Violation (266/90018-01c; 301/90018-01c): Design Control

The EDSFI identified that a short circuit between adjacent cables in a shared raceway could result in the spurious closure of the 480 VAC

safeguards bus tie breaker. The use of only one normally open tie breaker between two safeguards buses was part of the plant's original design. The licensee had a program in place for preventing spurious closure of the tie breaker. This program included removal of the fuses in the DC control power supply to the breaker and administrative controls to limit use of the tie breaker in each unit. This information was presented to the NRC during the Enforcement Conference (EA 90-159) held on October 4, 1990.

Based on the above, the NRC determined that the licensee has taken adequate corrective action to resolve this violation. Since this was an original design issue of low safety significance, this example was not included in the citation (EA 90-159). This item is closed.

c. (Closed) Violation (266/90018-01d; 301/90018-01d): Design Control

The EDSFI identified the potential for a cable line-to-line short in vertical Riser 82 that would simultaneously open control power fuses for both Unit 1 component cooling water (CCW) pump breakers. This condition also existed in the Unit 2 CCW pump circuitry. The CCW pump control circuitry was original plant design. The licensee initiated a temporary modification to prevent simultaneous electrical failure of both pumps. In addition, they committed to implement permanent modifications to provide adequate cable separation. These modifications will be accomplished by the end of each unit's next refueling outage. This information was presented to the NRC during the Enforcement Conference (EA 90-159) held on October 4, 1990.

Based on the above, the NRC determined that the licensee has taken adequate corrective action to resolve this violation. Since this was an original design issue of low safety significance, this example was not included in the citation (EA 90-159). This item is closed.

d. (Closed) Violation (266/90018-01e; 301/90018-01e): Design Control

While evaluating the seismic capability of the Emergency Diesel Generator (EDG) fuel oil system piping during the EDSFI, the licensee determined that the piping supports in the fuel oil pump house did not meet operability or Code allowable stress limits. Both EDGs were consequently declared inoperable, requiring the plant to design and install new supports.

The major factor contributing to this issue was an ambiguous original design and licensing basis for the EDG fuel oil supply system. The underground emergency fuel oil tank was designed as a seismic Category 1 structure to meet the seismic requirements of the fuel oil pump house. However, this qualification did not appear to extend to the supply piping itself. The original Point Beach design basis did not consider the fuel oil supply system to be safety related. The

licensee had earlier recognized that the fuel oil supply system performed a safety related function and was in the process of upgrading it.

The licensee presented the original/licensing design basis and current status of the fuel oil systems review to the NRC during the Enforcement Conference (EA 90-159) held on October 4, 1990. The overall efforts that the licensee has undertaken to reconstitute their design basis was also considered. The NRC determined that the plant has taken adequate corrective action to resolve this violation therefore this example was not included in the citation (EA 90-159). This item is closed.

e. (Closed) Violation (301/90011-01f): Design Control

The EOSFI identified that redundant cables for transmitting the open signal to the Unit 2 turbine driven auxiliary feedwater (AFW) steam supply valve, were run through a common conduit. This cable installation was part of the original plant design. The licensee subsequently separated the two cables. This information was presented to the NRC during the Enforcement Conference (EA 90-159) held on October 4, 1990.

Based on the above, the NRC determined that the licensee has taken adequate corrective action to resolve the violation. Since this was an original design issue of low safety significance, this example was not included in the citation (EA 90-159). This item is closed.

f. (Closed) Unresolved Item (266/90014-02; 301/90014-02): Adequacy of Operator Logs

Plant procedures require that six specific fire zones be checked twice per shift while the 2P2C charging pump is out of service. The inspector noted that the Primary Auxiliary Building (PAB) operator's log sheet only listed general areas in the PAB for these tours, thereby not assuring that the required areas would be checked. The plant evaluated this situation and revised the PAB shift log attachment (PBF-2058) to include a space for writing in the specific fire zones to be toured when various required equipment is out of service. The inspector reviewed the new log sheet and was satisfied. This item is closed.

g. (Open) Violation (266/89027-03; 301/89026-03): Failure to Follow Procedures

During a previous inspection several examples were cited of various failures to follow written instructions regarding the review and control of procedures and procedure changes. Weaknesses were also noted in existing procedures including insufficient caution statements and inconsistency among procedures. The utility committed to five major corrective actions in response to this violation: revision of the temporary change procedure (PBNP 2.1.3);

introduction of a new procedure user's guidelines (PBNP 2.1.X); training on these new procedures; revision of the 10 CFR 50.59 review procedure (QP 3-3); and an upgrade of the instruction governing periodic procedure reviews (PBNP 2.1.2). There were also several minor commitments.

