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

April 7, 2000

J. H. Swailes, Vice President of
Nuclear Energy
Nebraska Public Power District
P.O. Box 98
Brownville, Nebraska 68321

SUBJECT: NRC INSPECTION REPORT NO. 50-298/2000-04

Dear Mr. Swailes:

This refers to the inspection conducted on February 20 through April 1, 2000, at the Cooper Nuclear Station facility. The enclosed report presents the results of this inspection. The results of this inspection were discussed on March 29, 2000, with Mr. J. McDonald and other members of your staff.

The inspectors examined 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 inspectors examined a selection of procedures and representative records, observed activities, and conducted interviews with personnel.

Based on the results of this inspection, the NRC has determined that 5 violations of NRC requirements occurred. These violations are being treated as noncited violations (NCV's), consistent with the Interim Enforcement Policy for pilot plants. These NCV's are described in the subject inspection report. If you contest any of the violations, 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 Cooper facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if requested, will be placed in the NRC Public Document Room (PDR).

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

Sincerely,

/RA/

Charles S. Marschall, Chief
Project Branch C
Division of Reactor Projects

Docket No.: 50-298
License No.: DPR-46

Enclosure:
NRC Inspection Report No.
50-298/00-04

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	50-298
License No.:	DPR 46
Report No.:	50-298/00-04
Licensee:	Nebraska Public Power District
Facility:	Cooper Nuclear Station
Location:	P.O. Box 98 Brownville, Nebraska
Dates:	February 20 through April 1, 2000
Inspectors:	J. Clark, Senior Resident Inspector M. Hay, Resident Inspector
Approved By:	Charles S. Marschall, Chief, Project Branch C Division of Reactor Projects

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

SUMMARY OF FINDINGS

Cooper Nuclear Station
NRC Inspection Report 50-298/00-04 (DRP)

This report covers a 6-week period of baseline resident inspection.

The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in draft Inspection Manual Chapter 0609. The body of the report is organized under the broad categories of Reactor Safety and Other Activities as reflected in the summary below.

Cornerstone: Initiating Events

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix R, for inadequate emergency lighting. The inspectors identified a failure to provide required emergency lighting for the access and egress route to the service water pumps. The vestibule area outside the service water pump room did not have an emergency light. This issue had low safety significance. Operations personnel could have taken compensatory measures to gain access to the room without lighting (Section 1R05).

Cornerstone: Mitigating Systems

- Green. The inspectors identified a noncited violation of Technical Specification 5.4.1(a) for failure to perform an operability evaluation on a reactor recirculation pump discharge valve. The Reactor Recirculation Pump A Discharge Valve exhibited degraded performance during a forced outage in January and subsequently failed to operate on March 4, 2000. The valve is required to close on a loss-of-coolant accident signal to prevent the short cycling of a subloop for low pressure coolant injection. This issue had low safety significance. The other subloop, and the low pressure core spray system, remained operable (Section 1R15).

- Green. Maintenance personnel constructed a scaffold in the auxiliary building that blocked the operation of a secondary containment isolation valve. Operations and maintenance personnel determined that the valve was obstructed for a period of 4-5 days and that the valve would not have closed as required on a containment isolation signal. The inspectors concluded this was a noncited violation of Technical Specification 5.4.1(a). This issue had low safety significance. A redundant valve, in series with the obstructed valve, remained operable (Section 1R20).

- Green. Inadequate maintenance procedures for the refurbishment of the vacuum breaker valves in the previous refueling outage led to leakage in excess of Technical Specifications. On March 6, 2000, operations and licensing personnel reported to the NRC that the torus vacuum breakers failed a leak test surveillance. Proper mitigation of a loss-of-coolant accident requires that the vacuum breakers do not permit excessive communication between the drywell and the suppression chamber. Inadequate maintenance procedures for the refurbishment of the valves in the last refueling outage led to the excessive leakage. The inspectors concluded this was a noncited violation of

Technical Specification 5.4.1(a). This issue had low safety significance. Engineering personnel provided analyses and documentation that showed that, while the leakage was above administrative limits, it remained within design limits for the plant (Section 1R20).

