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From: Warren Lyon
To: John Nakoski; Timothy Collins
Date: Wed, Oct 11, 2006 11:06 AM
Subject: Request from Jerry

I just sent the attachment to Jerry and Tom at Jerry's request. This is the package we sent to Allen yesterday for concurrence.

N-17

September , 2006

MEMORANDUM TO: Ho Nieh, Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Thomas O. Martin, Director,
Division of Safety Systems
Office of Nuclear Reactor Regulation

SUBJECT: NRC STAFF ASSESSMENT OF THE WESTINGHOUSE / ADVANCE MEASUREMENT AND ANALYSIS GROUP (W/AMAG) CROSSFLOW ULTRASONIC FLOWMETER (UFM)

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

We have completed our reassessment of the CROSSFLOW UFM topical report. The NRC staff finds that (1) the use of the CROSSFLOW calibration factor derived from laboratory testing is not acceptable; (2) the use of in-situ (in-plant) calibration, as currently described in the topical report, is not sufficiently detailed to serve as a basis for future licensing submittals and is not traceable to a national standard; (3) the ranges of flows and plant configurations that define where CROSSFLOW can be used, as currently described in the topical report, were not adequately described; and (4) as currently described in the topical report, the description of the installation and use of CROSSFLOW was not consistent with the actual calibration and commissioning practices necessary to establish reasonable assurance that CROSSFLOW would function as expected within the claimed uncertainty. Accordingly, pending a revision to the topical report that addresses these concerns, the previously approved CENPD-397-P topical report is not acceptable as a basis for future licensing actions using CROSSFLOW to determine feedwater flow rate and NRC staff approval of the topical report should be withdrawn.

We recommend that you transmit the enclosed letter to Westinghouse to inform them of our findings.

CONTACT: Warren Lyon
301-415-2897

Enclosure: As stated

DISTRIBUTION: SPWB/RF I. Ahmed T. Alexion A. Howe C. Jackson
A. Marinos J. Jolicoeur W. Lyon J. Nakoski S. Rosenberg J. Thompson
J. Wermiel

ACCESSION NUMBER:

OFFICE	DSS/SPWB	DSS/SLS	BC/DSS/SPWB	BC/DE/EICB	BC/DORL	DD/DSS	D/DSS
NAME	WLyon	TCollins	JNakoski	AHowe	AMarinos	JWermiel	TMartin
DATE	9/ 20 /06	9/ 20 /06	9/ 20 /06	9/ /06	9/ /06	9/ /06	9/ /06

C:\temp\Crossflow TR withdrawal memor5.wpd

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Pages 4 through 14 redacted for the following reasons:

(b)(4); (b)(5)