UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

July 28, 2000

Tennessee Valley Authority
ATTN: Mr. J. A. Scalice
Chief Nuclear Officer and
Executive Vice President
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 50-327/00-05, 50-328/00-05

Dear Mr. Scalice:

On July 1, 2000, the NRC completed an inspection at your Sequoyah 1 & 2 reactor facilities. The enclosed report presents the results of that inspection which were discussed on July 6, 2000 with Mr. Masoud Bajestani and other members of your staff and also on July 27 with Mr. Pedro Salas.

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

The NRC identified one issue of very low safety significance that has been entered into your corrective action program and is discussed in the summary of findings and in the body of the attached inspection report. The issue was determined to involve a violation of NRC requirements, but because of its low safety significance the violation is not cited. If you contest this non-cited violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Sequoyah facility.

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).

Sincerely,

/RA/

Paul E. Fredrickson, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos. 50-327, 50-328
License Nos. DPR-77, DPR-79

Enclosure: NRC Inspection Report w/Attachment

cc w/encl:
Karl W. Singer
Senior Vice President
Nuclear Operations
Tennessee Valley Authority
Electronic Mail Distribution

Jack A. Bailey, Vice President
Engineering and Technical Services
Tennessee Valley Authority
Electronic Mail Distribution

Richard T. Purcell
Site Vice President
Sequoyah Nuclear Plant
Electronic Mail Distribution

General Counsel
Tennessee Valley Authority
Electronic Mail Distribution

R. J. Adney, General Manager,
Nuclear Assurance
Tennessee Valley Authority
Electronic Mail Distribution

Mark J. Burzynski, Manager
Nuclear Licensing
Tennessee Valley Authority
Electronic Mail Distribution

Pedro Salas, Manager
Licensing and Industry Affairs
Sequoyah Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

D. L. Koehl, Plant Manager
Sequoyah Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

Debra Shults, Manager
Technical Services
Division of Radiological Health
Electronic Mail Distribution

County Executive
Hamilton County Courthouse
Chattanooga, TN 37402-2801

Ann Harris
305 Pickel Road
Ten Mile, TN 37880

Distribution w/encl:
R. W. Hernan, NRR
H. N. Berkow, NRR
PUBLIC

OFFICE	RII:DRP	RII:DRP	RII:DRP	RII:DRP	RII:DRS		
SIGNATURE	***PTaylor***	***PFredrickson***	***RTelson***	***DStarkey***	***BCrowley for***		
NAME	PTaylor alt	RAGibbs	RTelson	DStarkey	RGibbs		
DATE	***7/13/00***	***7/27/00***	***7/28/00***	***7/28/00***	***7/13/00***	8/ /2000	8/ /2000
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: C:\SEQ IR00-05 R3.wpd

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos: License Nos:	50-327, 50-328 DPR-77, DPR-79
Report No:	50-327/00-05, 50-328/00-05
Licensee:	Tennessee Valley Authority (TVA)
Facility:	Sequoyah Nuclear Plant, Units 1 & 2
Location:	Sequoyah Access Road Soddy-Daisy, TN 37379
Dates:	April 2, 2000 - July 1, 2000
Inspectors:	Russell Gibbs, Senior Resident Inspector D. Starkey, Resident Inspector R. Telson, Resident Inspector Ron Gibbs, Senior Reactor Inspector
Approved by:	P. Fredrickson, Chief Reactor Projects Branch 6 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

The report covers a thirteen-week period of resident inspection in accordance with the baseline program in the reactor safety area. In addition, it includes an inspection conducted by a regional senior reactor maintenance inspector.

The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the NRC's Significance Determination Process, as discussed in the attached summary of the NRC's Reactor Oversight Process.

Cornerstone: Barrier Integrity

- Green. A non-cited violation of Technical Specification 6.8.1.a was identified for a deficient emergency operating procedure used for mitigation of loss of coolant accidents (LOCAs) outside containment. The procedure, ECA-1.2, "LOCA Outside Containment," was deficient because it provided inappropriate guidance involving reactor coolant system pressure trending for determination of LOCA isolation. In addition, the guidance differed from the Westinghouse Owners Group guidance without formal documented justification. The procedure deficiency, which was revealed during a licensed operator requalification simulator training exercise, could lead to untimely isolation of a LOCA and termination of a containment bypass condition for an actual plant event.