The commitment dates for these corrective actions vary from April 1990 to March 1991, with all but the training to be completed by December 1990. Most of the minor commitments were finished and reviewed by the inspector. The utility was unable to meet some of the earlier commitments and slipped the dates to December 1990. Although the inspector has noted significant improvement in the quality of the procedures that have been upgraded, the only corrective action completed is the revision of QP 3-3. This issue was discussed with the utility during a meeting with the NRC. The inspector will continue to follow the licensee's actions.

h. (Closed) Unresolved Item (266/89032-01; 301/89032-01): Potentially Inadequate Boric Acid Storage Tank (BAST) Levels

During a procedure review, a utility engineer noted that about 900 gallons of boric acid solution are needed to mitigate a steam line break accident. This 900 gallons must be in excess of the 1550 gallon automatic shut off point of the tank, which yields a minimum tank level of 2450 gallons. The plant Technical Specifications, however, specify a minimum level of only 2000 gallons. A reverification of the calculations revealed several mathematical errors resulting in 1740 vice 900 gallons being the amount needed for accident mitigation. Upon discovering this, the plant established an administrative minimum level for the BASTs of 3290 gallons (1550 + 1740) plus a 5% margin (65% tank level).

Using the information in Generic Letter 85-16, "High Boron Concentrations", Wisconsin Electric contracted with the reactor vendor, Westinghouse, to reevaluate the design bases and the calculations involved in the analysis. The Westinghouse analysis (WCAP-12602) demonstrated that the acceptance criteria for a number of conditions, including the following, remain satisfied with only 2000 ppm boric acid in the safety injection system:

Steam line rupture Small break loss of coolant accident (LOCA)
Large break LOCA Post-LOCA long term core cooling
subcriticality requirement

Since the refueling water storage tanks (RWSTs) contain a large quantity of 2000 ppm boric acid, the BASTs are not needed for the above listed conditions. Point Beach is planning a modification to discontinue the automatic use of the BAST in the safety injection system. The normal automatic suction source for safety injection would become the RWST, with the BAST available for manual emergency

boration if needed. The FSAR will be revised for the results of this reanalysis as will appropriate operating procedures.

Point Beach is also considering additional measures to reduce the boric acid concentration in the BASTs to minimize the associated problems with boron crystallization.

The inspector discussed this issue with the licensee and reviewed the safety evaluation performed for the safety injection modifications. No additional concerns regarding the steam line break accident were identified and this item is closed.

3. Plant Operation (71707) (71714) (93702)

a. Control Room Observation (71707)

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the inspection period. During these discussions and observations, the inspectors ascertained that the operators were alert, cognizant of current plant conditions, attentive to changes in those conditions and took prompt action when appropriate. The site telephone switchboard is transferred to the control room outside of normal business hours. This creates the potential to unnecessarily distract the operators. The plant is evaluating different arrangements for backshift operation of the switchboard.

The inspectors noted that a high degree of professionalism attended all facets of control room operation and that both unit control boards were generally in a 'black board' condition (no non-testing annunciators in alarm condition). Exceptions to this were the Unit 2 subcooling alarm and the Radiation Monitoring System (RMS) trouble alarm modules. Several shift turnovers were also observed and appeared to be handled in a thorough manner.

The inspectors performed walkdowns of the control boards to verify the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components.

The Plant Manager was observed making periodic tours of the control room and through the plant. The Vice President, Nuclear, and the Senior Manager, Nuclear Engineering, were also observed touring the plant.

b. Facility Tours (71707)

Tours of the Turbine, Auxiliary and Service Water buildings were conducted to observe plant equipment conditions, including plant housekeeping/cleanliness conditions, status of fire protection

equipment, fluid leaks and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance.

During facility tours, inspectors noticed very few signs of leakage and that all equipment appears to be in good operating condition. Plant cleanliness remains adequate, although the inspector continued to note areas where mobile equipment is stored unsecured near important plant machinery. Scaffolding material was found leaning against two auxiliary feedwater flow transmitters (2FT-4036 & 4037) in the component cooling water room. Shortly afterwards, one of the erected scaffold legs was found pressed up against one of these transmitters. The inspector informed the shift supervisor of this deficiency for correction.

c. Unit 1 Operational Status (93702)

The unit continued to operate at full power during this period with only requested load following power reductions.

