

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

April 19, 2002

R. T. Ridenoure
Division Manager - Nuclear Operations
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 550
Fort Calhoun, Nebraska 68023-0550

SUBJECT: NRC INSPECTION REPORT 50-285/01-06

Dear Mr. Ridenoure:

On December 30, 2001, through March 30, 2002, the NRC completed an inspection at your Fort Calhoun Station. The enclosed report documents the inspection findings which were discussed on April 1, 2002, with you and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the NRC has identified issues that were evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has also determined that violations are associated with these issues. These violations are being treated as noncited violations (NCVs), consistent with Section VI.A of the Enforcement Policy. The NCV is described in the subject inspection report. If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Fort Calhoun Station facility.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories and, although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional

security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your responses to these advisories and your ability to respond to terrorist attacks with the capabilities of the current design basis threat. From these audits, the NRC has concluded that your security program is adequate at this time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Claude E. Johnson, Chief Project Branch C Division of Reactor Projects

Docket: 50-285 License: DPR-40

Enclosure: NRC Inspection Report 50-285/01-06

cc w/enclosure:
Mark T. Frans, Manager
Nuclear Licensing
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 550
Fort Calhoun, Nebraska 68023-0550

James W. Chase, Division Manager Nuclear Assessments Fort Calhoun Station P.O. Box 550 Fort Calhoun, Nebraska 68023-0550 David J. Bannister, Manager - Fort Calhoun Station Omaha Public Power District Fort Calhoun Station FC-1-1 Plant P.O. Box 550 Fort Calhoun, Nebraska 68023-0550

James R. Curtiss Winston & Strawn 1400 L. Street, N.W. Washington, D.C. 20005-3502

Chairman
Washington County Board of Supervisors
Washington County Courthouse
P.O. Box 466
Blair, Nebraska 68008

Sue Semerena, Section Administrator Nebraska Health and Human Services System Division of Public Health Assurance Consumer Services Section 301 Centennial Mall, South P.O. Box 95007

Daniel K. McGhee Bureau of Radiological Health Iowa Department of Public Health 401 SW 7th Street, Suite D Des Moines, Iowa 50309 Lincoln, Nebraska 68509-5007

Training, Exercises, & Evaluation Branch Chief FEMA Region VII 2323 Grand Blvd., Suite 900 Kansas City, Missouri 64108-2670 Dale Thatcher (DFT)

Electronic distribution by RIV:
Regional Administrator (EWM)
DRP Director (KEB)
DRS Director (ATH)
Senior Resident Inspector (WCW)
Branch Chief, DRP/C (KMK)
Senior Project Engineer, DRP/C (vacant)
Staff Chief, DRP/TSS (PHH)
RITS Coordinator (NBH)
Jim Isom, Pilot Plant Program (JAI)
RidsNrrDipmLipb
Scott Morris (SAM1)
FCS Site Secretary (NJC)

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket: 50-285

License: DPR-40

Report No.: 50-285/01-06

Licensee: Omaha Public Power District

Facility: Fort Calhoun Station

Location: Fort Calhoun Station FC-2-4 Adm.

P.O. Box 399, Hwy. 75 - North of Fort Calhoun

Fort Calhoun, Nebraska

Dates: December 30, 2001, through March 30, 2002

Inspectors: W. Walker, Senior Resident Inspector

L. Willoughby, Resident Inspector

Approved By: Claude E. Johnson, Chief, Project Branch C

SUMMARY OF FINDINGS

Fort Calhoun Station NRC Inspection Report 50-285/01-06

IR 05000285-01-06; on 12/30/2001-03/30/2002; Omaha Public Power District, Fort Calhoun Station. Resident Report; Occupational Radiation Safety and Operability.

The inspection was conducted by resident inspectors. The inspection identified two Green findings, both of which were noncited violations. The significance of issues is indicated by their color (Green, White, Yellow, Red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609. Findings for which the significance determination process does not apply are indicated by No Color or by severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process web site at http://www.nrc.gov/NRR/OVERSIGHT/index.html.