- Green. The inspectors identified a noncited violation for operations personnel inadvertently causing a leak from the operating shutdown cooling loop to a secured and drained loop. The cross-connecting of residual heat removal loops produced an uncontrolled vessel level transient that was self-terminated when the nonoperating loop was filled. The inspectors determined that an inadequate equipment control release allowed a cross-connect valve between the two residual heat removal loops to be opened. The inspectors concluded this was a noncited violation of Technical Specification 5.4.1(a). This issue had low safety significance. Since the secured loop vent and drain valves were closed at the time, the transient lasted only 2 to 3 minutes, resulting in approximately 2500 gallons of water being lost from the refueling cavity. This resulted in only a minor decrease in refueling cavity level and no increased adverse radiological conditions (Section 1R20).

- Green. The inspectors determined that control room personnel were unaware of a heightened configuration risk of the plant and the associated contingency plans. On March 20, 2000, the inspectors questioned control room personnel about outage risk, configuration control, and contingency plans. The control room personnel were unaware that configuration risk was in the orange, or second highest, band. The operators also were unaware of specific contingency plans that they were responsible to implement. This issue had low safety significance. While a potential existed for improper configuration management, the lack of operator awareness did not result in any actual impact to the plant (Section 1R20).

Report Details

The plant was operated at full power from the beginning of the inspection period, until the beginning of a refueling outage on March 4, 2000. The plant remained in the refueling outage for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R03 Emergent Work

a. Inspection Scope

The Division 2 Emergency Diesel Generator experienced several start failures and output breaker problems during outage maintenance testing. The inspectors reviewed work plans and conducted interviews with engineering and maintenance personnel to verify adequate control of the emergent work. The inspectors focused on determining if problems were repetitive or had previous indications.

b. Observations and Findings

The inspectors did not identify any significant findings.

1R04 Equipment Alignments

.1 Routine Inspection

a. Inspection Scope

While Diesel Generator 2 was out of service for outage maintenance, the inspectors performed a partial alignment verification of the redundant Division 1 Emergency Diesel Generator. The inspection included a review of the component alignments designated in System Operating Procedure 2.2.20.2A, “Standby AC Power System (Diesel Generator) Component Checklist (Div 1),” Revision 0.

b. Observations and Findings

The inspectors did not identify any significant findings.

1R05 Fire Protection

.1 Monthly Routine Inspection

a. Inspection Scope

The inspectors performed fire protection tours to assess the material condition of plant fire protection equipment and proper control of transient combustibles. Specific risk-significant areas included the Division 2 emergency diesel generator room, service water room, and the reactor refueling floor.

b. Observations and Findings

The inspectors did not identify any significant findings in the emergency diesel generator room or the refueling floor.

On March 23, 2000, the inspectors toured the service water room. At the time, the nonessential bus that provided lighting for the area was de-energized for maintenance. The inspectors noted that emergency lights illuminated the area approaching the service water room as required by 10 CFR Part 50, Appendix R. However, the inspectors observed that the vestibule between the security door and the service water room door was not lighted. The inspectors noted that there were no Appendix R emergency lighting units in the vestibule, along the path to and from the service water room.

Section III.J of 10 CFR Part 50, Appendix R, requires that licensees provide emergency lighting in all areas needed for operation of safe shutdown equipment and for the associated access and egress routes.

The failure to provide emergency lighting in the vestibule of the service water room is a violation of Section III.J of 10 CFR Part 50, Appendix R. We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants (50-298/0004-01). The engineering staff acknowledged the lighting inadequacy and documented the condition in the corrective action program as Problem Identification Report 4-07684. The report also addressed appropriate contingency plans and a time frame for returning the condition to compliance.

The inspectors discussed the significance of the issue with regional staff. The inspectors concluded that this issue had low safety significance since operators could have taken compensatory measures to gain access to the service water room.

1R07 Heat Sink Performance

a. Inspection Scope

The inspectors observed and reviewed the cleaning, inspecting, and testing of Residual Heat Removal Heat Exchanger B to identify potential deficiencies that could mask

degraded performance. The inspectors reviewed Performance Evaluation Procedure 13.17, “Residual Heat Removal Heat Exchanger Performance Evaluation,” Revision 6.

b. Observations and Findings

The inspectors did not identify any significant findings.

