



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

September 1, 2009

Mr. James A. Spina, Vice President
Calvert Cliffs Nuclear Power Plant, Inc.
Constellation Generation Group, LLC
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN – CALVERT CLIFFS NUCLEAR POWER PLANT

Dear Mr. Spina:

On August 12, 2009, the NRC staff completed its performance review of Calvert Cliffs Nuclear Power Plant (CCNPP). Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2008, through June 30, 2009. 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.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only--Security Information" will include the security cornerstone review and resultant inspection plan.

Plant performance for the most recent quarter at Calvert Cliffs Units 1 and 2 was within the Regulatory Response column of the NRC's Action Matrix, based on one finding having low to moderate safety significance (White). This finding involved CCNPP's emergency action level table's fission product barrier matrix being incorrect resulting in a degraded risk significant planning standard function. In August 2009, we were notified by your staff that you will be ready for the NRC to conduct a supplemental inspection after November 2, 2009, to review the actions taken to address the White finding.

Based on our current assessment of performance for Calvert Cliffs Units 1 and 2, we plan to conduct, in addition to the reactor oversight process (ROP) baseline inspections at your facility, a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," and will inform you of the inspection dates once it is scheduled.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through December 31, 2010. In addition to the 95001 supplemental inspection and the baseline inspections, we plan on conducting an independent spent fuel storage installation

(ISFSI) inspection. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 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).

As you may know, the NRC is currently evaluating the scope and frequency of all the baseline inspection procedures as part of our biennial review of the ROP. If the results of the evaluation, or any other circumstances, cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Glenn Dentel at (610) 337-5233 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

James W. Clifford, Acting Director
Division of Reactor Projects

Docket Nos. 50-317, 50-318
License Nos. DRP-53, DRP-69

Enclosure: Calvert Cliffs Nuclear Power Plant Inspection/ Activity Plan

cc w/ encl.:

M. Wallace, Vice-Chairman, Constellation Energy
H. Barron, President, CEO, & Chief Nuclear Officer, Constellation Energy Nuclear Group, LLC
W. Parran, President, Calvert County Board of Commissioners
C. Fleming, Esquire, Sr. Counsel – Nuclear Generation Group, LLC
J. Gaines, Director, Licensing, Calvert Cliffs Nuclear Power Plant
S. Gray, Program Manager, Power Plant Assessment Program, Maryland Department of Natural Resources
K. Burger, Esquire, Maryland People's Counsel
R. Hickok, NRC Technical Training Center
L. Larragoite, Manager, Nuclear Safety and Security, Calvert Cliffs Nuclear Power Plant
G. Detter, Manager, Nuclear Safety and Security, Constellation Energy
M. Griffen, Maryland Department of the Environment
Chesapeake Safe Energy Coalition
S. Pattison, SLO (2)

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James W. Clifford, Acting Director
Division of Reactor Projects

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|--------|-------------|--------------|---------------|--|--|--|--|
| OFFICE | RI/DRP | RI/DRP | RI/DRP | | | | |
| NAME | NPerry/nsp* | GDentel/gtd* | JClifford/jwc | | | | |
| DATE | 08/21/09 | 08/24/09 | 09/01/09 | | | | |

*See prior concurrence

Calvert Cliffs
Inspection / Activity Plan
07/01/2009 - 12/31/2010

| Unit Number | Planned Dates | | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------|------------|---|--|----------------------|
| | Start | End | | | |
| | | | 7111121 - CDBI | | 6 |
| 1,2 | 08/03/2009 | 08/07/2009 | IP 7111121 | Component Design Bases Inspection | |
| 1,2 | 08/17/2009 | 08/21/2009 | IP 7111121 | Component Design Bases Inspection | |
| 1,2 | 08/24/2009 | 08/28/2009 | IP 7111121 | Component Design Bases Inspection | |
| | | | 7112203 - PUB RAD SAFETY - REMP | | 1 |
| 1,2 | 08/03/2009 | 08/07/2009 | IP 7112203 | Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program | |
| 1,2 | 08/03/2009 | 08/07/2009 | IP 71151-PR01 | RETS/ODCM Radiological Effluent | |
| | | | 7111111B - BIENNIAL REQUAL INSP WITH P/F RESULTS | | 3 |
| 1,2 | 11/16/2009 | 11/20/2009 | IP 7111111B | Licensed Operator Requalification Program | |
| | | | EP EXER - EP EXERCISE INSPECTION | | 3 |
| 1,2 | 10/18/2009 | 10/24/2009 | IP 7111401 | Exercise Evaluation | |
| 1,2 | 10/18/2009 | 10/24/2009 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | |
| 1,2 | 10/18/2009 | 10/24/2009 | IP 71151-EP01 | Drill/Exercise Performance | |
| 1,2 | 10/18/2009 | 10/24/2009 | IP 71151-EP02 | ERO Drill Participation | |
| 1,2 | 10/18/2009 | 10/24/2009 | IP 71151-EP03 | Alert & Notification System | |
| | | | 71152B - PI&R BIENNIAL TEAM | | 4 |
| 1,2 | 11/02/2009 | 11/06/2009 | IP 71152B | Identification and Resolution of Problems | |
| 1,2 | 11/16/2009 | 11/20/2009 | IP 71152B | Identification and Resolution of Problems | |
| | | | 71121 - OCC RAD SAFETY | | 1 |
| 1,2 | 12/07/2009 | 12/11/2009 | IP 7112101 | Access Control to Radiologically Significant Areas | |
| 1,2 | 12/07/2009 | 12/11/2009 | IP 7112102 | ALARA Planning and Controls | |
| 1,2 | 12/07/2009 | 12/11/2009 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | |
| 1,2 | 12/07/2009 | 12/11/2009 | IP 71151-OR01 | Occupational Exposure Control Effectiveness | |
| | | | TI-177 - MANAGING GAS ACCUMULATION IN ECCS | | 5 |
| 1,2 | 01/11/2010 | 01/15/2010 | IP 2515/177 | Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System | |
| | | | 71121 - OCC RADIATION SAFETY | | 1 |
| 1,2 | 01/25/2010 | 01/29/2010 | IP 7112101 | Access Control to Radiologically Significant Areas | |
| 1,2 | 01/25/2010 | 01/29/2010 | IP 7112102-7112102R | ALARA - Required | |
| | | | 71121 - OCC RADIATION SAFETY | | 1 |
| 1,2 | 03/01/2010 | 03/05/2010 | IP 7112101 | Access Control to Radiologically Significant Areas | |
| 1,2 | 03/01/2010 | 03/05/2010 | IP 7112102 | ALARA Planning and Controls | |
| 1,2 | 03/01/2010 | 03/05/2010 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | |
| | | | 7111108P - UNIT 1 INSERVICE INSPECTION | | 1 |
| 1 | 03/01/2010 | 03/12/2010 | IP 7111108P | Inservice Inspection Activities - PWR | |

