Enclosure to
Howe-48-80

Bechtel Associates Professional Corporation

SUBJECT: MCAR 25 (Issued 11/20/79)

Seismic and Environmental Component Qualifications

INTERIM REPORT 7

DATE: February 1, 1980

PROJECT: Consumers Power Company
Midland Plant Units 1 and 2
Bechtel Job 7220

Corrective Action Status:

1. Attached is Revision 11 of the Qualification Test Status Report (QTSR). Since the last report (Interim Report 6, November 7, 1979), the following four nonconformance reports (NCRs) have been dispositioned: 1751, 1764, 1778, and 1779. The corresponding qualification test reviews (QTRs) have also been closed. Efforts to close the remaining 22 open QTRs and to disposition the remaining 35 NCRs are continuing.

2. Six material requisitions (MRs) and technical specifications have been added to Revision 11 of the QTSR: E-34 (Field Purchase), J-244, J-281, M-347, M-349, and M-374. These were identified by a review of a draft update of the project Q-list (proposed Revision 8). MRs E-52 (Electrical Cable Tray), and E-55 (Raceway Support Material), both field purchased, will be added in the next revision of the QTSR.

3. Aided by the Qualification Open Action Summary (QOAS) document, the tracking and expediting of qualification open items is being actively pursued. The QOAS has been updated and reissued twice since Interim Report 6, and now includes forecast completion dates for each outstanding action item. QOAS Revision 2 shows February 1981 as the latest forecast completion date; however, over 90% of the outstanding action items show forecast completion dates for the first half of 1980.

4. As previously identified in MCAR 25, to date, only the Foxboro transmitters were unable to meet qualification requirements.

Submitted by: M J Leiune

Approved by: for E Wille... for L H Curtis

Concurrence by: L A Bailey

Attachment: QTSR Revision 11 dated 1/31/80

MKL/sg

QUALIFICATION TEST STATUS REPORT
Revision 11
1/31/80

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
A-45/A-45, Rev 2 (11/4/76)	DBA environmental testing (ORNL)	Seismic-none* Environmental-none*	Not applicable Subparagraph 3.0 test procedures, ANSI N101.2)	Not required	Not required Proprietary Final Report written by CPCo	Start Ship: NA Rerev: Not required 11 Decontaminative surfacer (A-15) and field priming/top coating (A-41) are included in testing program
C-018/C-18, Rev 6 (1/25/75)	Field erected tanks (Graver Tank)	Seismic-none*	Subparagraphs 5.1.3 (ASME Code, Section III. Subsection NC), 5.3.4; Appendix A, ppg. 11, 12; Appendix F, Paragraph 2.3 (design requirements); Article 4.0 (ASME Code, Section III, Subsection NC)	C-18-131-4 9/21/79 in review (BWST)	C-18-131-4, 9/21/79 in review (BWST)	Start Ship: 9/13/78A Rerev: Not required NCR 2669.
		Environmental-none*	Appendix F. Article 3.0	See FSAR Table 3.11-4 Test 16		
C-024/C-24 Rev 3 (5/7/76)	Service water sluice gates (Armco)	Seismic-IEEE Std 344-75*	Appendix A (G-30, Rev 1) G-321-D 7.0-PAR	C-24-42-3 12/8/77 Level 1 (gate assembly)	C-24-42-3 12/8/77 Level 1 (gate assembly)	Start Ship: 12/15/78A Rerev: Not required. NCR 2668.
				C-24-84-1 5/2/78 Level 2 (floor stand)	C-24-84-1 5/2/78 Level 2 (floor stand)	
		Environmental-none*	Appendix A (temperature and water chemistry)	See FSAR Table 3.11-4 Test 16		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
C-042/C-42, Rev 2 (6/9/78)	New and spent fuel racks (Wachter)	Seismic-none*	Subparagraphs 1.1.6, 3.1.2, 3.1.4, 4.2.4, 5.2.10, 5.3.10, 5.3.12, 9.2; Appendix B, Article 2.2 (IEEE Std 344-75) G-321-D 7.0-PAR	C-42-53-2 1/9/80 Level 1 (new fuel racks)	C-42-53-2 1/9/80 Level 1 (new fuel racks)	Start Ship: 5/15/80F | 11 Rerev: Not required
				C-42-31-6 11/15/79 Level 1 (spent fuel racks) 11	C-42-31-6 11/15/79 Level 1 (spent fuel racks) 11	
		Environmental-none*	Article 6.2 Appendix C - Criticality analysis (NRC-SRP 9.1.2 and ANSI N18.2a-1975) and thermal hydraulic criteria (spent fuel racks)	C-42-29-2 12/27/79 in review (t-h analysis-spent fuel racks)	C-42-29-2 12/27/79 in review (t-h analysis-spent fuel racks)	
			Appendix C - criticality analysis (NRC-SRP 9.1.1 and ANSI N18.2a-1975) (new fuel racks)	C-42-6-2 4/12/79 Level 1 (criticality analysis-new & spent fuel racks)	C-42-6-2 4/12/79 Level 1 (criticality analysis-new & spent fuel racks)	
C-044/C-44, Rev 3 (8/9/77)	Fuel pool gates (W.J. Woolley)	Seismic-IEEE Std 344-75*	Paragraphs 2.2, 2.3 (IEEE Std 344-75), 5.4, 5.4.2 (G-7, Rev 5), 5.5.3, 5.5.4, 5.6; Appendix D G-321-D 7.0-PAR	C-44-24-1, 7/27/78, Level 1	C-44-24-1, 7/27/78, Level 1	Start Ship: 5/1/79A Rerev: Inprocess NCR 2667.
				C-44-25-1, 7/27/78, Level 1	C-44-25-1, 7/27/78, Level 1	
		Environmental-none*	Articles 5.2 (rad doses), 5.3.2 G-321-D 26.1-PAR	Submittal expected by 2/1/80	Submittal expected by 2/1/80	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
C-046/C-46, Rev 6 (8/8/78)	Fuel transfer tube (Pathway-Bellows)	Seismic-none*			Bechtel stress report	Start ship: 3/30/79A NCR 2666.
		Environmental-none*	Article 4.3 (design conditions) G-321-D 26.1-PAR |11	Submittal expected by 2/1/80 (seals)	Submittal expected by 2/1/80 (seals)	
C-050B/C-50, Rev 13 (6/5/69)	Reactor building locks and hatches (W.J. Woolley)	Seismic-none*	Article 7.4.1a G-321-D 7.0-PAR	C-50B-12-7, 4/[illegible] '79, Level 1	C-50B-12-7, 4/13/79, Level 1	Start Ship: 10/20/78A Rerev: In-process. NCR 1746 Tubing and valves may require up-grading. Vendor cost and schedule quote requested 12/11/79. Letter from vendor 1/17/80 asking for clarifications. |11
				C-50B-13-8, 12/4/78, Level 1	C-50B-13-8, 12/4/78, Level 1	
				C-50B-17-13, 3/13/79, Level 1	C-50B-17-13, 3/13/79, Level 1	
				C-50B-18-10, 3/13/79, Level 1	C-50B-18-10, 3/13/79, Level 1	
				C-50B-138-6, 12/4/78, Level 1	C-50B-138-6, 12/4/78, Level 1	
				C-50B-141-4, 12/4/78, Level 1	C-50B-141-4, 12/4/78, Level 1	
		Environmental-none*	Article 7.4, 7.4.1j (seal requirements - spray chemistry and radiation) G-321-D 26.1 PAR	Submittal expected by 3/80 (seals) |11	Submittal expected by 3/80 (seals) |11	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status	
C-70/C-70, Rev 3 (10/31/74)	Hydraulic shock suppressors (ITT Grinnell)	Seismic-none*	Articles 4.2, 9.1 (ASME Code, Section III, Subsection NF, 1974)	C-70-114-3, 5/4/78, Level 1 (hydraulic snubbers-report)	C-70-114-3, 5/4/78, Level 1 (hydraulic snubbers-stress report)	Start Ship: 3/17/80F Returned to vendor for design modifications & retesting.	11
				C-70-205-2, 12/19/78, Level 1 (hydraulic snubbers-seismic analysis)	C-70-205-2, 12/19/78, Level 1 (hydraulic snubbers-seismic analysis)	Rerev: In-process. NCR 1747	
				C-70-431-1 12/7/79 in review	C-70-431-1 12/7/79 in review		11
		Environmental-none*	Article 5.0 (environmental conditions)	C-70-424-1 9/19/79 info. only (seal life)	C-70-424-1 9/19/79 info. only (seal life)		11
E-6/E-6, Rev 7 (10/2/74)	480V load center unit substations (General Electric)	Seismic-IEEE Std 344-71* IEEE Std 344-75**	Articles 4.1 (IEEE Std) 5.6 (G-7, Rev 4) G-321-D 7.0-PANR	E-6-35-1, 11/9/77, acceptable (Low voltage switchgear-IEEE Std 344-75)	E-6-53-1, 1/4/76, acceptable	Start Ship: 2/7/77A Rerev: Complete. NCR 1748: Dispositioned 10/17/79.	
				E-6-80-1, 10/5/77, acceptable (Transformers-IEEE Std 344-75)	E-6-81-3, 9/26/79, Level 1		
					E-6-81-4, 10/5/79 info. only (supplement)		11
					E-6-117-1 7/13/79 Level 1 (IPCEA S-16-402)		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE Std 323-74*	Paragraphs 4.1, 8.1.5 (ANSI C37.20, Section 8-2.2.2, temperature and water tight tests)	See FSAR Table 3.11-4 Test 18.		IEEE Std 323-71 not part of contract
E-7/E-7, Rev 6 (6/14/76)	460V motor control centers (Gould)	Seismic- IEEE Std 344-75*/**	Article 4.0 and Appendix A, Paragraph 1.4 (IEEE Std; G-7, Rev 4; G-29, Rev 2; and G-30, Rev 1.); G-29, Article 1.0 (IEEE Std 344-75); G-30, Article 1.0 (IEEE Std 344-75) G-32' D 7.0-PANR	E-7-58-7, 6/28/79 Level 2 (IEEE Std 344-75)	E-7-58-7, 6/28/79 Level 2 (IEEE Std 344-75)	Start Ship: 12/1/77A Rerev: Inprocess NCR 1749
		Environmental- IEEE Std 323-74*/**	Article 4.0, 8.4 (IEEE Std 323-74, G-28, Rev 2, Paragraph 1.6.1 (IEEE Std 323-74), G-30 Rev 1, Paragraph 1.6.1 (IEEE Std 323-74) G-321-D 26.1-PANR (test results)	E-7-101-1, 10/7/77, acc. table (IEEE Std 323-74)	E-7-129-4, 7/24/79, Level 3 (IEEE Std 323-74)	Letter to vendor 11/6/79 requesting resubmittal. 11
E-11/E-11, Rev 8 (9/27/74)	Battery chargers (SCI)	Seismic- IEEE Std 344-71* IEEE Std 344-75**	Paragraphs 4.1, 5.3 (IEEE Std and G-7, Rev 4) G-321-D 7.0-PANR	E-11-7-2, 7/18/77, Level 1 (IEEE Std 344-75)	E-11-18-2, 3/28/79, Level 1	Start Ship: 1/6/78A Rerev: Complete NCR 1750: Dispositioned 8/14/79.
		Environmental- IEEE Std 323-74*	Subparagraph 6.1.3, (temperature requirements)	See FSAR Table 3.11-4 Test 18		IEEE Std 323-71 not part of contract;
					E-11-20-1, 8/3/79 Level 1 (IPCEA S-61-402)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
E-12/E-12, Rev 5 (8/25/76)	Station batteries (Exide)	Seismic- IEEE Std 344-75*/**	Paragraph 4.0, 10.1 (IEEE Std 344 and G-7, Rev 5); G-7, Paragraph 2.2 (IEEE Std 344-75) G-321-D 7.0-PANR	E-12-38-5, 11/2/79 Level 1 (IEEE Std 344-75)	Test results expected by 1/81.	Start Ship: 11/6/78A Rerev: Not required
						Equipment failed initial tests due to corrosion problems. To be redesigned & retested.
		Environmental- IEEE Std 323-74*/**	Article 4.0, 10.4 (IEEE Std 323)	E-12-38-5, 11/2/79, Level 1 (IEEE Std 323-74)	Test results expected by 1/81	Interim test to be submitted by 2/80.
E-13/E-13, Rev 7 (9/11/74)	DC distribution centers (Westinghouse)	Seismic- IEEE Std 344-71*/**	Articles 5.3 (G-7, Rev 4) G-321-D 7.0-PAR (certification only)	E-13-25-1, 6/11/77, acceptable	E-13-29-3, 9/6/78, Level 1 (IEEE Std 344)	Start Ship: 9/27/78A Rerev: Complete NCR 1751: Dispositioned 1/7/80.
		Environmental- IEEE Std 323-74*	Section 7.2 (ANSI C 37.90) Section 6.6.2 (IPCEA S-61-402 and S-28-357)	See FSAR Table 3.11-4 Test 18	E-13-32-1, 9/21/79 Level 5 (IPCEA 61-402)	IEEE Std 323-71 not part of contract; Letter from vendor 3/13/79 states that S-28-357 does not apply and that ANSI C37.90 is not a requirement for this type of relay. SDDR submitted and accepted.
					E-13-31-1 9/13/79 Level 5 (NEMA)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
E-19/E-19, Rev 6 (10/11/74)	Preferred ac power supplies (SCI)	Seismic- IEEE Std 344-71* IEEE Std 344-75**	Paragraphs 4.1 (IEEE Std), 5.3 (G-7, Rev 4) G-321-D 7.0-PANR	E-19-16-1, 3/15/77, acceptable (IEEE Std 344-75)	E-19-32-1, 3/16/78, Level 1 (IEEE Std 344-75)	Start Ship: 1/6/78A Rerev: Complete. NCR 1752 Dispositioned 7/30/79.
		Environmental- IEEE Std 323-74*	Paragraph 4.1 (IEEE Standard) Subparagraph 6.7.2 (IPCEA S-61-402)	See FSAR Table 3.11-4 Test 18	E-19-34-1 7/19/79 Level 1 (IPCEA S-61-402)	IEEE Std 323-71 not part of contract; Vendor letter (3/20/79 stating that unable to provide compliance to IEEE Std 323-71; CPCo letter (9/15/79, S-7551) stating that further qualification is not required.