A. Inspector Identified Findings

Cornerstone: Occupational Radiation Safety

Green. A noncited violation of Technical Specification 5.8.1 occurred when the licensee failed to establish written procedures appropriate to the circumstances. The licensee's inadequate safety injection refueling water tank procedure did not contain precautions indicating that alignment in accordance with the cleanup procedure was not compatible with the resin transfer or dewatering of the spent resin storage tank. Specifically, on February 15, 2002, operations personnel were lining up to dewater the spent resin storage tank when they cross-connected the system cleaning up the safety water injection refueling water tank. This caused water from the safety water injection refueling water tank to be pumped into the spent resin storage tank, overfilling the tank and pushing resin into attached systems. The issue was more than minor, because not having an adequate procedure for cleanup of the safety injection refueling water tank is viewed as a precursor to a significant event if the resin intrusion had been allowed to continue for a longer period of time. Also, this occurrence had the potential to involve a worker's unplanned dose if radiological conditions had been significantly greater. This finding is being treated as a noncited violation consistent with Section VI.A of the Enforcement Policy (50-285/0106-01). This finding was entered into the licensee's corrective action program as Condition Report 200200379.

The safety significance of this finding was determined to be very low by the Occupational Radiation Safety Significance Determination Process because there was no overexposure or substantial potential for an overexposure, and the ability to assess dose was not compromised (Section 4OA3).

B. <u>Licensee Identified Findings</u>

A violation of very low safety significance was identified by the licensee and reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. This violation is listed in Section 4OA7.

Report Details

Summary of Plant Status:

The plant began the inspection period operating at 99.2 percent power as part of a recovery plan from the recent hot leg thermal streaming events. On January 25, 2002, power was reduced to approximately 98 percent, due to an additional hot leg thermal streaming event. Two more hot leg streaming events occurred in February. No further power reduction was necessary in either case. On February 15, a Notification of Unusual Event was declared due to elevated radiation in the Radiological Controlled Area. The elevated radiation occurred due to inadvertent spent resin movement within plant piping systems. No offsite releases occurred. The unit remained at 98 percent power for the remainder of the inspection period.

REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

- On January 29, 2002, the inspectors performed a partial inspection of the Compressed Air System to verify that all valves were in their proper positions. The inspectors used Piping and Instrumentation Drawing (P&ID) 11405-M-263 SH. 1, "Flow Diagram Compressed Air P & ID," Revision 64.
- The inspectors performed a complete equipment alignment inspection on the raw water system on March 15, 2002. The inspectors walked down accessible portions of the system and verified that the system lineup was in accordance with "Raw Water Flow Diagram P & ID, DWG. 11405-M-100," Revision 87: "Auxiliary Coolant Component Cooling System Flow Diagram P & ID, DWG. 11405-M-10 SH. 1," Revision 65; "Auxiliary Coolant Component Cooling System Flow Diagram P & ID, DWG. 11405-M-10 SH. 3," Revision 16; "Auxiliary Coolant Component Cooling System Flow Diagram P & ID, DWG. 11405-M-10 SH. 4," Revision 8; "Auxiliary Coolant Component Cooling System Flow Diagram P & ID, DWG. 11405-M-40 SH. 1," Revision 35; "Primary Sampling System Flow Diagram P & ID, DWG. 11405-M-12 SH. 1," Revision 64; "Plant Air Flow Diagram P & ID, DWG. 11405-M-13," Revision 44; "Flow Diagram Condensate P & ID, DWG. 11405-M-254 SH. 2," Revision 29; "Flow Diagram Potable & Service Water System P & ID, DWG. 11405-M-259 SH. 1," Revision 113; and "Flow Diagram Potable & Service Water System P & ID, DWG. 11405-M-259 SH. 2," Revision 25. The inspectors also reviewed open work orders and condition reports to determine the condition and operability of individual components and the overall system.
- The inspectors performed a partial equipment alignment inspection on the fire protection system on March 20, 2002. The inspectors walked down accessible portions of the system and verified that the system alignment was in accordance with P&IDs "Fire Protection Flow Diagram P & ID, DWG. 11405-M-266 SH. 1," Revision 79; "Fire Protection Flow Diagram P & ID, DWG. 11405-M-266 SH. 1A,"

Revision 17; "Fire Protection Flow Diagram P & ID, DWG. 11405-M-266 SH. 1B," Revision 24; and "Fire Protection Flow Diagram P & ID, DWG. 11405-M-266 SH. 12," Revision 10.

 On March 29, 2002, the inspectors performed a partial equipment alignment inspection on the component cooling water system. The inspectors walked down accessible portions of the system and verified that the system alignment was in accordance with P&ID "Auxiliary Coolant Component Cooling System Flow Diagram P & ID, DWG. 11405-M-10 SH. 2," Revision 12.

b. Findings

No findings of significance were identified.

