



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 24, 2009

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: REQUEST FOR ADDITIONAL INFORMATION RE: LICENSE AMENDMENT
FOR MEASUREMENT UNCERTAINTY RECAPTURE POWER UPRATE -
CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 -
(TAC NOS. MD9554 AND MD9555)

Dear Mr. Spina:

By letter dated August 29, 2008, Calvert Cliffs Nuclear Power Plant, Inc., the licensee, proposed to increase the authorized core power level of its Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, from 2700 megawatts thermal (MWt) to 2737 MWt.

By letter dated February 18, 2009, the licensee responded to the Nuclear Regulatory Commission (NRC) staff's request for additional information dated October 3, 2008. The staff has reviewed this latest submittal and concludes that additional clarification is needed as described in the enclosed request for additional information.

Based upon discussions with your staff, we understand that you plan to respond to the enclosure within 60 days from the date of this letter. Please contact me at 301-415-1364 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Douglas V. Pickett".

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: Distribution via Listserv

REQUEST FOR SUPPLEMENTAL INFORMATION

CALVERT CLIFFS NUCLEAR POWER PLANT, INC.

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

REQUEST FOR MEASUREMENT UNCERTAINTY RECAPTURE UPDATE

1. With regard to Caldon Ultrasonics Engineering Report ER-507, "Bounding Uncertainty Analysis for Thermal Power Determination at Calvert Cliffs Using the LEFM CheckPlus System," Rev. 2, Appendix C, Page 5, Table I, please respond to the following:
 - a) Why doesn't Table I include the uncertainty of Steam Enthalpy as included on Page 6 and Page A-41 of Caldon, Inc. Engineering Report ER-157P, "Supplement to Topical Report ER-80P: Basis for a Power Uprate with the LEFM \sqrt{TM} or LEFM CheckPlusTM System," Rev. 4, October 2001?
 - b) Please describe and show how the values $\pm 0.11\%$ (item b), and $\pm 0.15\%$ (item c) in the last column of Table I of ER-507 were calculated.
2. Please explain the relationship between the tables on Page 33 (or Page 34, 35) of BG&E Calculation CA06945, Rev 1, and Table I on Page 5 of Appendix C of ER-507 Rev 2. For example, which items in Table I were used for calculating the value of 0.442% (Total Neg dQ) in the Total Heat Balance Uncertainty Table on Page 33 of CA06945 or vice versa?
3. On Page 13 of CA06945, the table associated with Assumption 6.1 includes extrapolated values for the 100% rated thermal power (RTP) of uprated power using the licensed RTP data from September through December, 2008. Please describe and provide an example how these extrapolated values were calculated. What is the range of varying %RTP used during those 3 months?
4. In the response to RAI question 2b):

On Page 2 of Attachment 1 to the RAI response dated February 18, 2009, it is stated that the uncertainty contribution from the analog to digital converter of pressure instrument cannot exceed 13.79 psi. No uncertainty calculation of the analog to digital converter was provided. Please provide the total loop uncertainty analysis and calculation for this pressure instrument including the analog to digital converter.

Enclosure

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Sincerely,
/RA/

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

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