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
E-20/E-20, Rev 6 (8/6/74)	Cable penetrations (Amphenol Sams)	Seismic- IEEE Std 344-75*/**	Subparagraphs 4.1.12 (IEEE Std 344-75) 5.5 (G-6, Rev 4) G-321-D 7.0-PAR	E-20-114-4, 10/19/77, Level 1 (IEEE Std 344-75)	E-20-163-3 11/20/79 Level 2 | 11	Start Ship: Flanges: 7/28/76A Assemblies: 2/10/78A Rerev: Complete. NCR 1704: Dispositioned 12/18/78. | 11
		Environmental- IEEE Std 323-74* IEEE Std 317-72*	Subparagraph 4.1.11 (IEEE Std 323-74) Subparagraphs 4.1.10, 6.5.1, 7.1.1, 7.1.2, 7.2.1, 7.3.1 (IEEE Std 317-72)	E-20-114-4 10/19/77 Level 1 (IEEE Std 323-74, 317-72)	E-20-158-1 4/18/79 information only (preliminary test report)	
				E-20-162-4 4/12/79 Level 1 (supplementary test procedure)	E-20-168-2 7/26/79 Level 1 (supplementary test results)	
					E-20-166-1, 4/12/79, Level 1 (materials- IEEE Std 317-72)	
					E-20-167-2, 7/26/79, Level 1 (heating analysis)	
					E-20-169-1, 4/12/79, Level 1 (gamma shielding)	
					E-20-164-1 11/22/78 information only (o-rings)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
E-21/E-21, Rev 7 (6/20/74)	5,000V and 8,000V power cable (Kerite)	Seismic- none*	Not applicable	Not required	Not required	Start Ship: 9/22/76A Rerev: Complete. NCR 1753: Dispositioned 2/13/79.
		Environmental- IEEE Std 323-74* IEEE Std 383-74*	Paragraph 5.4 (service design requirements), no reference to IEEE standards	E-21-8-1, 8/5/76, Level 1	E-21-8-1, 8/5/76, Level 1	
E-22/E-22, Rev 3 (4/2/76)	600V power cable (Essex)	Seismic- none*	Not applicable	Not required	Not required	Start Ship: 2/1/77A Rerev: Complete. NCR 1754: Dispositioned 7/18/79.
		Environmental- IEEE Std 323-74*/** IEEE Std 383-74*	Appendix A (engineering data), no reference to IEEE Standards Subparagraphs 8.2.3, 8.3, and 12.3.3 (IEEE Std 383-74) G-321-D 26.2-PANR	E-22-44-2 11/12/79 Level 1 [11]	E-22-44-2 11/12/79 Level 1 [11] E-22-6-1, 7/17/76, Level 1 E-22-8 through E-22-31 7/18/79 Level 5	
E-26/E-26, Rev 4 (10/29/76)	600V control cable (Rockbestos)	Seismic- none*	Not applicable	Not required	Not required	Start Ship: 7/26/77A Rerev: Complete. NCR 1755: Dispositioned 2/13/79.
		Environmental- IEEE Std 323-74*/** IEEE Std 383-74*	Article 4.0 (IEEE Std 323-74) Article 4.0, 7.3, 11.3 (IEEE Std 383-74) G-321-D 26.2-PANR	E-26-27-2, 2/12/79, Level 1	E-26-27-2, 2/12/79, Level 1	
E-34 Rev 1 (out for bids)	Local control stations and transfer switches [11](field purchase) (out for bids)	Seismic- IEEE Std 344-75*/**	Paragraphs 4.0 (IEEE), 7.1 (certificate of compliance to IEEE 344, G-321-D, 7.0 PANR			Start Ship: Field purchase

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE Std 323-74*/**	Paragraphs 4.0 (IEEE), 6.4.2 (IPCEA S-19-81 or S-66-524), Appendix A (service conditions)			
E-45/E-45, Rev 3 (9/26/77)	a. 480Vac distribution panels (Square D)	Seismic- IEEE Std 344-75*/**	Articles 4.0, 5.3 (IEEE Std 344-75 and G-7, Rev 5); G-7, Paragraph 2.2 (IEEE Std 344-75); G-30, Rev 1, Paragraphs 1.1.1, 1.6, 1.7 (IEEE Std 344-75) G-321-D 7.0-PAR (prototype test only)	E-45-22-4, 7/10/79 Level 1 E-45-73-1 8/10/79 Level 1	E-45-22-4, 7/10/79 Level 1 E-45-73-1 8/10/79 Level 1	Start Ship: 11/13/78A Review: Complete. NCR 1756: Dispositioned 8/20/79.
		Environmental- IEEE Std 323-74*/**	Articles 4.0, 5.2, 12.2.1 (IEEE Std 323-74); G-30, Rev 1, 1.6 (IEEE Std 323-74) G-321-D 26.2 PAR	E-45-50-1, 11/4/78, Level 1 E-45-72-1, 8/4/79, Level 1	E-45-50-1, 11/4/78, Level 1 E-45-72-1, 8/4/79, Level 1	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
	b. 120Vac preferred panels	Seismic- IEEE Std 344-75*/**	Articles 4.0, 5.3 (IEEE Std 344-75 and G-7, Rev 5); G-7, Paragraph 2.2 (IEEE Std 344-75); G-30, Rev 1, Paragraphs 1.1.1, 1.6, 1.7 (IEEE Std 344-75) G-321-D 7.0-PAR (prototype test only)	E-45-54-3, 4/24/79, Level 1	E-45-54-3, 4/24/79, Level 1	Start Ship: 1/12/79A Rerev: Complete. NCR 1756: Dispositioned 8/20/79.
		Environmental- IEEE Std 323-74*/**	Articles 4.0, 5.2, 12.2.1 (IEEE Std 323-74); G-30, Rev 1, 1.6 (IEEE Std 323-74) G-321-D 26.2-PAR	E-45-51-2, 1/27/79 Level 1	E-45-51-2, 1/27/79 Level 1	
	c. 120Vac control and instrument panels	Seismic- IEEE Std 344-75*/**	Articles 4.0, 5.3 (IEEE Std 344-75 and G-7, Rev 5); G-7, Paragraph 2.2 (IEEE Std 344-75); G-30, Rev 1, Paragraphs 1.1.1, 1.6, 1.7 (IEEE Std 344-75) G-321-D 7.0-PAR (prototype test only)	E-45-55-3, 4/24/79, Level 1 E-45-64-1, 3/21/79, Level 1	E-45-55-3, 4/24/79, Level 1 E-45-64-1, 3/21/79, Level 1	Start ship: 12/21/78A Rerev: Complete. NCR 1756: Dispositioned 8/20/79.
		Environmental- IEEE Std 323-74*/**	Articles 4.0, 5.2, 12.2.1 (IEEE Std 323-74); G-30, Rev 1, 1.6 (IEEE Std 323-74) G-321-D 26.2-PAR	E-45-63-2, 7/26/79 Level 1	E-45-63-2, 7/26/79 Level 1	
	d. 125Vdc distribution panels	Seismic- IEEE Std 344-75*/**	Articles 4.0. 5.3 (IEEE Std 344-75 and G-7, Rev 5); G-7, Paragraph 2.2 (IEEE 344-75); G-30, Rev 1, Paragraphs 1.1.1, 1.6, 1.7 (IEEE Std 344-75) G-321-D 7.0-PAR (prototype test only)	E-45-53-3, 4/24/79, Level 1	E-45-53-3, 4/24/79, Level 1	Start ship: 2/7/79A Rerev: Complete. NCR 1756: Dispositioned 8/20/79.
		Environmental- IEEE Std 323-74*/**	Articles 4.0, 5.2, 12.2.1 (IEEE Std 323-74); G-30, Rev 1, 1.6 (IEEE Std 323-74) G-321-D 26.2-PAR	E-45-52-1, 11/30/78, Level 1	E-45-52-1, 11/30/78, Level 1	

MR/ Specification (Origin P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedu	Qualification Results	Status
E-49/E-49, Rev 3 (10/31/77)	Station battery fused disconnect switches (Gould)	Seismic- IEEE Std 344-75*/**	Articles 4.0 (IEEE Std), 7.1.1 (IEEE Std 344-75), 7.1.2 (G-7, Rev 5) G-321-D 7.0-PANR	E-49-2-3, 9/26/78, Level 1	E-49-2-3, 9/26/78, Level 1	Start Ship: 5/26/78A Rerev: In-process. NCR 1757
		Environmental- IEEE Std 323-74*/**	Articles 4.1 (IEEE Std), 7.2.1 (IEEE Std 323-74) G-321-D 27.0-PANR		E-49-7-3, 9/11/79, in review (certificate of compliance)	Letter to vendor 10/10/79 asking for submittal of actual test reports. Followup letter sent 12/21/79. 11
E-051B/E-051B, Rev 1 (11/4/77)	Instrument ac power transformers and regulator transformers (SCI)	Seismic- IEEE Std 344-75*/**	Articles 4.0, 5.2, 11.2 (IEEE Std 344-75); G-7 Rev 5, Paragraph 2.2 (IEEE Std 344-75); G-30, Rev 1, Paragraphs 1.11, 1.6, 1.7 (IEEE Std 344-75)	E-51B-15-2, 11/6/78, Level 1 (regulator transformer)	Submittal expected by 6/30/80	Start Ship: 9/18/79A Rerev: Not required New insulation design. Qualification to start 9/7/79.
			G-321-D 7.0-PANR	Submittal expected by 6/30/80 (instrument ac power trans)	Submittal expected by 6/30/80 (instrument ac power trans)	
		Environmental IEEE Std 323-74*/**	Articles 4.0, 11.2 (IEEE Std 323-74) G-321-D 26.2-PANR (certified test reports before shipment)	E-51B-13-6, 6/5/79, Level 1 (regulator transformer)	Submittal expected by 6/30/80	
				Submittal expected by 6/30/80 (instrument ac power trans)	Submittal expected by 6/30/80 (instrument ac power trans)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
E-56/E-56, Rev 1 (6/22/78)	Coax, triax, and twinax cable (Rockbestos)	Seismic- none*	Not applicable	Not required	Not required	Start Ship: 9/14/79A Rerev: Not required
		Environmental- IEEE Std 323-74*/** IEEE Std 383-74*	Articles 4.0, 10.5.5 (IEEE Std 323-74); Appendix A (engineering data) Articles 4.0, 7.1, 7.3, 7.4, 10.5.4 (IEEE Std 383-74) G-321-D 26.0-PANR (approval before shipment)	E-56-8-6 11/12/79, Level 1 |11	E-56-8-6, 11/12/79, Level 1 |11	
E-060/E-60, Rev 1 (8/17/78)	Instrument and special purpose cable (Rockbestos)	Seismic- none*	Not applicable	Not required	Not required	Start Ship: 1/26/79A Rerev: Not required
		Environmental- IEEE Std 323-74*/** IEEE Std 383-74*	Articles 4.0, 11.5.5 (IEEE Std 323-74) Appendix A (engineering data) Articles 4.0, 7.0, 7.1, 7.3, 7.4, 11.5.4 (IEEE Std 383-74) G-321-D 26.2-PANR (test results)	E-60-51-2 11/12/79 Level 1 |11	E-60-51-2 11/12/79 Level 1 |11	NCR 1855: Dispositioned 10/1/79.
E-205/E-205, Rev 9 (4/24/74)	Metalclad switchgear (ITE)	Seismic- IEEE Std 344-71*/**	Articles 4.0, 5.3 (G-7, Rev 4) G-321-D 7.0-PANR	E-205-223-1, 6/7/76, acceptable	E-205-223-1, 6/7/76, acceptable E-205-224-1, 6/7/76, acceptable (Appendix to E-205-223-1) E-205-203-1 9/19/75 Level 1 (circuit breakers-certification)	Start Ship: 12/9/76A Rerev: Complete. NCR 1758. Dispositioned 7/13/79.

