



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064**

July 31, 2000

EA-00-149

S. K. Gambhir, Division Manager
Nuclear Operations
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399
Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska 68023-0399

SUBJECT: NRC INSPECTION REPORT NO. 50-285/00-06

Dear Mr. Gambhir:

This refers to the inspection conducted on May 21 through July 1, 2000, at the Fort Calhoun Station facility. The results were discussed with Mr. Clemens and other members of your staff. The enclosed report presents the results of this inspection. The inspection included input in specific areas by regional specialists.

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

Based on the results of this inspection, the NRC has determined that a violation of NRC requirements occurred. This violation is being treated as a noncited violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy. This NCV is described in the subject inspection report. If you contest the violation, 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, Region IV; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Fort Calhoun Station.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be 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/NRC/ADAMS/index.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/

Kriss M. Kennedy
Project Branch C
Division of Reactor Projects

Docket No.: 50-285
License No.: DPR-40

Enclosure:
NRC Inspection Report No.
50-285/00-06

cc w/enclosure:
Mark T. Frans, Manager
Nuclear Licensing
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 399
Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska 68023-0399

James W. Chase, Division Manager
Nuclear Assessments
Fort Calhoun Station
P.O. Box 399
Fort Calhoun, Nebraska 68023

Richard P. Clemens, Manager - Fort Calhoun Station
Omaha Public Power District
Fort Calhoun Station FC-1-1 Plant
P.O. Box 399
Hwy. 75 - North of Fort Calhoun
Fort Calhoun, Nebraska 68023

Perry D. Robinson, Esq.
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

Cheryl K. Rogers, Program Manager
Nebraska Health and Human Services System
Division of Public Health Assurance
Consumer Services Section
301 Centennial Mall, South
P.O. Box 95007
Lincoln, Nebraska 68509-5007

Electronic distribution from ADAMS 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 (**DPL**)

Branch Chief, DRP/TSS (**LAY**)

RITS Coordinator (**NBH**)

Jim Isom, Pilot Plant Program (**JAI**)

Sampath Malur, Pilot Plant Program (**SKM**)

G. F. Sanborn, D:ACES (**GFS**)

K. D. Smith, RC (**KDS1**)

R. W. Borchardt, OE (**RWB1**)

OE:EA File (**RidsOeMailCenter**)

Only inspection reports to the following:

D. Lange (**DJL**)

NRR Event Tracking System (**IPAS**)

FCS Site Secretary (**NJC**)

Wayne Scott (**WES**)

R:_FCS\FC2000-06RP-WCW.wpd

RIV:SRI:DRP/C	RI:DRP/C	SPE:DRP/C	C:DRS/PSB	C:DRS/EMB
WCWalker:nc	CCOsterholtz	DPLoveless	GMGood	JLShackelford
KMKennedy for	T - KMKennedy	KMKennedy for	/RA/	/RA/
7/31/00	7/31/00	7/31/00	7/26/00	7/27/00

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 50-285
License No.: DPR-40
Report No.: 50-285/00-06
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: May 21 through July 1, 2000
Inspectors: W. Walker, Senior Resident Inspector
C. Osterholtz, Resident Inspector
P. Elkmann, Emergency Preparedness Analyst
J. Dodson, Health Physicist
J. Whittemore, Senior Reactor Inspector
Approved By: Kriss M. Kennedy, Chief, Project Branch C

ATTACHMENTS:

Attachment 1: Supplemental Information
Attachment 2: NRC's Revised Reactor Oversight Process

SUMMARY OF FINDINGS

Fort Calhoun Nuclear Station NRC Inspection Report 50-285/00-06

The report covers a 6-week period of resident inspection, an announced inspection by a region-based health physics inspector, and in-office review conducted by emergency preparedness and senior reactor inspectors.

The body of the report is organized under the broad categories of Reactor Safety, Emergency Preparedness, Radiation Safety, and Other Activities as listed in the summaries below.

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.

Cornerstone: Mitigating Systems

- **Green.** In 1997, the licensee identified that safety injection tank leakage had the potential to cause voiding in the low pressure safety injection system header from nitrogen precipitation (LER 50-285/97-017-01). This could have resulted in water hammer and subsequent system inoperability during the injection phase of a loss of coolant accident should it occur coincident with a loss of offsite power.

The NRC staff evaluated the condition using the reactor safety significance determination process. The potential water hammer would have the highest probability of occurring during the initial injection phase of a large break loss of coolant accident concurrent with a loss of offsite power. This resulted in a very low risk significance based on the very low likelihood of initiating event occurrence (Section 4OA5).