  This deficiency had very low safety significance because of the low initiating event frequency of the LOCA that could cause the event and other operator actions which could effectively mitigate the event thus further reducing the risk of core damage. (Section 1R11).

Report Details

Summary of Plant Status: Units 1 and 2 operated at or near 100 percent power throughout the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity and Emergency Preparedness

1R04 Equipment Alignment

.1 Partial Walkdowns

a. Inspection Scope

The inspectors conducted equipment alignment partial walkdowns to evaluate the operability of selected redundant trains or backup systems, listed below, with the other train or system inoperable or out-of-service. The walkdowns included a review of applicable operating procedures to determine correct system lineups and an inspection of critical components (e.g., power supplies, support systems) to identify any discrepancies which could affect operability of the redundant train or backup system.

- Emergency diesel generators (EDGs) 1A-A, 2A-A, and 2B-B during 1B-B EDG scheduled outage
- Unit 2 motor-driven auxiliary feedwater (AFW) pumps 2A-A and 2B-B during 2A-S turbine-driven AFW pump performance testing
- Unit 1 residual heat removal (RHR) pump 1A-A during pump 1B-B performance test
- Unit 1 centrifugal charging pump 1B-B during maintenance on 1A-A charging pump

b. Issues and Findings

No findings were identified.

.2 Complete Walkdown

a. Inspection Scope

The inspectors conducted a complete system walkdown on accessible portions of the Unit 1 AFW system. The walkdown emphasized material condition and correct system alignment. The selection of the system was determined using the site specific Individual Plant Examination (IPE), plant operating mode, and observations from previous walkdowns. The walkdown also included reviews of (1) operating procedures/drawings to determine correct system lineup, (2) outstanding maintenance work requests, (3) outstanding design issues including temporary modifications, (4) related operator workarounds, (5) engineering operability evaluations, and (6) system health reports.

b. Issues and Findings

No findings were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors conducted tours of areas important to reactor safety, listed below, to evaluate conditions related to (1) control of transient combustibles and ignition sources; (2) the material condition, operational status, and operational lineup of fire protection systems, equipment and features; and (3) the fire barriers used to prevent fire damage or fire propagation. The inspectors referenced SPP-10.10, “Control of Transient Combustibles” and prefire plans for the areas listed below, as appropriate.

- cable spreading room
- relay room
- EDG 1B-B area
- control building north end of elevations 732 and 669
- 480V shutdown board rooms
- 125V DC battery board rooms I-IV

b. Issues and Findings

No findings were identified.

1R07 Heat Sink Performance

a. Inspection scope

The inspectors conducted a review of the component cooling system (CCS) performance test, 0-TI-SXX-070-001.0, “Analysis of Component Cooling Heat Exchanger Test Data” for heat exchangers 2A1 & 2A2 to evaluate their performance. The CCS was selected because it is risk significant according to the IPE results. The inspectors reviewed the test acceptance criteria and results, verified that the test results were appropriately categorized against pre-established acceptance criteria and were acceptable, and evaluated whether the test frequency was sufficient to detect degradation prior to loss of heat removal capabilities below design basis values.

b. Issues and Findings

No findings were identified.

1R11 Licensed Operator Requalification Program

a. Inspection Scope

The inspectors reviewed simulator evaluations for previously identified weaknesses, observing for the crew's: (1) clarity and formality of communication, (2) ability to take timely action in the safe direction, (3) prioritization, interpretation, and verification of alarms, (4) correct use and implementation of procedures, including the alarm response procedures, (5) timely control board operation and manipulation, including high-risk operator actions, (6) oversight and direction provided by the shift manager, including ability to identify and implement appropriate TS actions such as reporting and emergency plan actions and notifications, and (7) the group dynamics involved in crew performance.

b. Issues and Findings

A non-cited violation of Technical Specification 6.8.1.a was identified during a simulator observation for a deficient emergency operating procedure used for mitigation of loss of coolant accidents (LOCAs) outside containment. The procedure, ECA-1.2, "LOCA Outside Containment," was deficient because it provided inappropriate guidance involving reactor coolant system pressure trending for determination of LOCA isolation. In addition, the guidance differed from the Westinghouse Owners Group (WOG) guidance without formal documented justification.