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental-IEEE Std 323-74*	Article 4.1 (ANSI C37.09, Section 4.15, requirements for temperature and total expected life)	Not required by specification. Test results only.	E-205-467-2, 12/28/79, in review (certification only-IEEE Std 323)	See FSAR Table 3.11-4 Test 18. Vendor to submit qualification report demonstrating qualification to IEEE Std 323-74 (CPCo S-7808 dated 10/23/79). This will supercede E-205-467-1. 11
					E-205-197-1 9/8/75 Level 1 (certification circuit breakers)	
					E-205-198-1 thru E-205-200-1 9/5/75 Level 1 (certification-circuit breakers)	
					E-205-208-1 thru E-205-213-1 12/2/75 Level 1 (certification-circuit breakers)	
					E-205-214-1 thru E-205-217-1 3/23/76 Level 1 (certification-circuit breakers)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
J-201/J-201, Rev 5 (4/14/75)	Main control boards (Magnetics)	Seismic- IEEE Std 344-75*/**	Paragraphs 1.5b, 2.1.1c, 2.1.5, 4.1.2, 13.0, Attachment 5, Rev 1; Paragraphs 4.1.15, 13.1.1, Attachment 5a, Paragraphs 1.3, 2.0, 2.8, Attachment 5b, 1.3, 2.0, 2.7, 5.0 (IEEE Std 344-75) G-321-D 7.0-PAR (procedures and reports)	J-201-286-1, 8/16/77, acceptable	J-201-397-1 2/28/78 Level 1	Start Ship: 8/19/77A Rerev: Inprocess. NCR 1759
				J-201-287-2 through 289-2, J-201-296-2 through 300-2, J-201-318-2, and 321-2, 8/10/78, Level 1	J-201-287-2 through 289-2, J-201-296-2 through 300-2, J-201-318-2, and 321-2, 8/10/78, Level 1	
				J-201-397-1, 2/28/78, Level 1	J-201-397-1, 2/28/78, Level 1	
				J-201-406-1 4/7/79 information only (relays & accessories)	J-201-406-1 4/7/79 information only (relays & accessories)	
				J-201-407-1 5/1/78 information only (electro-mechanical relays & components)	J-201-407-1 5/1/78 information only (electro-mechanical relays & components)	
				J-201-410-1, 8/10/78, Level 1	J-201-410-1, 8/10/78, Level 1	
				J-201-427-3 6/22/79 Level 1 (electrical devices)	Test report to be submitted by 3/80.	11

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure		Qualification Results		Status	
		Environmental- IEEE Std 323-74*/**	Subparagraph 4.1.13 (IEEE Std 323); Article 5.0 (service conditions) G-321-D 26.1-PAR (test procedures G-321-D 26.2-PANR (test report)	See FSAR Table 3.11-4, Test 17					
J-202/J-202, Rev 5 (12/20/77)	Auxiliary/ local control boards (Harlo)	Seismic- IEEE Std 344-75*/**	Articles 2.2.1, 9.3.1, 9.3.2, (IEEE Std 344-75)	J-202-79-3, 12/19/79, in review		J-202-79-3, 12/19/79, in review		Start Ship: 3/10/78A Rerev: Inprocess. NCR 1760	
				J-202-94-2 1/11/78 Level 1		J-202-94-2 1/11/78 Level 1			
				J-202-103-1 11/22/77 acceptable	11	J-202-103-1 11/22/77 acceptable	11		
				J-202-104-2 2/21/78 Level 1		J-202-104-2 2/21/78 Level 1			
				J-202-125-1 11/8/78 Level 1		J-202-125-1 11/8/78 Level 1			
				J-202-126-2 5/10/79 Level 1		J-202-126-2 5/10/79 Level 1			
		Environmental- IEEE Std 323-74*/**	Article 4.1 (service conditions)	See FSAR Table 3.11-4, Test 17				Letter to vendor 8/17/79 requesting certification to specification Section 4.1 (conditions of service). Letter from vendor 11/16/79 providing certification	11

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
J-204/J-204, Rev 6 (5/3/74)	Major instrument package (Foxboro)	Seismic- IEEE Std 344-71*/** (instrument racks, rack mounted instrumentation and power supplies)	Subparagraphs 4.1.3 (IEEE Std 344-71); Subparagraph 5.1.2 (G-6, Rev 4 and G-7, Rev 4); 6.1 G-321-D 7.0-PAR	J-204-33-3, 9/4/79 Level 1 (instrument rack-IEEE Std 344-75)	J-204-33-3, 9/4/79 Level 1 (instrument rack-IEEE Std 344-75)	Start Ship: 11/24/78A Rerev: In-Process. NCR 1761.
				J-204-189-1 6/27/77 information only (rack mounted modules - IEEE Std 344-75)		
				J-204-244-3 9/29/79 Level 1 (instrument rack and rack mounted modules - IEEE Std 344-75)	J-204-244-3, 9/29/79 Level 1 (instrument rack and rack mounted modules - IEEE Std 344-75)	
				J-204-278-1 9/12/79 in review (power supplies- IEEE Std 344-75)	J-204-278-1 9/12/79 in review (power supplies- IEEE Std 344-75)	
					J-204-281-1 9/28/79 Level 5 (instrument racks- certificate of compliance to IEEE Std 344-71)	11
		IEEE Std 344-71* IEEE Std 344-75** (panel mounted electronic controllers)		J-204-147-1, 9/8/76, acceptable (IEEE Std 344-71)	J-204-147-1, 9/8/76, acceptable (IEEE Std 344-71)	
				J-204-176-1, 9/2./77, acceptable (IEEE Std 344-71)	J-204-176-1, 9/21/77, acceptable (IEEE Std 344-71)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				J-204-230-1, 4/18/78, Level 2 (IEEE Std 344-75)	Results expected by 7/30/80 |11	
		Environmental- IEEE Std 323-74*	Subparagraph 4.1.2 and 6.1 (IEEE Std 323-71), Subparagraph 5.1.1 (J-1564) G-321-D 27.0-PAR	J-204-189-1, 6/27/77, information only, (rack mounted modules only- IEEE Std 323-74)		See FSAR Table 3.11-4 Test 17
				J-204-278-1 9/12/79 in review (power supplies- IEEE Std 323-74)	J-204-278-1 9/12/79 in review (power supplies- IEEE Std 323-74)	
		IEEE Std 383-74*	Subparagraphs 4.1.6 and 7.2.7 (IEEE Std 383-74)		J-204-280-1 9/20/79 in review (certification IEEE Std 383-74)	
J-207/J-207, Rev 4 (3/11/77)	Engineering safety features actuation system (Vitro Lab)	Seismic- IEEE Std 344-75*/**	Section 2B (IEEE Std 344-75) Section E2 (G-7, Rev 5) G-321-D 7.0-PAR	J-207-16-3, 2/13/78, Level 1	J-207-85-3, 10/23/78, Level 1	Start Ship: 6/30/78A Rerev: Complete. NCR 1762: Dispositioned 5/4/79.
		Environmental- IEEE Std 323-74*/** IEEE 383-74*	Section 2B, 5E1 (IEEE Std 323-74, 383-74) Article 4.0 (radiation) G-321-D 26.0-PAR	J-207-18-2, 10/19/77, Level 1 (service conditions)	J-207-222-1, 10/19/78, Level 1	Certification of compliance to IEEE 383-74 shipped to field with ESFAS documentation package.
				J-207-225-1, 4/27/79, Level 1 (radiation)	J-207-225-1, 4/27/79, Level 1 (radiation)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
J-214/J-214, Rev 1 (9/13/78)	Seismic instruments (Terra Technology)	Seismic-IEEE Std 344-75*/**	Paragraphs 2.2 (IEEE Std 344), 3.3.1 (IEEE Std 344-75), Subparagraphs 4.1.2, 7.1.4 (G-6, Rev 5 and G-7, Rev 5), and Article 6.1 (design qualification) Attachment M to MR, Sh 2	J-214-1-2, 7/7/79, Level 1	J-214-1-2, 7/7/79, Level 1	Start Ship: 7/11/79A Rerev: Not required. Reviewed by civil and found acceptable. Equipment is non-Q.
		Environmental-none*	Attachment M to MR (J-1564, Rev 0)	Not required	Not required	
J-229/J-563, Rev 3 (2/14/77)	Temperature switches (Thermowells) (United Electric Controls)	Seismic-none*	Attachment E to MR (J-1564, Rev 4) (J-1563-2, Rev 2)	Not required	Not required	Start Ship: 5/18/79A Rerev: Complete. Considered qualified by virtue of compliance to ASME Section III
		Environmental-none*	Attachment E to MR (J-1564, Rev 4)	Not required	Not required	
J-232/J-435, Rev 3 (3/29/77)	Orifice plates for nuclear service (Vickery-Simms)	Seismic-none*	Paragraphs 1.1.1, (ASME Code, Section III, Division 1, Classes 2 or 3)	Not required	Not required	Start Ship: 8/1/78A Rerev: Complete. Considered qualified by virtue of compliance to ASME Section III
		Environmental-none*	Attachment C to MR (data sheets)	Not required	Not required	
J-233/J-563, Rev 3 (11/24/76)	Resistance temperature detector assemblies (Thermowells) (Weed Instruments)	Seismic-none*	Paragraphs 1.1.1, 2.2, Attachment E to MR (J-1564, Rev 3) (J-1563-2, Rev 0)	Not required	Not required	Start Ship: 11/14/77A Rerev: Complete. Considered qualified by virtue of compliance to ASME Section III

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental-none*	Attachment E to MR (J-1563, Rev 0)	Not required	Not required	
J-233/J-568 Rev 3 (3/21/79)	Resistance temperature detector assemblies (RTDs)	Seismic-IEEE 344-75*/**	Paragraphs 2.B, 3.B.5 (IEEE Std 344-75, Reg. Guide 1.100)	J-233-49-1 9/10/79 Level 3	Results due 6 months after approval of procedures	Start Ship: 7/1/80F Rerev: Complete.
	(Weed Instruments	Environmental-IEEE 323-74*/**	Paragraphs 2.B, 3.B.7 (IEEE Std 323-74) J-1564 Rev 4	J-233-49-1 9/10/79 Level 3	Results due 6 months after approval of procedures	
J-241, Rev 6 (9/4/79)	Pressure gages, nuclear service (field purchase) (Helicoid)	Seismic-IEEE 344-75*	Paragraphs 2.2, 6.1, IEEE 344 Attachment 7 to MR (G-33(Q), Rev 7) C-321-D 7.0 PAR	ETL Report 4947 dated 2/13/73	ETL Report 4947 dated 2/13/79	Start Ship: Field purchase Rerev: Complete. Gages are required to maintain pressure boundary only and are not required to remain functional.
		Environmental-none*	Paragraph 4.1 and Attachment 4 to MR (J-1564, Rev 1) (environmental conditions)	Not required	Not required	
J-242/J-425, Rev 3 (4/29/77)	Venturi tubes, nuclear service (B.I.F.)	Seismic-none*	Appendix D, Article 2.4 of J-425, Rev 5	Not required	Not required	Start Ship: 7/21/78A Rerev: Complete. Considered qualified by virtue of compliance to ASME Section III
		Environmental-none*	Appendix D, Article 3.0 of J-425, Rev 1 and Attachment C to MR (data sheets)	Not required	Not required	
J-244/J-244, Rev 0 (8/24/79)	Radiation monitoring system (Victoreen)	Seismic-IEEE 344-75*/**	Paragraphs 2.2 (IEEE 344-75), 4.1.4 (G-6, Rev 5, G-7, Rev 5), 3.3.3	Submittal expected by 9/80	Submittal expected by 11/81	Start Ship: 12/1/80F