On December 21, Point Beach observed its 20th anniversary of commercial operation.

On January 2, the unit experienced a 2% power excursion when a technician lifted a lead from pressure instrument PI-2273, causing the low pressure feedwater heater to bypass. Reactor power reached a maximum of 101.9% and was reduced by operator action within minutes. The unit was returned to normal in about a half hour. The plant is still evaluating this event.

d. Unit 2 Operational Status (93702)

The unit continued to operate at full power during this period with the exception of requested load following power reductions, one inadvertent transient, and one power reduction to repair a condensate pump.

On December 13, at 0300, all condensate and heater drain pumps were inadvertently tripped as a result of the inadvertent actuation of relay 2CPAX. This relay functions to trip all operating condensate and heater drain pumps in the event of a containment high pressure to prevent the continued feeding of a faulted steam generator. The relay was accidentally latched by an operator who was performing verification of electrical data inside the unit 2 main control board. After the relay actuation, operators manually ran the turbine back and reduced reactor power to 36%. At 0309 the unit was stable, one heater drain and two condensate pumps had been restarted and the licensee commenced power ascension. The unit was restored to full power in 4 hours. The utility issued event report 301/90-005 discussing this issue and plans to either install a

protective cover over this relay or relocate it to an area of lower incidental contact risk.

On December 20, power was reduced to 55% to repair a sheared seal water inlet pipe on the B condensate pump. The condensate pump was required to be secured and isolated to effect repairs. Full power was restored within 11 hours.

e. Blizzard (71714)

On December 2, a severe winter storm swept into the area, developing into a blizzard the following day. The storm, packing sustained winds of 55 mph and gusts in excess of 60 mph, dropped 15 inches of snow and lasted until early morning December 4th. About 150 plant personnel were stranded at the plant through the night of December 3rd. Sufficient operators were either onsite or able to arrive onsite to maintain full shift compliments. The plant maintained two full shift crews onsite, in anticipation of port and starboard shifts, as a precautionary measure in event of plant inaccessibility. The site implemented procedure ADP-13C, "Severe Weather Conditions", in preparation for the storm.

The inspector reviewed the plant's preparations for and observed their performance during the storm. No concerns were raised. The only notable damage to the site was portions of the roof blowing off the north gatehouse.

The plant's security personnel received commendations in a letter from the Manitowoc County Sheriff's Department for their assistance in rescuing stranded motorists from roads near the plant. A number of stranded people were brought in and temporarily housed in the plant's Energy Information Center.

These reviews and observations were conducted to verify that facility operations were conducted safely and in conformance with requirements established under technical specifications, federal regulations, and administrative procedures.

4. Radiological Controls (71707)

The inspectors routinely observed the licensee's radiological controls and practices during normal plant tours and the inspection of work activities. Inspection in this area includes direct observation of the use of Radiation Work Permits (RWPs); normal work practices inside contaminated barriers; maintenance of radiological barriers and signs; and health physics (HP) activities regarding monitoring, sampling, and surveying. The inspector also observed portions of the radioactive waste system controls associated with radwaste processing.

From a radiological standpoint the plant is in good condition, allowing access to most sections of the facility. During tours of the facility,

the inspectors noted that barriers and signs also were in good condition. When minor discrepancies were identified, the HP staff quickly responded to correct any problems.

a. Elevated Airborne Radioactivity Levels (71707)

On January 2, the licensee informed the NRC via the emergency notification system that the plant had performed a limited evacuation of the primary auxiliary building (PAB) due to a rise in airborne radioactivity levels. Two gaseous leaks in the cryogenic compressor, a component of the letdown gas stripper system, resulted in a buildup of noble gases in the PAB when the ventilation system was secured for maintenance. The noble gas buildup caused radiation levels to rise. Health Physics technicians discovered the increased levels during routine surveillance before any alarm limits were reached. Thirteen personnel evacuated from the area exhibited various degrees of contamination to their hard hats, badges, and clothing. Two cases of minor skin contamination were observed. No regulatory limits were exceeded. Ventilation was restored and the PAB atmosphere was ventilated through high efficiency filters to restore airborne levels to normal. The cryogenic leaks were subsequently isolated and repaired. An additional leak was found on January 5, which was also repaired. The inspector observed the plant's response to this event and had no additional concerns.

All activities were conducted in a satisfactory manner during this inspection period.