1R09 Inservice Testing

a. Inspection Scope

The inspectors observed significant portions, or reviewed the performance of, the following in-service test procedures to evaluate the effectiveness in determining equipment availability and reliability:

- Surveillance Procedure 6.PC.208, “RHR and Reactor Recirculation Valve Operability and Closure Timing,” Revision 2C2
- Surveillance Procedure 6.SLC.102, “Standby Liquid Control Test Mode Surveillance Operation,” Revision 7

b. Observations and Findings

The inspectors did not identify any significant findings.

1R10 Large Containment Isolation Valves

a. Inspection Scope

The inspectors reviewed the performance of the following local leak rate tests performed on large containment isolation valves to assess adequacy of the process to maintain containment integrity:

- Surveillance Procedure 6.PC.503, “Drywell to Suppression Chamber Leakage Test,” Revision 9
- Surveillance Procedure 6.PC.513,” Main Steam Local Leak Rate Tests,” Revision 5

b. Observations and Findings

The inspectors did not identify any significant findings.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed with the system engineer the reporting criteria for failures on the Division 2 emergency diesel generator to evaluate the effectiveness of application of the maintenance rule. The inspectors also reviewed problem identification reports associated with both diesel generators, from the beginning of the year, to determine if licensee staff properly captured potential maintenance rule issues.

b. Observations and Findings

The inspectors did not identify any significant findings.

1R13 Maintenance Work Prioritization

a. Inspection Scope

The inspectors reviewed the work prioritization and control activities associated with preparations for Refueling Outage 19 to evaluate their effectiveness in minimizing plant risk. The inspectors discussed selected risk evaluations and overall plant configuration control with operators and work control personnel. The inspectors reviewed work schedules to identify risk significant activities, including surveillances, prior to entering the outage.

b. Observations and Findings

The inspectors did not identify any significant findings.

1R14 Nonroutine Plant Evolutions

a. Inspection Scope

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

b. Observations and Findings

The inspectors did not identify any cumulative 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 below licensee event reports using the Significance Determination Process and determined them to have minor significance. These items are considered within the licensee's control and do not warrant further NRC attention. The follow items are closed:

- LER 1994008-01 Inoperable Appendix A Fire Barrier

- LER 1994021-00 Design Error That Allows Spurious DG Rm HVAC
- LER 1995005-00 Failure to Adequately Perform Logic System Functional
- LER 1995010-00 RHR Min Flow Valve Position Vs Design
- LER 1997002-00 Safety Relief Valves Found Outside TS
- LER 1997010-02 Standby Gas Treatment Inoperability
- LER 1997012-00 Suppression Pool Design Basis
- LER 1998001-00 TS VIO Due to Failure to Address Equip
- LER 1998002-00 SBGT System Inoperable Due to Off-Gas Bld
- LER 1998006-00 Safety Valves Found Outside TS
- LER 1998010-00 Inadvertent Reactor Protection System Half Trip
- LER 1999001-01 Failure to Recognize Set Point Shift
- LER 1999004-01 Safety Relief Valve Found Outside TS
- LER 1999005-00 Sump Z Inoperability Results In TS Shutdown
- LER 1999009-00 Failure to Meet Acceptance Criteria
- LER 2000001-00 Turbine Bypass Valve Incorrect Setting
- LER 2000002-00 Appendix R Safe Shutdown Analysis Vulnerability
- LER 2000003-00 Failure to Meet Logic System Functional Testing
- LER 2000004-00 High System Flow During Restoration From Maintenance

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the adequacy of the licensee response to a ground on the Division 1, 125Vdc System during cycling of Reactor Recirculation Valve RR-MOV-MO53A on January 11, 2000, and January 14, 2000

b. Observations and Findings

On January 11, 2000, a ground occurred on the Division 1, 125Vdc system while closing Reactor Recirculation Valve RR-MOV-MO53A. On January 14, 2000, a ground occurred on the Division 1, 125Vdc system each time workers opened or closed the valve during a surveillance. On March 4, 2000, as operators attempted to establish shutdown cooling, Reactor Recirculation Valve RR-MOV-MO53A failed to close. Electricians found that valve motor had failed.

The inspectors identified that control room operators failed to perform an operability determination for Reactor Recirculation Valve RR-MOV-MO53A following the ground alarms on the Division 1 125Vdc System January 11 and 14, 2000, while operating the valve.

