UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
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September 18, 2000

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. 50-285/00-07

Dear Mr. Gambhir:

This refers to the inspection conducted on July 2 through August 19, 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 by an emergency planning regional specialist. The enclosed report presents the results of this inspection.

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/

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

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

Enclosure:
NRC Inspection Report No.
50-285/00-07

cc w/enclosure:
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NRR Event Tracking System **(IPAS)**
FCS Site Secretary **(NJC)**
Dale Thatcher **(DFT)**

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9/18/00	9/18/00	9/18/00		

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	50-285
License No.:	DPR-40
Report No.:	50-285/00-07
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:	July 2 through August 19, 2000
Inspectors:	W. Walker, Senior Resident Inspector C. Osterholtz, Resident Inspector P. Elkmann, Emergency Preparedness Analyst
Approved By:	Charles S. Marschall, 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 50-285/00-07(DRP)

Integrated resident and regional NRC Inspection Report 50-285/00-07, between July 2 and August 19, 2000, at the Fort Calhoun Nuclear Station covers a 7-week period of resident inspection.

The body of the report is organized under the broad categories of reactor safety, emergency preparedness, and other activities as listed in the summaries below. A finding was identified under the area of Technical Specification Surveillance.

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. The inspectors determined that a licensed operator failed to properly implement an operating instruction, resulting in an unplanned start of an auxiliary feedwater pump and a reactivity transient. The operator action of inadvertently starting the wrong pump resulted in cold feedwater being supplied to the steam generators causing an unplanned reactivity addition. The pump was secured in approximately 10 seconds. Starting the wrong pump caused reactor power to exceed steady state licensed thermal power of 1500 MWTH for approximately 7.5 minutes, with the highest recorded value being 1500.6 MWTH. No Technical Specification or thermal limits were exceeded (Section 1R22).

  This issue was characterized as having very low safety significance based upon the significance determination process review for the event.

Cornerstone: Emergency Preparedness

- No color. Simulator scenario data important to verifying drill and exercise performance was not retained by the licensee. The inspector was unable to verify the accuracy of the licensee's evaluation of classification opportunities for one simulator training cycle because the simulator scenario was not retained. The inspector was unable to readily identify scenario classification and notification opportunities for a second simulator training cycle because the simulator operator's guide addressed simulator failure inputs and operator actions but did not pre-identify the expected emergency action levels and classifications. A single scenario guide archived for a training cycle showed the "as expected" scenario, not the "as run" scenarios. The inspector was unable to verify the accuracy of classification and notification data recorded by licensee evaluators because information regarding the observed level of classification, the emergency action level on which classification was based, and other conditions were not retained. The licensee entered this issue into its corrective action program as part of Condition Report 2000-1473 (Section OA1.1).

  This issue was evaluated using the screening process of NRC Inspection Manual Chapter 0609, "Significance Determination Process." By applying the Groups 1, 2, and

3 screening criteria, the inspector determined that the issue did not meet the criteria for entry into the significance determination process because it was not a failure to meet an emergency preparedness planning standard or other regulatory requirement. However, the issue related to the collecting or reporting of performance indicator data. The inspector could not verify the accuracy of reported performance indicator data collected from operator requalification simulator scenarios. The ability to verify performance indicator data impacts the NRC's ability to perform its regulatory function under the revised reactor oversight program. Therefore, the issue was determined to be a finding of no color.

- No color. The inspector was unable to verify the licensee's determination of alert and notification system reliability because records were not maintained for some siren evaluations performed by siren technicians. Following an initial indication of a failed test siren technicians reviewed computer records and orally reported satisfactory evaluation results via telephone to the emergency preparedness department staff, who hand-corrected original test reports. Siren technicians did not capture available data used in determining that a siren test was successful, in order to establish the accuracy of the oral report. Technicians also did not provide a written record of their determination to emergency preparedness. The licensee was unable to retrieve or reconstruct data that provided the basis for the correction of siren test reports. The licensee entered the issue of incomplete siren test data into its corrective action program as part of Condition Report 2000-1473 (Section OA1.3).