1R05 <u>Fire Protection (71111.05)</u>

a. <u>Inspection Scope</u>

The inspectors reviewed the following areas to determine if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capabilities, and maintained passive fire protection features in good material condition. The following areas were reviewed:

- Safety injection pump rooms on January 14, 2002
- Raw water/component cooling water heat exchanger rooms on January 30, 2002
- Mechanical penetration room on February 18, 2002
- Corridor 26 and boric acid tank storage area in the auxiliary building on February 22, 2002
- Diesel Generator 2 room on March 7, 2002
- Main control room walk-in cabinets on March 13, 2002
- Shutdown cooling heat exchanger rooms March 14, 2002

The inspectors assessed these areas and verified combustibles that were noted were being controlled in accordance with the following:

- Standing Order SO-G-58, "Control of Fire Protection System Impairments," Revision 29
- Standing Order SO-G-91, "Control and Transportation of Combustible Materials," Revision 15

 Standing Order SO-G-103, "Fire Protection Operability Criteria and Surveillance Requirements," Revision 12

b. <u>Findings</u>

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

a. <u>Inspection Scope</u>

On January 17, 2002, the inspectors completed an inspection of the raw water pump room vault to verify that the equipment was not subject to damage resulting from internal flooding. The inspectors reviewed the internal flooding analysis performed to demonstrate that the safety-related equipment in the rooms was not vulnerable to internal flooding.

The following documents and calculations were used as criteria for the inspection:

- Probability Risk Assessment Summary Notebook
- Updated Safety Analysis Report, Section 9.8, "Raw Water System"

b. Findings

No Findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

.1 Annual Review

a. Inspection Scope

The inspectors observed removal of Heat Exchanger AC-1A end bells and the licensee inspection of the extent of fouling and blockage of tubes before cleaning. The inspectors also observed plant staff verify the number of plugged tubes were within the limits for operability of the heat exchanger and evaluated the cleaning interval for acceptability. The inspectors reviewed the results of the heat exchanger performance test and test data.

b. Findings

No findings of significance were identified.

.2 Biennial Review

a. <u>Inspection Scope</u>

The purpose of this biennial review was to verify that: (1) any potential heat exchanger deficiencies, which could mask degraded performance, were identified; (2) any potential common cause heat sink performance problems that had the potential to increase risk at the facility were identified; and (3) the licensee had adequately identified and resolved heat sink performance problems that could result in initiating events or affect multiple heat exchangers in mitigating systems and, thereby, increase risk. The plant risk assessment was used to select three heat exchangers. The heat exchangers selected are listed below:

- Shutdown Cooling Heat Exchanger AC-4A
- Shutdown Cooling Heat Exchanger AC-4B
- Raw Water/Component Cooling Water Heat Exchanger AC-1B

The inspectors reviewed the licensee's inspection, maintenance, and test methodology for the selected heat exchangers to verify that it was adequate to ensure proper heat transfer.

The inspectors also reviewed the heat exchanger inspection and test results. Specifically, the inspectors verified proper extrapolation of test conditions to design conditions, appropriate test instrumentation used, and appropriate accounting for instrument inaccuracies. Additionally, the inspectors verified that the licensee appropriately trended these inspection and test results, assessed the causes of the trends, and took necessary actions for any step changes in these trends.

For the selected heat exchangers, the inspectors verified that the licensee-established heat sink and heat-exchanger condition, operation, and test criteria was consistent with the design assumptions. Specifically, the inspectors reviewed the applicable test calculations to ensure that the thermal performance test acceptance criteria for the selected heat exchangers were being applied consistently throughout the calculations. The inspectors also verified that the appropriate acceptance values for fouling and tube plugging for the heat exchangers remained consistent with the values used in the design-basis calculations. Finally, the inspectors verified that the parameters measured during the thermal performance and flow balance tests for the selected systems were consistent with those assumed in the design bases.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Regualifications (71111.11)

a. <u>Inspection Scope</u>

On February 19, 2002, the inspectors observed a licensed operator simulator exercise. The simulator exercise evaluated the operator's ability to recognize, diagnose, and

