

March 4, 2003

Mr. Peter E. Katz  
Vice President - Calvert Cliffs Nuclear Power Plant  
Constellation Generation Group, LLC  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: ANNUAL ASSESSMENT LETTER - CALVERT CLIFFS NUCLEAR  
POWER PLANT

Dear Mr. Katz:

On February 6, 2003, the NRC staff completed its end-of-cycle plant performance assessment of Calvert Cliffs Nuclear Power Plant. The end-of-cycle review for Calvert Cliffs involved the participation of all technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2002. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections which may conflict with your plant activities.

Overall, Calvert Cliffs was operated in a manner that preserved public health and safety, and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Regulatory Response Column of the NRC's Action Matrix, based on two inspection findings of low to moderate safety significance (White) that apply to both units. The first finding, in the Public Radiation Safety cornerstone, was associated with the improper preparation of a package of radioactive materials for shipment, resulting in Department of Transportation external radiation dose rate limits being exceeded. A 95001 supplemental inspection conducted in October 2002 found that the extent of condition review to address this issue was narrow in scope and the corrective actions did not provide assurance that the performance deficiency would be corrected. A subsequent supplemental inspection conducted in December 2002 found that additional actions taken were properly focused on preventing recurrence. The lack of thorough extent-of-condition reviews for greater-than-green findings is a recurring problem that warrants attention. A second finding, in the Emergency Preparedness cornerstone, was issued because emergency sirens in Calvert County were not capable of being activated in a timely manner for 84 days. The 95001 supplemental inspection for this finding concluded that a sufficiently broad evaluation of the public alert and notification system issue had been conducted and the planned and completed corrective actions were adequate.

While plant performance for the most recent quarter is within the Regulatory Response Column of the NRC's Action Matrix, there were additional performance indicators and a safety significant inspection finding during the first half of the assessment cycle. A yellow inspection finding associated with a failure of the No. 11 turbine-driven auxiliary feedwater (AFW) pump had been identified at Unit 1 during a Special Inspection. A 95002 supplemental inspection in December 2001 found that the Calvert Cliffs staff had adequately identified the underlying causes for the failed AFW pump and that the corrective actions were appropriately broad to provide reasonable assurance that the failure would not recur. The Unit 1 "Scrams with Loss of Normal Heat Removal" PI was white for the first two quarters of 2002. A follow-up inspection found that the issues that caused the white PI had been satisfactorily addressed. The Unit 1 "Heat Removal System Unavailability" PI was white for the second quarter of 2002, due primarily to the No. 11 turbine-driven AFW pump unavailability. A separate follow-up inspection was not necessary because a 95002 supplemental inspection had already been conducted for the AFW system yellow finding.

In our mid-cycle assessment letter dated August 26, 2002, we discussed your progress in addressing a substantive cross-cutting issue in the area of Problem Identification and Resolution, which had been first discussed in our annual assessment letter dated March 4, 2002. The NRC staff had identified findings in the Mitigating Systems cornerstone in which Calvert Cliffs personnel did not consistently and thoroughly assess degraded or non-conforming structures, systems, and components. A decrease in the number and significance of Problem Identification and Resolution cross-cutting findings was noted during the 2002 assessment period. This indicates that the issue has been effectively addressed and we are closing the cross-cutting issue.

The enclosed inspection plan details the inspections scheduled through March 31, 2004. A one-time inspection activity has been added to the inspection plan for the Unit 2 steam generator replacement activity. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last six months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

As you are aware, since the terrorist attacks on September 11, 2001, the NRC has issued several Orders and threat advisories to enhance security capabilities and improve guard force readiness. We have conducted inspections to review your implementation of these requirements and have monitored your actions in response to changing threat conditions. For calendar year 2003, we plan to continue these inspections, conduct portions of the security baseline inspection program, as well as perform additional inspections to evaluate your compliance with new requirements that may be ordered. Based on our final determinations in this regard, we will notify you of any inspection plan changes.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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/reading-rm/adams.html> (the Public Electronic Reading Room).

