Consumers
Power
Company

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September 10, 1979
Howe-246-79

Mr J G Keppler, Regional Director
Office of Inspection and Enforcement
Region III
US Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

MIDLAND NUCLEAR PLANT
UNIT NO 1, DOCKET NO 50-329
UNIT NO 2, DOCKET NO 50-330
COMPONENT QUALIFICATION TEST DOCUMENTATION RE-REVIEW

Reference: S H Howell letters to J G Keppler; Midland Nuclear Plant; Unit No 1, Docket No 50-329; Unit No 2, Docket No 50-330; Component Qualification Test Documentation Re-Review;

1) Serial Howe-252-78, dated November 20, 1978
2) Serial Howe-17-79, dated January 17, 1979
3) Serial Howe-79-79, dated March 9, 1979
4) Serial Howe-133-79, dated May 4, 1979
5) Serial Howe-193-79, dated July 6, 1979

The referenced letters were interim 50.55(e) reports as is this letter.

The B&W detailed re-review of qualification documentation, consisting of comparison of the conditions the equipment was qualified to versus the postulated design basis accident conditions as defined in the FSAR, is now scheduled for completion in November, 1979.

As of August 15, 1979, qualification has been completed on 15 of the Bechtel Purchase Orders for safety grade equipment. For the qualification to be considered complete, any questions resulting from the re-review must be resolved and all required qualification documentation must have been received and approved by Bechtel. The enclosure provides the latest status of the Bechtel qualification re-review effort.

Beyond the previously identified Foxboro Model E10 transmitters, no other equipment has been determined not to be capable of meeting its qualification requirements.

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QUALIFICATION TEST STATUS REPORT
Revision 9
8/15/79

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
A-15, Rev 6 (8/23/76)	Decontaminative surfacer (Ameron)	Seismic-none*	Not applicable |9	Not required |9	Not required |9	Start Ship: shipped to field
		Environmental-none*	Subparagraphs 3.0 (Specification G-23 and ANSI N101.4), 5.1 (ANSI N101.2), and 10.0 (inspection and tests)			Rerev: Not required
A-41/A-41, Rev 4 (4/12/77)	Field priming and/or top coating of of steel surfaces	Seismic-none*	Not applicable |9	Not required |9	Not required |9	Start Ship: shipped
		Environmental-none*	Subparagraph 3.2 (ANSI N101.2 and N101.4)			Rerev: Not required. This order handled by the field
A-45/A-45, Rev 2 (11/4/76)	DBA environmental testing (ORNL)	Seismic-none*	Not applicable |9	Not required |9	Not required |9	Start Ship: NA
		Environmental-none*	Subparagraph 3.0 test procedures, ANSI N101.2)	Submittal expected by 8/31/79	Submittal expected by 8/31/79	Rerev: Not required
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-18-131-3 6/8/79 Level 3 |9	C-18-131-3, 6/8/79 Level 3 |9	Start Ship: 9/13/78A
		Environmental-none*	Appendix F. Article 3.0	See FSAR Table 3.11-4 Test 16 |9		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
C-024 Rev 3 (5/7/76)	Service water sluice gates (Armco)	Seismic-IEEE Std 344-75*	Appendix A (G-30, Rev 1)	C-24-42-3 2/13/77 Level 1 (gate assembly)	C-24-42-3 2/13/77 Level 1 (gate assembly)	Start Ship: 12/15/78A Rerev: Not required.
				C-24-84-1 5/2/78 Level 2 (floor stand)	C-24-84-1 5/2/78 Level 2 (floor stand)	9
		Environmental-none*	Appendix A (temperature and water chemistry)			
C-042/C-42, Rev 2 (6/9/78)	New and spent fuel racks (Wachter)	Seismic-none* 9	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-42-53-1 6/27/79 in review (new fuel racks) 9	C-42-53-1 6/27/79 in review (new fuel racks) 9	Start Ship: 9/14/79F 9 Rerev: Not required
				C-42-31-3 7/9/79 in review (spent fuel racks) 9	C-42-31-3 7/9/79 in review (spent fuel racks) 9	
		Environmental-none*	Article 6.2, Appendix C (criticality and thermal-hydraulic criteria - spent fuel racks only)	C-42-29-1 4/2/79 Level 1 (t-h analysis) 9	C-42-29-1 4/2/79 Level 1 (t-h analysis) 9	
				C-42-6-2 4/12/79 Level 1 (criticality analysis)	C-42-6-2 4/12/79 Level 1 (criticality analysis)	