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE 323-74*/**	Paragraphs 2.2 (IEEE 323-74), 5.0, 10.5, 4.0 (service conditions), 3.3.3 J-1564, Rev 4 G-321-D, 27.0 PAR	Submittal expected by 9/80	Submittal expected by 11/81	
J-245/J-245 Rev 3 (3/15/79)	Field Transmitters (Rosemount)	Seismic- IEEE Std 344-75*/**	Paragraph 5.4.1a, Appendix A	J-245-14-2 12/11/79 Level 1	J-245-14-2 12/11/79 Level 1	Start Ship: 9/14/79A Rerev: Not required. NCR 2665.
				J-245-27-1 J-245-28-1 8/30/79 Level 1	J-245-27-1 J-245-28-1 8/30/79 Level 1	
				J-245-29-1 11/30/79 Level 2 (regulating diode)	J-245-29-1 11/30/79 Level 2 (regulating diode)	
				J-245-16-3 12/27/79, in review	J-245-16-3 12/27/79, in review	
		Environmental- IEEE Std 323-71** IEEE Std 323-74* (see response to RG 1.89 FSAR Appendix 3A)	Paragraph 5.3.2, Attachment 9 to MR	J-245-14-2 12/11/79 Level 1	J-245-14-2 12/11/79 Level 1	
				J-245-16-3, 12/27/79 in review	J-245-16-3, 12/27/79 in review	
				J-245-29-1 11/30/79 Level 2 (regulating diode)	J-245-29-1 11/30/79 Level 2 (regulating diode)	
J-253/J-253, Rev 3 (6/7/74)	Atmospheric steam dump valves (CCI)	Seismic- IEEE Std 344-71*	Paragraph 5.2 (seismic criteria) G-321-D 7.0-PAR	J-253-23-4, 7/28/76, acceptable	J-253-23-4, 7/28/76, acceptable	Start Ship: 12/1/77A Rerev: Complete.
		Environmental- none*	Paragraph 5.1 (environmental criteria)	See FSAR Table 3.11-4 Test 16		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status	
J-255 A/J-255, Rev 8 (7/8/74)	Nuclear service control valves (Vulcan)	Seismic- IEEE Std 344-71*	Paragraph 5.3, 5.4 (seismic criteria); G-9, 4.2 (IEEE Std 344); 7.1 (IEEE Std) G-321-D 7.0-PAR	J-255A-19-2, 12/23/75, Level 1	J-255A-19-2, 12/23/75, Level 1	Start Ship: 6/5/78A Rerev: In-process. NCR 1763	
				J-255A-53-2 4/6/79 Level 3	J-255A-53-2 4/6/79 Level 3		
				J-255A-53-3 8/13/79 Level 2 (addendum)	J-255A-53-3 8/13/79 Level 2 (addendum)		
				J-255A-64-1 7/26/79 Level 3	J-255A-64-1 7/26/79 Level 3		
		Environmental- IEEE Std 323-74*	Paragraph 5.2 (environmental criteria) and Attachment F to J-255 (G-9, Rev 2)	J-255A-53-2 4/6/79 Level 3	J-255A-53-2 4/6/79 Level 3	Some valves are designated FSAR Table 3.11-4 Test 16.	11
				J-255A-53-3 8/13/79 Level 2 (addendum)	J-255A-53-3 8/13/79 Level 2 (addendum)		
				J-255A-64-1 7/26/79 Level 3	J-255A-64-1 7/26/79 Level 3		
J-255B/J-255 Rev 8 (7/9/74)	Nuclear service control valves (CCI)	Seismic- IEEE Std 344-71*	Paragraph 5.3, 5.4 (seismic criteria); G-9, 4.2 (IEEE Std 344); 7.1 (IEEE Std) G-321-D 7.0-PAR	J-255B-25-2, 8/31/76, acceptable	J-255B-25-2, 8/31/76, acceptable	Start Ship: 8/1/76A Rerev: In-process NCR 2664	
				J-255B-63-2, 2/11/79 Level 1	J-255B-63-2, 2/11/79 Level 1		
				J-255B-78-1 9/24/79 information only	J-255B-78-1 9/24/79 information only		
				J-255B-79-2 11/27/79 Level 1	J-255B-79-2 11/27/79 Level 1		11

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status	
		Environmental- IEEE Std 323-74*	Paragraph 5.2 (environmental criteria) and Attachment F to J-255 (G-9, Rev 2)	J-255B-78-1 9/24/79 information only	J-255B-78-1 9/24/79 information only		11
				J-255B-79-2 11/27/79 Level 1 | 11	J-255B-79-2 11/27/79 Level 1 | 11		
				J-255B-84-1 10/15/79 information only (submergence test)	J-255B-84-1 10/15/79 information only (submergence test)		
J-256/J-603, Rev 6 (7/16/76)	Nuclear service solenoid valves (Target Rock Corp)	Seismic- IEEE Std 344-75*/**	Article 4.0 (IEEE Std 344); Appendix A Article 2, Appendix I (design limits qualification)	J-256-45-5, 5/18/79, Level 1	J-256-45-5, 5/18/79, Level 1	Start Ship: 6/78A Rerev: complete NCR 1764: Dispositioned 10/23/79.	11
				J-256-71-3 6/19/79, Level 1	J-256-71-3 6/19/79 Level 1		
				Submittal expected by 6/80 (pressure regulating valves) | 11	Submittal expected by 6/80 (pressure regulating valves) | 11		
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72*/**	Article 4.0 (IEEE Std 323,382) Paragraph 5.1, Appendix J (environmental criteria) and App G (G-29, Rev 1)	J-256-42-1, 12/8/77, acceptable	J-256-42-1, 12/8/77, acceptable		11
				J-256-42-2 4/13/79 Level 1 (addendum to J-256-42-1- IEEE Std 323, 382)	J-256-42-2 4/13/79 Level 1 (addendum to J-256-42-1- IEEE Std 323, 382)		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
J-258/J-605, Rev 8 (7/29/75)	Nuclear service butterfly control valves (Fisher Controls)	Seismic- IEEE Std 344-75*/**	Article 4.0 (IEEE Std 344), Paragraph 5.1; Appendix I, Paragraph 4.2 (IEEE Std 344); G-9 Paragraph 4.2, 7.1.	J-258-21-1, 6/17/76, acceptable (air operated butterfly valves)	J-258-21-1, 6/17/76, acceptable (air operated butterfly)	Start Ship: 5/79A Rerev: Complete. NCR 1765: Dispositioned 4/20/79.
				J-258-40-1 4/18/78 Level 1 (Limitorque operators)	J-258-40-1 4/18/78 Level 1 (Limitorque operators)	
				J-258-44-5 10/31/79 Level 1 (static load operability testing- 6" and 8" valves) |11	J-258-56-1 2/14/79 Level 1 (8" valves) Submittal expected by 3/80 (6" valves)	Need test results for 6" valves. |11
				J-258-54-1 2/21/79 Level 1 (electro-hydraulic operated & motor operated butterfly valves) |11	J-258-54-1 2/21/79 Level 1 (electro-hydraulic operated & motor operated butterfly valves) |11	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72*	Paragraph 5.1 and Appendix L (environmental criteria) no reference to IEEE Standards Article 4.0 (IEEE Std 382); G-9, Paragraphs 4.2 (IEEE Std 382) Paragraphs 4.0, 7.13 IEEE 382-72)	J-258-40-1, 4/18/78, Level 1 (Limitorque operators)	J-258-40-1, 4/18/78, Level 1 (Limitorque operators)	
					J-258-52-1 2/12/79 Level 5 (environmental certification- valves & actuators except electro- hydraulic actuators)	
				J-258-63-1 7/11/79 Level 1 (radiation- liners)	J-258-63-1 7/11/79 Level 1 (radiation- liners)	
				J-258-64-2 10/9/79 Level 2 (electro- hydraulic actuators) 11	J-258-64-2 10/9/79 Level 2 (electro- hydraulic actuators) 11	
				Se. FSAR Table 3.11-4 Test 16 (air operated valves)		
J-275/J-275, Rev 3 (8/17/77)	Engineering safety isolation system (CCC)	Seismic- IEEE Std 344-75*/**	Paragraphs 2.2, 3.3.3 (IEEE Std 344-75); Section 4.1.3 (G-7, Rev 5) G-321-D 7.0-PAR		J-275-58-2, 6/27/78, Level 1	Start Ship: 4/1/78A Rerev: In- process. NCR 1766
				J-275-68-2 6/7/78 Level 1	J-275-76-1, 6/28/78, Level 1	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE Std 323-74*/**	Paragraphs 2.2, 3.3.3,5.1 (IEEE Std 323-74); Subparagraph 4.1.1 (J-1564)	J-275-75-2, 7/5/78, Level 1	J-275-79-1, 7/5/78, Level 1	See FSAR Table 3.11-4 Test 17
		IEEE Std 383-74*	Paragraphs 2.2, 6.7.1 (IEEE Std 383-74) G-321-D 26.2-PANR		J-275-81-1, 7/13/78, Level 1 (Certificate of compliance)	Letter to vendor 12/20/79 expediting documentation to IEEE Stds 323-74 and 383-74 | 11
					J-275-85-1 9/17/79 Level 3 | 11	
J-278/J-278, Rev 3 (2/6/79)	Room water level safety monitoring system (Automation Industries)	Seismic IEEE Std 344-75*/**	Section 2.2, 3.3.3, 6.2.5, 6.4.4, 6.6.4 (IEEE Std 344-75), 4.1.3 (G-7, Rev 5)	J-278-5-2 6/4/79 Level 1	J-278-36-1 12/28/79 Level 1 | 11	Start Ship: 1/31/80F Rerev: Not required | 11
		Environmental IEEE Std 323-74*/**	Section 3.3.3, 5.1, 6.2.5, 6.6.4 (IEEE Std 323-74)	J-278-14-3 8/7/79 Level 1	J-278-35-2 1/14/80 Level 2 | 11	
				J-278-15-1 5/15/79 Level 1	J-278-35-2 1/14/80 Level 2	
J-281/J-281, Rev 1 (out for bids)	Control room hazardous gas monitoring system (out for bids)	Seismic- IEEE 344-75*/**	Paragraphs 2.2 (IEEE), 2.3 (IEEE 344-75), 3.3.3, 4.1 (G-7) G-321-D, 7.0 PAR	Submittal expected by 6/80	Submittal expected by 12/80	Start Ship: 10/81F
11		Environmental- IEEE 323-74*/**	Paragraphs 2.2 (IEEE), 2.3 (IEEE 323-74) 3.3.3, 4.2 (J-1564), 5.0	Submittal expected by 6/80	Submittal expected by 12/80	
J-284/J-284, Rev 1 (9/28/79)	Containment post-LOCA hydrogen monitoring equipment (Consip Incorp)	Seismic- IEEE Std 344-75*/**	Section 2B, 3C4 (IEEE Std 344-75); Section 4.A.2 (G-7, Rev 5)	Submittal expected by 4/80	Submittal expected by 9/80	Start Ship: 8/80F Rerev: Not required

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
	11	Environmental- IEEE Std 323-74*/**	Section 2B, 3C4, 5A (IEEE Std 323-74); Section 4A (7220-J-1564, Rev. 3)	Submittal expected by 4/80	Submittal expected by 9/80	
M-14/M-14, Rev 3 (12/30/75)	Auxiliary feedwater pumps (Bingham-Willamette)	Seismic- IEEE Std 344-75*/**	Articles 2.0, 6.1.3, 6.4.1.k, and 6.4.2.e (IEEE Std 344-75); Article 13.0 (G-7, Rev 4) G-321-D 7.0-PAR	M-14-124-1, 3/29/79 in review (motor driven pumps)	M-14-124-1, 3/29/79 in review (motor driven pumps) 11	Start Ship: 5/24/78A Rerev: Complete. NCR 1767 Letter to vendor 7/19/79 transmitting comments on seismic qualification reports; meeting held with vendor on 10/9/79 to discuss qualification of equipment. 11
				M-14-125-1, 3/29/79 in review (turbine driven pumps)	M-14-125-1, 3/29/79 in review (turbine driven pumps)	11
				M-14-118-1, 1/5/79, Level 2 (motors)	M-14-118-1, 1/5/79, Level 2	
				M-14-128-1 12/4/79 Level 3 (turbine and related control panel) 11	Results expected by 12/80 11	Telex to vendor 1/9/80 expediting resubmittal of M14-128-1 and submittal of seismic report for control panel.