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

Calvert Cliffs
Inspection / Activity Plan
07/01/2009 - 12/31/2010

| Unit Number | Planned Dates | | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------|------------|--|---|----------------------|
| | Start | End | | | |
| | | | TI-172 - U1 TI 2515/172 DISSIMILAR METAL WELDS | | 1 |
| 1 | 03/01/2010 | 03/12/2010 | IP 2515/172 | Reactor Coolant System Dissimilar Metal Butt Welds | |
| | | | 8/2EXAM - OPERATOR LICENSING INITIAL EXAMS | | 4 |
| 1 | 06/28/2010 | 07/02/2010 | U01770 | FY10 - CALVERT CLIFFS UNIT 1&2 INITIAL OPERATOR LICENSING EXAM | |
| 1 | 08/02/2010 | 08/13/2010 | U01770 | FY10 - CALVERT CLIFFS UNIT 1&2 INITIAL OPERATOR LICENSING EXAM | |
| | | | 71121.03 - RAD MONITORING INSTRUMENTS | | 1 |
| 1,2 | 05/03/2010 | 05/07/2010 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | |
| | | | 71122.01 - RAD GAS & LIQ EFFLUENTS SYSTEM | | 1 |
| 1,2 | 06/07/2010 | 06/11/2010 | IP 7112201 | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | |
| | | | 2515/173 - INDUSTRY GROUND WATER INITIATIVE | | 1 |
| 1,2 | 06/07/2010 | 06/11/2010 | IP 2515/173 | Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative | |
| | | | ISFSI - ISFSI LOADING CAMPAIGN | | 1 |
| 1,2 | 07/12/2010 | 07/16/2010 | IP 60855 | Operation Of An ISFSI | |
| 1,2 | 07/12/2010 | 07/16/2010 | IP 60855.1 | Operation of an Independent Spent Fuel Storage Installation at Operating Plants | |
| | | | EP PROGR - EP PROGRAM INSPECTION | | 1 |
| 1,2 | 08/02/2010 | 08/06/2010 | IP 7111402 | Alert and Notification System Testing | |
| 1,2 | 08/02/2010 | 08/06/2010 | IP 7111403 | Emergency Response Organization Augmentation Testing | |
| 1,2 | 08/02/2010 | 08/06/2010 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | |
| 1,2 | 08/02/2010 | 08/06/2010 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| 1,2 | 08/02/2010 | 08/06/2010 | IP 71151 | Performance Indicator Verification | |
| | | | TRI FIRE - TRIENNIAL FIRE PROTECTION INSPECTION | | 3 |
| 1,2 | 11/15/2010 | 11/19/2010 | IP 7111105T | Fire Protection [Triennial] | |
| 1,2 | 11/29/2010 | 12/03/2010 | IP 7111105T | Fire Protection [Triennial] | |
| | | | 71121 - OCC RAD SAFETY - ACCESS/ALARA & ISFSI | | 1 |
| 1,2 | 12/06/2010 | 12/10/2010 | IP 60855.1 | Operation of an Independent Spent Fuel Storage Installation at Operating Plants | |
| 1,2 | 12/06/2010 | 12/10/2010 | IP 7112101 | Access Control to Radiologically Significant Areas | |
| 1,2 | 12/06/2010 | 12/10/2010 | IP 7112102 | ALARA Planning and Controls | |
| 1,2 | 12/06/2010 | 12/10/2010 | IP 71151 | Performance Indicator Verification | |

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This report shows only on-site and announced inspection procedures.