

July 3, 2007

Mr. James A. Spina, 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 NOS. 1 AND 2 -
REQUEST FOR ADDITIONAL INFORMATION REGARDING REVISION TO
CONTAINMENT SUMP SURVEILLANCE REQUIREMENT TO VERIFY
STRAINER INTEGRITY (TAC NOS. MD4237 AND MD4238)

Dear Mr. Spina:

By letter dated February 1, 2007, Calvert Cliffs Nuclear Power Plant, Inc. (the licensee) requested an amendment to revise its containment sump surveillance requirement to verify strainer integrity at the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information provided and has determined that additional information is needed to complete its review. Enclosed is the NRC staff's request for additional information (RAI). As discussed with your staff, we understand that you intend to respond to the RAI within 45 days of receipt of this letter.

If you have any questions, please contact me at 301-415-1364.

Sincerely,

/RA/

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure:
As stated

cc w/encl: See next page

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

cc:

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REQUEST FOR ADDITIONAL INFORMATION

REVISION TO CONTAINMENT SUMP SURVEILLANCE REQUIREMENT

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-317 AND 50-318

MECHANICAL AND CIVIL ENGINEERING BRANCH

1. Provide information showing the layout of the new strainer arrangement and its support system.
2. Provide the summary of evaluations performed by the licensee to show the structural adequacy of the new strainer design and its support system for the applicable loadings such as dead weight, differential pressure, thermal, seismic, and dynamic loadings.
3. Provide a summary of evaluations performed for the new strainer design acceptability from the consideration of dynamic effects associated with any potential high energy line breaks, pipe whip, jet impingement, and missile impact.

SAFETY ISSUES RESOLUTION BRANCH

1. In the license amendment request, the licensee stated that “although the configurations of the existing trash racks and screens and the replacement sump strainer assemblies are different, they serve the same fundamental purpose.” What are the bases to conclude that the trash racks and screen functions are retained in the replacement strainer? How is the design function of the removed trash racks addressed in the new design?
2. Does the strainer replacement represent a change from two independent sumps to a shared sump? If so, please justify the change.
3. How will Calvert Cliffs ensure that all parts of the strainers show no evidence of structural distress or abnormal corrosion and are not restricted by debris? How will Calvert Cliffs ensure that the strainers will not incur undetected latent damage (e.g., from maintenance or operations activities on or in the vicinity of the strainers) that could adversely impact the strainer’s performance?
4. The installation of the new containment sump strainer increases the metal heat sink mass in containment. Does this metal heat sink mass increase impact the containment long-term pressure transient in the loss-of-coolant accident analyses? If so, please explain how.

Enclosure