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE Std 323-74*/**	Articles 2.0, 6.4.1.k, and 6.4.2.e (IEEE Std 323-74)	M-14-119-2, 4/23/79, in review (motors)	M-14-119-2, 4/23/79, inreview (motors)	Teletype to vendor 6/28/79 asking for IEEE Std 323 qualification test program and results for turbine control panels and controls including governor trip and throttle valves.
				M-14 128-1 12/4/79 Level 3 (turbine and related control panel)	Results expected by 12/80	11
						Some equipment designated FSAR Table 3.11-4 Test 16. 11
M-18/M-18, Rev 4 (5/4/77)	Emergency diesel generators (Delaval)	Seismic- IEEE Std 344-75*/**	Subparagraphs 1.6, 3.b.7 and 5.1.14 (IEEE Std 344-75); Appendix A (G-29, Rev 3) G-321-D 7.0-PAR	M-18-30-3 2/28/78 Level 1 (engine and auxiliaries)	M-18-370-1, 8/20/79 Level 3	Start Ship: 9/22/78A Rerev: Complete. NCR 2663.
					M-18-370-2 5/31/79 in review (addresses submittal 1 comments)	
				M-18-59-4 1/25/78 Level 1 (control equipment)	M-18-371-1, 8/17/78 Level 3	
					M-18-371-2 5/31/79 in review (addresses submittal 1 comments)	
				M-18-362-1, 6/29/78, Level 1 (generators)	M-18-372-1, 2/7/79, Level 3	
				M-18-391-1 9/14/79 Level 2 (y-strainer and air filter)	M-18-391-1 9/14/79 Level 2	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-18-387-2 4/17/79 Level 1 (jacket water and lube oil immersion heaters)	M-18-387-2 4/17/79 Level 1	
				M-18-388-1 12/15/78 Level 1 (ladders and platforms)	M-18-388-1 12/15/78 Level 1	
		Environmental- IEEE Std 323-74*/**	Subparagraphs 3.b.7, 5.1.1a and c, 9.2.1 (IEEE Std 323-74)	M-18-389-1, 5/20/79, Level 3 (generator control system components)		Telex to vendor 10/8/79 asking for information on hermetic seals.
				M-18-351-3 10/23/79 in review (Class 1E motors) 11	M-18-351-3 10/23/79 in review 11	
				M-18-334-4, 5/22/79, Level 1, (engine control system components)		Some equipment designated FSAR Table 3.11-4, Test 16. 11
				M-18-362-1, 6/29/78, Level 1 (generators)		
M-19/M-19, Rev 2 (7/29/77)	Emergency diesel fuel transfer pumps (Chempump)	Seismic- IEEE Std 344-75*/**	Subparagraphs 4.1.1.h, 4.2.2, 4.5.2, 10.3.3.c (IEEE Std 344) Appendix H, Subparagraphs 1.5.1, 1.7, 1.8, 1.9 (IEEE Std 344-75); Appendix I, Paragraph 3.5 G-32I-D 7.0 PAR	M-19-20-3, 1/3/79, Level 1 (pumps) 11	M-19-20-3, 1/3/79, Level 1 (pumps)	Start Ship: 12/5/79A Rerev: Not required. 11

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental-IEEE Std 323-74*/**	Subparagraphs 4.1.1.h, 4.2.2, 4.5.3, 10.3.3.c (IEEE Std 323) Appendix H, Subparagraph 1.6.1, 1.7, 1.8, 1.9 (IEEE Std 323-74); Appendix I, Articles 3.0, 4.0; E-10, Rev 9, Subparagraph 11.3a,b (IEEE Std 323-74, IEEE Std 334-74)	M-19-26-2, 4/3/79, Level 3 (motors-IEEE Stds 323-74, 334-74)		
M-020/M-020, Rev 2 (8/01/77)	Traveling water screens (FMC)	Seismic-IEEE Std 344-75*	Page 3, MR, Paragraphs 1.c and 1.d; Attachment 2, Subparagraphs 3.B.9, 4.A.1, 5.E.6, 6.A.1; Appendix B, Articles 1.A.27, 2.A, 2.B, 4.C, 5.B; E-10, Paragraphs 2.10, 3.1 (IEEE Std); G-5, Paragraphs 2.0 (IEEE Std); G-30, Paragraph 1.0; Subparagraphs 1.1.1, 1.7 (IEEE 344-75) G-321-D 7.0 PAR	M-20-21-3, 3/13/79, Level 1	M-20-21-3, 3/13/79, Level 1	Start Ship: 11/10/78A Rerev: Not required Motors and controls are not Class 1E.
		Environmental-none*	Appendix B (service conditions)	See FSAR Table 3.11-4 Test 16		
M-51/M-51, Rev 4 (2/5/74)	Component cooling water heat exchangers (Yuba)	Seismic-none*	Paragraphs 4.12, 7.4.b, Appendix 1, 2.0, 5.0 (G-7, Rev 4)	M-51-51-4 2/18/76, Level 1	M-51-51-4 2/18/76, Level 1	Start Ship: 3/10/78A Rerev: Complete. NCR 1768: Dispositioned 9/13/79.
		Environmental-none*	Articles 3.0 3.1.2, 3.2.3, Appendix 1, 3.0	See FSAR Table 3.11-4, Test 16.		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-052/M-052, Rev 5 (5/13/74)	Component cooling water pump motors	Seismic- IEEE Std 344-71*	Paragraphs 4.4 (G-7, Rev 4), 4.9, 7.4; E-10, Rev 8, 2.10, 3.1	M-52-27-8, 1/30/78, Level 1 (motors)	M-52-27-8, 1/30/78, Level 1 (motors)	Start Ship: 12/21/77A Rerev: Inprocess. NCR 1769
		Environmental- IEEE Std 323-74*	Subparagraphs 3.1.2, 3.3.2, 4.10.1, 4.10.16, 4.11.2; E-10, Rev 8, Paragraphs 2.9, 3.1	M-52-60-1 10/15/79 Level 4 ||	Submittal expected by 4/80 ||	
M-53/M-53, Rev 5 (5/20/77)	Component cooling water pumps (Bingham-Willamette)	Seismic- IEEE Std 344-75*/**	Paragraphs 2.2, 3.2.5, 5.5 (IEEE Std 344-75); Appendix A, Articles 2.0, 5.0 (G-7, Rev 5) G-321-D 7.0 PAR	M-53-24-5, 12/30/78, Level 1 (pump & motor)	M-53-24-5, 12/30/78, Level 1 (pump & Motor)	Start Ship: 5/1/78A Rerev: Complete See M-52 for CCW pump motors. Pumps and motors analyzed in combination in accordance with IEEE Std 344-75.
		Environmental-none*	Paragraphs 2.2, 5.4.1; Subparagraphs 5.1.2; Appendix A, 3.0	See FSAR Table 3.11-4 Test 16		
M-54/M-54, Rev 5 (2/12/74)	Reactor building spray pumps (B&W Canada)	Seismic- IEEE Std 344-71*	Subparagraph 4.5.1, 4.5.2 (E-10), Section 10.3 (G-9) G-321-D 7.0-PAR	M-54-25-3, 1/16/75, Level 1 M-54-54-1, 1/16/75, Level 1 M-54-55-1, 1/16/75, Level 1	M-54-25-3, 1/16/75, Level 1 M-54-54-1, 1/16/75, Level 1 M-54-55-1, 1/16/75, Level 1	Start Ship: 1/20/78A Rerev: Complete. NCR 1770 Telex to vendor 1/18/80 expediting submittal of seismic documentation for pump appurtenances and environmental tests for motors. ||

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE 323-71*	Subparagraphs 2.1.2, 2.2	See FSAR Table 3.11-4, Test 16.		Telex to vendor 9/24/79 requesting environmental testing and results. Reply from vendor 10/22/79 stating that request was passed on to motor manufacturer (Siemans-Allis).
M-55/M-55, Rev 4 (10/18/74)	Fuel pool cooling heat exchanger (Yuba)	Seismic- IEEE Std 344-71*	Subparagraphs 2.2 Item 7; 2.3.3; 4.3.9, (G-7), Rev 4); 7.4b; Appendix 1, Article 2.0 (G-7) G-321-D 70 PAR	M-55-27-3, 7/25/77, acceptable	M-55-27-2, 7/25/77, acceptable	Start Ship: 4/15/77A Rerev: Complete. NCR 2662.
		Environmental- none*	Subparagraphs 3.1.2, 3.2.2, 3.2.3.1, Appendix 1, Article 3.0	See FSAR Table 3.11-4, Test 16		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-56/M-56, Rev 3 (1/14/75)	Fuel pool cooling and chilled water pumps (Gould)	Seismic IEEE Std 344-71*	Subparagraphs 4.2.2, 4.5.2, 10.3; Appendix 1 2.3, 5.0 (G-7, Rev 4) G-321-D 7.0 PAR	M-56-72-1 1/12/78, acceptable (fuel pool cooling pump)	M-56-72-1 1/12/78, acceptable	Start Ship: 2/11/79A Rerev: Complete NCR 1771
				M-56-73-1, 2/22/78, Level 1 (chilled water pump)	M-56-73-1, 2/22/78, Level 1	
		Environmental- IEE Std 323-74*/**	Appendix 1, Article 3.0	M-56-69-3, 3/20/79, Level 1 (motors - IEEE Std 323-74)	M-56-69-3, 3/20/79, Level 1	See FSAR Table 3.11-4 Test 16.
M-61/M-61, Rev 2 (1/3/75)	Makeup filters (Pall Trinity)	Seismic-none*	Paragraph 6.5 (G-7, Rev 4) G-321-D 7.0 PAR	M-61-17-1, 8/10/77 acceptable	M-61-17-1, 8/10/77 acceptable	Start Ship: 5/8/78A, Rerev: Complete. NCR 1772: Dispositioned 8/23/79.
		Environmental- none*	Paragraphs 5.3 and 6.1 (Table 1 and Appendix A)	Not required (Ref. NCR)	Not required (Ref. NCR)	
M-64/M-64, Rev 6 (3/29/74)	Nuclear tanks (Richmond)	Seismic-none*	Subparagraphs 7.2.1.i (G-29, Rev 2; G-7, Rev 4)	M-64-32-4, 9/13/76, acceptable (CCW surge tanks)	M-64-32-4, 9/13/76, acceptable	Start Ship: 7/8/76A, Rerev: Complete. NCR 1773: Dispositioned 10/3/79.
				M-64-33-4, 4/15/76, acceptable (radwaste gas surge tanks)	M-64-33-4, 4/15/76, acceptable	
				M-64-34-5, 6/22/78, acceptable (emergency diesel oil day tanks)	M-64-34-5, 6/22/78, acceptable	

