

APR 21 1983

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MAY 05 1983

Docket No.: 50-352/353

APPLICANT: Philadelphia Electric Company
FACILITY: Limerick Generating Station
SUBJECT: SUMMARY OF MEETING HELD ON MARCH 22 - 24, 1983 ON
MECHANICAL ENGINEERING REVIEW

On March 22 - 24, 1983, members of the Mechanical Engineering Branch-(MEB) met with representatives from Philadelphia Electric Company (the applicant), Bechtel (the architect - engineer), and General Electric (the NSSS vendor) at the General Electric Offices in San Jose, California to discuss the applicant's response to the staff's requests for additional information (RAI). 89 of the requests for additional information discussed were attached to a letter transmitted to the applicant February 7, 1983. Two additional requests for information were discussed during the meeting and are included in Attachment 3 as questions 90 and 91.

Attachment 1 provides a list of participants at the meeting. Attachment 2 provides a status of the RAI discussed at the meeting and the proposed action.

Of the 91 RAI, three remain open and seven* are confirmatory. Of the three open items, two involve analysis not yet performed by the applicant and therefore could remain open items when MEB issues its SER. These items are the Feedwater Check Valve analysis and supports designed to ANSI B31.1 instead of ASME NF. Of the seven confirmatory items, at least four are expected to remain confirmatory when MEB issues its SER.

The staff is continuing the review of the FSAR and the responses to the RAI.

Original signed by:

R. E. Martin, Project Manager
Licensing Branch No. 2, DL

Attachments:
As stated

cc: See next page

8305110079 830505
PDR ADOCK 05000352
A PDR

*Item 56 requires a confirmatory review by NRC.

*SEE ATTACHED PAGE FOR PREVIOUS CONCURRENCES

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SURNAME	MHaughey:pt	REMartin	RLI	ASchwencer		
DATE	4/11/83	4/11/83	4/18/83	4/18/83		

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Docket No.: 50-352/353

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ACRS (16)

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Attachment 1 provides a list of participants at the meeting. Attachment 2 provides a status of the RAI discussed at the meeting and the proposed action.

Of the 91 RAI, three remain open and five are confirmatory. Of the three open items, two involve analysis not yet performed by the applicant and therefore could remain open items when MEB issues its SER. These items are the Feedwater Check Valve analysis and Supports designed to ANSI B31.1 instead of ASME NF. Of the five confirmatory items, at least four are expected to remain confirmatory when MEB issues its SER.

The staff is continuing the review of the FSAR and the responses to the RAI.

R. E. Martin, Project Manager
 Licensing Branch No. 2, DL

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OFFICE	DL:LB#2/PM	DL:LB#2/PM	DE:MEB	DL:LB#2/BC			
SURNAME	MHaughey:pt	RMartin	RLI 761	ASchwencer			
DATE	4/11/83	4/11/83	4/18/83	4/ /83			

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LIMERICK MEB-SER MEETING SUMMARY
MARCH 22-24, 1983

3.2 CLASSIFICATION

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
1	3.2.1	R.G. 1.29	B	Open	NRC to discuss with Kirkwood.
2	3.2.1	RPV Int.	GE	Closed	None. Revision completed.
3	3.2.1	Turb. Bypass	B	Closed	None
4	3.2.1	React. Control Sys.	GE	Closed	None
5	3.2.2	CS Structures	GE	Closed	None. Revision completed.
6	3.2.2	Pipe Supports	B	Closed	None. Revision completed.
7	T3.2-1	RPV Support Skirt	GE	Closed	None. Revision completed.
8	T3.2-1	CRD Hsg. Support	GE	Closed	None. Revision completed.
9	T3.2-1	RPV Int.	GE	Closed	None. Revision completed.
10	T3.2-1	Class 3 Piping	B	Closed	None. Revision completed.