The inspectors observed a licensed operator requalification simulator training exercise involving a small break LOCA outside containment. During the exercise, the inspectors observed a pause in the simulation by the instructor to coach the operating crew through a portion of Procedure ECA-1.2, "LOCA Outside Containment." The instructor pointed out that the procedure did not explicitly direct the appropriate action for a break in the simulated location. The instructor informed the crew in the post-simulation critique that corrective action had been initiated to revise the procedure.

The inspectors discussed the procedure issue with the licensee, reviewed the associated problem evaluation report (PER), PER 00-003715-000, and reviewed Procedure ECA-1.2. The PER noted that a second crew had experienced a similar problem with Procedure ECA-1.2 and discussions with involved personnel indicated there was difficulty determining if the LOCA was isolated. The PER also noted that Procedure ECA-1.2 guidance differed from the WOG guidance. The WOG guidance indicated that reactor coolant system (RCS) pressure must be increasing to indicate a leak was isolated. Procedure ECA-1.2 indicated that RCS pressure could be either rising or stable. Step 2 of Procedure ECA-1.2 has the operator check for RCS pressure to be stable or rising. Under certain small break LOCA conditions, RCS pressure may be stable. For these conditions, checking for stable RCS pressure could lead the operator to misdiagnose the LOCA isolation. Increasing RCS pressure is a more definitive indication that a leak is isolated, especially for small break LOCA conditions. The inspectors asked if a justification was provided as to why Procedure ECA-1.2 differed from the generic WOG guidance. The licensee stated that there was no formal documented justification.

The inspectors determined that the procedure deficiency could lead to untimely isolation of a LOCA and termination of a containment bypass condition for an actual plant event. The inspectors discussed the issue with the NRC Region II senior reactor analyst (SRA). Using the significance determination process, the inspectors and the SRA determined that the deficient procedure was a Green finding. The finding had very low safety significance because of the low initiating event frequency of the LOCA that could cause the event and other operator actions which could effectively mitigate the event thus further reducing the risk of core damage.

This emergency operating procedure deficiency is a violation of TS 6.8.1.a. which requires written procedures to be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, dated February 1978. Appendix A recommends procedures for combating emergencies and other significant events. Contrary to TS 6.8.1.a, the procedure was deficient for the reasons discussed above for accident mitigation involving LOCAs outside containment. This violation is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy, issued on May 1, 2000 (65 FR 25368) and is identified as NCV 50-327, 50-328/00-05-01, Deficient Procedure for Mitigation of LOCA Outside Containment. This violation is in the licensee's corrective action program as PER 00-003715-000.

1R12 Maintenance Rule Implementation

.1 Quarterly Reviews

a. Inspection Scope

The inspectors sampled portions of selected structures, systems or components (SSCs), listed below, as a result of performance problems, to assess the effectiveness of the licensee's maintenance practices. The inspectors evaluated the licensee's Maintenance Rule (MR) implementation against Procedure SPP-6.6 and Instruction 0-TI-SXX-000-004.0 both entitled "Maintenance Rule Performance Indicator, Monitoring, Trending, and Reporting," and NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." Reviews focused on (1) MR scoping; (2) characterization of failed SSCs; (3) safety significance classifications; (4) 10CFR50.65 (a)(1) or (a)(2) classifications; and (5) the appropriateness of performance criteria for SSCs classified as (a)(2) or goals and corrective actions for SSCs classified as (a)(1).

- System 32A, auxiliary control air
- System 88, containment isolation
- System 82, standby diesel generators
- System 03, 1A-A MDAFW manual control switch failure
- System 30, HVAC, (6.9 kV shutdown board room cooling)

b. Issues and Findings

No findings were identified.