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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
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 |9	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
				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	Submittal expected by 2/1/80 |9	Submittal expected by 2/1/80 |9	
C-046/C-46, Rev 6 (8/8/78)	Fuel transfer tube (Pathway-Bellows)	Seismic-none*	Article 5.1.1			Start ship: 3/30/79A
		Environmental-none*	Art cle 4.3 (rad doses)	Submittal expected by 2/1/80 (seals) |9	Submittal expected by 2/1/80 (seals) |9	
C-050B/C-50, Rev 13 (6/5/69)	Reactor building locks and hatches (W.J. Woolley)	Seismic-none*	Article 7.4	C-50B-12-7, 4/13/79, Level 1	C-50B-12-7, 4/13/79, Level 1	Start Ship: 10/20/78A Rerev: In-process. NCR 1746
				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	

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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	
		Environmental-none*	Article 7.4 (design requirements)				
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	C-70-114-3, 5/4/78, Level 1	Start Ship: 10/1/78A Rerev: In-process. NCR 1747	
				C-70-205-2, 12/19/78, Level 1	C-70-205-2, 12/19/78, Level 1	Per Telecom 10/3/78, standards updated for revisions by ITT	
				C-70-328-2 1/24/79, Level 3	C-70-328-2, 1/24/79, Level 3		
		Environmental-none*	Article 5.0 (environmental conditions) G-321-D 26.0-PAR (performance tests)	C-70-333-2, 4/3/79, Level 1		Hydro test submitted during delivery of snubber. Report on seal life to be submitted.	
				C-70-332-3, 4/26/79 Level 1			
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: In-process. NCR 1748	
				E-6-80-1, 10/5/77, acceptable (Transformers-IEEE Std 344-75)	E-6-81-2, 3/14/79, Level 3	Letter to vendor 6/28/79 asking for response to our letter (3/19/79) regarding documentation verifying compliance for qualification.	9
		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	9

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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
E-7/E-7, Rev 6 (6/14/76)	460V motor control centers (Gould) 9	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-321-D 7.0-PANR	E-7-58-9, 7/13/79 Level 2 9	E-7-58-9, 7/13/79 Level 2 9	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, acceptable	E-7-129-3, 7/13/79, Level 3 9	
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-11-18-1, 2/22/78, Level 1	Start Ship: 1/6/78A Rerev: Complete NCR 1750 9
				E-11-20-1, 3/14/79, Level 1	E-11-20-1, 3/14/79, Level 1	
		Environmental- IEEE Std 323-74*	Subparagraph 6.1.3, (temperature requirements)	See FSAR Table 3.11-4 Test 18 9		IEEE Std 323-71 not part of contract; letter to vendor 7/30/79 asking for documentation verifying compliance to IPCEA S-71-402 9
E-12/E-12, Rev 5 (8/25/76)	Station batteries (Exide)	Seismic- IEEE Std 344-75*/**	Paragraph 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-12-38-4, 7/13/79, Level 3 9		Start Ship: 11/6/78A Rerev: Not required

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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
		Environmental- IEEE Std 323-74*/**	Article 10.4 (IEEE Std 323)	E-12-38-4, 4/13/79 Level 3 | 9	Submittal expected by 9/79 | 9	
E-13/E-13, Rev 7 (9/11/74)	DC distribution centers (Westinghouse)	Seismic- IEEE Std 344-71*/**	Articles 4.0, 5.3 (G-7, Rev 4) G-321-D 7.0-PAR (certification only)	E-13-25-1, 6/11/77, acceptable (IEEE Std 344-75)	E-13-29-3, 9/13/78, Level 1	Start Ship: 9/27/78A Rerev: Complete (seismic) Inprocess (environmental) NCR 1751 | 9
		Environmental- IEEE Std 323-74*	Section 7.2 (ANSI C 37.90) Section 6.6.2 (IPCEA S-61-402) | 9	See FSAR Table 3.11-4 | 9 Test 18		IEEE Std 323-71 not part of contract; letter to vendor 2/27/79 requesting ANSI and IPCEA certification; Response 3/13/79 stating that ANSI C37.90 is not a requirement for this type of relay. SDDR requested by letter to vendor 6/4/79. | 9
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-19-17-3, 9/19/77, Level 1	E-19-32-1, 3/16/78, Level 1	Start Ship: 1/6/78A Rerev: Complete. NCR 1752 Dispositioned 7/30/79. | 9

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 4.1 (IEEE Standard)	See FSAR Table 3.11-4 Test 18	9		IEEE Std 323-71 not part of contract; letter to vendor 3/9/79 requesting verification of compliance with IEEE Std 323-71 and IPCEA S-61-402; Response 3/20/79 stating that unable to provide compliance to IEEE Std 323-71; letter to vendor clarifying request for IPCEA compliance; reply from vendor 7/17/79 stating compliance to IPCEA S-61-402.	9

