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1920-99-20053

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

Ladies and Gentlemen:

Subject: Three Mile Island Nuclear Station, Unit 1 (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289  
10 CFR 50.46 Report on Significant PCT Change in ECCS Analyses

On January 6, 1999, GPU Nuclear was informed by Framatome Technologies Incorporated (FTI) that Babcock & Wilcox 177-FA Lowered Loop (LL) plant large break loss of coolant accident (LBLOCA) analyses supporting current plant operation have nonconservative peak cladding temperature (PCT) predictions. The emergency core cooling system ECCS analyses performed with the BWNT LOCA Evaluation Model (BAW-10192P-A) underpredicted the PCTs because the most limiting reactor coolant pump (RCP) type and two-phase degradation model were not used. FTI reanalysis with the most limiting RCP parameters indicates that the calculated PCT can increase by more than 50° F. Pursuant to 10 CFR 50.46(a)(3)(ii), GPU Nuclear is notifying the NRC of a significant change in the calculated PCT within 30 days of discovery. 1/0 0001

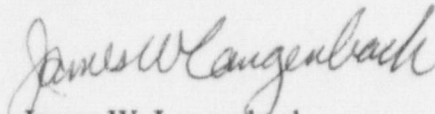
TMI-1 continued compliance to the 10 CFR 50.46(b)(1) PCT limit of 2200° F has been demonstrated by the FTI analysis of the most limiting plant, time in life, and fuel design with the most limiting RCP inputs. FTI has determined that the maximum PCT inclusive of all identified penalties and credits is 2150° F. Additionally, the TMI-1 LOCA application analyses for the Mark-B9 fuel LHR limits have used a conservatively low initial pressurizer liquid inventory which has resulted in TMI-1 reported PCTs approximately 80° F to 100° F higher than would be produced with a nominal pressurizer inventory. Therefore, the revised TMI-1 maximum PCT is estimated to be less than 2150° F. This PCT change is not considered to be a reportable event as described in 10 CFR 50.55(e), 50.72 or 50.73 since continued conformance with the criteria of 10 CFR 50.46(b) has been established by FTI.

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FTI is performing TMI-1 specific reanalysis to determine the new PCT for TMI-1. This reanalysis is scheduled to be completed by FTI no later than April 1, 1999. GPU Nuclear will notify the NRC of the results of this reanalysis within ten (10) days of receipt from FTI. This reanalysis will also determine the affect on the proposed TMI-1 LHR limits and calculated PCTs reported in pending Technical Specification Change Request No. 279, submitted to the NRC on December 3, 1998.

If any additional information is needed, please contact Mr. David J. Distel, Nuclear Licensing and Regulatory Affairs at (973) 316-7955.

Sincerely,



James W. Langenbach  
Vice President and Director, TMI

/DJD

cc: Administrator, Region I  
TMI-1 Senior Project Manager  
TMI-1 Senior Resident Inspector  
File No. 95042