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November 21, 1995 C311-95-2486 (717) 948-8005

U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

Gentlemen:

Subject:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)

Operating License No. DPR-50

Docket No. 50-289

Additional Information in Response to Generic Letter (GL) 95-03

"Circumferential Cracking of Steam Generator Tubes"

On April 28, 1995, the NRC issued GL 95-03 which requested that addressees evaluate their recent operating experience related to circumferential cracking, justify continued operation until their next scheduled steam generator tube inspections, and to develop plans for their next steam generator tube inspections. GPU Nuclear submitted a response to the GL on June 20, 1995 and responded to a request for additional information on October 30, 1995. It is noteworthy that our letter of October 30, 1995 incorporated the results from recent inspections as committed to in our initial response to the GL.

In response to a second NRC request for additional information dated October 27, 1995, this letter confirms that terrain plots were used routinely during the Cycle 10 (10R) examinations in 1993 to analyze the rotating pancake probe (RPC) eddy current data and more specifically during the 11R examinations in September 1995 where RPC was used to examine those locations most likely to be susceptible to circumferential cracking.

Sincerely,

J. Knubel

Vice President and Director, TMI

MRK Attachments

cc:

Administrator, Region I
TMI-1 Senior Project Manager
TMI Senior Resident Inspector

A001

## GPU Nuclear Response a Second NRC Request for Additional Information Regarding Generic Letter 95-03

## NRC Question:

During the Maine Yankee outage in July/August 1994, several weaknesses were identified in their eddy current program as detailed in NRC Information Notice 94-88, "Insertice Inspection Deficiencies Result in Severely Degraded Steam Generator Tubes." In Information Notice 94-88, the staff observed that several circumferential indications could be traced back to earlier inspections when the data was reanalyzed using terrain plots. These terrain plots had not been generated as part of the original field analysis for these tubes. For the rotating pancake coil (RPC) examinations performed at your plant at locations susceptible to circumferential cracking during the previous inspection (i.e., previous inspection per your Generic Letter 95-03 response), discuss the extent to which terrain plots were used to analyze the eddy current data. If terrain plots were not routinely used at locations susceptible to circumferential cracking, discuss whether or not the RPC eddy current data has been reanalyzed using terrain mapping of the data. If terrain plots were not routinely used during the outage and your data has not been reanalyzed with terrain mapping of the data, discuss your basis for not reanalyzing your previous RPC data in light of the findings at Maine Yankee.

Discuss whether terrain plots will be used to analyze the RPC eddy current data at locations susceptible to circumferential cracking during your next steam generator tube inspection (i.e., the next inspection per your Generic Letter 95-03 response).

## GPU Nuclear Response:

The GPU Nuclear eddy current analysis guidelines used during the recent TMI-1 Cycle 11 Refueling (11R) Outage (September 8, 1995 through October 13, 1995) required, as a minimum, terrain plotting of all RPC data using the base frequency (300 kHz) whether the data was being used for circumferential crack detection or confirmation of bobbin coil indications. In addition to terrain plotting, the guidelines required the use of lissajous and strip chart displays to ensure that all tube wall degradation was detected and recorded. GPU Nuclear completed the examination commitments in response to GL 95-03 during the 11R Outage.

Analysis guidelines required routine terrain mapping of RPC data during the 10R Outage in September 1993. Therefore reanalysis of previous RPC data is not necessary.

## METROPOLITAN EDISON COMPANY JERSEY CENTRAL POWER AND LIGHT COMPANY PENNSYLVANIA ELECTRIC COMPANY GENERAL PUBLIC UTILITIES NUCLEAR CORPORATION

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289

Additional Information in Response to NRC Generic Letter 95-03

This letter is submitted in response to a second NRC request for additional information regarding Generic Letter 95-03, "Circumferential Cracking of Steam Generator Tubes." All statements contained in this response have been reviewed, and all such statements made and matter set forth therein are true and correct to the best of my knowledge.

J. Knubel

Vice President and Director, TMI

Signed and sworn before me this

21st day of 4 Journber, 1995.

Notary Public

Notarial Seal
Debra S. Klick, Notary Public
Londonderry Twp., Dauphin County
My Commission Expires July 4, 1998

Member, Pennsylvania Association of Notaries