

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 13450

FILE: _____

FROM: PP&L Allentown, PA. N.W. Curtis	DATE OF DOC 11-25-75	DATE REC'D 11-28-75	LTR XXX	TWX	RPT	OTHER
TO: Walter R. Butler	ORIG 1 Signed	CC 0	OTHER	SENT NRC PDR SENT LOCAL PDR		XXX XXX
CLASS UNCLASS XXX	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-387(388)		

DESCRIPTION:
Letter re. their letter of 4-17 and 23-75.
Letter providing additional info. on the adequacy of the Mark II Containment for Susquehanna Steam Elec. Station... W/Attached status program...

ENCLOSURES:

(1 Copy Received)

PLANT NAME: Susquehanna # 1 & 2

FOR ACTION/INFORMATION

SAB 12-3-75

BUTLER (L) W/Copies	SCHWENCER (L) W/ Copies	ZIEMANN (L) W/ Copies	REGAN (E) W/ Copies	REID (L) W/ COPIES
CLARK (L) W/ Copies	STOLZ (L) W/ Copies	DICKER (E) W/ Copies	LEAR (L) W/ Copies	
PARR (L) W/Copies	VASSALLO (L) W/ Copies	KNIGHTON (E) W/ Copies	SPIES W/ Copies	
KNIEL (L) W/ Copies	PURPLE (L) W/ Copies	YOUNGBLOOD (E) W/ Copies	LPM W/ Copies	

INTERNAL DISTRIBUTION

<u>REG FILE</u> NRC PDR	<u>TECH REVIEW</u> SCHROEDER	DENTON	<u>LIC ASST</u> R. DIGGS (L)	<u>A/T IND.</u> BRAITMAN
OGC, ROOM P-506A	MACCARY	GRIMES	H. GEARIN (L)	SALTZMAN
GOSSICK/STAFF	KNIGHT	GAMMILL	E. GOULBOURNE (L)	MELTZ
CASE	PAWLICKI	KASTNER	P. KREUTZER (E)	
GIAMBUSSO	SHAO	BALLARD	J. LEE (L)	<u>PLANS</u> KREUTZER
BOYD	STELLO	SPANGLER	M. RUSHBROOK (L) (Ltr)	MCDONALD
MOORE (L)	HOUSTON	<u>ENVIRO</u>	S. REED (E)	CHAPMAN
DEYOUNG (L)	NOVAK (S)	MULLER	M. SERVICE (L)	DUBE (Ltr)
SKOVHOLT (L)	ROSS	DICKER	S. SHEPPARD (L)	E. COUPE
GOLLER (L) (Ltr)	IPPOLITO	KNIGHTON	M. SLATER (E)	PETERSON
P. COLLINS	TEDESCO	YOUNGBLOOD	H. SMITH (L)	HARTFIELD (2)
DENISE	J. COLLINS	REGAN	S. TEETS (L)	KLECKER
REG OPR	LAINAS	PROJECT LDR	G. WILLIAMS (E)	EISENHUT
FILE & REGION (2)	BENAROYA	BARBER	V. WILSON (L)	WIGGINTON
MIPC	VOLLMER	WARLESS	R. INGRAM (L)	Varga Hughes
			M. DUNCAN (E)	

EXTERNAL DISTRIBUTION

- ✓ LOCAL PDR Wilkes Barre, Pa.
- ✓ TIC (ABERNATHY) (1)(2)(10) - NATIONAL LABS
- ✓ NSIC (BUCHANAN) 1 - W. PENNINGTON, Rm E-201 GT
- 1 - ASLB 1 - CONSULTANTS
- 1 - Newton Anderson NEWMARK/BLUME/AGBABIAN
- ✓ ACRS HOKKINDX/SENT to L.A. M. Rushbrook
- 1 - PDR-SAN/LA/NY
- 1 - BROOKHAVEN NAT LAB
- 1 - G. ULRIKSON ORNL

m4
PL



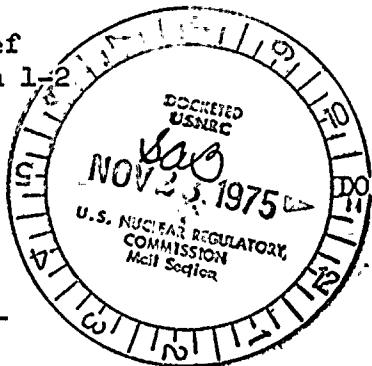
TWO NORTH NINTH STREET, ALLENTOWN, PA. 18101 PHONE: (215) 821-5151

