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June 4, 1984 5211-84-2138

Office of Nuclear Reactor Regulation Attn: John F. Stolz, Chief Operating Reactors Branch No. 4 U. S. Nuclear Regulatory Commission Washington, D.C. 20555

Dear Mr. Stolz:

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

In accordance with telephone discussions on May 10, 1984, enclosed please find a tabulation of stresses for the B Main Feedwater (MFW) Line in the Intermediate Building as requested by the NRC Staff. This table shows that the non-seismic portion of the line in the Intermediate Building has seismic resistance. This MFW line was recently checked during the TMI-1 I.E. Bulletin 79-14 and 79-02 review, which considered effects of Safe Shutdown Earthquake (SSE). This analysis included internal pressure stress which was originally considered together with deadweight in the computer evaluation.

Sincerely,

Director, TMI-1

HDH/CWS/mle

Attachment

cc: J. Van Vliet

R. Conte

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TABLE 1

B MAIN FEEDWATER LINE STRESSES IN THE INTERMEDIATE BUILDING

Stress (Psi)	Allowable (Psi)	% of Allow for Thermal	Th + DW + SSE + Press(Psi)	Allowable .8(Sa+Sh) (Psi)	Secondary Stress Allowable
2698	18000	14.99	20367	30000	67.89
3057	18000	16.98	13540	30000	45.13
5210	18000	28.9	14467	30000	48.22
3791	18000	21.06	18006	30000	60.02
4015	18000	22.30	18868	30000	62.89
	2698 3057 5210 3791	2698 18000 3057 18000 5210 18000 3791 18000	2698     18000     14.99       3057     18000     16.98       5210     18000     28.9       3791     18000     21.06	2698     18000     14.99     20367       3057     18000     16.98     13540       5210     18000     28.9     14467       3791     18000     21.06     18006	2698     18000     14.99     20367     30000       3057     18000     16.98     13540     30000       5210     18000     28.9     14467     30000       3791     18000     21.06     18006     30000

\*Please note that .8 (Sa + Sh) {Giambusso Criteria} is not a Code Allowable stress recognized by any design code. It is a reference stress in Reg. Guide 1.46 to flag the analysts that if the Primary & Secondary Stresses equal this value or exceeds the point must be investigated for high energy line break (HELB).

Th = Thermal Stress
DW = Dead Weight Stress

SSE = Safe Shutdown Earthquake Stress

Press = Internal Pressure Stress