Crosscutting Issues: Human Performance Problems

- **No Color.** Licensee employees did not comply with the licensee's program for addressing identified out-of-tolerance conditions in measuring and test equipment used in the performance of safety-related activities. The employees inappropriately backdated signatures on four Defective/Rejected Evaluation Forms to indicate that corrective action to address the out-of-tolerance conditions had been completed within the 30-day period specified by the licensee's program. The licensee's failure to maintain accurate information related to measuring and test equipment used in safety-related activities was identified as a violation of 10 CFR Part 50.9. This willful Severity Level IV violation is being treated as noncited violation (50-285/0006-01), consistent with Section VI.A of the NRC Enforcement Policy. The condition resulting in the violation is in the licensee's corrective action system as Condition Report 199901924, dated September 30, 1999 (EA-00-149) (Section 4OA4).

Report Details

Summary of Plant Status:

The Fort Calhoun Station began this inspection period at 100 percent power and maintained that level throughout the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignments

a. Inspection Scope

The inspectors performed a partial inspection of Emergency Diesel Generator 1 while surveillance testing was being performed on Emergency Diesel Generator 2. Plant procedures and drawings were used to verify correct system alignment for Emergency Diesel Generator 1.

b. Findings

There were no findings identified during this inspection.

1R05 Fire Protection

a. Inspection Scope

The inspectors performed inspections of the following areas to determine if proper fire protection controls for combustibles and ignition sources were being effectively maintained:

- Emergency Diesel Generator Rooms 1 and 2
- Auxiliary building safety injection pump rooms
- Raw water pump rooms

b. Findings

There were no findings identified during this inspection.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed an evaluated requalification scenario in the simulator for an operating crew. The inspectors also observed the postdrill critique performed between training and operations after the scenario's conclusion.

b. Findings

There were no findings identified during this inspection.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors verified proper implementation of the maintenance rule for the following components:

- Main Steam Radiation Monitor RM-064
- Pressurizer Relief Isolation Valve HCV-151
- Control Room Air Conditioning Unit VA-46A
- Condensate Pumps FW-2A and FW-2B

Cause determinations were reviewed to ensure maintenance preventable conditions were properly dispositioned.

b. Findings

There were no findings identified during this inspection.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors observed and reviewed emergent work on the diesel generator air start regulators when three out of four regulators were discovered out of specification low after performing surveillance testing on Emergency Diesel Generator 2.

b. Findings

There were no findings identified during this inspection.

1R14 Nonroutine Plant Events

a. Inspection Scope

The inspectors reviewed licensee event reports for potential human errors and evaluation of risk significance.

b. Findings

The inspectors did not identify any common human performance issues. The inspectors noted that the licensee had initiated or completed corrective actions for each of the reviewed items. Inspectors also reviewed each of the listed licensee event reports (LERs). The LERs documented issues of minor significance. Therefore, they do not warrant further NRC attention. The following items are closed:

- LER 50-285/98-015: Lack of Respirator Qualifications
- LER 50-285/98-016: Uninstalled Relay Covers
- LER 50-285/99-002: Engineered Safeguards Feature Switch Failure

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the operability and reportability evaluations performed to assure emergency diesel generator operability with lower than expected as-found air start regulator setpoints.

b. Findings

There were no findings identified during this inspection.

1R19 Postmaintenance Testing

a. Inspection Scope

The inspectors observed or evaluated the following postmaintenance tests to determine whether the test adequately confirmed equipment operability:

- Work Order 61122 for Raw Water Pump AC-10A breaker maintenance
- Work Order 49451 for maintenance on HCV-400A, Component Cooling Water Inlet to Containment Cooling Coil VA-1A
- Work Order 43842 for Charging Pump CH-1B Relief Piping Replacement

b. Findings

There were no findings identified during this inspection.