Technical Specification 5.4.1(a) requires that licensees establish, implement, and maintain written procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix A recommends administrative procedures. Administrative Procedure 0.5.OPS, “Operations Review of Problem Identification Reports/Operability Determinations/Evaluations,” Revision 1, Section 3.1.12.3, states “An operability

determination is required for degraded conditions of safety systems and components where functionality is called into question."

The inspectors concluded that failure to perform an operability determination on January 14, 2000, following multiple indications of a degraded Valve RR-MOV-MO53A, was a violation of Technical Specification 5.4.1(a). We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants (50-298/0004-02). The licensee documented these issues in their corrective action process as Problem Identification Report 4-07643.

Using the significance determination process, inspectors concluded that the failure of Reactor Recirculation Valve RR-MOV-MO53A had low safety significance. The valve's inability to close resulted in unavailability of two out of four trains of low pressure coolant injection. Inspectors concluded that full mitigation capability remained from January 14 through March 4, 2000, based on availability of the remaining two out of four trains of low pressure coolant injection and both trains of low pressure core spray.

1R19 Postmaintenance Testing

a. Inspection Scope

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

- Tests performed on service water Valve SW-MOV-89B following its replacement
- Tests performed on the Division 2 diesel generator following outage maintenance

b. Observations and Findings

The inspectors did not identify any significant findings.

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors observed control of outage activities to determine whether the licensee appropriately considered the impact on risk. In particular, inspectors observed or reviewed the following outage related activities:

- Licensee's outage risk control plan
- Portions of the reactor plant cooldown following reactor shutdown
- Selected risk significant outage activities such as configuration control
- Selected clearance and restoration of risk significant equipment and systems
- Control of containment, decay heat removal, inventory, and reactivity

- Selected refueling activities associated with fuel handling and control rod drive refurbishment

b Observations and Findings

.1 On February 26, 2000, operators identified a scaffold that prevented secondary containment isolation Valve HV-AOV-257AV from fully closing and declared the valve inoperable. The licensee determined that workers constructed the scaffold between February 16 and 21, 2000. During the time that the scaffold rendered Valve HV-AOV-257 inoperable the plant operated at 100 percent power. Technical Specification 3.6.4.2. requires operability of each secondary containment isolation valve during power operation.

Technical Specification 5.4.1(a) requires that licensees establish, implement, and maintain written procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix A recommends procedures for performing maintenance. Maintenance Procedure 7.0.7, "Scaffolding Construction and Control," Revision 7, Section 2.1, states, in part, "Scaffolds shall not be installed such that plant equipment cannot be accessed or operated." The inspectors concluded that the construction of a scaffold such that Valve HV-AOV-257 could not be operated was a violation of Technical Specification 5.4.1(a). We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants (50-298/0004-03). The licensee documented this in their corrective action process as Resolved Condition Report 2000-0151.

The inspectors determined that the inoperability of Valve HV-AOV-257AV imposed low risk significance. Valve HV-AOV-257 is an air-operated valve used to isolate the reactor building supply ventilation system. Valve HV-MOV-272MV, a redundant motor-operated valve capable of isolating the reactor building supply ventilation system if required, remained operable.

.2 On March 19, 2000, with the reactor shut down, the reactor head removed, the cavity flooded, and Residual Heat Removal Loop A providing shutdown cooling, operators began a valve alignment for Loop B. The operators performed the valve alignment to prepare for refilling the loop later that day. When an operator opened Valve RHR-102, it provided an unintended flow path between the operating Loop A and the empty Loop B. The operating Loop A pumped water into Loop B for 2-3 minutes at approximately 1,100 gallons per minute. Since operators had previously closed the vent and drain valves on Loop B, the flow into Loop B decreased and stopped as it filled and pressurized. The licensee subsequently determined that the operator was given a valve lineup sheet for normal standby operation of Loop B. The lineup did not address the actual plant conditions (Loop B drained and Loop A operating in shutdown cooling).

Technical Specification 5.4.1(a) requires that licensees establish, implement, and maintain written procedures recommended in Regulatory Guide 1.33, Revision 2,

Appendix A, February 1978. Appendix A recommends procedures for equipment control, including tagging and restoring equipment. Operations Clearance Order 00-RHR-0065 placed Valve RHR-102 in an incorrect position for the plant conditions. The inspectors concluded that the inadequacy of the clearance order was a violation of Technical Specification 5.4.1(a). We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants (50-298/0004-04). The licensee documented this in their corrective action process as Problem Identification Report 4-07468.

