

June 30, 2000

Mr. Charles H. Cruse  
Vice President - Nuclear Energy  
Baltimore Gas and Electric Company  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT - NRC INSPECTION REPORT  
NOS. 05000317/2000-005 AND 05000318/2000-005

Dear Mr. Cruse:

This letter transmits the report of a baseline problem identification and resolution program inspection conducted from May 8 - 26, 2000, at the Calvert Cliffs Nuclear Power Plant (CCNPP), Units 1 and 2. The results of this inspection were discussed with Mr. P. Katz and other members of your staff at an exit meeting on May 26, 2000.

The inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems at CCNPP. Within this area, the inspection consisted of selected examinations of procedures and representative records, observations of activities, personnel interviews and plant walkdowns.

There were no findings identified. The team concluded that, in general, CCNPP personnel properly identified and resolved problems through the implementation of the station's corrective action program. However, the NRC team did have several observations associated with problem identification and with the prioritization and evaluation of issues. Station personnel entered these items in the corrective action program following their identification.

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Sincerely,

***/RA by Brian E. Holian for/***

Wayne D. Lanning, Director  
Division of Reactor Safety

Docket Nos. 05000317, 05000318  
License Nos. DPR-53, DPR-69

Mr. Charles H. Cruse

2

Enclosure: NRC Combined Inspection Report Nos. 05000317/2000-005 and  
05000318/2000-005

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos: 05000317; 05000318  
License Nos: DPR-53; DPR-69 (Renewed)

Report Nos: 05000317/2000-005, 05000318/2000-005

Licensee: Baltimore Gas and Electric Company (BG&E)

Facility: Calvert Cliffs Nuclear Power Plant, Units 1 and 2

Location: Lusby, Maryland

Dates: May 8-26, 2000

Inspectors: Larry Scholl, Sr. Reactor Inspector  
Fred Bower, Resident Inspector, Calvert Cliffs  
Suresh Chaudhary, Sr. Reactor Inspector  
James Noggle, Sr. Reactor Inspector

Approved by: Scott A. Morris, Acting Chief  
Electrical Engineering Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

Calvert Cliffs Nuclear Power Plant, Units 1 & 2  
Inspection Report Nos. 05000317/2000-005 and 05000318/2000-005

This report provides the results of a two week baseline team inspection of BG&E's problem identification and resolution program. The inspection was performed by three Region I-based inspectors and a resident inspector utilizing NRC Inspection Procedure 71152, "Identification and Resolution of Problems." This performance-based inspection included a review of issues within all seven cornerstones of safety.

### **Problem Identification and Resolution**

In general, BG&E personnel effectively identified, entered, prioritized, and evaluated problems at the Calvert Cliffs station in accordance with their established corrective action program guidance. The team identified several minor deficiencies associated with problem identification and evaluation, although the total number of these issues were low. The inspection team also determined that BG&E's implementation of individual corrective actions was appropriate. Nuclear performance assessment department audits were thorough and provided good independent oversight of plant activities.

## Report Details

### **4. OTHER ACTIVITIES (OA)**

#### 4OA2 Problem Identification and Resolution

##### .1 Effectiveness of Problem Identification

###### a. Inspection Scope

The team conducted a performance-based review of BG&E's process for identifying and correcting problems at the CCNPP. The team inspected items associated with all seven cornerstones of safety within the three strategic performance areas of reactor safety, radiation safety, and safeguards.

Documents reviewed by the team included station administrative procedures, issue reports (IRs), safety system report cards, corrective maintenance work orders for safety-related and "maintenance rule" systems, operability evaluations, temporary alterations, operating experience evaluations, Nuclear Performance Assessment Department (NPAD) audit reports, self-assessment reports, Plant Operations Safety Review Committee (POSRC) meeting minutes, Off-Site Safety Review Committee (OSSRC) meeting minutes, and items identified through the use of the gold card process. Interviews were conducted with station personnel in the various site departments at various working levels within the organization. The team performed walkdowns of portions of risk-significant safety systems with the responsible system engineer and performed independent inspection of various areas of the plant.

###### b. Issues and Findings

The team found that station personnel effectively identified and entered problems as issue reports into the corrective action program (CAP). The significance threshold for entering issues into the CAP was also appropriate. However, the team did identify three items of low significance that were either not entered into the CAP or were not entered in a timely manner.