1R20 Refueling and Outage

a. Inspection Scope

The inspectors verified that fuel handling operations involving inspection and reconstitution of fuel in the spent fuel pool were being performed in accordance with Technical Specifications and approved procedures. The location of the fuel assemblies and removed fuel pins was properly tracked throughout the evolution. The inspectors also reviewed the corrective actions taken when a fuel assembly guide tube was inadvertently bent during fuel reconstitution activities.

b. Findings

There were no findings identified during this inspection.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed all or part of the following surveillance activities to confirm that the licensee effectively controlled the associated risk:

- Surveillance Test Procedure OP-ST-RW-3001, "AC-10A Raw Water Pump Quarterly Inservice Test," Revision 25
- Surveillance Test Procedure OP-PM-AFW-0004, "Third Auxiliary Feedwater Pump Operability Verification," Revision 20

b. Findings

There were no findings identified during this inspection.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors performed a detailed review of Temporary Modification DCP/DCN 10375/10333. This modification bypassed the positioner controller in the control circuit for the Turbine-Driven Auxiliary Feedwater Pump FW-10 inlet throttle valve. This modification was performed after erratic controller operation was observed on Pump FW-10 during surveillance testing.

b. Findings

There were no findings identified during this inspection.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

The inspector performed an in-office review of changes to emergency action levels contained in Emergency Plan Implementing Procedure EPIP-OSC-1, "Emergency Classification," Revision 32, submitted August 11, 1999, under the provisions of 10 CFR Part 50, Appendix E, Section V. The inspector discussed minor questions with the licensee's emergency preparedness staff on April 5 and 6, 2000.

b. Findings

There were no findings identified during this inspection.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS2 Radioactive Material Processing and Transportation

a. Inspection Scope

The inspector interviewed licensee personnel, walked down liquid and solid radioactive waste processing systems, and reviewed the following items:

1. Radioactive material processing and shipping procedures
2. The status of radioactive waste process equipment that was not operational and/or abandoned in place
3. Changes made to the radioactive waste processing systems since the last inspection in July 1998
4. Waste stream mixing and/or sampling procedures, methodology for waste concentration averaging, and waste classification procedures
5. Radiochemical sample analysis results for each of the radioactive waste streams
6. The use of scaling factors and calculations used to account for difficult to measure radionuclides
7. Changes in waste stream composition caused by changing operational parameters and analysis updates

8. Shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness
9. Transport cask certificates of compliance and cask loading and closure procedures
10. Transferee's licenses and state/Department of Transportation permits
11. Conduct of radioactive waste processing and radioactive material shipment preparation activities
12. Training program for the conduct of radioactive waste processing and radioactive material shipment preparation activities
13. Nine nonexcepted package shipment records
14. Licensee event reports, special reports, audits, and self-assessments related to the radioactive material and transportation programs performed since the last inspection in July 1998
15. Condition reports written against the radioactive material and shipping programs since the previous inspection in July 1998

b. Findings

There were no findings identified during this inspection.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed the following performance indicators to verify their accuracy and completeness:

- Unplanned Scrams per 7000 Critical Hours (Automatic and Manual Scrams)
- Scrams with Loss of Normal Heat Removal

b. Findings

There were no findings identified during this inspection.

4OA4 Crosscutting Issue

Human Performance Problems

a. Inspection Scope

The inspectors reviewed an investigation that was initiated and conducted under the licensee's Employee Concerns Program to address issues related to the licensee's Measuring and Test Equipment (M&TE) Program. This required further review of condition reports related to the issue, licensee procedures related to the maintenance of M&TE and human performance, and M&TE program records related to specific equipment.

b. Findings

The inspectors reviewed an Employee Concerns Program Investigation, dated January 4, 2000, and agreed with the licensee's conclusion that licensee employees had inappropriately backdated Defective/Rejected Evaluation Forms (DREF) that were initiated when M&TE was found out of tolerance. In accordance with the licensee's program requirements, verification of equipment operability was to be completed and documented on the DREF and approved by the Supervisor-I&C within 30 days after initiation of the DREF. According to licensee representatives, the backdating was done to conceal poor program performance that resulted from a lack of resources. The inspectors reviewed a number of completed DREF records and observed that licensee representatives characterized the records as backdated to indicate that the required evaluation and corrective actions had not been completed within the required 30-day period.

The inspectors then reviewed Condition Reports 199900974 and 1999091924. These two reports identified the event of backdating DREFs and then rolled up 23 other condition reports related to M&TE issues for an assessment of the program. As a result, a safety assessment was performed and an M&TE Improvement Action Plan was initiated and developed. The original investigation initially determined that there was no safety significance attached to any of the backdated DREFs. This was validated by the safety assessment. The inspectors further observed that all information relative to safety significance was accurate and only the date of the document signatures was inaccurate. Also, the evaluations were performed and approved within 40 days, instead of 30 days.