This issue was considered to have low safety significance since the drained residual heat removal loop provided limited available space to divert water. The diverted water did not result in loss of shutdown cooling, and it reduced refueling cavity level by a few inches. No increased adverse radiological conditions resulted from the draining. In addition, with the reactor head removed and the flooded refueling cavity, a large amount of water remained available for core cooling.

.3 On March 4, 2000, operators notified the NRC that the torus vacuum breakers failed their as-found leak rate test. Licensing engineers and technicians informed the inspectors that workers had assembled the valve seats incorrectly during the previous refueling outage. The work packages for the previous work left some complicated steps to the skill of the craft and did not give sufficient acceptance criteria for various stages of the assembly. Through discussion with workers, the inspectors concluded that the complicated steps exceeded the worker skills and training.

Technical Specification 5.4.1(a) requires that licensees establish, implement, and maintain written procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix A recommends procedures for control of maintenance. Maintenance Work Order 97-2578 failed to provide sufficient guidance for workers to properly control assembling the valve seats. The inspectors concluded that the inadequacy of the work order instructions was a violation of Technical Specification 5.4.1(a). We are treating this violation as a noncited violation, consistent with the Interim Enforcement Policy for pilot plants (50-298/0004-05). The licensee documented this in their corrective action process as Problem Identification Report 4-06954.

Inspectors determined that the vacuum breaker leakage had low safety significance. The test revealed valve leakage that exceeded the Technical Specification surveillance acceptance criteria of a 1" diameter hole equivalent leakage with actual leakage equivalent to a 2.55" diameter hole. Design calculations and the Updated Safety Analysis Report, however, documented a design limit of a 7" diameter hole equivalent leakage. Although the leakage exceeded the Technical Specification limit, the plant remained within the design bases.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed or reviewed the following tests for effective control of risk:

- Surveillance Procedure 6.MISC.401, “Position Indicator Inservice Testing,” Revision 6
- Surveillance Procedure 6.EE.603, “125V Battery Service Test,” Revision 7C1

b. Observations and Findings

The inspectors did not identify any significant findings.

OTHER ACTIVITIES

4OA1 Meetings

.1 Exit Meeting Summary

On March 29, 2000, the inspectors conducted a meeting with Mr. J. McDonald, Plant Manager, and other members of plant management and presented the inspection results. The plant management acknowledged the findings presented. Plant management also informed the inspectors that no proprietary material was examined during the inspection.

4OA2 Closure of Open Items

.1 Unresolved Items

Inspectors reviewed the following unresolved items (URI) and determined that no further action is required. These items are closed.

- URI 1997003-01 Procedures allow operation in region not allowed by COLR.
- URI 1997008-03 Failure to evaluate the use of teflon tape.
- URI 1999011-01 Evaluations on the effects on motor-operated valves subject to high energy line breaks

.2 Closure of Violations

Inspectors reviewed the following violations and determined that no further action is required. These violations have been entered into the licensee’s corrective action program, as indicated, and are closed.

- Violation 50-298/1997012-02: Failure to recognize degradation of RHR. Action

Item Tracking Serial Number A-03122.

- Violation 50-298/1997012-03: Multiple examples of not identifying conditions adverse to quality. Action Item Tracking Serial Number A-03122.

- Violation 50-298/1998005-01: (EEI) Examples of failures to implement 10 CFR Part 50, Appendix B, Criterion XVI. Action Item Tracking Serial Number A-03134.

- Violation 50-298/1998008-01: Four examples of failure to follow procedures. Action Item Tracking Serial Number A-04015.