5. Maintenance/Surveillance Observation (62703) (61726)

a. Maintenance (62703)

Station maintenance activities of safety related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with technical specifications.

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

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

Portions of the following maintenance activities were observed/reviewed:

- 2P2C charging pump brush inspection

The maintenance technician was provided with only a hand held flashlight for illuminating the motor interior during the brush inspection. This tended to make portions of the work awkward as the technician attempted balancing the flashlight while removing the rotor brushes. The activity was satisfactorily completed and no concerns were identified.

- Unit 2B condensate pump seal water inlet pipe repair

The work plan section of the maintenance work request sheet only had the instruction "replace broken nipple". The technician performing the work was preparing to install a replacement component which had been welded together earlier. This piece would not fit because of an orifice in the pipe coupling. A second component was then fabricated to accommodate the orifice. A maintenance supervisor asked about retest requirements and determined that a hydrostatic test was needed. This second component was then hydrostatically tested and installed. Upon inquiry, the technician informed the inspector that the first component he had tried to install had not been hydrostatically tested. Discussions with maintenance supervision indicated that since this was a time sensitive job, numerous portions of the work were being done in parallel and the retest requirements had not yet been determined when the technician was preparing to install the first component. The licensee believes that had the first component fit and been installed, the need for a hydrostatic test on it would have been determined before the system was returned to service.

- Unit 1 auxiliary feedwater pump steam drain trap repair

The safety procedure prescribed in the work package called for use of a full face shield and pipe wrap for initial disassembly of the system. Upon questioning by the inspector, the technician performing the maintenance stated that these items were not used because the system was not pressurized. His basis for this assumption was that the steam trap was cold to the touch. Although his assumption was valid in this case, the plant has experienced a recent incident resulting in severe burns to personnel who thought a system was vented. The inspector discussed this incident with plant management.

b. Surveillance (61726)

The inspector observed surveillance testing and verified that testing was performed in accordance with adequate procedures; that test instrumentation was calibrated; that limiting conditions for operation were met; that removal and restoration of the affected components were accomplished; that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test; and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector witnessed and reviewed the following test activities:

- IT-20 (Revision 8) Reactor Coolant Vents
- ICP 2.3 (Revision 4) Reactor Protection System Logic (Long)

The technician performing this test checked off three procedure steps for completion prior to performing them. An equipment failure subsequently caused the test to be interrupted after the first of these three steps were performed. The next two steps had been incorporated into the procedure to preclude inadvertent trips of the unit under test. The inspector discussed this deficiency with plant management and no further concerns were noted.

No other discrepancies were noted during the observance of any of the above tests.

6. Emergency Preparedness (71707)

An inspection of emergency preparedness activities was performed to assess the licensee's implementation of the site emergency plan and implementing procedures. The inspection included monthly review and tour of emergency facilities and equipment, discussions with licensee staff, and a review of selected procedures.

All activities were conducted in a satisfactory manner during this inspection period.

7. Security (71707)

The inspector, by direct observation and interview, verified that portions of the physical security program were being implemented in accordance with the station security plan. This included checks that identification badges were properly displayed, vital areas were locked and alarmed, and personnel and packages entering the protected area were appropriately searched. The inspector also monitored any compensatory measures that may have been enacted by the licensee.

a. Inadequate Compensatory Measures (71707)

On December 3, the licensee informed the NRC via the emergency notification system that malfunctioning security equipment along a portion of the plant perimeter was improperly compensated for a brief period. Appropriate compensatory measures were subsequently taken. A search of the area revealed no abnormalities.

b. Inadequately Administered Security Examination (71707)

The licensee informed the inspector that they had received information indicating that the August 1990 examination for their graduating security officer class had been improperly administered. Students were apparently allowed to use notes and some reference material to take an examination which is normally intended to be closed book. Some of the students may have had access to more reference material than others, thereby possibly skewing test results. The utility evaluated the performance records of those security officers onsite from the August class and initially determined that all were adequate to remain in their positions. After interviewing the individuals involved, the utility decided that disciplinary action was appropriate. A reexamination is planned for all security guards to further verify that all personnel possess the minimum knowledge levels for their job. The utility is also counseling their security school contractor.

All other activities were conducted in a satisfactory manner during this inspection period.

8. Engineering and Technical Support (71707)

The inspector evaluated licensee engineering and technical support activities to determine their involvement and support of facility operations. This was accomplished during the course of routine evaluation of facility events and concerns through direct observation of activities and discussion with engineering personnel.