However, 10 CFR 50.9 states in part that, information required by the Commission's regulations to be maintained by a licensee shall be complete and accurate in all material respects. Criterion 12 of Appendix B to 10 CFR Part 50 states that measures shall be established to assure that tools, gages, instruments, and other M&TE devices used in activities affecting quality are properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits. Licensee quality-related Procedure MD-AD-0008, "Issuance, Control, and Calibration of Measuring and Test Equipment," Revision 3, Section 5.12, described actions to be taken when M&TE is found out of tolerance. Step 5.12.2 stated, "Verification of equipment operability shall

be completed and documented on the (DREF) Defective/Rejected Evaluation Form, and approved by the Supervisor-I&C within 30 days after initiation of the DREF.”

Contrary to the requirements noted above, between August 21 and October 1, 1999, information required by the Commission’s regulations was not complete and accurate in all material respects. Specifically, the DREFs had been backdated with completion dates to indicate that the required evaluation had been performed earlier than actually completed. This information is material to the NRC because it demonstrates timely verification that safety-related equipment remains operable and in compliance with the licensee’s program requirements.

Although the licensee had identified and corrected the willful inappropriate backdating of signatures on M&TE records, the failure to maintain accurate information related to M&TE used in safety-related activities was identified as a violation of 10 CFR 50.9. This willful violation is being treated as noncited violation (50-285/0006-01), consistent with Section VI.A of the NRC Enforcement Policy (EA-00-149). The condition resulting in the violation is in the licensee’s corrective action system as Condition Report 199901924, dated September 30, 1999.

4OA5 Other

- .1 (Closed) LER 50-285/97-017, Revision 1: Low Pressure Safety Injection System in an Unanalyzed Condition Because of the Potential for Voiding.

This report documented that nitrogen voiding in the safety injection system could have resulted in water hammer during the injection phase of a loss-of-coolant accident should it occur coincident with a loss of offsite power. The licensee’s evaluation indicated that several piping supports would have reaction loads exceeding design allowables for the low pressure coolant injection system if significant voiding existed. Licensee engineers determined that safety injection tank leakage on May 9-23, 1997, had the potential to have caused system voiding during the low header pressure conditions that follow a loss of offsite power. Therefore, while previous safety injection tank leakage conditions existed, the system may have voided and been in an unanalyzed condition during a loss-of-coolant accident. Licensee engineers also identified previous examples of safety injection tank leakage that were more significant than the leakage quantified and evaluated in May 1997.

The licensee modified the system to install vents at appropriate locations and monitored system performance to determine the effectiveness of this solution. In addition, Valve HCV-331, the primary leakage path from the safety injection tanks, was repaired during the licensee’s 1998 refueling outage. Licensee engineers conducted an engineering evaluation to determine the impact of this condition on the operability of the low pressure safety injection system. Based on a review of previous surveillance testing, the engineers found no evidence that a water hammer event had occurred in the low pressure safety injection system piping as a result of this condition.

The inspectors evaluated the condition using the reactor safety significance determination process and characterized the issue as a “green” finding. The potential

water hammer would have the highest probability of occurring during the initial injection phase of a large break loss-of-coolant accident concurrent with a loss of offsite power. This resulted in a very low risk significance based on the very low likelihood of initiating event occurrence.

Based on the lack of specific information related to the actual potential for voiding during past safety injection tank leakage conditions, no violation of regulatory requirements was identified. The item has been placed in the licensee's corrective action program as Condition Reports 199701532, 199701155/01, and 199701155/02.

- .2 (Closed) LER 50-285/98-008-00: Overpressurization of Auxiliary Feedwater Piping Caused by Misadjustment of the Governor. This event was discussed in NRC Inspection Report 50-285/98-12. No new issues were revealed by this LER.
- .3 (Closed) Inspection Followup Item (IFI) 50-285/98-05-06: Spent Fuel Pool Demineralizer Resin Sluice. This item was opened to review the licensee's corrective actions associated with the subject event. Licensee personnel had received more than two person-rem in responding to several problems that prevented sluicing of demineralizer resin. The initial dose projection had been significantly lower.

This ALARA issue was evaluated using the occupational radiation safety significance determination process and was determined to be of only minor significance. The two person-rem dose received was well below the five person-rem significance threshold. The item had been placed in the licensee's corrective action program as Condition Report 199800321. As a result, this item is administratively closed because it is within the licensee's control and does not warrant further NRC attention.