- Violation 50-298/1998008-02: Inadvertent initiation of safety feature due to inadequate procedures followed by inadequate corrective action. Action Item Tracking Serial Number A-04015.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Boyce, Risk and Regulatory Affairs Manager
L. Dugger, Engineering Support Manager
M. Kaul, Operations Support Specialist
M. Gillan, Outage Manager
B. Houston, Quality Assurance Operations Manager
W. Macecevic, Operations Manager
E. McCutchen, Senior Licensing Engineer
J. McDonald, Plant Manager
B. Rash, Senior Engineering Manager
R. Sessoms, Quality Assurance Senior Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-298/0004-01	NCV	Appendix R Lighting Inadequate (Section 1R05)
50-298/0004-02	NCV	MOV-53A Operability Evaluation (Section 1R15
50-298/0004-03	NCV	Scaffold Blocking Containment Valve (Section 1R20)
50-298/0004-04	NCV	RHR X-Conn and Vessel Draining (Section 1R20)
50-298/0004-05	NCV	Leaking Torus Vacuum Breakers (Section 1R20)

Previous Items Closed

50-298/0004-01	NCV	Appendix R Lighting Inadequate (Section 1R05)
50-298/0004-02	NCV	MOV-53A Operability Evaluation (Section 1R15
50-298/0004-03	NCV	Rod 42-19 Overspeed (Section 1R19)
50-298/0004-04	NCV	Scaffold Blocking Containment Valve (Section 1R20)
50-298/0004-05	NCV	RHR X-Conn and Vessel Draining (Section 1R20)
50-298/0004-06	NCV	Leaking Torus Vacuum Breakers (Section 1R20)
50-298/94008-01	LER	Inoperable Appendix A Fire Barrier
50-298/94021-00	LER	Design Error That Allows Spurious DG Rm HVAC
50-298/95005-00	LER	Failure to Adequately Perform Logic System Functional
50-298/95010-00	LER	RHR Min Flow Valve Position Vs Design
50-298/97002-00	LER	Safety Relief Valves Found Outside TS
50-298/97010-02	LER	Standby Gas Treatment Inoperability
50-298/97012-00	LER	Suppression Pool Design Basis
50-298/98001-00	LER	TS VIO Due to Failure to Address Equip
50-298/98002-00	LER	SBGT System Inoperable Due to Off-Gas Bld
50-298/98006-00	LER	Safety Valves Found Outside TS
50-298/98010-00	LER	Inadvertent Reactor Protection System Half Trip

50-298/99001-01	LER	Failure to Recognize Set Point Shift
50-298/99004-01	LER	Safety Relief Valve Found Outside TS
50-298/99005-00	LER	Sump Z Inoperability Results In TS Shutdown
50-298/99009-00	LER	Failure to Meet Acceptance Criteria
50-298/00001-00	LER	Turbine Bypass Valve Incorrect Setting
50-298/00002-00	LER	Appendix R Safe Shutdown Analysis Vulnerability
50-298/00003-00	LER	Failure to Meet Logic System Functional Testing
50-298/00004-00	LER	High System Flow During Restoration From Maintenance
50-298/97003-01	URI	Procedures allow operation in region not allowed by COLR.
50-298/97008-03	URI	Failure to evaluate the use of teflon tape.
50-298/99011-01	URI	Evaluations on the effects on motor-operated valves
50-298/97012-02	VIO	Failure to recognize degradation of RHR
50-298/97012-03	VIO	Multiple examples of not identifying conditions adverse to quality
50-298/98005-01	VIO	Examples of failures to implement 10 CFR Part 50, Appendix B
50-298/98008-01	VIO	Four examples of failure to follow procedures
50-298/98008-02	VIO	Inadvertent initiation of safety feature

ATTACHMENT 2

NRC'S REVISED REACTOR OVERSIGHT PROCESS

The NRC 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 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:
•Initiating Events	•Occupational	•Physical Protection
•Mitigating Systems	•Public	
•Barrier Integrity		
•Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC used 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 little effect on safety. WHITE findings indicate issues with some increased importance to safety, which may require additional NRC inspections. YELLOW findings are more serious issues with an even higher potential to effect safety and would require the NRC to take additional actions. RED findings represent an unacceptable loss of safety margin and would result in the NRC taking significant actions that could include ordering the plant shut down.

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 incremental degradation in safety: GREEN, WHITE, YELLOW, AND RED. The color for an indicator corresponds to levels of performance that may result in increased NRC oversight (WHITE); performance that results in definitive, required action by the NRC (YELLOW); and performance that is unacceptable but still provides adequate protection to public health and safety (RED). GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections.

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. As a licensee's safety performance degrades, the NRC will

take more and increasingly significant action as described in the matrix. 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.

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