Peter E. Katz

3

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact James Trapp at 610-337-5186 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Hubert J. Miller  
Regional Administrator

Docket Nos. 50-317, 50-318  
Licensee Nos. DPR-53, DPR-69

Enclosure: Calvert Cliffs Inspection/Activity Plan

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| OFFICE | RI/DRP        | RI/DRP    | RI/DRP     | RI/ORA     |
|--------|---------------|-----------|------------|------------|
| NAME   | NPerry/JT for | JTrapp/JT | ABlough/AB | HMiller/HM |
| DATE   | 03/3/03       | 03/3/03   | 03/3/03    | 03/3/03    |

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**Calvert Cliffs**  
**Inspection / Activity Plan**  
**12/29/2002 - 03/27/2004**

| Unit Number | Inspection Activity | Title   | No. of Staff on Site | Planned Dates |            | Inspection Type      |
|-------------|---------------------|---|----------------------|---------------|------------|----------------------|
|             |                     |   |                      | Start         | End        |                      |
|             | <b>50001</b>        | <b>- U2 SG REPLACEMENT INSPECTION</b>   | <b>1</b>             |               |            |                      |
| 2           | IP 50001            | Steam Generator Replacement Inspection  |                      | 01/01/2003    | 05/15/2003 | Other Routine        |
|             | <b>95001</b>        | <b>- SUPPLEMENTAL INSPECTION</b>  | <b>1</b>             |               |            |                      |
| 1, 2        | IP 95001            | Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area     |                      | 01/27/2003    | 01/30/2003 | Supplemental Program |
|             | <b>7111108</b>      | <b>- INSERVICE INSPECTION</b>   | <b>2</b>             |               |            |                      |
| 2           | IP 2515/150         | Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Bulletin 2002-02) |                      | 02/24/2003    | 02/28/2003 | Safety Issues        |
| 2           | IP 7111108P         | Inservice Inspection Activities - PWR   |                      | 03/03/2003    | 03/07/2003 | Baseline Inspections |
|             | <b>71121</b>        | <b>- OCC RAD SAFETY</b>   | <b>1</b>             |               |            |                      |
| 2           | IP 50001            | Steam Generator Replacement Inspection  |                      | 03/03/2003    | 03/07/2003 | Other Routine        |
| 1, 2        | IP 7112101          | Access Control to Radiologically Significant Areas                                      |                      | 03/03/2003    | 03/07/2003 | Baseline Inspections |
| 1, 2        | IP 7112102          | ALARA Planning and Controls   |                      | 03/03/2003    | 03/07/2003 | Baseline Inspections |
| 1, 2        | IP 7112103          | Radiation Monitoring Instrumentation and Protective Equipment                           |                      | 03/03/2003    | 03/07/2003 | Baseline Inspections |
| 1           | IP 71151            | Performance Indicator Verification  |                      | 03/03/2003    | 03/07/2003 | Baseline Inspections |
|             | <b>71121</b>        | <b>- OCC RAD SAFETY</b>   | <b>1</b>             |               |            |                      |
| 2           | IP 50001            | Steam Generator Replacement Inspection  |                      | 04/14/2003    | 04/18/2003 | Other Routine        |
| 1, 2        | IP 7112101          | Access Control to Radiologically Significant Areas                                      |                      | 04/14/2003    | 04/18/2003 | Baseline Inspections |
| 1, 2        | IP 7112102          | ALARA Planning and Controls   |                      | 04/14/2003    | 04/18/2003 | Baseline Inspections |
| 1, 2        | IP 7112103          | Radiation Monitoring Instrumentation and Protective Equipment                           |                      | 04/14/2003    | 04/18/2003 | Baseline Inspections |
| 1, 2        | IP 71151            | Performance Indicator Verification  |                      | 04/14/2003    | 04/18/2003 | Baseline Inspections |
|             | <b>71122.02</b>     | <b>- RADWASTE</b>   | <b>1</b>             |               |            |                      |
| 1, 2        | IP 7112202          | Radioactive Material Processing and Transportation                                      |                      | 06/02/2003    | 06/06/2003 | Baseline Inspections |
|             | <b>71151</b>        | <b>- EP PI VERIFICATION</b>   | <b>1</b>             |               |            |                      |
| 1, 2        | IP 71151            | Performance Indicator Verification  |                      | 07/07/2003    | 07/11/2003 | Baseline Inspections |
|             | <b>T1148BC</b>      | <b>- SEC ICM</b>  | <b>4</b>             |               |            |                      |
| 1, 2        | IP 2515/148         | Inspection of Nuclear Reactor Safeguards - Interim Compensatory Measures                |                      | 07/07/2003    | 07/11/2003 | Safety Issues        |
|             | <b>71152B</b>       | <b>- PROBLEM IDENTIFICATION AND RESOLUTION</b>  | <b>3</b>             |               |            |                      |
| 1, 2        | IP 71152B           | Identification and Resolution of Problems   |                      | 10/20/2003    | 10/24/2003 | Baseline Inspections |
| 1, 2        | IP 71152B           | Identification and Resolution of Problems   |                      | 11/03/2003    | 11/07/2003 | Baseline Inspections |
|             | <b>7111401</b>      | <b>- EP EXERCISE EVALUATION</b>   | <b>2</b>             |               |            |                      |
| 1, 2        | IP 7111401          | Exercise Evaluation   |                      | 10/20/2003    | 10/24/2003 | Baseline Inspections |
| 1, 2        | IP 7111404          | Emergency Action Level and Emergency Plan Changes                                       |                      | 10/20/2003    | 10/24/2003 | Baseline Inspections |
|             | <b>7111111B</b>     | <b>- L.O. REQUALIFICATION PROGRAM</b>   | <b>2</b>             |               |            |                      |
| 1, 2        | IP 7111111B         | Licensed Operator Requalification   |                      | 11/17/2003    | 11/21/2003 | Baseline Inspections |