All activities were conducted in a satisfactory manner during this inspection period.

9. Safety Assessment/Quality Verification (35502) (40500) (90712) (92700)

The licensee's quality assurance programs were inspected to assess the implementation and effectiveness of programs associated with management control, verification, and oversight activities. Special consideration was given to issues which may be indicative of overall management involvement in quality matters such as self improvement programs, response to regulatory and industry initiatives, the frequency of management plant tours and control room observations, and management personnel's attendance at technical and planning/scheduling meetings.

a. Licensee Event Report (LER) Review (90712)

The inspector reviewed LERs submitted to the NRC to verify that the details were clearly reported, including accuracy of the description and corrective action taken. The inspector determined whether further information was required, whether generic implications were indicated, and whether the event warranted on-site followup. The following LER was reviewed and closed:

*301/90-005 Inadvertent Relay Actuation Causes Loss of Condensate Flow

This report details an inadvertent relay actuation which caused a loss of condensate and heater drain flow to the main feedwater pumps. The relay was actuated by an operator bumping into it during the performance of electrical data verification. Operators were able to control the resultant transient and avert a reactor trip. The utility is planning to either install a protective cover over the relay or relocate it to a less vulnerable position. Additional details are contained in paragraph 3.d.

b. LER Followup (92700)

The LER denoted by asterisk above was selected for additional followup. The inspector verified that appropriate corrective action was taken or responsibility was assigned and that continued operation of the facility was conducted in accordance with Technical Specifications and did not constitute an unreviewed safety question as defined in 10 CFR 50.59. Report accuracy, compliance with current reporting requirements and applicability to other site systems and components were also reviewed.

c. Off Site Review Committee Meeting (40500)

The inspector observed meeting 44 of the Off Site Review Committee (OSRC). The required quorum was maintained throughout the meeting and was periodically supplanted by additional persons including the President of Wisconsin Energy and the President of Wisconsin Electric. Committee members were experienced in various aspects of the nuclear industry. Issues discussed included INPO findings and recommended corrective actions; NRC findings; effectiveness of the OSRC in getting issues resolved; safety reviews; plant open items; and various technical issues selected by the committee members. The committee asked direct and probing questions and interviewed those people personally responsible for the items being reviewed. Issues that were not resolved were left open in the committee's tracking system and several technical presentations were requested of plant personnel for the next biannual meeting. The inspector considered the effectiveness of the OSRC's reviews to be good.

d. Quality Assurance Program Implementation (35...)

The inspector reviewed portions of the utility's quality assurance program with an emphasis on their escalation and followup of internally identified deficiencies. Previous inspection of this area resulted in the issuance of a violation with an accompanying civil penalty in April of 1990. The inspectors' focus during the reinspection of this area, was to ascertain the status of the corrective actions taken by the licensee in response to the original violation and civil penalty.

One of the corrective actions implemented by the licensee was the establishment of a prioritization system for self-identified open items. This system separates open items into the following four categories:

Priority 1: Immediate personnel safety and immediate or unresolved nuclear safety, operations, or reportability issue.

Priority 2: Defined and/or established issues associated with licensee regulatory commitments, non-immediate nuclear safety, or non-immediate operability.

Priority 3: Issues that do not affect nuclear safety-related functions. Issues related to operability of balance-of-plant (BOP) equipment. Internal or other industry commitments.

Priority 4: Plant betterment and/or enhancement items.

These categories appear to be adequately defined and the application of priority classification to items on the Monthly Open Item Status Report (MOISR) appears to be satisfactorily implemented.

Another corrective action was to revise the process through which delinquent open items are handled to ensure each item is fully addressed in a timely manner. This involved revising the escalation procedure, which is the vehicle used to address delinquent open items. The licensee issued a new Quality Assurance Instruction (QAI), QAI 16.2, "Open Item Follow-up and Escalation Process for Internally-Identified Deficiencies", on July 2, 1990. The scope of this new procedure applies to all Audit Finding Reports (AFRs) and Non-conformance Reports (NCRs) initiated by the licensee.

A review of overdue NCRs and AFRs revealed that many are not being escalated in accordance with QAI 16.2. Among the deficiencies noted were overdue items that were never escalated; overdue items that were not escalated within the time frame allowed by the procedure; overdue items whose due dates were subsequently extended beyond that allowed by the procedure; and multiple examples of missing documentation required by QAI 16.2. The following are examples of

priority 1 or 2 NCRs and AFRs that were allowed to lapse their due dates with either no or late escalation initiated:

N-90-062 originally due 6/15/90, not escalated until 10/27/90

N-90-173 originally due 9/01/90, not escalated until 10/17/90

N-90-190 originally due 9/15/90, not escalated until 10/17/90.

