

August 17, 2000

MEMORANDUM TO: Marsha Gamberoni, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

FROM: Timothy G. Colburn, Senior Project Manager, Section 1 */RA/*
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: THREE MILE ISLAND UNIT 1 (TMI-1) – ELECTRONIC
TRANSMISSION, ISSUES TO BE DISCUSSED WITH THE
LICENSEE REGARDING S/G KINETIC EXPANSION INSPECTION
ACCEPTANCE CRITERIA (TAC NO. M99388)

The staff held a meeting with GPU Nuclear, Inc., on July 25, 1997, to discuss the licensee's proposed TMI-1 Once-Through Steam Generator (OTSG) Kinetic Expansion Inspection Acceptance Criteria (current TMI-1 Technical Specifications only require the licensee to inspect the free span region of the OTSG tubes). The licensee provided its criteria by formal letter dated August 8, 1997. The licensee provided a copy of its MPR Associates Report, MPR-1820, Rev. 0, "TMI Nuclear Generating Station OTSG Kinetic Expansion Inspection Criteria Analysis," by letter dated September 8, 1997, and a copy of Rev. 0 of GPU Nuclear, Inc., Topical Report 116, "Leakage Assessment Methodology for TMI OTSG Kinetic Expansion Examination," by letter dated November 26, 1997. The NRC staff requested additional information on June 17, 1999, to which the licensee responded by letters dated July 30, and September 22, 1999. The licensee also provided Rev. 1 to MPR-1820 by letter dated August 20, 1999. Conference calls were held with the licensee on January 13 and 27, 2000, to which the licensee responded on January 14, and February 4, 2000. The staff is reviewing the information provided by the licensee and has developed a number of questions (attached). These were transmitted electronically to the licensee on August 10, 2000. This memorandum and the attached document (proposed request for additional information) do not currently state an NRC staff position and do not formally request information. The staff discussed disposition of the questions in the attachment with licensee personnel in a phone call on August 10, 2000.

Docket No. 50-289

Attachment: As stated

CONTACT: T. Colburn, NRR
301-415-1402

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PROPOSED REQUEST FOR ADDITIONAL INFORMATION
THREE MILE ISLAND, UNIT 1
S/G KINETIC EXPANSION INSPECTION ACCEPTANCE CRITERIA
DOCKET NO. 50-289

1) In the spring of 2000 NRC identified two generic B&W (Babcock and Wilcox) SG (steam generator) issues summarized below. How is the TMI kinetic expansion structural integrity/leakage integrity issue affected by these two issues?

a) B&W did not consider the most limiting accident scenario (break in the "candy cane" portion of the piping). We are aware that this issue is being handled generically by the B&WOG, and there is a risk assessment in-house with the NRC to address this issue. The NRC review is ongoing. Does this issue affect TMI/KE repair criteria?

b) Leak-before-break (LBB) was approved generically for B&W plants back in the 1980's. In 1990, B&W began taking credit for LBB in order to ignore thermal loads in steam generator tubes. This is inappropriate. How is TMI/KE repair criteria affected by this issue?

2) During a 1/27/00 conference call with TMI, they stated that the original design basis loads were used for the structural assessment, but were not used for the leakage assessment. They indicated that different loads were used, and these loads were reviewed and approved by the NRC in 1997. They referenced license amendment request #269 (initial Amergen submittal dated 8/14/97, NRC dated 10/2/97). This was a license amendment to reduce the TS maximum allowable does equivalent iodine-131 limit. NRC staff has reviewed the related documents, and did not identify a submittal requesting a change in design basis loads, and also did not identify NRC approval of a change in design basis loads. Be prepared to discuss further.

3) Amergen recently told NRC staff (Tim Colburn) that they will soon be submitting their planned SG inspection scope for the next TMI SG inspection. Amergen also indicated that if the SG industry initiative (NEI 97-06) is reviewed/approved by NRC in time for their upcoming inspection, the inspection scope may be revised. Please discuss the potential changes that could be submitted.

4) NRC will discuss status of their review of the KE repair criteria.