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MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-64-35-4, 4/15/76, acceptable (radwaste gas decay tanks)	M-64-35-4, 4/15/76, acceptable	
				M-64-42-3, 4/26/76, acceptable (emergency diesel oil storage tanks)	M-64-42-3, 4/26/76, acceptable	
				M-64-64-5, 9/20/79, Level 1 (safeguards expansion tanks-Unit 1)	M-64-64-5, 9/20/79, Level 1	
				M-64-65-5, 9/20/79 Level 1 (safeguards expansion tanks-Unit 2)	M-64-65-5, 9/20/79 Level 1	
				M-64-73-4, 4/13/78 Level 1 (pressurized water storage tanks)	M-64-73-4, 4/13/78 Level 1 (pressurized water storage tanks)	
				M-64-82-2, 5/8/79, Level 1 (control room pressurization tank)	M-64-82-2, 5/8/79, Level 1	
				M-64-83-3, 6/5/79, Level 1 (hydrazine storage tank)	M-64-83-3, 6/5/79, Level 1	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental-none*	Paragraph 3.1 (temperature)	See FSAR Table 3.11-4, Test 16.		
M-75/M-75, Rev 5 (12/30/75)	Service water pumps (Gould)	Seismic-IEEE Std 344-75*/**	Paragraphs 4.1, 8.1 (IEEE Std); Subparagraphs 7.1.8-10, (G-30, Rev 1), 9.3.2; Article 13.0; Appendix 1, Article 2.0; Appendix 2, Paragraph 2.4 (G-30, Rev 1, Article 1.0 (IEEE Std 344-75)) G-321-D 7.0 PAR	M-75-21-6, 4/28/78, Level 1 (pump supports) M-75-28-2 11/28/77, Level 1 (motors-IEEE Std 344-71)	M-75-21-6, 4/28/78, Level 1 (pump supports) M-75-38-3, 8/22/78, Level 1 (motors-IEEE Std 344-71)	Start Ship: 12/30/77A Rerev: Complete. NCR 1774
		Environmental-IEEE Std 323-74*/**	Paragraphs 4.1, 8.1 (IEEE Std); Appendix 1, Article 3.0; Appendix 2, Paragraph 3.0	M-75-28-2, 11/28/77, Level 1 (motors-IEEE Std 323-74)	M-75-63-2, 11/19/79 Level 4 (motors)	11
M-90/M-90, Rev 2 (5/17/77)	Incore instrument tank (CBI)	Seismic-none*	Paragraphs 10.2.4, Article 7.0 (G-6, Rev 4); Appendix 1, Paragraphs 2.0, 2.3 (G-6, Rev 4) G-321-D 7.0 PAR	M-90-34-3, 8/28/78, Level 1 (design calcs)	M-90-34-3, 8/28/78, Level 1 (design calcs)	Shipped 4/1/78A Rerev: Complete. NCR 2661.
		Environmental-none*	Paragraphs 4.1; Appendix 1, Article 3.0 (G-26, Rev 1)	Not required (Ref. QTR)	Not required (Ref. QTR)	
M-92/M-92, Rev 4 (1/26/70)	Reactor building cranes (Harnischfeger	Seismic-none*	Paragraph 3.2 (G-6); E-10, Rev 5, Paragraphs 2.10, 3.0 (G-7, Rev 4)	M-92-34-4, 8/2/79 Level 1	M-92-34-4, 8/2/79, Level 1	Start Ship: 3/14/75A Rerev: Complete. NCR 1775: Dispositioned 9/7/79.
		Environmental-none*		Not required	Not required	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-93/M-93, Rev 3 (10/23/75)	Auxiliary building crane (Ederer)	Seismic- IEEE Std 344-75*	Paragraphs 3.2, 3.12 9.0, 10.2, (G-7, Rev 5) 4.22 (E-10) G-321-D 7.0-PAR	M-93-76-1 11/13/79 in review |11	M-93-76-1 11/13/79 in review |11	Start Ship: 9/17/76A Rerev: Complete. NCR 1776: Dispositioned 4/20/79. |11
		Environmental- none*	Paragraph 2.2 Paragraph 4.22 (E-10)	Not required	Not required	Equipment is Q-listed for seismic reasons only.
M-117/M-117, Rev 10 (3/13/74)	Nuclear service valve (Anchor/ Darling)	Seismic- IEEE Std 344-71*	M-221, Paragraph 3.1, Appendix 1, Paragraph A1.12 (RG 1.48); G-9, Paragraphs 4.2, 7.1 (IEEE Std 344-71)	M-117-40-3, 8/5/76, acceptable	M-117-40-3, 8/5/76, acceptable	Start Ship: 5/15/78A Rerev: Inprocess. NCR 1777
				M-117-41-3, 8/5/76, acceptable	M-117-41-3, 8/5/76 acceptable	
				M-117-93-1 5/23/79 Level 1	M-117-93-1 5/23/79 Level 1	
				M-117-97-1 9/10/79 Level 1 (manual) |11	M-117-97-1 9/10/79 Level 1 (manual) |11	
		Environmental- IEEE Std 323-74* IEEE Std 382-72*/** (solenoid valves inside containment) IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-221, Paragraph 3.1, 7.1; G-9, Paragraph 4.2 (IEEE Std 382-72);	M-117-90-1 7/8/79 Level 1 (aging)	M-117-90-1 7/8/79 Level 1	Limitorque operators.
				M-117-54-2 2/26/79 information only (IEEE Std 382- Draft 13)	M-117-54-2 2/26/79 information only (IEEE Std 382- Draft 13)	Limitorque operators.
				M-117-80-1 8/6/79 Level 1 (aging-dc motor operators) |11	M-117-80-1 8/6/79 Level 1 (aging-dc motor operators) |11	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-118A/M-118A, Rev 4 (5/9/74)	Nuclear service gate and globe valves (E.B.V. Systems)	Seismic- IEEE Std 344-71*	M-221, Paragraph 3.1, Appendix A1, Paragraphs A1.11, A1.20, A1.23 (IEEE Std 344-71) Appendices B, C, D G-321-D 7.0 PAR	M-118A-55-2, 3/17/78, acceptable (28 inch ball valves)	M-118A-55-2, 3/17/78, acceptable	Start Ship: 4/24/78A Rerev: Complete NCR 1778: Dispositioned 9/20/79. |11
		Environmental- IEEE Std 323-74*	M221, Paragraph 3.1, Appendix 1, Paragraphs A1.4, A1.19.20	See FSAR Table 3.11-4 Test 16		
M-118B/M-118B, Rev 4 (5/9/74)	Nuclear service gate and globe valves (Rockwell International)	Seismic- IEEE Std 344-71*	M-221, Paragraph 3.1, Appendix A1, Paragraphs A1.11, A1.31; (G-32), Paragraphs 2.A, B, 8.C.6 (IEEE Std 344-75) Paragraph 5.5 G-321-D-7.0-PAR	M-118B-48-2, 6/6/77, acceptable M-118B-78-2 5/29/79 Level 1 M-118B-97-1 7/24/79 Level 1 |11	M-118B-48-2, 6/6/77, acceptable M-118B-78-2 5/29/79 Level 1 M-118B-97-1 7/24/79 Level 1 |11	Start Ship: 1/79A Rerev: Complete. NCR 1779 Dispositioned 10/5/79. |11
		Environmental- IEEE Std 323-74* IEEE Std 382-72*/** (solenoid valves inside containment)	M-221-Sect 3.1, Paragraphs A1.4, A1.31 A1.34; Appendix A14, Article 5.0; G-32, Paragraph 2.A, B, 8.C.4-5; (IEEE Std 323-71, IEEE Std 382-72)	M-118B-81-2, 4/3/79, Level 1 M-118B-82-1 3/13/79 Level 1 (radiation) M-118B-97-1 7/24/79 Level 1 |11	M-118B-94-1, 7/23/79 Level 1 M-118B-95-1 7/18/79 Level 1 M-118B-97-1 7/24/79 Level 1 |11	
M-120/M-120, Rev 3 (7/6/74)	Nuclear valves, 2 1/2" and larger (Anchor/ Darling)	Seismic- IEEE Std 344-71*	M-221, Article 3.1, Paragraph 3.1, Appendix 1 Paragraph A1.4; G-9, Paragraphs 4.2, 7.1, (IEEE Std 344) G-321-D-7.0-PAR	M-120-87-2, M-120-88-2, 8/5/76, acceptable M-120-95-1 through 97-1, 8/5/76, acceptable	M-120-87-2, M-120-88-2, 8/5/76, acceptable M-120-95-1 through 97-1, 8/5/76, acceptable	Start Ship: 9/13/78A Rerev: Complete. NCR 1780: Dispositioned 10/3/79.

MF/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-120-105-1, 12/9/77, acceptable	M-120-105-1, 12/9/77, acceptable	
				M-120-106-2, 6/26/78, Level 1	M-120-106-2, 6/26/78, Level 1	
				M-120-107-2, 6/16/78, Level 1	M-120-107-2, 6/16/78, Level 1	
				M-120-134-1 11/19/79 Level 2 |11	M-120-134-1 11/19/79 Level 2 |11	
		Environmental- IEEE Std 323-74* IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-221, Paragraph 3.1 Appendix 1, Paragraph A1.1; G-9, Section 4.2, 7.1, (IEEE 382-72, 323-71)	M-120-120-2 2/26/79 Level 1 (aging)	M-120-120-2 2/26/79 Level 1	
				M-120-86-2, 2/20/79, information only	M-120-86-2, 2/20/79, information only	Limitorque operators.
M-123A/123A, Rev 2 (5/24/74)	Nuclear valves, 2 1/2" and larger (Westinghouse)	Seismic- IEEE Std 344-71*	M-221, Article 3.1 Appendix 1, Paragraphs A1.14, G-9, Paragraphs 4.2, 7.1 (IEEE Std 344) Appendix 7, 4.2 G-321-D 7.0 PAR	M-123A-93-2, 1/25/77, acceptable (gate valves)	M-123A-93-2 1/25/77 acceptable	Start Ship: 4/30/76A Rerev: Complete.
		Environmental- IEEE Std 323-74* IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-221, Article 3.1 Appendix 1, Paragraphs A1.1, G-9, Paragraphs 4.2, 7.1 (IEEE Std 382) G-321-D 26.0 PAR	M-123A-96-2, 4/27/79 Level 1	M-123A-96-2 4/27/79 Level 1	Limitorque operators. Telex to vendor 2/9/79 asking for flame resistance documentation.
M-123B/M-123B, Rev 2 (10/25/75)	Nuclear valves, 2 1/2" and larger (Target Rock)	Seismic- IEEE Std 344-75*/**	M-221, Paragraph 3.1, Table 1, 3; Appendix 1, A1.4 (RG 1.48); G-9, Paragraphs 4.2, 7.1 (IEEE Std 344) G-321-D-7.0-PAR	M-123B-48-3, 1/12/79, Level 1	M-123B-48-3, 1/12/79, Level 1	Start Ship: 4/30/77A Rerev: Inprocess. NCR 1781

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status	
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-221, Article 3.1 Appendix 1, Paragraphs 1.1 G-9, Paragraphs 4.2, 7.1 (IEEE Std 382) G-321-D 7.0 PAR	M-123B-54-2 5/29/79 Level 1	M-123B-54-2 5/29/79 Level 1	Limitorque operators.	
					M-123B-62-1, 3/24/79, Level 1 (certificate of compliance to IEEE Std 383)	Some valves designated FSAR Table 3.11-4 Test 16.	11
					M-123B-63-1 11/20/79 Level 1	Limitorque operators.	11 11
M-123C/M-123C, Rev 2 (10/25/74)	Nuclear valves, 2 1/2" and larger (Anchor/ Darling)	Seismic- IEEE Std 344-71*	M-221, Paragraph 3.1; Table 1, 3; Appendix 1, A1.4 (RG 1.48) G-9, Paragraphs 4.2, 7.1 (IEEE Std 344) G-321-D 7.0-PAR	M-123C-44-1, 8/5/76, acceptable (6 inch motor operated gate valves)	M-123C-44-1, 8/5/76, acceptable	Start Ship: 4/12/78A Rerev: Inprocess. NCR 1782	
				M-123C-63-2, 5/26/78, Level 1 (3 inch motor operated gate valves)	M-123C-63-2, 5/26/78, Level 1		
		Environmental- IEEE Std 323-74* IEEE Std 382-72*	M-221, Paragraph 3.1; Appendix 1, A1.1; G-9, Paragraphs 4.2, 7.1 (IEEE Std 323 and 382)	M-123C-37-2, 12/19/78 Level 1	M-123C-37-2 12/19/78, Level 1		
				M-123C-69-1, 2/8/79, Level 1 (aging)	M-123C-69-1, 2/8/79, Level 1		
M-125A/M-125A, Rev 3 (6/14/74)	Nuclear valves, gate and check (Westing- house)	Seismic- IEEE Std 344-71*	M-221, Paragraph, 3.1, Appendix 1, A1.4, (RG 1.48); G-9, Paragraph 4.2, (IEEE Std 344) G-321-D 7.0-PAR	M-125A-88-2, 12/13/76, acceptable (gate valves)	M-125A-88-2, 12/13/76, acceptable	Start Ship: 9/28/76A Rerev: Complete. NCR 1783: Dispositioned 9/20/79.	
				M-125A-80-1, 5/18/76, acceptable (check valves)	M-125A-80-1, 5/18/76, acceptable		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
		Environmental- IEEE Std 323-74 IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-221, Article 3.1, Appendix 1, Paragraph A1.1; G-9, Paragraphs 4.2, 7.1 (IEEE Std 323 and 382)	M-125A-92-1 2/8/79 Level 1	M-125A-92-1 2/8/79 Level 1	Limitorque operators.
M-125B/M-125, Rev 3 (6/21/74)	Nuclear service valves 2-1/2" and larger (Target Rock)	Seismic- IEEE Std 344-71*	M-221, Paragraph 3.1; Table 1, Appendix 1, A1.4; G-9, Rev 1, 4.0 (IEEE Std 344) G-321-D 7.0-PAR	M-125B-26-1 through 34-1, 10/16/75, Level 1	M-125B-26-1 through 34-1, 10/16/75, Level 1	Start Ship: 1/5/77A Rerev: Complete. NCR 1784: Dispositioned 4/20/79.
		Environmental-none*		Not required (manual valves) |11	Not required (manual valves) |11	
M-125C/M-125, Rev 3 (6/21/74)	Nuclear service valves 2-1/2" and larger (Anchor Darling)	Seismic- IEEE Std 344-71*	M-221, Paragraph 3.1, Table 1, 3; G-9, Paragraphs 4.2, 7.1 (IEEE Std 3 G-321-D 7.0-PAR	M-125C-54-3, 11/9/79, Level 1 M-125C-59-1 through -62-1, 8/5/76, acceptable	M-125C-54-3, 11/9/79, Level 1 M-125C-59-1 through -62-1, 8/5/76, acceptable	Start Ship: 4/12/78A Rerev: Complete. NCR 1785: Dispositioned 10/3/79.