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Calvert Cliffs**  
**Inspection / Activity Plan**  
**12/29/2002 - 03/27/2004**

| Unit<br>Number | Inspection Activity | Title  | No. of Staff<br>on Site | Planned Dates |            | Inspection<br>Type   |
|----------------|---------------------|--|-------------------------|---------------|------------|----------------------|
|                |                     |  |                         | Start         | End        |                      |
|                | <b>71121</b>        | <b>- OCC RAD SAFETY</b>  | <b>1</b>                |               |            |                      |
| 1, 2           | IP 7112101          | Access Control to Radiologically Significant Areas                       |                         | 12/01/2003    | 12/05/2003 | Baseline Inspections |
| 1, 2           | IP 7112102          | ALARA Planning and Controls  |                         | 12/01/2003    | 12/05/2003 | Baseline Inspections |
| 1, 2           | IP 7112103          | Radiation Monitoring Instrumentation and Protective Equipment            |                         | 12/01/2003    | 12/05/2003 | Baseline Inspections |
|                | <b>7112201</b>      | <b>- PUB RAD SAFETY - RETS</b>   | <b>1</b>                |               |            |                      |
| 1, 2           | IP 7112201          | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems |                         | 12/08/2003    | 12/12/2003 | Baseline Inspections |
|                | <b>7111121</b>      | <b>- SSDI</b>  | <b>6</b>                |               |            |                      |
| 1, 2           | IP 7111121          | Safety System Design and Performance Capability                          |                         | 01/12/2004    | 01/16/2004 | Baseline Inspections |
| 1, 2           | IP 7111121          | Safety System Design and Performance Capability                          |                         | 01/26/2004    | 01/30/2004 | Baseline Inspections |
|                | <b>3/1 EXM</b>      | <b>- OPERATOR LICENSING INITIAL EXAMS</b>                                | <b>3</b>                |               |            |                      |
| 1              | U01517              | CALVERT CLIFFS UNITS 1&2 INITIAL EXAM (3/1-5/04)                         |                         | 01/26/2004    | 01/30/2004 | Not Applicable       |
| 1              | U01517              | CALVERT CLIFFS UNITS 1&2 INITIAL EXAM (3/1-5/04)                         |                         | 02/23/2004    | 02/27/2004 | Not Applicable       |
|                | <b>7111107B</b>     | <b>- HEAT SINK</b>   | <b>1</b>                |               |            |                      |
| 1, 2           | IP 7111107B         | Heat Sink Performance  |                         | 02/09/2004    | 02/15/2004 | Baseline Inspections |