A-SP-87-01-004 originally due 6/1/89, not escalated until 10/31/90.

A-P-89-14-107 originally due 6/01/90, not escalated until 10/31/90.

A-P-88-10-031 was extended on 7/30/90 to 9/30/90 and again extended on 9/30/90 to 11/30/90, not escalated as of 12/7/90.

This is inconsistent with the requirements to carry out the quality assurance program in accordance with written policies, procedures or instructions as stated in 10 CFR 50, Appendix B. (This issue remains unresolved pending further review by the NRC) (266/90027-01; 301/90027-01). Although only the above specific examples are cited, implementation of the entire escalation procedure needs to be addressed. The licensee has stated that they intend to again revise the escalation procedure, upgrading it to the status of a QA program policy. However, it appears that more than a revision of the procedure is needed if implementation of the program is to be significantly improved.

To address this, the utility has indicated that they are performing an internal audit of the corrective action program to follow up on the inspector's findings. The inspector reviewed the procedure for this audit and noted that it should adequately cover the escalation process. The inspector will review the results of the utility's findings and continue to monitor performance in this area. Details will be documented in a future report.

The inspector also reviewed portions of the utility's adherence to the quality assurance program outlined in section 1.8 of the Final Safety Analysis Report (FSAR). Several discrepancies were noted.

The FSAR states that in matters related to quality assurance, the plant manager remains cognizant through direct involvement and through input from various sources, including the in-plant Quality Assurance Coordinator and QA Representatives. These two positions are defined by procedures PBNP 1.7.3, "Quality Assurance Coordinator", and PBNP 1.7.4, "Quality Assurance Representative", respectively. These state, in part, that the QA Coordinator shall have either one year of related QA experience, three months on-site training in QA, or a combination of the two. Upon questioning, the licensee stated that the current QA Coordinator does not meet the experience level criteria called out in the procedure. When also

questioned about the role of QA representatives, the plant replied that they do not utilize these positions.

The above examples constitute a deviation from the licensee's commitments as stated in the FSAR (266/90027-02; 301/90027-02). Although not cited in this deviation, the following items further exemplify weaknesses in this area.

FSAR figure 1.8.1 shows the Vice President of the Nuclear Power Department reporting to the Chairman of the Board. This structure was changed on January 1, 1990, with the Vice President now reporting to the President of the utility. This change was not incorporated into the June 1990 revision of the FSAR. Other discrepancies in FSAR figures were noted, however, these occurred after the June 1990 revision and the licensee is currently reviewing these drawings for correction in the next revision.

PBNP 4.13, "Equipment Isolation Procedure", requires a semi-annual review of the isolation tagout log by Site QA. However, the Site QA group only audits the tagout log once a year in accordance with their own internal policy, this is contrary to the procedure.

This deviation and the weaknesses above indicate that other deficiencies may exist in the QA program. The utility's internal QA audit may need to be expanded to cover these additional concerns. The inspector will review the utility's proposed corrective action in response to the deviation and subsequently determine if additional NRC inspection efforts in this area are needed.

All other activities were conducted in a satisfactory manner during this inspection period.

10. Management Meetings (30702)

A Meeting was held between NRC Region III management and Wisconsin Electric management on January 11, 1991, to discuss items of interest and foster improved communications between the licensee and the NRC. Items of discussion included weaknesses in escalation procedure implementation within the Quality Assurance program, status of the utility's vertical slice audits, status of delivery and operation of the plant specific simulator, decrease in the quality of licensee event reports, deficiencies of station fire watches, and delays in upgrading procedures and procedural controls in response to a cited violation.

11. Outstanding Items (92702)

Unresolved Items

Unresolved items are matters about which more information is required in

order to ascertain whether they are acceptable items, items of noncompliance, deviations, or violations. An unresolved item disclosed during the inspection is discussed in paragraph 9.d.

12. Exit Interview (71707)

A verbal summary of preliminary findings was provided to the licensee representatives denoted in Section 1 on January 16, 1991, at the conclusion of the inspection. No written inspection material was provided to the licensee during the inspection.

The likely informational content of the inspection report with regard to documents or processes reviewed during the inspection was also discussed. The licensee did not identify any documents or processes as proprietary.