  This issue was evaluated using the screening process of NRC Inspection Manual Chapter 0609, "Significance Determination Process." By applying the Groups 1, 2, and 3 screening criteria, the inspector determined that the issue did not meet the criteria for entry into the significance determination process because it was not a failure to meet an emergency preparedness planning standard or other regulatory requirement. However, the issue related to the collecting or reporting of performance indicator data. The inspector could not verify the reported alert and notification system reliability performance indicator value from documented test results, because the accuracy of hand-corrections made to test data could not be verified. The ability to verify performance indicator data impacts the NRC's ability to perform its regulatory function under the revised reactor oversight program. Therefore, the issue was determined to be a finding of no color.

Report Details

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

3. REACTOR SAFETY
Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

The inspectors performed a partial walkdown of Steam-Driven Auxiliary Feedwater Pump FW-10 during a surveillance of the Motor-driven Auxiliary Feedwater Pump FW-6 to verify equipment alignment and identify discrepancies that could impact redundant system operability. The inspectors used the following procedure to perform the walkdown:

- OP-ST-AFW-0001, "Auxiliary Feedwater System Valve Alignment Check," Revision 10.

The inspectors reviewed portions of the Technical Specifications and Updated Safety Analysis Report.

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:

- Cable spreading room
- East and west switchgear rooms
- Raw water/component cooling water heat exchanger rooms

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:

- Emergency response facility computer
  Safety injection and refueling water tank low level monitoring switches
- Diesel generator air regulators to air start motors
- RM-054A steam generator blowdown radiation monitor
- Feeder breaker (1A3-10) for Raw Water Pump AC-10C

b. Findings

There were no findings identified during this inspection.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the licensee's risk assessment for equipment outages as a result of planned and emergent maintenance to evaluate the licensee's effectiveness in assessing risk. The inspectors also discussed these work activities with planning and maintenance personnel. They observed and reviewed emergent work on the following systems/components/activities:

- Circulating Water Pump C after a leak developed on the seal water system that required on-line repair

- Fuel reconstitution activities after a fuel rod cap broke off into the fuel rod gripper

- Safety injection and refueling water tank low level monitoring switches

b. Findings

There were no findings identified during this inspection.

1R15 Operability Evaluations

.1 (CLOSED) Unresolved Item 50/285/0003-01: Turbine-driven Auxiliary Feedwater Pump FW-10 Operability

This unresolved item documented that, during a surveillance test on the Turbine-Driven Auxiliary Feedwater Pump FW-10 discharge, pressures and flows oscillated and that pump speed oscillated between 6600 and 7100 rpm. The test was suspended and the licensee performed troubleshooting on the pump and identified that the derivative relay (part of the speed control) for the pump was out of calibration. The licensee set the

derivative relay to the correct value and reperformed the surveillance test successfully.

The inspectors questioned whether the pump would have performed its intended safety function with the derivative relay improperly calibrated. The licensee hired an outside contractor to perform an analysis of the test. On July 7, 2000, the analysis and results of testing were provided in Report OPD-001-R-01, "Analysis of Ft. Calhoun Auxiliary Feedwater Oscillation," Revision 2, to verify that the turbine-driven auxiliary feedwater pump could meet necessary flow demands with the derivative relay improperly calibrated.

The inspectors reviewed the above analysis and test results and agreed with the conclusion that the pump would supply the required water inventory to the steam generators with the observed oscillations. This unresolved item is closed.

1R19 Postmaintenance Testing

a. Inspection Scope

The inspectors reviewed or observed the postmaintenance testing on the following equipment to verify that procedures and test activities are adequate to verify system operability:

- Work Order 53433 for Control Room Air Conditioning Unit VA-46A maintenance
- Work Order 34110 for Shutdown Cooling Heat Exchanger Inlet Valve HCV-480 valve operator inspection and refurbishment

b. Findings

There were no findings identified during this inspection.