BG&E utilizes the gold card program, in part, to identify, document and trend issues below the significance threshold for generating an IR. The team identified two gold card issues that should have been documented as IRs. One issue involved a filter in the spent fuel pool ventilation system that was found out of its normally installed location and the other identified the existence of the incorrect revision of a Design Change Notice (DCN) in a modification work order package that could have affected the scope of work and/or the safety tagging. After further review, BG&E determined that the filter problem had been captured in an IR approximately two weeks after the date of the gold card issue reviewed by the team. BG&E also initiated IR3-055-0876 to further evaluate the issue associated with the incorrect DCN revision.

The third item identified by the team involved the timeliness of issuing IR3-005-110 which documented a concern for potential vortexing in the refueling water tank during the injection phase following a loss of coolant accident. The team observed that the IR was not initiated until March 1999 even though the issue was identified in a safety system functional inspection report issued in November, 1998. This resulted in a significant delay in conducting a formal operability evaluation for the affected systems. BG&E initiated issue report IR3-047-782 to document and further evaluate this issue.

## .2 Prioritization and Evaluation of Issues

### a. Inspection Scope

The team assessed BG&E's effectiveness in prioritizing and evaluating issues by performing a detailed review of a sample of items from various sources. The samples were selected from open and closed category I, II and III issue reports, non-cited violations, NRC generic communications, industry operating experience evaluations, 10 CFR 21 report evaluations, self-assessment reports, NPAD audit reports, installed temporary alterations, open operability evaluations, issues identified by the safety review boards (POSRC and OSSRC) and employee concerns program issues. The team also observed the activities of the Issue Report Review Group (IRRG) and the Corrective Action Review Board.

The team performed an independent assessment of the appropriateness of the assigned significance level (category) for a selected sample of IRs. The significance level determines the type and timing of the cause evaluation to be performed. Other attributes reviewed by the team included the adequacy of the root cause analysis (Category I IRs) or apparent cause determinations (Category II IRs) and the corresponding corrective action plans. The evaluation of potential generic issues and extent of condition reviews were also assessed.

The team also reviewed a sample of items in the corrective action program backlog to determine if there were instances where a combination of low significance issues may collectively result in a more significant concern.

### b. Issues and Findings

With the exception of several minor items identified by the team, BG&E's prioritization and evaluation of issues were generally appropriate. Root cause evaluations for issues were thorough and corrective action plans were appropriate to address the identified causes. Nonetheless, the team had several observations involving issue prioritization and evaluation:

- Issue report IR3-029-921 documented the need to stop loading a high integrity container (HIC) containing contaminated resin into a shipping cask because the measured dose rate was significantly higher than the expected (calculated) dose rate. Since the calculated dose was used to determine the type of shipping container that would be required, the error resulted in the incorrect shipping cask being ordered. Problems were then encountered when the HIC became stuck after BG&E attempted to put it into a container for temporary storage on site until the correct shipping container could be obtained. The team noted that the IR was assigned a Category III rating based on it being linked to a related Category I IR which included a corrective action to evaluate why the dose rate calculation was in error. The categorization of issues based on linkage to other IRs was not specifically addressed by the station administrative procedures and has the potential for diluting the apparent risk significance of the linked issues. BG&E initiated IR IR3-046-926 to further evaluate this issue.
- Issue reports IR3-029-451 and IR3-029-182. Both documented emergency

notification siren problems that occurred as a result of work on radio transmitters under the control of two county governments within the emergency planning zone. The team noted that in both cases the identified cause was that the technicians did not realize that the work they were doing would affect the siren transmitter. No corrective actions were identified or taken to prevent recurrence. During this inspection BG&E completed a self-assessment that identified additional corrective actions to improve the reliability of the sirens.

- During an overhaul of a low pressure safety injection (LPSI) pump BG&E identified that an ASME Code required repair and replacement plan had not been prepared to perform the work. BG&E initiated IR3-008-414 to document and evaluate this issue. The corrective action specified as a result of the IR was to modify the one specific maintenance procedure to more clearly identify the pressure retaining parts. The team found that the corrective actions were not consistent with the identified cause in that the cause was personnel error and the corrective action was to revise one procedure. BG&E initiated issue report IR-030-101 to re-evaluate the causal analysis and issue report IR3-035-230 was initiated to evaluate potential generic implications.
- Issue reports IR3-038-073 and IR3-005-697 addressed the installation of an oversized impeller in a LPSI pump. The team found that the documentation associated with these IRs was not sufficient for the team to assess the adequacy of the extent of condition review. BG&E initiated issue report IR3-030-721 to further evaluate this question.
- Issue report IR3-000-019 documented the discovery of contamination outside of the radiologically controlled area. The team found that the associated extent of condition review was narrowly focused. BG&E subsequently provided the team with additional information that indicated more radiation surveys were performed than those that were actually documented in the IR. The team also noted that additional actions could have been taken in BG&E's effort to determine the cause of the event. For example, the date of origin of the original contamination could have been estimated and possibly correlated with ongoing plant activities to better define the root cause.

