

March 4, 2002

Mr. Charles H. Cruse
Vice President
Constellation Nuclear
Calvert Cliffs Nuclear Power Plant, Inc.
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

SUBJECT: ANNUAL ASSESSMENT LETTER - CALVERT CLIFFS NUCLEAR POWER
PLANT (REPORT 50-317/02-01, 50-318/02-01)

Dear Mr. Cruse:

On January 31, 2002, 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 April 1, 2001 through December 31, 2001. 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.

As discussed in our previous annual assessment letter dated May 31, 2001, this inspection and assessment cycle consisted of three quarters (i.e., the second, third, and fourth calendar quarters of calendar year 2001) instead of the usual four quarters. This change was implemented in order to align the inspection and assessment cycle with the calendar year beginning on January 1, 2002.

Overall, Calvert Cliffs operated in a manner that preserved public health and safety and met all cornerstone objectives with moderate degradation in safety performance. Plant performance for the most recent quarter was within the Degraded Cornerstone Column of the NRC Manual Chapter 0305, Action Matrix, based on the Unit 1 finding of substantial safety significance (YELLOW) in the mitigating systems cornerstone. This finding was associated with the May 16, 2001, failure of the No. 11 turbine-driven auxiliary feedwater pump. Calvert Cliffs Unit 2 was within the Licensee Response Column of the Action Matrix for the entire assessment cycle based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green).

The YELLOW inspection finding associated with the pump failure was identified during a Special Inspection (reference Inspection Report 50-317/01-09, dated August 24, 2001) conducted in June-July 2001. A 95002 supplemental inspection (reference Inspection Report 50-317/01-13, dated January 14, 2002) identified that the Calvert Cliffs staff had adequately identified the underlying causes for the failed auxiliary feedwater pump and that the corrective actions were appropriately broad to provide reasonable assurance that failure would not recur.

The pump failure was of substantial safety significance because the auxiliary feedwater system, which includes two electric and one turbine-driven pump, supplies water to the steam generators to remove decay heat when the main feedwater system is unavailable. Failure analysis of the No. 11 auxiliary feedwater pump determined that the pump would not have been capable of fulfilling its safety function mission time, from March 25, 2000 to May 16, 2001. The Calvert Cliffs staff promptly repaired the No. 11 auxiliary feedwater pump and, based upon the preliminary determination that excessive sealant was the most probable cause of the pump bearing failure, removed from service and inspected all potentially affected pumps at Units 1 and 2.

Prior to our inspection of the auxiliary feedwater pump issue, Calvert Cliffs Unit 1 had been in the Regulatory Response Column of the Action Matrix, based on the "Scram with Loss of Normal Heat Removal" PI having been WHITE (increased regulatory response band) since the first quarter of 2000. This PI, in the initiating events cornerstone, may return to GREEN as early as the third quarter of 2002. During this assessment period, the NRC completed the 95001 inspection for this indicator and determined that your staff's causal analysis was extensive. In addition, the corrective actions were closely connected to each cause identified in the analysis.

Additionally, the NRC staff has identified a substantive cross-cutting issue in the area of Problem Identification and Resolution. Specifically, the staff identified seven 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. In addition to the findings raised during the special inspection of the No. 11 auxiliary feedwater pump, other examples related to air in the containment sump piping; switchgear ventilation system problems; and non-conforming design temperature conditions in the Unit 2 reactor cavity annulus.

The NRC staff plans to perform Problem Identification and Resolution (PI&R) inspections annually over the next two years. The PI&R inspection is being conducted at an increased frequency at Calvert Cliffs because PI&R issues contributed to the Yellow finding that placed Unit 1 into the Degraded Cornerstone Column of the NRC's Action Matrix.

The enclosed inspection plan details the inspections scheduled through March 31, 2003. You should also note the scheduling of the steam generator replacement inspection (Inspection Procedure 50001) and the Independent Spent Fuel Storage Installation inspection (Inspection Procedure 60855). 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 schedule for the last six months of the inspection plan is tentative and may be revised at the Mid-Cycle Review meeting.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued safeguards advisories recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants, including Calvert Cliffs, remain at a high level of security. On February 25, 2002, the NRC issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim compensatory measures to address the generalized high-level threat environment. These additional compensatory requirements will provide the NRC with reasonable assurance that public health and safety and the common defense and security continue to be adequately protected in the current generalized high-level threat environment. These requirements will remain in effect pending notification from the Commission that a significant change in the threat environment occurs, or until the Commission determines that other changes are needed following a more comprehensive re-evaluation of current safeguards and security programs. To date, we have monitored Calvert Cliff's actions in response to the terrorist attacks through a series of audits. With the issuance of the Order, we will evaluate Calvert Cliff's compliance with these interim requirements.