1R22 Technical Specification Surveillance

.1 Surveillance Inspections

a. Inspection Scope

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

- Surveillance Test Procedure OP-ST-RW-3004, "Raw Water System Category C Valve Inservice Test," Revision 12
- Surveillance Test Procedure OP-ST-FP-0003, "Fire Protection System Diesel Generator Rooms Sprinkler Functional Test," Revision 9
- Surveillance Test Procedure OP-ST-AFW-0004, "Auxiliary Feedwater Pump FW-10 Operability Test," Revision 20

- Surveillance Test Procedure EM-ST-EE-0001, “Monthly Surveillance Test For Station Battery No. 1 (EE-8A), “ Revision 10

- Surveillance Test Procedure OP-ST-CCW-3002, “AC-3A Component Cooling Water Pump Inservice Test,” Revision 13

b. Findings

There were no findings identified during this inspection.

.2 Inadvertent Manual Start of Diesel-Driven Auxiliary Feedwater Pump FW-54

a. Inspection Scope

The inspectors reviewed Condition Report 200001346 and other licensee corrective actions after the inadvertent manual start of Diesel-Driven Auxiliary Feedwater Pump FW-54 while demonstrating operability of the Turbine-Driven Auxiliary Feedwater Pump FW-6.

b. Findings

On July 19, 2000, an operator inadvertently started Diesel-Driven Auxiliary Feedwater Pump FW-54, when he intended to start Electric-Driven Auxiliary Feedwater Pump FW-6. The electric-driven auxiliary feedwater pump was scheduled for operability testing prior to performing more extensive tests on the turbine-driven auxiliary feedwater pump.

The inspectors determined that a licensed operator failed to properly implement an operating instruction, resulting in an unplanned start of an auxiliary feedwater pump and a reactivity transient. The operator action of inadvertently starting the wrong pump resulted in cold feedwater being supplied to the steam generators causing an unplanned reactivity addition. The pump was secured in approximately 10 seconds. Starting the wrong pump caused reactor power to exceed steady state licensed thermal power of 1500 MWTH for approximately 7.5 minutes with the highest recorded value being 1500.6 MWTH. No Technical Specification or thermal limits were exceeded (GREEN).

This issue was characterized as having very low safety significance based upon the significance determination process review for the event.

The inspectors concluded that the licensed operator failed to properly implement Operating Instruction OI-AFW-4, “Auxiliary Feedwater Startup and System Operation,” Revision 34. This violation is being treated as a noncited violation (50-285/20007-01) consistent with Section VII.A of the NRC Enforcement Policy.

Emergency Preparedness

1EP2 Alert Notification System Testing (7111402)

a. Inspection Scope

The inspector reviewed the following items to determine if the licensee's offsite siren testing program was adequately implemented:

- Offsite siren system design
- Licensee commitments and license requirements for the offsite siren system
- Post-maintenance testing records for the siren system
- Siren testing procedures
- Test records and log entries for the third quarter of 1999 through the second quarter of 2000
- Offsite siren system problem identification and resolution documentation

b. Findings

There were no findings identified during this inspection.

1EP3 Emergency Response Organization Augmentation Testing (7111403)

a. Inspection Scope

The inspector reviewed the following to evaluate the adequacy of the licensee's system for augmentation and to determine whether facility activation goals can be met:

- Emergency response organization augmentation system design
- Augmentation system commitments and license requirements
- Surveillance test procedures of the augmentation system
- Results of augmentation system drills conducted between January 1999 and August 2000
- Emergency response organization staffing levels
- Training records for a sample of the emergency response organization
- Augmentation system problem identification and resolution documentation

b. Findings

There were no findings identified during this inspection.

1EP4 Emergency Action Level and Emergency Plan Changes (7111404)

a. Inspection Scope

The inspector reviewed Revision 15 to Definitions and Abbreviations in the Radiological Emergency Response Plan which was electronically transmitted to the NRC on July 25, 2000. The inspector performed this review to determine if the revised plan met NRC requirements. The inspector reviewed the licensee's 50.54(q) review documentation associated with this change.

b. Findings

There were no findings identified during this inspection.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (7111405)

a. Inspection Scope

The inspector reviewed the following items to evaluate the licensee's ability to identify and resolve emergency preparedness related problems:

- Licensee corrective action program procedures
- Summary reports for two emergency events occurring in calendar year 1999
- Corrective actions resulting from emergency events, drills, and exercises
- A summary of condition reports assigned to emergency preparedness from August 1, 1998 through August 3, 2000
- A sample of completed corrective actions in risk significant areas
- The two most recent licensee emergency preparedness program reviews
- Two root cause analysis reports associated with emergency preparedness corrective actions

b. Findings

There were no findings identified during this inspection.

