

MEMORANDUM TO:

FROM:

SUBJECT: RECOMMENDED ACTION IN RESPONSE TO THE NRC STAFF
EVALUATION OF USING THE CROSSFLOW ULTRASONIC
FLOWMETER TO DETERMINE FEEDWATER FLOW RATE AND TO
ACHIEVE INCREASED THERMAL POWER

REFERENCES: (1) "Improved Flow Measurement Accuracy Using Crossflow Ultrasonic
Flow Measurement Technology," ABB Combustion Engineering, CENPD-
397-P-A, ML052070504, May 31, 2000. (Proprietary)

(2) Gresham, James A., "CROSSFLOW Ultrasonic Flow Measurement
System Standard and Non-Standard Installations (Proprietary / Non-
proprietary)," Letter to NRC from Manager, Regulatory Compliance and
Plant Licensing, Westinghouse Electric Company, LTR-NRC-06-35, May
31, 2006.

In the attached NRC staff assessment, the we find that (1) the existing previously approved
Reference 1 topical report is no longer acceptable as a basis for using CROSSFLOW to
determine feedwater flow rate, (2) a basis has not been established for such use that
acceptably addresses the issues discussed in the assessment, and (3) CROSSFLOW is not
acceptable for use in determination of feedwater flow rate for either measurement uncertainty
recapture power uprate (MUR) or power recovery (PR) purposes. Therefore, we recommend
issuing an order requiring that licensees stop using CROSSFLOW until the issues have been
acceptably resolved.

Reference 2 stated that the following (b)(4) licensees use or plan to use CROSSFLOW for PR by
applying 10 CFR 50.59:

(b)(4)

and the following (b)(4) use or plan to use CROSSFLOW for MUR under 10 CFR 50.92 requests
for license amendments:

(b)(4)

Information in this record was deleted in
accordance with the Freedom of Information Act.
Exemptions 4
FOIA/PA 2008-0046

N-1

The Calvert Cliffs and Ft. Calhoun MUR amendment requests are before the NRC staff for review and these can be addressed by rejecting the requests. No order is necessary. Orders should be issued to the other licensees, including Calvert Cliffs for use of CROSSFLOW in PR.

Attachment As Stated

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