.2 Biennial Reviews

a. Inspection Scope

The inspectors reviewed the licensee's periodic assessment, "Maintenance Rule Second Periodic Assessment Report Units 1, 2 & Common," Rev. 1, Dated May 19, 2000, which was issued in accordance with paragraph a(3) of the MR (10 CFR 50.65). The inspectors verified that the assessment was issued in accordance with the time restraints of the MR, and also that the assessment included all required areas including balancing reliability and unavailability, review of a(1) activities, review of a(2) activities, and consideration of industry operating experience.

b. Issues and Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors evaluated, as appropriate for the selected SSCs listed below, (1) the effectiveness of the risk assessments performed before maintenance activities were conducted; (2) the management of risk that, upon identification of an unforseen situation, necessary steps were taken to plan and control the resulting emergent work activities; and (3) that maintenance risk assessments and emergent work problems were adequately identified and resolved. The inspectors referenced Procedures SPP-7.1, "Work Control Process " and Instruction 0-TI-DSM-000-007.1, "Equipment to Plant Risk Matrix" during these inspection activities.

- WO 00-003990-000, EDG 1B-B stator repair
- WO 00-003744-000, AFW level control valve 1-LCV-3-156 repair
- WO-99-010586-000, Fire protection sprinkler outage in various areas of control building
- PER 00-003795-000, removal from service of ERCW screen wash pump C-B
- WO- 003193-000, 125V vital battery charger IV hot connection
- 1-TO-2000-001 1-3-551, Unit 1 turbine driven AFW pump scheduled maintenance

b. Issues and Findings

No findings were identified.

1R14 Personnel Performance During Nonroutine Plant Evolutions and Events

a. Inspection Scope

The inspectors reviewed human performance associated with a nonroutine plant evolution. On April 1, 2000 while Unit 1 was operating at 100 percent power, an unexpected power increase of about one and a half percent occurred. The power increase was caused by an RCS dilution that occurred when an operator placed an unflushed cation filter bed in service. The inspectors reviewed plant operating logs, plant computer information, plant procedures, previous similar events involving reactivity management, and conducted discussions with numerous plant personnel. The inspectors reviewed the associated PER and discussed the transient with operations and engineering personnel.

b. Issues and Findings

No findings were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed selected technical operability evaluations (TOEs) affecting risk significant mitigating systems, listed below, to assess, as appropriate, (1) the technical adequacy of the evaluations; (2) whether continued system operability was warranted; (3) whether other existing degraded conditions were considered as compensating measures; (4) where compensatory measures were involved, whether the compensatory measures were in place, would work as intended, and were appropriately controlled; (5) where continued operability was considered unjustified, the impact on TS LCOs and the risk significance in accordance with the significance determination process. The inspectors referenced Procedure SPP-10.6, "Engineering Evaluations for Operability Determination" as needed during the course of these inspection activities.

- TOE 0-99-201-1725, Westinghouse Breakers Exceeding Service Life
- TOE 0-00-250-3175, 125V Vital Battery Charger IV Hot Connection
- TOE 99-010436-00, Component Cooling Water Heat Exchanger Fouling
- PER 00-3696-00, Operability/Reportability Determination for Pressurizer Pressure Controller in Manual in Mode 3
- PER 00-004434-00, Operability of 1A-A MDAFW for Failure to Start Manually from Main Control Room Handswitch
- TOE 2-99-074-2064, 2A-A RHR Pump Upper Motor Bearing in Required Action Range Following Section XI Test
- TOE 0-00-201-2194, DS Breakers with New Direct Trip Actuators Installed After December 1, 1999
- TOE 0-99-062-11695, Use of Heavier Valves in Systems 62 (CVCS), 63 (SIS), 68 (RCS), and 77 (WDS) Without Proper Seismic Analysis or Vibration Review

b. Issues and Findings

No findings were identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors evaluated Operator Workaround SQ990007WA, Intermediate Heater String Isolates after Unit Trip, for its potential effects on the functionality of mitigating systems. The workaround was reviewed to determine (1) if the functional capability of the system or human reliability in responding to an initiating event was affected, (2) the effect on the operator's ability to implement abnormal or emergency procedures, and (3) if operator workaround problems were captured in the licensee's corrective action program.

b. Issues and Findings

No findings were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors reviewed Post Maintenance Test (PMT) Procedure SPP-6.3, "Pre-/Post Maintenance Testing" which governs the licensee's PMT process, and also work orders (WOs) and/or test activities, as appropriate, for selected risk significant mitigating systems to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and/or engineering personnel; (2) testing was adequate for the maintenance performed; (3) acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing basis documents, (4) test instrumentation had current calibrations, range and accuracy consistent with the application, (5) tests were performed as written with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; (8) and that equipment was returned to the status required to perform its safety function.