OA1 Performance Indicator Verification (71151)

.1 Drill and Exercise Performance

a. Inspection Scope

The inspector verified a sample of the licensee's reported results of the Drill and Exercise Performance indicator by reviewing records for licensee drills and simulator training scenarios conducted during the first two quarters of 2000. The inspector reviewed the archived scenario and data sheets for the operator requalification cycles 2 and 3.

b. Findings

The inspector was unable to verify classification and notification opportunities in the archived information for one requalification cycle because no simulator scenario data was retained. The inspector was unable to readily verify classification opportunities in another requalification cycle because the simulator operator's guide identified simulator failures and failure codes with expected operational responses, but not expected classifications. The guide did not pre-identify classification and notification opportunities that were expected during each scenario. A single scenario guide was archived for one requalification cycle which showed the "as expected" scenario but the "as run" scenarios were not retained. It could not be determined from the available information whether scenario deviations occurred during the training cycles which impacted the expected classification and notification opportunities.

The inspector was unable to verify the accuracy of the evaluator's data sheet recording drill and exercise performance. Information was not retained regarding the level of classification, the emergency action level on which classification was based, and other information which would allow the inspector to verify that the evaluator correctly evaluated the timeliness and accuracy of classification and the associated notification. The licensee entered the issue of the lack of archived scenario information from simulator sessions into its corrective action program as part of Condition Report 2000-1473.

The inspector reviewed notification worksheets generated during the operator requalification simulator scenarios to evaluate the licensee's determination of accurate notifications. The licensee stated that notification following a classification with no associated protective actions was accurate if it contained only the correct emergency classification and emergency action level. The accuracy of other information on the notification form was not considered in determining notification accuracy. This narrow definition of notification accuracy was not proceduralized in the licensee's EPDM-14, Revision 0, "Emergency Preparedness Performance Indicator Program," which governed collection of performance indicator information.

The inspector reviewed NEI 99-02, Revision 0, "Regulatory Assessment Performance Indicator Guideline," and determined that its guidance did not provide evaluation criteria for determining notification accuracy. The inspector discussed the narrow interpretation

of notification accuracy with the licensee, noting examples where the accuracy of additional information could affect the ability of offsite agencies to respond. The licensee entered the issue of evaluation criteria for notification accuracy into its corrective action program as part of Condition Report 2000-1473. This issue is considered an unresolved item (URI #285/00-07-02) pending a determination through the frequently-asked-question (FAQ) process of whether the licensee's definition of notification accuracy was appropriate.

.2 Emergency Response Organization Readiness

a. Inspection Scope

The inspector verified the licensee's reported results for the Emergency Response Organization Drill Participation performance indicator by reviewing the emergency response organization database tracking drill and exercise participation within the previous eight calendar quarters. The inspector reviewed drill participation attendance records for a sample of five emergency responders to determine if database records for these responders were accurate.

b. Findings

There were no findings identified during this inspection.

.3 Alert and Notification System Reliability

a. Inspection Scope

The inspector verified the licensee's reported results for the Alert and Notification System Reliability performance indicator by reviewing offsite siren test results performed in the third quarter of 1999 through second quarter 2000.

b. Findings

The inspector was unable to verify the licensee's determination of alert and notification system (siren) reliability because records were not maintained for some siren evaluations performed by siren technicians. Under some circumstances the silent siren test computer report did not correctly indicate a successful test when one had occurred. Following an initial indication of a failed test siren technicians reviewed computer records and orally reported satisfactory evaluation results via telephone to the emergency preparedness department staff, who hand-corrected original test reports. Siren technicians did not capture available data reviewed in determining that a siren test was successful, in order to establish the accuracy of the oral report. Technicians also did not provide a written record of their determination to emergency preparedness. The licensee was unable to retrieve or reconstruct data that provided the basis for the correction of siren test reports. The licensee entered the issue of incomplete siren test data into its corrective action program as part of Condition Report 2000-1473.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors verified the accuracy and completeness of data used to calculate and report:

- The transients per 7000 critical hours
- Safety system unavailability

b. Findings

No findings were identified in the verification of these performance indicators. The performance indicators all remained in the licensee response band (Green).