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-125C-92-1, 2/1/78, Level 1	M-125C-92-1, 2/1/78, Level 1	
				M-125C-113-1, M-125C-114-1, 2/28/79, Level 1	M-125C-113-1, M-125C-114-1, 2/28/79, Level 1	
				M-125C-115-1, 6/27/79, Level 1	M-125C-115-2, 6/27/79, Level 1	
				M-125C-124-1 11/19/79 Level 2	M-125C-124-1 11/19/79 Level 2	
				M-125C-125-1 11/21/79 Level 2	M-125C-125-1 11/21/79 Level 2	11
				M-125C-126-1 12/10/79 Level 2	M-125C-126-1 12/10/79 Level 2	
		Environmental- IEEE Std 323-74* IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-221, Paragraph 3.1, Appendix 1, Subparagraph A1.1; G-9, Paragraphs 4.2, 7.1 (IEEE Std 323 and 382)	M-125C-111-1, 2/8/79 Level 1 (aging)	M-125C-111-1, 2/8/79 Level 1	Limitorque operators.
M-127A/M-127, Rev 4 (9/16/74)	Nuclear manual and air-operated valves 2" and under (Kerotest)	Seismic- IEEE Std 344-71*	M-225, Paragraph 3.2, 16.4, Appendix A1, Paragraph A1.3; G-9, Paragraphs 4.2, 7.1, (IEEE), G-10, 11.3 G-321-D 7.0 PAR	M-127A-20-1, 9/20/76, acceptable (air operated valves)	M-127A-20-1, 9/20/76, acceptable (air operated valves)	Start Ship: 3/31/78A Rerev: Complete NCR 1786: Dispositioned 8/24/79. Air operated valves on surplus.
		Environmental- none*		Not required (manual valves)	Not required (manual valves)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-127B/M-127, Rev 3 (9/16/74)	Nuclear manual operated valves 2" and under (Henry Vogt)	Seismic- IEEE Std 344-71*	M-225, Paragraphs 3.2, 16.4.4c; Appendix A1, Paragraph A1.3 G-321-D 7.0-PAR	Not required (manual valves)	Not required (manual valves)	Start Ship; 9/18/78A Rerev: Complete. NCR 1787: Dispositioned 10/25/79.
		Environmental- none*	M-225 Paragraph 3.2; Appendix A1, Paragraph A1.1, A1.9; G-26	Not required (manual valves)	Not required (manual valves)	
M-127C/M-127, Rev 3 (9/17/74)	Nuclear manual operated valves 2" and under (Yarway)	Seismic- IEEE Std 344-71*	M-225, Paragraphs 3.2, 16.4.4c; Appendix A1 Paragraph A1.3 G-321-D 7.0-PAR	M-127C-11-1 11/6/75 Level 5	M-127C-11-1 11/6/75 Level 5	Start Ship: 10/13/78A Rerev: Complete. NCR 1788: Dispositioned 10/25/79.
		Environmental- none*	M-225, Paragraph 3.1, Appendix A1, Paragraph A1.1, Appendix A1, Paragraph A1.9; G-26	Not required (manual valves)	Not required (manual valves)	
M-129A/M-129, Rev 2 (9/16/74)	Nuclear valves, sst, manual and air-operated 2" and under (Kerotest)	Seismic- IEEE Std 344-71*	M-225, Article 3.2, Appendix A1, Paragraph A1.3; G-9, Paragraphs 4.2, 7.1 (IEEE), G-10 Article 11.3 G-321-D 7.0-PAR	M-129A-63-1, 9/20/76, acceptable	M-129A-63-1, 9/20/76, acceptable	Start Ship: 2/15/78A Rerev: Complete.
		Environmental- IEEE Std 323-74* IEEE Std 382-72*	Appendix A1, A1.1; G-9 Paragraphs 4.2, 7.1 G-26; G-10, Paragraph 11.3 G-321-D 26.0 PAR	Not required (manual valves) See FSAR Table 3.11-4 Test 16 (air-operated valves)	Not required (manual valves) M-129A-95-1, 4/3/79, Level 1 (IPCEA S-19-81)	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-129B/M-129, Rev 1 (9/16/74)	Nuclear valves, sst, 2" and under (Weston Hydromatics)	Seismic- IEEE Std 344-71*	M-225, Paragraphs 3.2, 3.2.3; G-9, Paragraphs 4.2, 7.1 (IEEE Std 344); G-10, Paragraph 11.3 G-321-D 7.0-PAR	M-129B-31-1, 6/25/76, acceptable	M-129B-31-1, 6/25/76, acceptable	Start Ship: 2/15/78A Rerev: Inprocess. NCR 2660. All valves currently surplus.
				M-129B-32-5, 3/20/79, Level 1	M-129B-32-5, 3/20/79, Level 1	
				M-129B-33-2, 11/18/76, acceptable	M-129B-33-2, 11/18/76, acceptable	
		Environmental- IEEE Std 323-74* IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-225, Paragraph 3.2 Appendix A1, Paragraph A1.1; G-9, Paragraphs 4.2, 7.1 (IEEE Std 382); G-26; G-10, Paragraph 11.3 G-321-D 26.0 PAR	See FSAR Table 3.11-4 Test 16 (air-operated valves)		Letter from vendor 3/1/79 clarifying applicability of Limitorque Reports
M-131/M-131, Rev 2 (7/7/78)	Diaphram valves (ITT Grinnell)	Seismic- IEEE Std 344-75*/**	Paragraph 3.B.1.C, 4.A.1, 5.B; Attachment E, Article 1.0; Table C-1 G-321-D 7.0-PAR	M-131-27-3 7/23/79 Level 1	M-131-27-3 7/23/79 Level 1	Start Ship: 4/80F Rerev: Not required |11
				M-131-30-1, 7/13/79, Level 1 (limit switches)	M-131-30-1, 7/13/79, Level 1 (limit switches)	
		Environmental- IEEE Std 323-74*/**	Paragraphs 4.A.1, 4.A.4, Appendix A; Article 3.0 Attachment E, Table C-1	M-131-30-1, 7/13/79, Level 1 (limit switches)	M-131-30-1, 7/13/79, Level 1 (limit switches)	See FSAR Table 3.11-4 Test 16.
				M-131-32-2, 11/6/79, Level 1 (radiation) |11	M-131-32-2, 11/6/79, Level 1 (radiation) |11	
M-132/M-132, Rev 3 (11/27/74)	Butterfly valves (H. Pratt)	Seismic- IEEE Std 344-71*	M-228, Paragraph 3.1, Appendix 1, Section A1.3, (RG 1.48) G-321-D 7.0-PAR	M-132-67-3, through -72-3, 9/7/76, acceptable	M-132-67-3, through -72-3, 9/7/76, acceptable	Start Ship: 11/22/76A Rerev: Complete. NCR 1789

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-132-83-1 and -84-1, 9/24/76, acceptable	M-132-83-1 and -84-1, 9/24/76, acceptable	
				M-132-87-1 through -92-1, 10/12/76, acceptable	M-132-87-1 through -92-1, 10/12/76, acceptable	
				M-132-99-2 through -103-2, 5/12/77, acceptable	M-132-99-2 through -103-2, 5/12/77, acceptable	
				M-132-105-2, 3/3/78, Level 1	M-132-105-2, 3/3/78, Level 1	
				M-132-106-1, 3/3/78, Level 1	M-132-106-1, 3/3/78. Level 1	
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M-220, Paragraph 3.1; Appendix 1, Paragraph A1.1	M-132-108-2, 3/16/79, Level 1	M-321-108-2, 3/16/79, Level 1	Limitorque operators.
M-134/M-134, Rev 3 (1/7/77)	Steel plug valves (Tufline)	Seismic- IEEE Std 344-75*/**	Section 3.B.1.C, 4.A.1, 5.B; G-9, Paragraph 4.2 (IEEE Std 344) G-321-D 7.0 PAR	M-134-36-1, M-134-38-1 through M-134-41-1, M-134-43-1 through M-134-45-1, 6/9/78, Level 1	M-134-36-1, M-134-38-1 through M-134-41-1, M-134-43-1 through M-134-45-1, 6/9/78, Level 1	Start Ship: 3/23/79A Rerev: Inprocess. NCR 1790 11
				M-134-37-2, 1/23/79, information only	M-134-37-2, 1/23/79, information only	
				M-134-42-2, 6/28/79, Level 1	M-134-42-2, 6/28/79, Level 1	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEI Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-134-46-2, 7/10/78, Level 1	M-134-46-2, 7/10/78, Level 1	
				M-134-89-2, 9/28/79, Level 1	M-134-89-2, 9/28/79, Level 1	
				M-134-90-1, 9/19/79, Level 1	M-134-90-1, 9/19/79, Level 1	
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72*	Appendix C, Article 3.0; G-9, Paragraphs 4.2, (IEEE Std 382) 7.1	M-134-85-1, 11/15/78, Level 1 (Limitorque - outside RCB)	M-134-85-1, 11/15/78, Level 1	See FSAR Table 3.11-4 Test 16.
					M-134-91-1 11/7/79 Level 1	Limitorque operators.
M-140/M-140, Rev 2 (5/6/77)	Nuclear service pressure relief valves (Crosby)	Seismic-none* IEEE Std 344-75*/** (1PSV-1016 and 2PSV-1116 only)	MR Page 5, Item 18; Attachment 1.0, Paragraph 3.6; Appendix D, Paragraphs 2.4, 2.5, G-321-D 7.0-PAR	M-140-76-3, M-140-80-3, M-140-81-3, M-140-82-3, M-140-83-3, M-140-84-3, 1/19/79, Level 1	M-140-76-3, M-140-80-3, M-140-81-3, M-140-82-3, M-140-83-3, M-140-84-3, 1/19/79, Level 1	Start Ship: 6/21/79A Rerev: Complete. NCR 2659.
				M-140-77-4, 5/22/79, Level 1	M-140-77-4, 5/22/79, Level 1	
				M-140-78-6, 6/20/79, Level 1	M-140-78-6, 6/20/79, Level 1	
				M-140-79-4, 3/29/79, Level 1	M-140-79-4, 3/29/79, Level 1	
				M-140-85-4, 4/17/79, Level 1	M-140-85-4, 4/17/79, Level 1	
				M-140-86-6, 9/25/79, Level 1	M-140-86-6, 9/25/79, level 1	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
				M-140-114-1, M-140-115-1, M-140-116-1, 10/29/79, Level 1 ||11	M-140-114-1, M-140-115-1, M-140-116-1, 10/29/79, Level 1 ||11	
		Environmental- none*	Section 3.2, Appendix D Paragraphs 2.1, 3.0, Appendix F	M-140-41-1, 9/27/77, Level 5 (radiation)	M-140-41-1, 9/27/77, Level 5	
M-146/M-146, Rev 2 (6/19/75)	Auxiliary building safeguard chiller (Carrier)	Seismic- IEEE Std 344-71*	Section 3.5 10.3.1.i, 5.16 (G-7); E-10, Paragraph 2.10 (G-7 Rev 4), Section 3.1 (IEEE Std) G-321-D 7.0-PAR	M-146-16-2, 1/23/76, Level 1	M-146-33-1, 6/10/76, acceptable (chiller) ||11	Start Ship: 10/29/76A Rerev: Complete. NCR 1791: Dispositioned 10/25/79.
				||11	M-146-34-1, 6/10/76, acceptable (control panel) ||11	
					M-146-42-1, 4/16/79, Level 3 (control enclosure) ||11	
		Environmental- IEEE Std 323-74*/**	Section 4.0, 3.5 (M-146-Sk-1); E-10, Section 3.1 (IEEE Std)	See FSAR Table 3.11-4 Test 16.		
M-149/M-149, Rev 5 (1/22/76)	Air handling unit (Trane)	Seismic- IEEE Std 344-75*/**	Paragraph 6.17 (G-7); Section 7.1 (IEEE Std 344-71); Appendix N, Articles 9.0, 11.0 (G-7, Rev 4) E-10, Article 3.0 G-321-D 7.0-PAR	M-149-63-4, 4/1/77, acceptable	M-149-63-4, 4/1/77, acceptable	Start Ship: 7/1/77A Rerev: Inprocess. NCR 1792
				M-149-66-1, -72-1, and -74-1, 10/4/76, acceptable	M-149-66-1, -72-1, and -74-1, 10/4/76, acceptable	
		Environmental- IEEE Std 323-74*/**	Appendix N, Articles 2.0 9.0; E-10, Article 3.0 (IEEE Std) G-321-D 26.1 PAR G-321-D 26.2 PAR	See FSAR Table 3.11-4, Test 16.		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-150/M-150, Rev 7 (4/30/76)	Air filtering unit (MSA)	Seismic- IEEE Std 344-75*/**	Paragraph 6.10 (G-7) Appendix A, Items 1, 2, and 3, Page 1 G-321-D 7.0-PAR	M-150-51-4, 11/23/76, acceptable	M-150-51-4, 11/23/76, acceptable	Start Ship: 2/15/78A Rerev: Complete. NCR 1793
				M-150-62-2, 11/21/76, acceptable	M-150-62-2, 11/21/76, acceptable	
				M-150-64-4, 12/19/78, Level 1	M-150-64-4, 12/19/78, Level 1	
				M-150-142-2, 5/29/79, Level 1 (relative humidity controls)	Submittal expected by 11/80	11
				M-150-145-2, 5/24/79 Level 1 (electric heater and heater controls)	Submittal expected by 11/80	11
				M-150-156-1, 5/5/79, Level 1	M-150-156-1, 5/5/79, Level 1	
		Environmental- IEEE Std 323-74*/** IEEE Std 334-74* IEEE Std 334-71**	Appendix A G-321-D 26.1 PAR G-321-D 26.2 PAR	M-150-142-2, 5/29/79 Level 1	Submittal expected by 11/80	11
				M-150-145-2 5/24/79 Level 1 (electric heater and heater controls)	Submittal expected by 11/80	
				M-150-146-2, 11/20/79, Level 2 (high temperature alarms)	11 Test results expected by 11/80	11