- WO 00-003193-000, 125V vital battery charger IV hot connection repair
- WO 00-003990-000, Power range instrument N42 gain potentiometer replacement
- WO 00-004434-000, 1A-A MDAFW pump main control room switch replacement
- WO 99-010485-000, Containment purge radiation monitor 2-RM-90-130 repair
- WO 00-003754-000, EDG 1B-B stator repair
- WO 00-003744-000, AFW level control valve, 1-LCV-3-156, repair

b. Issues and Findings

No findings were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors witnessed surveillance tests and/or reviewed test data of selected risk-significant SSCs, listed below, to assess, as appropriate, whether the SSCs met TS, the updated final safety analysis report (UFSAR), and licensee procedure requirements, and to determine if the testing effectively demonstrated that the SSCs were operationally ready and capable of performing their intended safety functions.

- 1-SI-OPS-082-024.A, 1A-A D/G 24 Hour Run and Load Rejection Test
- 0-PI-SFT-032-001.B, Auxiliary Control Air Operability Test
- 2-SI-SXP-003-201.B, MDAFW 2B-B Performance Test
- 1-SI-OPS-082-024.B, 1B-B EDG 24-Hour Run and Load Rejection Test
- 2-SI-SXP-003-201.S, Turbine Driven AFW Pump 2A-S AFW Performance Test
- 2-SI-SXV-003-219.0, AFW Check Valve Test During Operation
- 2-SI-SXP-063-201.A, Safety Injection Pump 2A-A Performance Test

b. Issues and Findings

No findings were identified.

1EP1 Drill, Exercise, and Actual Events

a. Inspection Scope

The inspectors observed the licensee perform the May 12 (Blue Team) quarterly emergency plan drill to evaluate drill conduct and the adequacy of licensee critique of performance to identify weaknesses and deficiencies. The inspectors reviewed the drill scenario and plan, and observed drill performance in the control room (simulator) and the technical support center (TSC). The inspectors also attended the TSC post drill critique.

b. Issues and Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verifications

Mitigating System Cornerstone

a. Inspection Scope

The inspectors reviewed operating logs to determine the accuracy and completeness of the safety system unavailability PI data for the systems listed below. The inspectors compared the reported PI data to plant operating logs for the period January-February 2000. In addition, the inspectors reviewed the licensee's corrective action program to determine if any problems with the collection of PI data had occurred and if resolution was satisfactory. The inspectors referenced NEI 99-02 during this inspection to ensure the licensee was properly tracking unavailability.

- AFW system
- RHR system

b. Issues and Findings

No findings were identified.

4OA6 Management Meetings

The inspectors presented the inspection results to Mr. Masoud Bajestani, Site Vice President, and other members of licensee management at the conclusion of the inspection on July 6, 2000. A reexit on one issue was also conducted on July 27 with Mr. Pedro Salas, Manager of Licensing and Industry Affairs. The licensee acknowledged the findings presented.

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

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Bajestani, Site Vice President
H. Butterworth, Operations Manager
T. Carson, Maintenance Manager
E. Freeman, Maintenance and Modifications Manager
J. Gates, Site Support Manager
C. Kent, Radcon/Chemistry Manager
D. Koehl, Plant Manager
M. Lorek, Assistant Plant Manager
D. Lundy, Site Engineering Manager
P. Salas, Manager of Licensing and Industry Affairs
J. Valente, Engineering & Support Services Manager

NRC

R. Bernhard, Region II Senior Reactor Analyst
W. Rogers, Region II Senior Reactor Analyst

ITEMS OPENED AND CLOSED

Opened and Closed

50-327, 328/00-05-01	NCV	Deficient Procedure for Mitigation of LOCA Outside Containment (Section 1R11).

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

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness

Radiation Safety

- Occupational
- Public

Safeguards

- 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, and 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.