- .4 (Closed) IFI 50-285/98-010-01: Troubleshooting of Post Accident Sampling System Accident Sequence. This IFI tracked the same issues documented in LER 50-285/98-009-00. This LER was closed in NRC Inspection Report 50-285/99-11.
- .5 (Closed) Unresolved Item 50-285/99-012-06: Failure to Ensure that the Arrival and Presence of an NRC Inspector was Not Announced. This unresolved item was addressed in a letter from NRC Region IV to Fort Calhoun dated April 21, 2000.
- .6 (Closed) Violation 285/98008-02: Inadequate balance between reliability and unavailability for the reactor protection and engineered safety features actuation systems. This violation was tracked as Part 2 of Enforcement Action 1998-392 and was written to document that the licensee failed to develop unavailability performance criteria for the subject systems in violation of 10 CFR 50.65(a)(3). At that time, the NRC had concluded that information regarding the reason for the violation and the corrective actions taken and planned to correct the violation and prevent recurrence was already adequately addressed on the docket in a letter from the licensee dated July 31, 1998.

This Severity Level IV violation was issued in a Notice of Violation prior to the March 11, 1999, implementation of the NRC's new policy for treatment of Severity Level IV violations. Because this violation would have been treated as a noncited violation in

accordance with Section VI.A.1 of the current NRC Enforcement Policy, and based on the issue being tracked in the licensee's corrective action program, it is being closed administratively in this report.

- .7 (Closed) Violation 285/98008-03: Inadequate goals established for the 125 vdc, circulating water, chemical and volume control, and emergency core cooling systems. This violation was tracked as Part 3 of Enforcement Action 1998-392 and was written to document multiple examples of the licensee's failure to establish adequate corrective actions and monitoring goals for problematic equipment. At that time, the NRC had concluded that information regarding the reason for the violation and the corrective actions taken and planned to correct the violation and prevent recurrence was already adequately addressed on the docket in a letter from the licensee dated July 31, 1998.

This Severity Level IV violation was issued in a Notice of Violation prior to the March 11, 1999, implementation of the NRC's new policy for treatment of Severity Level IV violations. Because this violation would have been treated as a noncited violation in accordance with Section VI.A.1 of the current NRC Enforcement Policy, and based on the issue being tracked in the licensee's corrective action program, it is being closed administratively in this report.

4OA6 Exit Meeting Summary

The results of the inspections conducted during this period were discussed with licensee management on May 30 and June 9, 20, and 30, 2000. The licensee acknowledged the findings presented.

During all four meetings, the NRC representatives asked the licensee personnel present whether any materials examined during the inspection should be considered proprietary. The licensee identified a vendor training lesson plan as proprietary information. This information was returned to the licensee during the inspection. No other proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Chase, Division Manager, Nuclear Assessment
R. Clemens, Plant Manager
S. Gambhir, Division Manager, Nuclear Operations
W. Gates, Vice President
R. Phelps, Division Manager, Nuclear Engineering
R. Short, Assistant Plant Manager
C. Simmons, Supervisor - Emergency Planning
J. Spilker, Manager, Corrective Action Group
M. Tesar, Division Manager, Nuclear Support Services
G. Cavanaugh, Supervisor, Nuclear Licensing
M. Puckett, Manager, Radiation Protection
J. Mattice, Supervisor, Radwaste Operations
E. Matzke, Licensing Specialist
D. Travsch, Manager, Quality Assurance
L. Schneider, Senior Lead Auditor, Quality Assurance
M. Brewer, Senior Technician, Radwaste

DOCUMENTS REVIEWED

EPIP OSC-1, "Emergency Classification," Revision 32

CONDITION REPORTS

199900974
199901924
199801474
199801485
199801558
199801717
199801850
199900236
199901220

PROCEDURES

NUMBER	DESCRIPTION	REVISION
NPM-9-01	Addressing an Inappropriate Human Performance Action	0
MD-AD-0008	Issuance, Control, and Calibration of Measuring and Test Equipment	3

PROCEDURES

NUMBER	DESCRIPTION	REVISION
MD-AD-0008	Issuance, Control, and Calibration of Measuring and Test Equipment	4
MD-AD-0008	Issuance, Control, and Calibration of Measuring and Test Equipment	6
RW-AD-100	Radioactive Waste Management Program	4
RW-200	Process Control Program	3
RW-201	Control of Containers	2
RW-202	Collection and Sorting of Dry Active Waste	6
RW-203	Compacting Dry Active Waste (DAW)	2
RW-204	Packaging Non-Compactable Dry Active Waste	2
RW-207	Operation of the Fix Radwaste Liquid Processing System	2
RW-209	Dewatering Spent Resin in Disposal Containers	7
RW-211	Storage of Filters from Radwaste Systems	2
RW-212	Loading HIC Overpacks	2
RW-214	Collection and Shipment of Oils	1
RW-216	Testing of Sorbent Materials	1
RW-217	Packaging of Non-Waste Radioactive Materials	4
RW-218	10 CFR Part 61 Classification	8
RW-219	D.O.T. Quantification	3
RW-221	10 CFR Part 61 Sampling	3
RW-222	Radioactive Waste, Equipment and Materials Inventory	2
RW-300	Shipping Radwaste and Radioactive Materials	5
RW-304	Radwaste Shipments to Barnwell, South Carolina	5
RW-319	Loading the SEG 14-215 Cask	0
RW-321	Handling Procedure for the CNS 8-120B Shipping Cask	0