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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

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 Michele G. Evans, Chief, Reactor Projects Branch 1, at 610-337-5224, with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA by
James T. Wiggins
Acting For/

Hubert J. Miller
Regional Administrator

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

Enclosure: Calvert Cliffs Inspection/Activity Plan

Charles H. Cruse

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cc w/encl: M. Geckle, Director, Nuclear Regulatory Matters (CCNPPI)
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J. Walter, Engineering Division, Public Service Commission of Maryland
K. Burger, Esquire, Maryland People's Counsel
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Calvert Cliffs
Inspection / Activity Plan
12/30/2001 - 03/31/2003

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	7111121 - SSDI		5			
1, 2	IP 7111121	Safety System Design and Performance Capability		01/14/2002	01/19/2002	Baseline Inspections
1, 2	IP 7111121	Safety System Design and Performance Capability		01/28/2002	02/01/2002	Baseline Inspections
	50001 - STEAM GENERATOR REPLACEMENT INSPECTION		5			
1	IP 50001	Steam Generator Replacement Inspection		01/01/2002	03/30/2002	Other Routine
	7112201 - PUB RAD SAFETY - RETS		1			
1, 2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		01/14/2002	01/18/2002	Baseline Inspections
	7111107B - HEAT SINK		1			
1, 2	IP 7111107B	Heat Sink Performance		01/21/2002	01/25/2002	Baseline Inspections
	7111102 - 7111102		1			
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		01/28/2002	02/01/2002	Baseline Inspections
	7111108 - INSERVICE INSPECTION		2			
1	IP 2515/145	Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles (NRC Bulletin :		03/18/2002	03/22/2002	Safety Issues
1	IP 7111108	Inservice Inspection Activities		03/18/2002	03/22/2002	Baseline Inspections
	71121 - OCC RAD SAFETY		1			
1	IP 50001	Steam Generator Replacement Inspection		03/11/2002	03/15/2002	Other Routine
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		03/11/2002	03/15/2002	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		03/11/2002	03/15/2002	Baseline Inspections
1, 2	IP 7112103	Radiation Monitoring Instrumentation		03/11/2002	03/15/2002	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		03/11/2002	03/15/2002	Baseline Inspections
	71130 - SECURITY		1			
1, 2	IP 7113001	Access Authorization Program (Behavior Observation Only)		04/08/2002	04/12/2002	Baseline Inspections
1, 2	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification and Authorizator		04/08/2002	04/12/2002	Baseline Inspections
	50001 - STEAM GENERATOR REPLACEMENT INSPECTION		4			
1	IP 50001	Steam Generator Replacement Inspection		04/01/2002	05/15/2002	Other Routine
	71121 - OCC RAD SAFETY		1			
1	IP 50001	Steam Generator Replacement Inspection		05/13/2002	05/17/2002	Other Routine
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		05/13/2002	05/17/2002	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		05/13/2002	05/17/2002	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		05/13/2002	05/17/2002	Baseline Inspections
	7/15 EXM - OPERATOR LICENSING INITIAL EXAMS		4			
1	U01442	CALVERT CLIFFS 1&2 O/L INITIAL EXAM 7/15-18/2002		06/17/2002	06/21/2002	Not Applicable
1	U01442	CALVERT CLIFFS 1&2 O/L INITIAL EXAM 7/15-18/2002		07/15/2002	07/19/2002	Not Applicable

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

Calvert Cliffs
Inspection / Activity Plan
12/30/2001 - 03/31/2003

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
71114 - EP PROGRAM REVIEW & EP PI VERIFICATION			1			
1, 2	IP 7111402	Alert and Notification System Testing		07/15/2002	07/19/2002	Baseline Inspections
1, 2	IP 7111403	Emergency Response Organization Augmentation Testing		07/15/2002	07/19/2002	Baseline Inspections
1, 2	IP 7111404	Emergency Action Level and Emergency Plan Changes		07/15/2002	07/19/2002	Baseline Inspections
1, 2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		07/15/2002	07/19/2002	Baseline Inspections
1, 2	IP 711151	Performance Indicator Verification		07/15/2002	07/19/2002	Baseline Inspections
71152B - PROBLEM IDENTIFICATION AND RESOLUTION			3			
1, 2	IP 71152B	Identification and Resolution of Problems		08/05/2002	08/09/2002	Baseline Inspections
1, 2	IP 71152B	Identification and Resolution of Problems		08/19/2002	08/23/2002	Baseline Inspections
60855 - ISFSI			1			
2	IP 60855	Operation Of An ISFSI		07/22/2002	07/26/2002	Other Routine
7111401 - EP EXERCISE EVALUATION			2			
1, 2	IP 7111401	Exercise Evaluation		09/09/2002	09/13/2002	Baseline Inspections
1, 2	IP 711151	Performance Indicator Verification		09/09/2002	09/13/2002	Baseline Inspections
7112103 - OCC RAD SAFETY - INSTRUMENTATION			1			
1, 2	IP 7112103	Radiation Monitoring Instrumentation		09/09/2002	09/13/2002	Baseline Inspections
7112203 - PUB RAD SAFETY - REMP			1			
1, 2	IP 7112203	Radiological Environmental Monitoring Program		10/21/2002	10/25/2002	Baseline Inspections
71121 - OCC RAD SAFETY			1			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		12/09/2002	12/13/2002	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		12/09/2002	12/13/2002	Baseline Inspections
711112B - MAINTENANCE RULE			1			
1, 2	IP 711112B	Maintenance Rule Implementation		12/16/2002	12/20/2002	Baseline Inspections
711117B - MODS			3			
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		12/16/2002	12/20/2002	Baseline Inspections
1, 2	IP 711117B	Permanent Plant Modifications		12/16/2002	12/20/2002	Baseline Inspections
71121 - OCC RAD SAFETY			1			
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		03/03/2003	03/07/2003	Baseline Inspections
7111108 - INSERVICE INSPECTION			2			
2	IP 2515/145	Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles (NRC Bulletin .		03/10/2003	03/14/2003	Safety Issues
2	IP 7111108	Inservice Inspection Activities		03/10/2003	03/14/2003	Baseline Inspections

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