November 25, 1975

Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Dr. Walter R. Butler, Chief
Light Water Reactor Branch 1

SUSQUEHANNA STEAM ELECTRIC STATION
MARK II CONTAINMENT - DYNAMIC FORCING
FUNCTION INFORMATION REPORT
ER 100450 FILE 172
PLA-89



Regulatory

File Cya

DOCKET NOS. 50-387 and
50-388

Dear Dr. Butler:

In your April 17 and 23, 1975 letters to PP&L, you requested that we provide further information on the adequacy of the Mark II containment for Susquehanna SES (SSES) with respect to recently identified hydrodynamic loads. In the attachment to our June 5, 1975 letter, we provided you with our program and schedule for conducting an assessment of the containment structures.

Item 1 of the attachment was submitted to you on August 7, 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 GE letter from I.F. Stuart to R. Boyd dated October 24, 1975, and contains phenomena descriptions which will be used to evaluate the Mark II containment on SSES. This report was submitted later than expected due to additional technical efforts required to complete the DFFR and the inclusion of phenomenological information on Item 3. As a consequence, Item 4, the plant unique report, is now expected to be submitted by the end of January, 1976. We expect to include the complete response to Item 3 in the plant unique report.

On June 30, 1975 the Mark II Containment Owners presented to the NRC an outline and schedule for the Mark II Supporting Program. This supporting program (Item 5 of our June 5 letter) was submitted to you on August 25, 1975. The status of this program is as follows:



Dr. Walter R. Butler

Page 2


PLA-89

1. LOCA Related Activities - Item A.3 (Impact Tests on Pool Internal Structures) and Item A.4 (Qualification of Impact Model) are covered by recently submitted documents NEDE-13426-P Class III and NEDC-20989-2P (Vol. 2) respectively.
2. Safety/Relief Valve Related Activities - Item B.2 (Relief Valve Pipe Clearing for Ramshead) is covered by:
 - a. for modeling, NEDO-20942 and NEDE-20942 P;
 - b. for test comparisons, NEDO-21062 and NEDE-21062 P.

The attached table of load factors will be used to evaluate the SSES 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.

The purpose of this letter is to reference these documents on the Susquehanna docket. Moreover, as a member of the Mark II Owners Group we will be closely following the progress of the Supporting Program and keep you advised of its progress. Any reports, data or analyses which become available during the Supporting Program will be forwarded to the NRC through appropriate channels.