DEFECTIVE/REJECTED EVALUATION FORMS

Form Numbers	Affected Measuring and Test Equipment	Completion Date/ Record File date
99161	M&TE 50109, Fischer and Porter Flowrator	September 21, 1999/ October 1, 1999
99168	M&TE 22205, Entek IRD Vibration Meter	September 24, 1999/ October 1, 1999
99169	M&TE 22207, Entek IRD Vibration Meter	September 24, 1999/ October 1, 1999
99170	M&TE 12105, Model 1433W Decade Box	September 25, 1999/ October 1, 1999

MISCELLANEOUS DOCUMENTS

NUMBER	DESCRIPTION	REVISION
99-067	Plant Review Committee Meeting Minutes	October 11, 1999
	Licensee Employee Concerns Program Investigation	January 4, 2000
	M&TE Action Plan Summary	November 15, 2000
	Nuclear Safety Assessment of Backdated Forms	November 24, 2000
Policy 7.10	Disciplinary Action	April 1, 2000

Listing of radioactive waste and material shipments from July 1998 through June 2, 2000

Listing of condition reports from July 1998 through June 2, 2000

Shipping Documentation Packages RW9851, RW9853, NW0006, RW9861, RW9906, RW9908, RW9917, NW9943, and RW9921

10 CFR Part 61 Analysis data packages for 1998 and 1999

Radiation Protection Program Assessment, CHP 98-02, June 15-26, 1998

Radiation Protection Program Assessment, CHP 98-041, October 12, 1998

Radiation Protection Program Assessment, CHP 99-01, March 22-24, 1999

Radiation Protection Program Assessment, CHP 99-02, May 25-June 18, 1999

Quality Assurance Audit Report 56, 98-QA/QC-125, October 29, 1998

SARC Audit Report 63, 99-SARC-010, March 12, 1999
SARC Audit Report 58, 99-SARC-019, May 20, 1999
Quality Assurance Surveillance Report B2-00-1, 00-QA/QC-032, June 6, 2000

ITEMS OPENED AND CLOSED

Opened and Closed During this Inspection

50-285/0006-01 NCV Failure to Maintain Accurate Information (40A4)

Closed During this Inspection

285/98008-02	VIO	Inadequate balance between reliability and unavailability for the reactor protection and engineered safety features actuation systems (Section 40A5)
285/98008-03	VIO	Inadequate goals established for the 125 vdc, circulating water, chemical and volume control, and emergency core cooling systems (Section 40A5)
285/99012-06	URI	Failure to Ensure that the Arrival and Presence of an NRC Inspector was Not Announced (Section 40A5)
285/98005-06	IFI	Spent Fuel Pool Demineralizer Resin Sluice (Section 40A5)
285/98-010-01	IFI	Troubleshooting of Postaccident Sampling System Accident Sequence (Section 40A5)
285/97-017-01	LER	Low pressure safety injection in an unanalyzed condition because of the potential for voiding (Section 40A5)
285/98-008-00	LER	Overpressurization of Auxiliary Feedwater Piping Due to Misadjustment of Governor (Section 40A5)
285/98-015	LER	Lack of Respirator Qualifications (Section 1R14)
285/98-016	LER	Uninstalled Relay Covers (Section 1R14)
285/99-002	LER	Engineered Safeguards Feature Switch Failure (Section 1R14)

LIST OF ACRONYMS AND INITIALISMS USED

ALARA	as low as is reasonably achievable
CFR	Code of Federal Regulations
DOT	Department of Transportation
DREF	Defective/Rejected Evaluation Form
HIC	high-integrity container
IFI	inspection followup item
LER	licensee event report
URI	unresolved item
VIO	violation
Vdc	Volts, direct current

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness	<ul style="list-style-type: none">● Occupational● Public	<ul style="list-style-type: none">● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the significance determination process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, or RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.