3.2 CLASSIFICATION (Continued)

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
11	T3.2-1	* Emerg. CWS	B	Closed.	None
12	T3.2-1	R.G. 1.26	B	Conf.	PECO to provide additional diesel info. by 4/83. NRC to confirm with Kirkwood.
13	T3.2-1	QA Certif.	B	Closed	None. Revision completed.
14	T3.2-1	QG for C&I	GE/B	Closed	None

LIMERICK MEB-SER MEETING SUMMARY
MARCH 22-24, 1983

3.6 PIPING ANALYSIS

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
15	3.6.1.1	Pipe Diam.	B/GE	Closed	None. Revision completed.
16	3.6.2	Terminal Ends	B	Closed	None
17	3.6.2.1.1.1	Break Crit.	GE/B	Closed	None. Revision completed.
18	3.6.2.1.1.1	Pipe Welds	B	Closed	None
19	3.6.2.1.1.1	Welded Attachment	B	Closed	None
20	3.6.2.1.1.1	Volumetric Exam	B	Closed	None. Revision completed.
21	3.6.2.1.1	Break Crit.	GE/B	Closed	None. Revision completed.
22	3.6.2.1.1.4	Interm Break	B	Closed	None
23	3.6.2.1.1.5	SC II Break	B	Closed	None
24	3.6.2.1.3	Pipe Whip	B	Closed	None Revision completed.
25	3.6.2.1.3	Circumf. Break	GE/B	Closed	None

3.6 PIPING ANALYSIS (Continued)

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
26	3.6.2.1.3	Circumf. Break	B	Closed	None
27	3.6.2.1.3	Break Area	GE/B	Closed	None. Revision completed.
28	3.6.2.1.3	Longit. Break	B	Closed	None
29	3.6.2.1.3	Break Geometry	GE/B	Closed	None
30	3.6.2.1.3	Longit. Break	GE/B	Closed	None
31	3.6.2.2.2	Recirc. Stiffness	GE	Closed	None
32	3.6.2.2.2f	Recirc. Operability	GE	Closed	None
33	3.6.2.2.2	FW Check Valve	B	Open	Response revised. PECO to followup.
34	3.6.2.3	Power Level Assump.	B	Closed	None
35	3.6.2.4	PDA Whip & Restraint	GE	Closed	None
36	3.6.2.5.2	Restraint	B/PECO	Closed	None. Revision Completed.

3.6 PIPING ANALYSIS (Continued)

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
37	3.6.2.5.2	Operability Restraint	B	Closed	None
38	3.6 T&F	Break Calculation	B/GE	Closed	None. Revision Completed. Schedule Commitment.

LIMERICK MEB-SER MEETING SUMMARY
MARCH 22-24, 1983

3.7 SEISMIC ANALYSIS

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
39	3.7.3.2.1	OBE Cycles	GE	Closed	None Revision completed.
40	3.7.3.2.2	Fatigue Cycles	B	Closed	None Revision completed.
41	3.7.3.6	3 Seis Components	GE	Closed	None Revision completed.
42	3.7.3.7.1	Closely Spaced Modes	GE	Closed	None
43	3.7.3.12	Buried Piping	B	Closed	None
44	3.7.3.13	Boundary Anchor	B	Closed	None

LIMERICK MEB-SER MEETING SUMMARY
MARCH 22-24, 1983

3.9 MECHANICAL DESIGN

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>	
45.	3.9.1.1.1	CRD Trans.	GE	Closed	None	
46	3.9.1.1.2	CRD Hsg. Trans.	GE	Closed	None	
47	3.9.1.1.3	OBE Cycles for HCU	GE	Closed	None	
48	3.9.1.1.5	Startup/Shutdown Cycles	GE	Closed	None	
49	3.9.1.1.2	Normal/Upset Trans.	GE	Closed	None	Revision completed.
50	3.9.1.1.9	Pool Cycles	GE/B	Closed	None	Revision completed.
51	3.9.1.1.9	Scram Cycles	GE	Closed	None	
52	3.9.1.2	Computer Programs	GE/B	Closed	None	Revision completed.
53	3.9.1.3	Exp. Stress Anal.	GE	Closed	None	
54	3.9.1.4	Elast.-Plastic Anal.	GE/B	Closed	None	
55	3.9.1.4.1	CRD Tests	GE	Closed	None	

