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175 EAST OLD COUNTRY ROAD · HICKSVILLE, NEW YORK 11801

ANDREW W. WOFFORD
VICE PRESIDENT

SNRC-70

November 25, 1975

Mr. J. F. Stolz, Chief
Light Water Reactors Branch 2-1
Division of Reactor Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

BWR Mark II Containment
Shoreham Nuclear Power Station - Unit 1
Docket #50-322

Dear Mr. Stolz:

In your April 18 and 21, 1975 letters to us, you requested that we provide further information on the adequacy of the Mark II containment for the Shoreham Nuclear Power Station with respect to recently identified hydrodynamic loads. In Attachment "A" of our June 3, 1975 letter, we provided to you our schedule consisting of five items for conducting an assessment of our containment structures.

Item 1, Suppression Pool and Relief Valve Piping Drawings, was submitted to you by letter dated July 30, 1975.

Item 2 and a portion of Item 3 are covered by the Mark II Containment Dynamic Forcing Function Information Report (DFFR) NEDO-21061 and NEDE-21061P. The DFFR was transmitted by General Electric letter from I. F. Stuart to R. Boyd dated October 24, 1975. It was submitted later than expected due to additional technical efforts required for a more complete report and the inclusion of phenomenalogical information on pool temperature monitoring.

Item 4, our plant unique containment assessment report, is now expected to be submitted in January 1976 as a result of the above delay. We also expect to complete and include the description of the suppression pool temperature monitoring system in that report.

Item 5, an outline and schedule for the Mark II Supporting Program, was presented to NRC on June 30, 1975, by the Mark II Owners and confirmed by our August 25, 1975 letter to you. The status of this Program is as follows. For the LOCA Related Activities, Item A.3 (Impact Tests on Pool Internal Structures) and Item A.4 (Qualification of Impact Model), General Electric has submitted reports NEDE-13426-P and NEDC-20989-2P (Vol. II) respectively. For the Safety Relief Valve Related Activity, Item B.2 (Relief Valve Pipe Clearing Model for Ramshead) General Electric has submitted reports NEDO-20942 and NEDE-20942P concerning modeling and NEDO-21062 and NEDE-21062P concerning test comparisons.

The attached table of load factors will be used to evaluate the Shoreham Nuclear Power Station Containment as discussed with you at our August 21, 1975 meeting. This table identifies the numerical values and is complimentary to Table 5.2-1 in the DFFR.

In conclusion, this letter will serve to reference the above described documents on the Shoreham docket. Moreover, as a member of the Mark II Owners Group, we will be closely following the activities of the Supporting Program and keep you advised of progress. Any reports, data or analyses which become available during the Program, will be forwarded to the NRC through appropriate channels.

Very truly yours,

A. W. Wofford
Vice President

Attachment

ATTACHMENT
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LOAD COMBINATION FOR MARK II CONTAINMENTS CONSIDERING HYDRODYNAMIC LOADS

EQN.	LOAD COND.	D	L	F	P_o	T_o	R_o	E_o	E_{ss}	P_B	P_A	T_A	R_A
1	Normal w/o Temp	1.4	1.7	1.0	1.0	-	-	-	-	-	-	-	-
2	Normal w/Temp	1.0	1.3	1.0	1.0	1.0	1.0	-	-	-	-	-	-
3	Normal Ser. Env.	1.0	1.0	1.0	1.0	1.0	1.0	1.25	-	-	-	-	-
4	Abnormal	1.0	1.0	1.0	-	-	-	-	-	1.25	-	1.0	1.0
4a	Abnormal	1.0	1.0	1.0	-	-	-	-	-	-	1.25	1.0	1.0
5	Abnormal Sev. Env.	1.0	1.0	1.0	-	-	-	1.1	-	1.1	-	1.0	1.0
5a	Abnormal Sev. Env.	1.0	1.0	1.0	-	-	-	1.1	-	-	1.1	1.0	1.0
6	Normal Ext. Env.	1.0	1.0	1.0	1.0	1.0	1.0	-	1.0	-	-	-	-
7	Abnormal Ext. Env.	1.0	1.0	1.0	-	-	-	-	1.0	1.0	-	1.0	1.0
7a	Abnormal Ext. Env.	1.0	1.0	1.0	-	-	-	-	1.0	-	1.0	1.0	1.0

LOAD DESCRIPTION

D = Dead Loads

L = Live Loads

F = Prestressing Loads

T_o = Operating Temperature Loads

R_o = Operating Pipe Reactions

P_o = Operating Pressure Loads

SRV = Safety/Relief Valve Loads

E_o = Operating-Basis Earthquake

E_{ss} = Safe Shutdown Earthquake

P_B = SBA or IBA Pressure Load

P_A = DBA (LOCA) Pressure Load

T_A = Pipe Break Temperature Load

R_A = Pipe Break Temperature Reacti

R_r = Reaction and jet forces assoc with the pipe break