

April 5, 2004

Mr. George Vanderheyden, Vice President  
Calvert Cliffs Nuclear Power Plant, Inc.  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 1 - REQUEST FOR  
ADDITIONAL INFORMATION RE: REQUEST FOR RELAXATION OF  
INSPECTION REQUIREMENTS OF ORDER EA-03-009 (TAC NO. MC1921)

Dear Mr. Vanderheyden:

In reviewing your submittal of January 30, 2004, concerning the subject proposed relaxation request to the Order EA-03-009, the Nuclear Regulatory Commission (NRC) staff determined that it needs additional information to continue its review. The NRC staff discussed the issue with your staff on March 17, 2004. As we indicated during our conversation, we are enclosing the request for additional information. You recognize that you desire our response to your request before the inspection during the upcoming refueling outage; therefore, we need your response as soon as practical in order to meet your date.

Sincerely,

*/RA/*

Guy S. Vissing, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-317

Enclosure: As stated

cc w/encl: See next page

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REQUEST FOR ADDITIONAL INFORMATION CONCERNING  
REQUEST FOR RELAXATION OF INSPECTION REQUIREMENTS  
OF ORDER EA-03-009 FOR  
CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 1  
DOCKET NO. 50-317

Relaxation Request 1:

1. Please provide the total number for each type of reactor pressure vessel head (RPVH) nozzles that are affected by this relaxation in Unit 1.
2. Please provide justification that coverage up to 0.75 inch above the weld will provide an adequate level of quality and safety. Are there residual stress data for Unit 1 that indicates that 0.75 inch is a sufficient level above the weld, or is there any other basis that demonstrates an acceptable level of quality and safety for the restricted inspections?
3. If the guide sleeves are removed, would there be additional geometric constraints on performing the examination required in the Order?
4. The Order allows either ultrasonic testing (UT) or a surface examination. The hardship is for UT only. For a similar situation for Unit 2, the licensee responded to a request for additional information by indicating that there was a contractor that could provide the capability to deliver an eddy current probe to the region where access is limited. However, that contractor was not available for Unit 2 during its 2003 outage. Discuss why the licensee is not proposing the use of eddy current examination for Unit 1. If the eddy current inspections could be performed, there would be no need for relaxation of the Order.
5. Is the 10-million dollar cost just for the removal of the thermal guide sleeves? Please expand on what this estimate includes.
6. Did the licensee perform a crack growth evaluation above the weld? If so, what was the initial flaw size and was it through wall? The licensee is requested to describe the methodology in detail, and provide examples for the crack growth calculations. Did the licensee perform this evaluation in accordance with the MRP-55 guidelines? Did the licensee perform the evaluation, or was it performed by a contractor? Was the crack growth evaluation based on the as-built weld geometry? Please provide justification if the crack growth evaluation was not based on the as-built weld geometry.

It should be noted that in its Safety Evaluation (SE) dated April 18, 2003, the NRC staff understood that the licensee demonstrated hardship to perform certain Order inspections for the Unit 2 2003 outage due to the timing of the issuance of the Order. However, the staff also recognized and stated in the SE that the licensee did not demonstrate a hardship for Unit 1 or for subsequent Unit 2 outages.

#### Relaxation Request 2

1. What is the maximum hoop stress in the bottom portion of the nozzle. Please provide crack growth predictions for through wall axial flaws located at various angles in the control element drive mechanism's.
2. What are the yield strengths and heat numbers of the material used in Unit 1?
3. Was the crack growth rates assessed using MRP-55? What was the initial flaw size used? Please provide more detail of what was used in the calculations and what assumptions were used. The licensee is requested to describe the methodology in detail and provide examples for the crack growth calculations. Was the crack growth evaluation based on the as-built weld geometry? If not, please provide justification if the crack growth evaluation was not based on the as-built weld geometry.
4. What is the distance from below the J-groove weld to the area of the nozzle that cannot be inspected?

Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2

cc:

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