respond to equipment problems. The simulator scenario included an uncontrolled heat extraction with a station blackout. Included in the scenario was a failure of the reactor to fully scram from main control panel and reactor protection panel, failure of a reactor coolant pump breaker from opening, loss of the 161 kV system, and failure of a main steam stop valve to close. The inspectors evaluated the operator performance using the following: Emergency Operating Procedure EOP-00, "Standard Post Trip Actions," Revision 15; Emergency Operating Procedure EOP-05, "Uncontrolled Heat Extraction," Revision 16; Emergency Operating Procedure EOP-20, "Functional Recovery Procedure," Revision 6; Abnormal Operating Procedure AOP-22, "Reactor Coolant Leak," Revision 10; and Abnormal Operating Procedure AOP-31, "Loss of 161 KV System," Revision 5.

b. <u>Findings</u>

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

During the inspection period, the inspectors reviewed licensee implementation of the Maintenance Rule. The inspectors verified structure and component scoping, characterization, safety significance, performance criteria, and the appropriateness of goals and corrective actions. The inspectors compared the licensee's implementation of the Maintenance Rule to the requirements outlined in 10 CFR 50.65, Maintenance Rule Implementing Instruction MRII-6, "Placement of SSCs in Category (a)(1) or (a)(2)," Revision 6; Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2; and meeting minutes from various expert technical panel meetings. The inspectors reviewed the following components:

- Control element drive mechanism failures for RC-10-20, RC-10-23 and RC-10-25
- Component Cooling Water Heat Exchanger Raw Water Inlet Valve HCV-2881A
- Component Cooling Water Surge Tank Level Transmitter LT-2801
- Axial Power Distribution Trip Calculator Al-31D-DW15
- Containment Cooling and Filter Unit VA-15A inlet damper
- Volume Control Tank CH-14 Boric Acid Make-up Inlet Valve FCV-269

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's risk assessments for equipment outages as a result of planned and emergent maintenance to evaluate the licensee's effectiveness in assessing risk for planned and emergent activities. The inspectors compared the licensee's risk assessment and risk management activities against requirements of 10 CFR 50.65 (a)(4), the recommendations of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2. The inspectors also discussed the planned and emergent work activities with planning and maintenance personnel. They reviewed and observed emergent work on the following systems/components/activities:

 January 30, 2002 Raw Water Pump AC-10B, replace broken packing gland stud

March 26, 2002 Charging Pump CH-1C, repacking of the pump

b. <u>Findings</u>

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the technical adequacy of the following operability evaluations to verify that they were sufficient to justify continued operation of a system or component. The inspectors verified that, although the equipment was degraded, the operability evaluation provided adequate justification that the equipment could still meet its Technical Specification, Updated Safety Analysis Report, and design bases requirements and that any potential risk increase contributed by the degraded equipment was thoroughly evaluated. The following evaluations were reviewed:

- Operability of safety bus during load sequencing with Primary Water Booster Pump DW-41B continuously running (Condition Report 200200184)
- Operability of control functions with an absence of a metal barrier between Cable Trays 38-C1A and 38-C1B (Condition Report 200200579)
- Operability of Emergency Diesel Generator 1 with loose foundation bolts (Condition Report 200200160)

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. <u>Inspection Scope</u>

The inspectors verified that postmaintenance tests were adequate to verify system operability and functional capabilities. The inspectors verified that testing met design and licensing bases requirements, Technical Specifications, the Updated Safety Analysis Report, Inservice Testing, and licensee administrative procedures. The inspectors verified test results for the following components:

- January 16, 2002 Refurbish Component Cooling Heat Exchanger AC-1A and Raw Water Inlet Valve HCV-2880A
- January 17, 2002 Replacement of cracked valve cover on the Auxiliary Feedwater Pump FW-54 diesel engine
- January 19, 2002 Replacement of Nuclear Power Range Safety Channel C (Al-31C-CW3) drawer
- January 22, 2002 Troubleshooting Cleaning Rod RC-10-23 electrical contacts
- January 30, 2002 Replacement of HCV-2881A (AC-1B Raw Water Inlet Valve) rod end bearing
- January 30, 2002 Replacement of broken packing stud on Raw Water Pump AC-10B
- March 13, 2002 Replacement of wire lug on Reactor Coolant Safety Relief and Power Operated Relief Valve Flow Channel Indicator FI-102-1

b. <u>Findings</u>

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. <u>Inspection Scope</u>

The inspectors observed or reviewed the following surveillance tests to ensure the systems tested were capable of performing their safety function and to assess their operational readiness. Specifically, the inspectors verified that the following surveillance test met Technical Specifications, ASME Section XI test requirements, the Updated Safety Analysis Report, and licensee procedural requirements:

•	January 23, 2002	Surveillance Test OP-ST-CCW-3022, "AC-3C Component
		Cooling Water Pump Inservice Test," Revision 10

 January 29, 2002 Surveillance Test EM-ST-EE-0003, "Quarterly Surveillance Test For Station Battery No. 1 (EE-8A)," Revision 15

•	February 5, 2002	Surveillance Test OP-ST-RW-3031, "AC-10D Raw Water Pump Quarterly Inservice Test," Revision 23
•	March 13, 2002	Surveillance Test IC-ST-RC-0001, "Functional Test of Acoustic Flow Monitors," Revision 4
•	March 20, 2002	OP-ST-FO-3001, "Diesel Generator 1 Fuel Oil System Pump Inservice Test," Revision 16
•	March 28, 2002	OP-ST-AFW-0004, "Auxiliary Feedwater Pump FW-10 Operability Test," Revision 21

b. <u>Findings</u>

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 <u>Drill Evaluation (71114.06)</u>

a. <u>Inspection Scope</u>

The inspectors observed the emergency preparedness drill on March 5, 2002. The purpose of these observations was to evaluate operator performance, licensee event classification, notification of state and local authorities, and adequacy of protective action recommendations. The inspectors also reviewed the licensee's critiques of the exercises to determine if they were self-critical in the identification of strengths and performance issues.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's first quarter 2002 performance indicator data submittal to verify its accuracy and completeness. The inspectors reviewed control room logs and condition reports to verify that the data was properly submitted. The inspectors verified the following indicators:

- Unplanned scrams per 7000-hours critical
- Scrams with loss of normal heat removal

Unplanned power changes per 7000 critical hours

b. Findings

No findings of significance were identified.

4OA3 Event Followup (71153)

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's actions in response to a spent resin intrusion event into the waste gas vent header, which occurred during dewatering of the spent resin storage tank.

b. Findings

During the night shift on February 15, 2002, the licensee was performing a system lineup to remove water from the spent resin storage tank. At the time the operating crew was performing the dewatering lineup of the spent resin storage tank, the plant was also performing a safety injection refueling water tank demineralization operation to reduce the radioactivity of the tank's contents. The operation was being performed in accordance with Procedure OI-WDL-6, "SIRWT Water Cleanup," Revision 5. This operation started in September 2001 using a portable pump, filters, and ion exchangers to circulate safety injection refueling water tank (SIRWT) contents through a filter and ion exchanger to reduce the source term material in this tank for dose reduction during an upcoming refueling outage. The portable equipment tapped into existing plant valves and piping to recirculate the tank contents through the portable filter and ion exchanger. The alignment utilized in the SIRWT cleanup shared common piping with the alignment necessary to dewater the spent resin storage tank.

During the lineup to dewater the spent resin storage tank, operators failed to verify Valve WD-1232 (spent resin pump isolation valve) closed. Leaving this valve open, cross-connected the spent resin storage tank drain line with the plant piping being used to pump SIRWT water from the portable SIRWT cleanup booster pump to the portable ion exchanger and filter. This caused the SIRWT water to backfill the spent resin storage tank. This resulted in fluffing of the resin contained in the spent resin storage tank sufficiently to cause both resin and water from the spent resin storage tank to fill the lines entering the top of the spent resin storage tank from the half pound nitrogen header and the vent header. This configuration continued for several moments until station operators, following the observation of unanticipated system response and an alarm on local Radiation Monitor RM-081, realized what was occurring and secured the dewatering lineup. Due to high radiation levels in the radiological controlled area of the auxiliary building, the licensee declared a notification of unusual event per Emergency Action Level 11.4, "Plant Conditions Warrant Increased Awareness by Plant Staff or Government Authorities."

The inspectors determined that the licensee had an inadequate procedure for performance of the SIRWT water cleanup. This finding was a violation of Technical

Specification 5.8.1.

This finding is more than minor because the issue is viewed as a precursor to a significant event, if the resin intrusion had been allowed to continue for a longer period of time. This finding affects the radiation safety occupational cornerstone. This finding was found to be of very low safety significance (Green) using the reactor safety significance determination process because the radiation did not spread beyond the radiologically controlled area and the licensee took prompt actions to ensure no spill occurred.

