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September 18, 1989

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Subject: McGuire Nuclear Station
Docket Nos. 50-369 and 50-370
NUREG-0737 Item II.D.1, Performance Testing of Relief and Safety Valves
NRC Review/Technical Evaluation Report - Response Supplement Schedule
(TACS 44593 and 54601)

Gentlemen:

My letter of June 16, 1989 addressing Item 8a deficiencies noted in the NRC's Technical Evaluation Report (TER) of the McGuire Nuclear Station response to NUREG-0737 Item II.D.1, "Performance Testing of Relief and Safety Valves", noted that an error had been identified in the existing thermal hydraulic analysis (SLUGGER computer program) which invalidated the existing structural calculation results for the piping downstream of the pressurizer safety valves. It was indicated that Duke had reviewed the impact of the load changes due to this error on the structural analysis for the system and found that the system remained operable but was not in full compliance with the ASME Code, and that Duke was reviewing reanalysis/field modification alternatives to bring the system within ASME Code compliance. My letter also stated that while it was intended that information regarding this ASME Code compliance would be included in the previously committed to December 1, 1989 response addressing the results of combining seismic with the original analysis results (i.e. the Items 7 and 8b TER requested additional information), that schedule might change due to the increase in scope resulting from the SLUGGER error and if so the NRC would be advised accordingly.

As a result of the above mentioned reanalysis/field modification review, Duke has entered into a contract with B&W Corporation to reperform the thermal hydraulic analysis using the RELAP 5 computer code. Several alternatives will be modeled as part of this reanalysis. It should be noted that, as discussed in my June 16th letter, Duke still maintains that the corrected version of the current thermal hydraulic calculations using the vendor codes (EDSFLOW and SLUGGER 2) is a reasonable method to predict response of downstream piping due to a lift of the code safety valves and passage of the seal water slug. However, Duke believes the corrected SLUGGER code is overly conservative. Further, based on conversations with NRC staff, the RELAP code is preferred by the NRC.

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Consequently, due to the complexity and additional scope of work resulting from the SLUGGER Code error, the previously indicated December 1, 1989 date for completing a thermal hydraulic and structural reanalysis for the piping downstream of the code safety valves cannot be met. B&W has committed to provide the thermal hydraulic results by February 17, 1990. An assessment of these results by Duke including any additional actions required will be submitted to the NRC by March 19, 1990. This response, addressing the Items 7 and 8b additional information requests will include the information regarding ASME code compliance.

Should there be any questions concerning this response/schedule or if further information is desired, contact Bruce Nardoci at (704) 373-7432.

Very truly yours,

J W Hampton
for

Hal B. Tucker

PBN183/lcs

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