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-151A/M-151, Rev 4 (10/5/77)	HVAC subcontract (Zack)	Seismic- none*	Paragraphs 11.2.2, 1.2.3, 1.3j, 6.2, 6.4; C-305, Table 2.1; Appendix G G-321-D 7.0 PAR	M-151-58-3, 4/30/79, Level 1 (dampers)	M-151-58-3, 4/30/79, Level 1 (dampers)	Start Ship: 10/26/77A Rerev: Not required. NCR 2658. Meeting with vendor 9/12/79. Telex to vendor 10/16/79 requesting seismic qualification.
				M-151-84-2, 10/15/79, Level 1 (fire dampers)	M-151-84-2, 10/15/79, Level 1 (fire dampers)	
		Environmental- none		Not required	Not required	
M-154/M-154, Rev 1 (9/26/77)	HVAC isolation valves (Pacific Air)	Seismic- IEEE Std 344-75*/**	Section 3.1, 5.3.1f (IEEE Std 344); Paragraph 5.1.1, 6.0, 10.3.3; G-9, Sections 4.2, 7.1 (IEEE Std) G-321-D 7.0 PAR	M-154-38-4, 3/20/79, Level 1 (dampers)	M-154-38-4, 3/20/79, Level 1	Start Ship: 6/29/79A Rerev: Inprocess.
				M-154-39-3, 1/24/79; Level 1 (air operators)	M-154-39-3, 1/24/79, Level 1	
				M-154-40-3, 3/22/79, Level 1 (limitorque actuators)	M-154-40-3, 3/22/79, Level 1	
				M-154-41-3 1/22/79, Level 1 (solenoid valves)	M-154-41-3 1/22/79, Level 1	
				M-154-43-3 4/5/79, Level 1 (limit switches)	M-154-43-3 4/5/79, Level 1	
				M-154-52-1 11/19/79 Level 1 (motor operated valves) 11	M-154-52-1 11/19/79 Level 1 11	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status	
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72*	Section 3.1, 5.3.1, 7.3.4C (IEEE Std 323) G-9, Paragraphs 4.2, 7.1	M-154-41-3, 1/22/79, Level 1 (solenoid valves)	M-154,41-3, 1/22/79, Level 1	Some valves designated FSAR Table 3.11-4 Test 16.	11
				M-154-43-3, 4/5/79, Level 1 (limit switches)	M-154-43-3, 4/5/79, Level 1		
				M-154-52-1 11/19/79 Level 1 (motor operated valves)	M-154-52-1 11/19/79 Level 1		11
M-157/M-157, Rev 4 (9/20/76)	Vane axial fans (Joy)	Seismic- IEEE Std 344-75*/**	Paragraphs 3.6, 5.5.10, 5.9 (G-7, G-29): Subparagraph 9.2.7d; G-7, Rev 4; G-29, 1.1.1 (IEEE Std 344-75) G-321-D 7.0-PAR	M-157-33-1 through -38-1, 6/15/77, acceptable	M-157-33-1 through -38-1, 6/15/77, acceptable	Start Ship: 9/6/77A Rerev: Complete.	
				M-157-39-1, 6/28/78, acceptable	M-157-39-1, 6/28/78, acceptable		
				M-157-46-2, 5/23/79, Level 1	M-157-46-2, 5/23/79, Level 1		
				M-157-24-1, 5/9/77, Level 1 (motors-IEEE Std 344-75)	M-157-42-1, 11/25/78, Level 1 (motors-IEEE Std 344-75)		
		Environmental- IEEE Std 323-74*/** IEEE Std 334-74* IEEE Std 334-71*	Section 3.6, 5.5.10, (IEEE 323-74, 334) G-321-D 26.1 PAP G-321-D 26.2 PAR	M-157-24-1, 5/9/77, Level 1 (motors-IEEE Stds 323-74, 334-74)	M-157-42-1, 11/25/78, Level 1 (motors-IEEE Stds 323-74, 334-74)		11

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-163/M-163, Rev 2 (11/15/75)	Recirculating air cooling units CVI (Penwalt)	Seismic- IEEE Std 344-75*/**	Sections 6.4.1, 8.3.2d, 4.1.j (IEEE Std) Section 6.8 (G-6, Rev 4)	M-163-40-2, 10/25/77, acceptable (fans)	M-163-40-2, 10/25/77, acceptable (fans)	Start Ship: 3/9/78A Rerev: Complete. NCR 1794: Dispositioned 10/25/79.
				M-163-56-1, 2/3/79, Level 2 (fans and motors-IEEE Std 344)	M-163-46-3, 4/7/78, Level 1 (fans and motors-IEEE Std 344)	
		Environmental- IEEE Std 323-74*/** IEEE Std 334-74* IEEE Std 334-71**	Section 4.1.j (IEEE Std); Section 6.3.4, 8.3 (IEEE Std 323); Section 4.1.j, 7.2.2, (IEEE Std 334-71) G-26; E-10, Paragraph 2.9, 2.10	M-163-56-1, 2/3/79, Level 2 (fans and motors-IEEE Stds 334, 323)	M-163-48-3, 4/7/78, Level 1 (fans and motors-IEEE Stds 344, 323)	
				M-163-57-1, 2/5/79, Level 1 (radiation)	M-163-57-1, 2/5/79, Level 1 (radiation	
M-168/M-168, Rev 6 (9/22/76)	Reactor building isolation 18" and 48" valves (H. Pratt)	Seismic- IEEE Std 344-75*/**	Paragraph 5.3, Appendix A, Article 8.0 Appendix C, Appendix H; G-9, Paragraphs 4.2, 7.1 (IEEE Std 344-75) G-321-D 7.0 PAR	M-168-48-1, 9/8/78, Level 1	M-168-48-1 9/8/78, Level 1	Start Ship: 10/16/78A Rerev: Inprocess. NCR 1795
				M-168-49-1, 9/8/78, Level 1	M-168-49-1, 9/8/78, Level 1	
				M-168-46-1, 9/7/78, Level 1	M-168-46-1, 9/7/78, Level 1	
				M-168-47-1, 9/7/78, Level 1	M-168-47-1, 9/7/78, Level 1	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-180/M-180, Rev 2 (5/12/77)	Service water self-cleaning strainers (S.P. Kinney)	Seismic-IEEE Std 344-75*/**	Section 4.1.10 (IEEE Std 344); Paragraphs 5.4, 6.5 (G-30); Section 6.8.2 (shafts); Appendix A, Section A2.0 (G-30); A2.0; G-30, Rev 0 G-321-D 7.0 PAR	M-180-16-5, 5/10/78, Level 1 (strainers)	M-180-16-5, 5/10/78, Level 1	Start Ship: 7/15/79A Rerev: In-process.
				M-180-27-3, 5/18/78, Level 1 (motors)	M-18-27-3, 5/18/78, Level 1	
				M-180-34-3, 5/22/79 Level 1 (motors)	M-180-34-3 5/22/79 Level 1	
		Environmental-IEEE Std 323-74*/**	Section 4.1.10 (IEEE Std 323-74); Appendix A, Section A3.0, E-10, Section 11.3a (IEEE Std 323-74 and 334-74) G-321-D 26.1 PAR G-321-D 26.2 PAR	M-180-27-3, 5/18/78, Level 1 (motors)	M-180-27-3, 5/18/78, Level 1	See FSAR Table 3.11-4 Test 16.
M-333/M-333, Rev 3 (11/26/77)	Nuclear service pressure relief valves (Crosby)	Seismic-none*	Appendix K; Appendix D, 2.4 G-321-D 7.0-PAR	M-333-17-2, 2/20/79, level 1	M-333-17-2, 2/20/79, Level 1	Start Ship: 1/31/80F Rerev: Complete.
		Environmental-none*	Section 2.0, 3.0, Appendix A, 2.0; Appendix D, 3.0	Not required	Not required	
M-336/M-336, Rev 1 (8/8/77)	Nuclear wye strainers (Leslie Co.)	Seismic-none*	Attachment F, Sheets 1-4; Attachment G	M-336-27-2, 4/26/78, Level 1	M-336-27-2, 4/26/78, Level 1	Start Ship: 4/3/78A Rerev: Complete.
		Environmental-none*	Appendix A, Section 3.3, 4.0, Attachment F	See FSAR Table 3.11-4 Test 16.		

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-347/M-347 Rev 2 (1/24/78)	HVAC control dampers (American Warming and Ventilating)	Seismic- IEEE Std 344-75*/**	Paragraphs 2.2 (IEEE 344), 3.2.6, 5.0, 7.0 (G-7, G-29) G-321-D 7.0 PAR	M-347-14-1 5/3/78 Level 1	M-347-14-1 5/3/78 Level 1	Start Ship: 6/1/79A
				M-347-17-2 10/4/78 Level 1	M-347-17-2 10/4/78 Level 1	
				M-347-18-1 7/20/78 Level 1	M-347-18-1 7/20/78 Level 1	
					M-347-22-1 7/20/78 Level 1	
	11			M-347-53-1 2/13/79 Level 1	M-347-53-1 2/13/79 Level 1	
				M-347-57-1 M-347-58-1 M-347-59-1 5/11/79 Level 1	M-347-57-1 M-347-58-1 M-347-59-1 5/11/79 Level 1	
				M-347-65-2 M-347-78-1 12/18/79 Level 2	M-347-65-2 M-347-78-1 12/18/79 Level 2	
		Environmental IEEE Std 323-74*/**	Paragraphs 2.2 (IEEE 323), 4.2, 5.0 G-321-D 27.0 PAR	M-347-17-2 10/4/78 Level 1	M-347-17-2 10/4/78 Level 1	Some dampers designated FSAR Table 3.11-4 Test 16.
M-349/M-349 Rev 5 (3/29/78)	HVAC instrumentation (Johnson Controls Inc.)	Seismic- IEEE Std 344-75*/**	Paragraphs 2.B (IEEE 344), 5.B (IEEE 344-75), 3.B.8, Appendix D G-321-D 7.0 PAR	M-349-27-4 6/20/79 Level 1	Submittal expected by 4/80	Start Ship: 12/4/79A
		Environmental- IEEE Std 323-74*/**	Paragraphs 2.B (IEEE 323), 4.A (J-1564, Rev 1), 5.A, 6	M-349-27-4 6/20/79 Level 1	Submittal expected by 4/80	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedure	Qualification Results	Status
M-374/M-374 Rev 1 (6/14/79)	Positive displacement hydrazine pumps (Hills-(McCanna)	Seismic-IEEE Std 344-75*/**	Paragraphs 2.2 (IEEE 344-75), 3.2.5, 5.4.1, 5.5, Appendix A G-321-D 7.0 PAR	Submittal expected by 5/9/80	Submittal expected by 5/9/80	Start Ship: 7/30/80F
11		Environmental-IEEE Std 323-74*/**	Paragraphs 2.2 (IEEE 323-74), 3.3.8, 4.2 (service conditions), 5.4.1, 5.6, Appendix A	Submittal expected by 5/9/80	Submittal expected by 5/9/80	

*Issued IEEE qualification standard: the latest IEEE qualification standard that was approved and issued on the date the purchase order was executed. For this purpose, the following issue dates were used:

IEEE Standard	Date Issued
317-72	12-1-72
317-76	5-24-76
323-71	4-1-71
323-74	2-28-74
334-71	9-16-71
334-74	10-29-74
344-71	11-17-71
344-75	1-31-75
382-72	4-10-73
383-74	4-15-74

**FSAR qualification commitment: any commitment made in the Midland FSAR relative to which IEEE qualification standard(s) would be used in qualifying a particular piece of equipment. If no ** is listed, then there is no FSAR commitment with respect to that item.

Reference	Equipment Affected	Commitment	Effectivity Date
RG 1.40	Containment recirculation air cooler motors	IEEE 344-71	3-16-73
RG 1.48	Seismic Category I active pumps and valves	IEEE 344-75	7-1-75
RG 1.52	Atmospheric cleanup system air filtration and absorption units	IEEE 323-71 334-71 344-71	6-73
RG 1.63	Electrical penetration assemblies	IEEE 317-72	10-73
RG 1.73	Class 1E solenoid valves installed inside containment	IEEE 382-72	1-74
	Class 1E motor operated valves installed inside containment	IEEE 382-72, draft 13	
RG 1.89 FSAR Table 3.11-1	Class 1E equipment	IEEE 323-74	11-15-74
RG 1.100	Class 1E equipment	IEEE 344-75	Not specified
FSAR Subsection 3.10.4		IEEE 344-71	Not specified