The team concluded that, based on the low number of items identified and their minor safety significance, overall performance in this area was good.

### .3 Implementation of Corrective Actions

#### a. Inspection Scope

For those items reviewed in detail (see Section 4OA2.2 of this report), the team assessed the adequacy of BG&E's plans to ensure that the corrective actions properly addressed the identified cause(s) of the issue or event. The team also verified the implementation of a sample of corrective actions. The samples were selected based on their importance in reducing operational risks. Lastly, sample of corrective action effectiveness reviews performed by BG&E were assessed.

#### b. Issues and Findings



The team had no findings in this area.

Corrective actions were properly prioritized and implemented. Extensions of due dates for corrective actions were properly evaluated and reviewed.

#### .4 Assessment of Safety Conscious Work Environment

##### a. Inspection Scope

During the conduct of interviews, document reviews and observations of BG&E activities, the team looked for evidence that suggested plant employees may be reluctant to raise safety concerns. The type of questions included in Appendix 1 to NRC Inspection Procedure 71152, "Suggested Questions For Use In Discussions With Licensee Individuals Concerning PI&R Issues," were utilized during interviews. The team also reviewed the evaluation and resolution of issues that were addressed by BG&E's employee concerns program in the past year.

##### b. Issues and Findings

The team had no findings in this area.

The team observed good support and use of the corrective action process at all levels of the organization and across all of the departments involved in the inspection. Employee concerns program issues were effectively evaluated and resolved.

BG&E appeared to have established a safety conscious work environment that resulted in safety issues being entered into and resolved by the corrective action program.

#### .5 Effectiveness of BG&E Audits and Assessments

##### a. Inspection Scope

The team reviewed a sample of self-assessments and Nuclear Performance Assessment Department (NPAD) audits to evaluate the effectiveness of these activities in assessing performance and identifying problems. The samples reviewed include various functional areas within the plant and also include BG&E's assessment of the corrective action program.

##### b. Issues and Findings

The team had no findings in this area.

NPAD assessments were thorough and contained good findings and recommendations. The scope, depth and quality of departmental self-assessments varied significantly and the team noted that BG&E was taking actions to improve their self-assessment process.

BG&E's overall assessment of CCNPP's corrective action program was consistent with the NRC team's observations. Areas for improvement have been identified and are being addressed with good oversight by the station's Corrective Action Review Board.

#### 4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. P. Katz and other members of BG&E management at an exit meeting on May 26, 2000. Licensee management acknowledged the findings presented.

## PARTIAL LIST OF PERSONS CONTACTED

BG&E

|               |   |
|---------------|---|
| C. Cruse      | Vice President, Calvert Cliffs Nuclear Power Plant  |
| G. Detter     | General Supervisor, Design Engineering              |
| A. Edwards    | Director, Nuclear Security                          |
| T. Forgette   | Director, Emergency Planning                        |
| D. Holm       | Superintendent, Nuclear Operations                  |
| P. Katz       | Plant General Manager                               |
| B. Montgomery | Director, Nuclear Regulatory Matters                |
| K. Nietman    | Manager, Nuclear Performance Assessment             |
| M. Navin      | Superintendent, Technical Support                   |
| P. Pieringer  | Principal Engineer, Electrical and Controls Systems |
| M. Polak      | General Supervisor, Maintenance Support             |
| M. Rigsby     | Supervisor, Radiation/Chemistry Technical Services  |
| R. Sydnor     | Principal Engineer, Engineering Work Management     |
| T. Sydnor     | General Supervisor, Plant Engineering               |
| R. Szoch      | Supervisor, Issues Assessment Unit                  |
| C. Yoder      | Director, Life Cycle Management Project             |

NRC

|            |                           |
|------------|---------------------------|
| S. Stewart | Senior Resident Inspector |
| T. Hoeg    | Resident Inspector        |

## LIST OF ACRONYMS USED

|       |   |
|-------|---|
| ASME  | American Society of Mechanical Engineers  |
| BG&E  | Baltimore Gas and Electric                |
| CAP   | Corrective Action Program                 |
| CCNPP | Calvert Cliffs Nuclear Power Plant        |
| CFR   | Code of Federal Regulations               |
| DCN   | Document Change Notice                    |
| HIC   | High Integrity Container                  |
| IR    | Issue Report                              |
| LPSI  | Low Pressure Safety Injection             |
| NPAD  | Nuclear Performance Assessment Department |
| NRC   | Nuclear Regulatory Commission             |
| NRR   | Nuclear Reactor Regulation                |
| OSSRC | Off-Site Safety Review Committee          |
| POSRC | Plant Operations Safety Review Committee  |