3.9 MECHANICAL DESIGN (Continued)

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
56	3.9.2	* Pre-op Vib./ NUREG-0619	GE/B/PECO	Closed	None Revision completed. NRC to confirm.
57	3.9.2.1	Level 1 & 2 Criteria	GE/B	Closed	None Revision completed.
58	3.9.2.1	Startup Piping Test	B	Conf.	Pending NRC's review of test spec.
59	3.9.2.4	Prototype Reactor	GE	Closed	None
60	3.9.2.5	LOCA + SSE	GE	Closed	None
61	3.9.2.1a.3	Snubbers-Vib. Control	GE/B	Closed	None
62	3.9.2.1	Pre-op Vib. Crit.	B/GE	Closed	None Revision completed.
63	3.9.3	AP NUREG-0609	GE/B	Conf.	None Pending NRC's New Loads review.
64	3.9.3.1	Piping Func. Capab.	GE/B/PECO	Closed	None Revision completed.
65 ¹	3.9.3.1.6	Recirc. Pump Design	GE	Closed	None Revision completed.
66	3.9.3.1	NUREG-0800 Req't	GE/B	Closed(B) Conf.(GE)	None Pending Revision completed. NRC's review of NSSS NL update.

3.9 MECHANICAL DESIGN (Continued)

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
67	3.9.3.1	SRV Piping Fatigue	B	Closed	None Revision completed
68	T3.9-6	Load Combination	GE	Closed	None Revision completed.
69	3.9.3.1	NL Reconciliation	GE/B	Conf.	None Pending NRC's New Loads review.
70	3.9.3.3.2	Open Discharge Sys.	B	Closed	None
71	3.9.3.4.1	Hi. Cyc. Fatigue for Supports	B/GE	Closed	None
72	3.9.3.4.1	Bolts Stress	GE/B	Closed	None Revision completed.
73	3.9.3.4	Prim. & Sec. Stress	GE/B	Closed	None
74	3.9.3.3	Pres. Relief Devices	B/GE	Closed	None Revision completed.
75	3.9.3.4	NF Boundaries	B/GE	Closed	None
76 ¹	3.9.3.4	Support Buckling	GE/B	Closed	None Revision completed.
77	3.9.3.4.1	Snubber Design	B/GE	Closed	None Revision completed.

3.9 MECHANICAL DESIGN (Continued)

<u>Q. #</u>	<u>FSAR SECTION</u>	<u>SUBJECT</u>	<u>RESP. ORG.</u>	<u>STATUS</u>	<u>ACTION</u>
78	3.9.3.4.1	Snubber Design	B	Closed	None
79	3.9.3.4.1	Snubber Design	B	Closed	None
80 *	3.9.3.4.1	Snubber Test	B	Closed	None Revision completed.
81	3.9.3.4.1	Snubber Design	B	Closed	None Revision completed.
82	3.9.3.4.6	Support Design	B	Open	(1) Class 1 full penetration welding on comp. support. (2) ISI of AISC items and Class 1 comp. supports.
83	3.9.3.1	Load Combination Table	GE/B	Closed	Revision completed. B to follow up commitment.
84	3.9.4.2	CRD Comp. Design	GE	Closed	None Revision completed.
85	3.9.5	Jet Pump Beam (IEB80-07)	GE/PECO	Closed	None
86	3.9.5.1	RPV Int. NG	GE	Closed	None Revision completed.
87 ¹	3.9.6.1	Inservice Testing	B/PECO	Closed	None Revision completed.
88	3.9.6.1	Inservice Testing	B/PECO	Closed	None Revision completed.
89	3.9.6.1	ISI Program	B/PECO	Conf.	PECO and NRC to meet to discuss IST.

90
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 3/24/83

91

QUESTION NO. 90

Show how the Miter in the Non-Straight Main Steam Line has been included in the piping analysis.

QUESTION NO. 91

As a result of the Independent Design Verification Program for Susquehanna, a question was raised concerning the implementation of NB-3113. How is NB-3113 implemented for the Limerick Project?

MEMO DATED: MAY 05 1983

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