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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
E-20/E-20, Rev 5 (8/6/74)	Cable penetrations (Amphenol Sams)	Seismic- IEEE Std 344-75*/**	Subparagraphs 4.1.12 (IEEE Std 344) 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) |9	Seismic results unacceptable. E-20-163-2, 1/22/79, Level 3	Start Ship: Flanges: 7/28/76A Assemblies: 2/10/78A Rerev: Complete. Meeting held to resolve problems (refer to Meeting Notes Numbers 438 & 439 dated 3/14/79 and 3/15/79). |9
		Environmental- IEEE Std 323-74* IEEE Std 317-72*	Subparagraph 4.1.11 (IEEE Std 323) 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 |9 (IEEE Std 323-74, 317-72)	E-20-158-1 submitted for information only (4/18/78).	
				Supplementary environmental Test Procedure E-20-162-4, 4/12/79, Level 1	Supplementary Environmental Test Results E-20-162-4, 4/12/79, Level 1	
					E-20-166-1, 4/12/79, Level 1	
					E-20-167-1, 4/12/79, Level 2	
					E-20-168-1, 4/12/79, Level 2	
					E-20-169-1, 4/12/79, Level 1	

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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
E-21/E-21, Rev 7 (6/20/74)	5,000V and 8,000V power cable (Kerite)	Seismic- none*	Not applicable |9	Not required |9	Not required |9	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 |9	Not required |9	Not required |9	Start Ship: 2/1/77A Rerev: Complete. NCR 1754 Dispositioned 7/18/79 |9
		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-22-44-1 7/10/79 Level 2 |9	E-22-44-1 7/10/79 Level 2 E-22-6-1, 7/17/76, Level 1 E-22-8 through E-22-31 7/18/79 Level 5 |9	
E-26/E-26, Rev 4 (10/29/76)	600V control cable (Rockbestos)	Seismic- none*	Not applicable |9	Not required |9	Not required |9	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	

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-45/E-45, Rev 3 (9/26/77)	a. 480Vac distribution panels (Square D)	Seismic- IEEE Std 344-75*/** 9	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-45-22-3, 6/30/79 Level 2 | 9	E-45-22-3, 6/30/79 Level 2 | 9	Start Ship: 11/10/78A Rerev: In-process. NCR 1756.
		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)	E-45-10-3, 6/12/78, Level 1	E-45-10-3, 6/12/78, Level 1	
	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
		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)	E-45-51-2, 2/1/79, Level 1	E-45-51-2, 2/1/79, 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-45-55-3, 4/24/79, Level 1	Start ship: 12/21/78A
		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)	E-45-63-2, 6/13/79, in review | 9	E-45-63-2, 6/13/79, in review | 9	

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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	
	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	
		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)	E-45-52-1, 11/30/78, Level 1	E-45-52-1, 11/30/78, Level 1		
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 26.2-PANR		E-49-7-2 2/1/79 in review	Letter to vendor 6/14/79 requesting reply to our letter in regards to humidity requirement for qualification	9

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-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) To be resubmitted	Submittal expected by 6/30/80 |9	Start Ship: 9/7/79F Rerev: Not required |9
			G-321-D 7.0-PANR	Submittal expected by 6/30/80 (instrument ac power trans) |9	Submittal expected by 6/30/80 (instrument ac power trans) |9	New insulation design. Qualification to start 9/7/79. |9
		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) |9	Submittal expected by 6/30/80 |9	
				Submittal expected by 6/30/80 (instrument ac power trans) |9	Submittal expected by 6/30/80 (instrument ac power trans) |9	
E-56/E-56, Rev 1 (6/22/78)	Coax, triax, and twinax cable (Rockbestos)	Seismic- none*	Not applicable |9	Not required |9	Not required |9	Start Ship: 9/30/79F Rerev: Not required |9
		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-56-8-4, 7/2/79, Level 2 |9	E-56-8-4, 7/2/79, Level 2 |9	Qualification of unaged sample being conducted under E-60 test. |9

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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
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-60-21-3, 7/2/79, Level 2	Test in progress 9/28/79F	
E-205/E-205, Rev 8 (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	Not required by specification. Test results only	E-205-222-1, 6/7/76, acceptable (certification only)	Start Ship: 12/9/76A Rerev: Complete. NCR 1758 Dispositioned 7/13/79.
		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-205-467-1, 3/8/79, Level 2 (certification only)	See FSAR Table 3.11-4 Test 18
					E-205-197-1 9/8/75 Level 1 (certification only)	
					E-205-239-1 3/15/77 acceptable (certification only)	