## LIST OF DOCUMENTS REVIEWED

Plant Administrative Procedures

|          |   |
|----------|---|
| QL-2     | Self Assessment/Corrective Action Program       |
| QL-2-100 | Issue Reporting and Assessment                  |
| QL-2-101 | Causal Analysis                                 |
| QL-2-102 | Action Item Subsystem                           |
| QL-2-104 | Self-Assessment                                 |
| QL-2-105 | Conduct of the Corrective Action Review Board   |
| MD-1-100 | Temporary Alterations                           |
| NO-1-106 | Functional Evaluation/Operability Determination |

Non-Cited Violations

|          |  |
|----------|--|
| 98-80-02 | 4 kV undervoltage protection calculation   |
| 98-80-07 | Low pressure coolant injection common discharge line damage                              |
| 98-09-01 | Failure to meet surveillance test interval for containment tendon testing                |
| 98-09-02 | Personnel did not follow radiological protection procedures                              |
| 98-10-04 | Hot shorts in motor operated valve control cables  |
| 98-10-05 | Suction valves could open due to a fire  |
| 98-12-03 | Spare reactor trip circuit breaker in service without required testing                   |
| 99-01-01 | Failure to complete testing for low pressure protection                                  |
| 99-03-01 | Failure to follow tagging procedure  |
| 99-03-02 | Emergency diesel generator out of service greater than technical specification time      |
| 99-03-03 | Failure to report condition prohibited by technical specifications                       |
| 99-05-01 | Inadequate corrective actions for repetitive failures for containment spray check valves |
| 99-06-01 | Failure to document problems with emergency diesel generator in maintenance work order   |
| 99-06-02 | Failure to report condition outside of design basis                                      |
| 99-07-01 | Procedure non-compliance during maintenance on auxiliary feedwater valve                 |
| 99-08-02 | Condition adverse to quality not addressed by implementing a modification                |
| 99-11-01 | Failure to follow procedures during reactor vessel level system work                     |
| 99-11-02 | Inadequate survey of released contaminated sewage  |
| 99-11-03 | Emergency plan revision not reported to NRC within 30 days                               |
| 00-01-01 | Failure to scale radionuclides in waste classification                                   |
| 00-01-02 | Failure to verify authorized receipt of radioactive material                             |

Category I Issue Documentation (by associated AIT number)

|           |   |
|-----------|---|
| 199900355 | 22 Steam generator feedwater bypass valve does not work properly in automatic   |
| 199900394 | West penetration room and five persons contaminated                             |
| 199900773 | High radiation area created around shut down cooling heat exchanger             |
| 199900838 | U1 saltwater system instrumentation repeat problems                             |
| 199900986 | Indication meter pegged low   |
| 199901142 | Salt water header flow below expected flow rates                                |
| 199901246 | Contact has poor continuity   |
| 199901252 | Unit 1 reactor trip due to circuit breaker trip                                 |
| 199901310 | High integrity container transfer stopped due to higher than expected radiation |

levels  
 199901510 Un-posted radiation area found by NRC  
 199900004 U1 trip due to lightening strike  
 199900005 Fuel oxide layer greater than expected  
 199900008 Main transformer performance  
 200000001 High integrity container stuck during transfer  
 200000002 Rate of reactor trips unacceptable  
 200000003 Normal heat sink loss/performance of equipment  
 200000005 Internal control of vendors  
 200000056 U1 turbine trip for no apparent reason  
 200000095 Security computer failed to annunciate alarms  
 200000315 Operator inadvertently isolated component cooling

Category II Issue Documentation (by associated AIT number)

199900002 Safety injection level probe failures  
 199900019 Emergency diesel generator governor failure  
 199900048 Fitness for duty tests left in lab  
 199900101 Power-operated relief valve main seat cracking  
 199900128 Containment spray pump curves do not bound surveillance test results  
 199900185 No process for verifying data in chapter two of the updated final safety analysis report  
 199900193 Parts not properly dedicated  
 199900201 Nitrogen 16 monitors do not meet purchase spec  
 199900217 Safety evaluations not forwarded to off-site safety review committee  
 199900232 Reactor protection system channel trip for no apparent reason  
 199900243 Steam generator level indicator out of tolerance  
 199900255 As-found values out of tolerance  
 199900270 Emergency preparedness collective significance analysis  
 199900271 Auxiliary feedwater steam drain valves in a(1)  
 199900289 Contaminated area identified  
 199900316 No calculation for vortexing in refueling water tank  
 199900354 Charging pump failed to start  
 199900372 Emergency diesel generator relays not qualified  
 199900392 Corrosion in many areas of containment liner  
 199900409 Fitness for duty issues  
 199900430 High pressure safety injection pump differential pressure exceeded high alert limit  
 199900465 Components out of calibration  
 199900493 Improper safeguards information access  
 199900511 Contamination of individual  
 199900538 Reactor protection system temperature instrument  
 199900607 Valve released without approved drawings and material change  
 199900646 Low pressure safety injection pump rotating assembly replaced without plan  
 199900660 Coil probe head broken off in tube  
 199900682 Low pressure safety injection pump high vibration  
 199900738 Charging pump overload trip  
 199900853 Containment spray pump motor windings embedded in grease  
 199900923 Frequency of unplanned transients increasing  
 199900990 Wrong oil in #22 containment spray pump  
 199901060 Repeat functional failures - control relays