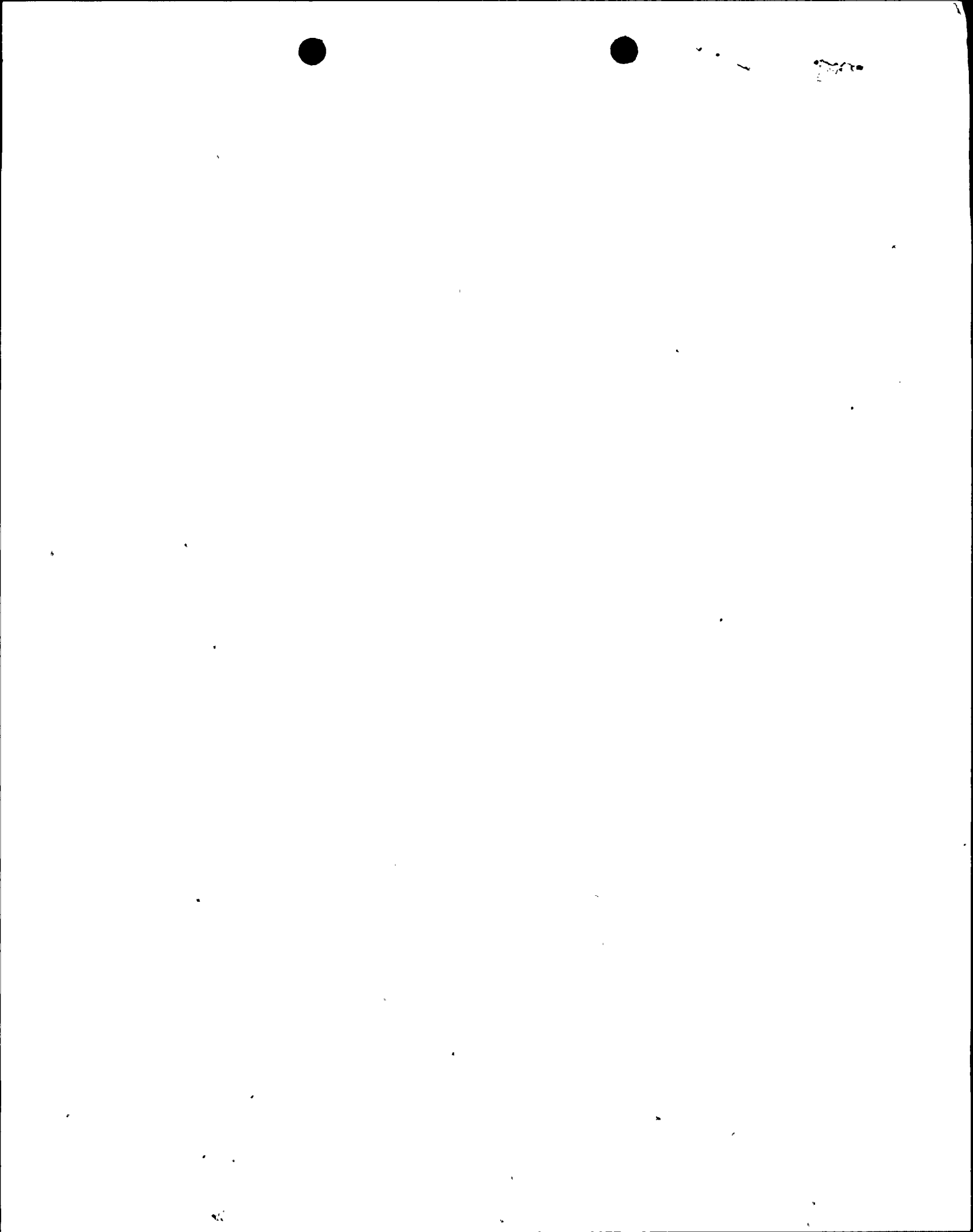
Very truly yours,



N. W. Curtis

Vice President-Engineering & Construction

WEB:AAW



LOAD COMBINATION FOR MARK II CONTAINMENTS CONSIDERING HYDRODYNAMIC LOADS

<u>EQN.</u>	<u>LOAD COND.</u>	<u>D</u>	<u>L</u>	<u>F</u>	<u>P_O</u>	<u>T_O</u>	<u>R_O</u>	<u>E_O</u>	<u>E_{SS}</u>	<u>P_B</u>	<u>P_A</u>	<u>T_A</u>	<u>R_A</u>	<u>R_T</u>	<u>SRV</u>
1	Normal w/o Temp	1.4	1.7	1.0	1.0	-	-	-	-	-	-	-	-	-	1.5
2	Normal w/Temp	1.0	1.3	1.0	1.0	1.0	1.0	-	-	-	-	-	-	-	1.3
3	Normal Ser. Env.	1.0	1.0	1.0	1.0	1.0	1.0	1.25	-	-	-	-	-	-	1.25
4	Abnormal	1.0	1.0	1.0	-	-	-	-	-	1.25	-	1.0	1.0	-	1.25
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	-	1.1
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	-	-	-	-	-	1.0
7	Abnormal Ext. Env.	1.0	1.0	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	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 Reaction Loads
 R_T = Reaction and jet forces associated with the pipe break