Technical Specification 5.8.1 requires, in part, that written procedures shall be established, implemented, and maintained covering applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Section 9, requires, in part, that "Maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written instructions appropriate to the circumstances." The licensee's inadequate SIRWT procedure did not contain precautions indicating that alignment in accordance with the cleanup procedure was not compatible with the resin transfer or dewatering of the spent resin storage tank. This violation is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy (50-285/0106-01). This violation was entered into the licensee's corrective action program as Condition Report 200200379.

4OA5 Other

The following licensee event reports (LERs) were determined to be of minor significance and are closed:

LER 285/00-001-00: Recalculation of Dose to the Control Room Operators Places the

Plant Outside Design Basis

LER 285/01-001-00: Primary Safety Valves Outside Lift Setting Acceptance Range

4OA6 Management Meetings

Exit Meeting Summary

The resident inspectors presented inspection results for the heat exchanger inspection to Mr. W.G. Gates, Vice President of Nuclear, and other members of licensee management on March 11, 2002.

The resident inspector also presented inspection results to Mr. W.G. Gates, Vice President of Nuclear, and other members of licensee management at the conclusion of the inspection on April 1, 2002.

The inspectors asked whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified by the licensee.

4OA7 Licensee Identified Violations

The following findings of very low safety significance were identified by the licensee and are violations of NRC requirements, which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as noncited violations.

NCV Tracking Number

Requirement Licensee Failed to Meet

50-285/0106-02

Technical Specification 5.8.1 requires, in part, that written procedures shall be established, implemented, and maintained. The licensee failed to properly implement Standing Order SO-O-41, "Control of Operator Aids and Emergency Equipment," Revision 85, step 4.2, which states plant personnel must be given permission from the Shift Manager prior to using any Operator Aids for nonemergency purposes. Specifically, on January 13, 2002, maintenance personnel removed a pry bar necessary for local starting of the turbine-driven auxiliary feedwater pump without obtaining the shift manager's permission. This issue is more than minor because it had the potential to impact the licensee's ability to locally start the turbine-driven auxiliary pump. This event is described in the licensee's corrective action program as Condition Report 200200111. This finding is being treated as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy (50-285/0106-02).

The safety significance of this finding was determined to be very low in that a local start of the turbine-driven auxiliary feedwater pump is a proceduralized action that is only necessary with a loss of offsite power combined with a near-term loss of dc power and a failure of the dieseldriven auxiliary feedwater pump (Section 4OA7).

ATTACHMENT

KEY POINTS OF CONTACT

Licensee

- D. Bannister, Plant Manager
- G. Cavanaugh, Supervisor, Station Licensing
- R. Clemens, Division Manager, Nuclear Assurance Division
- M. Core, Manager, System Engineering
- J. Drahota, Supervisor, Operations Engineering
- M. Frans, Manager, Nuclear Licensing
- J. McManis, Manager, Design Engineering
- C. Ovici, System Engineer
- R. Phelps, Division Manager, Nuclear Engineering Division
- R. Ridenoure, Division Manager, Nuclear Operations Division

NRC

W. Walker, Senior Resident Inspector L. Willoughby, Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed During this Inspection

50/285/0106-01	NCV	Failure to have an adequate procedure for cleanup of the SIRWT (Section 4OA3)
50/285/0106-02	NCV	Failure to follow procedures and obtain Shift Manager approval prior to using an operator aid for nonemergency purposes (Section 4OA7)

DOCUMENTS REVIEWED

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

- Work Order Package 00054236 01 AC-4A Performance Monitoring Test
- Work Order Package 00054235 01 AC-4B Performance Monitoring Test
- Work Order Package 00107103 AC-1B Performance Monitoring Test
- PED-SEI-16 Evaluation of Heat Exchanger Performance, Revision 4
- Calculation FC06651 Raw Water Heat Exchanger Temperature Loop Uncertainty, Revision 4

- Engineering Assistance Request 96-032 Evaluation of CCW Heat Exchangers Post DBA Performance with 5% Plugged Tubes
- Engineering Assistance Request 27057 Uncertainty Analysis for the Heat Exchanger Testing Program Based on Installed Temperature Loop Uncertainties
- Engineering Assistance Request 94-037 AC-4A/B Design Basis Capacity