199901086 Relay failures - operating experience  
 199901109 Potential for trip due to switchyard operations  
 199901125 Heat exchangers operated at less than minimum flow  
 199901146 Reactor protection system pre-trip indication oscillations  
 199901155 Foxboro Part 21 notification  
 199901172 22 Auxiliary feedwater functional failure  
 199901212 Battery cell voltage out-of-specifications  
 199901223 Emergency diesel generator speed control not functional  
 199901243 Reactor coolant pump lower seal temperature indicator failure  
 199901297 Containment air cooling fan stopped for no apparent reason  
 199901322 Unexpected power increase during borating  
 199901366 Timeliness of water hammer corrective action  
 199901396 Functional evaluations and operability determinations may not have been submitted to the plant operations safety review committee  
  
 199901406 Heat exchanger does not have sufficient flow  
 199901434 Emergency core cooling system sump screen size  
 199901447 Diesel fire pump did not pass surveillance test  
 199901522 Drawing change required due to installation of battery  
 200000083 Radioactive gas leak  
 200000129 High pressure safety injection pump failed to start  
 200000163 Vendor procedures/and tech manuals  
 200000226 Worker entered dose field of 866 mr/hr  
 200000349 Containment coating too thick  
 200000374 Plant operations safety review committee expectations for recommending approval of causal analysis are not clear

#### NRC Generic Communication Issues

|                                 |  |
|---------------------------------|--|
| Information Notice 99-01        | Containment air cooler fan HEPA filters    |
| Information Notice 99-07        | Failed fire protection deluge valves       |
| Information Notice 99-10 Rev. 1 | Degradation of prestressing tendon systems |

#### Operating Experience Issues

|                      |  |
|----------------------|--|
| PS 33288             | RCP Lube oil collection system                             |
| Part 21 Notification | Rosemount transmitter drift                                |
| IR3-016-462          | ABB Condition Alert - Steam line break analysis            |
| IR1-044-668          | ABB Infobulletin - Loss-of-coolant accident analysis       |
| IR3-007-555          | ABB Part 21- Potential Non-conservatism in analysis factor |

System Report Cards

Salt Water System  
 Service Water System  
 Radiation Monitoring System  
 High Pressure Safety Injection System  
 Containment Spray System  
 Auxiliary Feedwater System  
 Emergency Diesel Generators

NPAD Audits

Audit 98-05 Corrective Actions Program  
 Audit 98-16 Emergency Core Cooling Systems - Safety System Functional Inspection  
 Audit 99-08 Emergency Planning  
 Audit 99-07 Operations  
 Audit 99-05 Testing  
 1998 Safety Performance Assessment Report  
 Mid-Year 1999 Safety Performance Assessment Report  
 1999 Safety Performance Assessment Report

Self-Assessment Reports

Tolerance for Incomplete Work - Plant Engineering Section  
 10 CFR 50 Appendix R Program  
 Station Blackout  
 Emergency Planning Collective Significance Analysis  
 Air Operated Valve Program Requirements  
 10 CFR 50.59 Program  
 Corrective Action Program

Temporary Modifications

2-99-0043 Removal of safety injection actuation signals/recirculation actuation signals from component cooling heat exchanger service water valves  
 1-99-0014 Monitoring of nuclear instrumentation detector well temperatures  
 2-99-0033 21 Feedwater pump high vibration  
 1-99-0032 12 Steam generator feedwater pump turbine monitoring

Operability Evaluations

98-021 Reactor protection system low flow trip  
 99-011 Containment tendons  
 95-003 Auxiliary feedwater pump turbine missiles  
 97-001 Service water to containment air coolers GL 96-06  
 00-001 Low pressure safety injection system check valve

## **ATTACHMENT 1**

### **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:

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

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>.