4OA6 Exit Meeting Summary

.1 On August 18, 2000, the inspectors presented the inspection results in a meeting with Mr. Clemens and other members of your staff. The licensee acknowledged the findings as presented. The licensee did not consider any material examined during the inspection to be proprietary.

.2 On August 11, 2000, the inspector presented the emergency planning inspection results.

.3 The inspector presented the inspection results to Mr. S.K. Gambhir, Division Manager, Nuclear Operating Division, and other members of licensee management at the conclusion of the inspection on August 11, 2000. The licensee acknowledged the findings presented.

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

A telephone exit meeting was conducted with E. Matzke, Licensing Engineer, on August 21, 2000, to discuss the re-characterization of one issue.

ATTACHMENT 1

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
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G. Cavanaugh, Supervisor, Station Licensing
J. Chase, Division Manager
R. Clemens, Plant Manager
M. Frans, Manager, Nuclear Licensing
S. Gambhir, Division Manager, Nuclear Operations Division
H. Sefick, Manager, Security and Emergency Preparedness
R. Short, Assistant Plant Manager
C. Simmons, Supervisor, Emergency Preparedness

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

285/00-07-02	URI	Licensee definition of notification accuracy (OA1.1).

Opened and Closed During this Inspection

50-285/0007-01	NCV	Inadvertent Manual Start of the Diesel-Driven Auxiliary Feedwater Pump (Section IR22)

Closed

50-285/0003-01	URI	Turbine-Driven Auxiliary Feedwater Pump FW-10 Operability (Section 1R15)

DOCUMENTS REVIEWED

Procedures:

EPDM-2	Emergency Preparedness Test Program	Revision 12
EPDM-4	Conduct of Drills/Exercises	Revision 4
EPDM-10	Emergency Response Organization Training and Qualification Program	Revision 7
EPDM-14	Emergency Preparedness Performance Indicator Program	Revision 0
EPIP OSC-2	Command and Control Position Actions - Notifications	Revision 35
EPIP OSC-15	Communicator Actions	Revision 20
EPIP EOF-24	EOF Back Up Alert Notification System Activation	Revision 3
EPT-1	Alert Notification System Silent Test	Revision 9
EPT-34	Perform Augmentation or Notification Drill	Revision 19
SO-R-2	Condition Reporting and Corrective Action	Revision 11

Other Documents:

- Evaluation and Analysis of the Siren Warning System for the Fort Calhoun Nuclear Power Station, December 1984
- Evaluation and Analysis of the Siren Warning System for the Fort Calhoun Nuclear Power Station, Addendum: Siren System Modification and Testing, December 1987
- Design and Verification of Siren Alerting System, Fort Calhoun Nuclear Power Station
- Field Testing of the Siren Prompt Notification System for the Fort Calhoun Nuclear Power Station, January 1987
- EP 99-241, Notification of Unusual Event Summary Report
- EP 99-262, Alert Summary Report
- MR-FC-87-13, Final Design Package for Alert Notification System, October 1985 Revision
- N-TSOP-17, Technical Services Department Emergency Preparedness, Early Warning Siren Alert System, Revision 1, March 1987

- Procedure Change 11805, Radiological Emergency Response Plan, Definitions and Abbreviations, Revision 14
- 99-QA/QC-044, Quality Assurance Audit Report No. 4: Emergency Response Plan and Implementing Procedures, dated April 23, 1999
- 00-QA/QC-023, Quality Assurance Audit Report #4: Emergency Response Plan and Implementing Procedures, dated April 19, 2000
- EPT-34 Surveillances: 3QTR1999, 4QTR1999, 1QTR2000, 2QTR2000

ATTACHMENT 2

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
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

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. 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.