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) G-321-D 7.0-PAR (procedures and reports)	J-201-286-1, 3/16/77, acceptable		Start Ship: 8/19/77A Rerev: Inprocess. NCR 1759
				J-201-287-2 through 289-2, and J-201-296-2 through 300-2, 8/10/78, Level 1	J-201-287-2 through 289-2, and J-201-296-2 through 300-2, 8/10/78, Level 1	
				J-201-318-2 and 321-2, 8/10/78, Level 1	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-201-410-1, 8/10/78, Level 1	J-201-410-1, 8/10/78, Level 1	
		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 |9		
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-202-79-1, 10/6/77, acceptable	J-202-79-1, 10/6/77, acceptable	Start Ship: 8/10/78A Rerev: Inprocess. NCR 1760
		Environmental- IEEE Std 323-74*/**	Article 4.1 (service conditions)	See FSAR Table 3.11-4, Test 17 |9		

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-204-33-2, 5/18/79 Level 2 |9	J-204-33-2, 5/18/79 Level 2 |9	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) |9		
				J-204-244-2 6/25/79 Level 3 |9	J-204-244-2, 6/25/79 acceptable |9	
		IEEE Std 344-71* IEEE Std 344-75** (panel mounted electronic controllers)		J-204-147-1, 9/8/76, acceptable	J-204-147-1, 9/8/76, acceptable	
				J-204-176-1, 9/21/77, acceptable	J-204-176-1, 9/21/77, acceptable	
				J-204-230-1, 4/18/78, Level 2 (IEEE Std 344-75) |9	Results expected by 12/30/79 |9	Currently being tested.
		Environmental- IEEE Std 323-74*	Subparagraph 4.1.2 and 6.1 (IEEE Std 323-71), Subparagraph 5.1.1 (J-1564)	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 |9
		IEEE Std 383-74*	Subparagraphs 4.1.6 and 7.2.7 (IEEE Std 383-74) G-321-D 26.0-PANR (test results)			Certificate of compliance required. MR to be revised to indicate requirement. |9
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.

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 383-74*	Section 2B, 5E1 (IEEE Std 323-74, 383-74) Article 4.0 (radiation) G-321-D 26.0-PAR 9	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. 9
				J-207-16-3, 2/13/78, Level 1 (radiation)	J-207-16-3, 2/13/78, Level 1	
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-214-1-1, 2/5/79, Level 2	J-214-1-1, 2/5/79, Level 2	Start Ship: 7/11/79A Rerev: Not required. Reviewed by civil and found acceptable. 9
		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) 9	Not required	Not required	Start Ship: 5/18/79. Rerev: Complete. Considered qualified by virtue of compliance to ASME Section III 9
		Environmental- none*	Attachment E to MR (J-1564, Rev 4)	Not required	Not required	

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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
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
		Environmental-none*	Attachment E to MR (J-1563, Rev 0)	Not required	Not required	
J-241, Rev 5 (9/6/79F)	Pressure gages, nuclear service (field purchase) (issued for bids)	Seismic IEEE 344-75*	Paragraphs 2.2, 6.1, and Attachment 4 to MR (J-1564, Rev 1), Attachment 7 to MR (G-33(Q), Rev 7 G-321-D 7.0 FAR			Start Ship: Field purchase Rerev: Complete.
		Environmental-none*	Paragraph 4.1 and Attachment 4 to MR (J-1564, Rev 1)			
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

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*	Appendix D, Article 3.0 of J-425, Rev 1 and Attachment C to MR (data sheets)	Not required	Not required	
J-245/J-245 Rev 0 (3/15/79)	Field Transmitters (Rosemount)	Seismic- IEEE Std 344-75*/** |9	Paragraph 5.4.1a, Appendix A	J-245-14-1 J-245-16-1 6/22/79 Level 3 |9	J-245-14-1 J-245-16-1 6/22/79 Level 3 |9	Start Ship: 7/31/79A Rerev: Not required. |9
		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-245-14-1 J-245-16-1 6/22/79 Level 3 |9	J-245-14-1 J-245-16-1 6/22/79 Level 3 |9	
J-253/J-253, Rev 3 (6/7/74)	Atmospheric steam dump valves (CCI)	Seismic- IEEE Std 344-71* |9	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 |9		
J-255 A, J-255, Rev 8 (7/8/74) J-255B/ J-255, Rev 8 (7/9/74)	Nuclear services control valves (Vulcan (A) and CCI (B)	Seismic- IEEE Std 344-71* |9	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 |9	J-255A-19-2, 12/23/75, Level 1 |9	Start Ship: 6/5/78A Rerev: In-process.
				J-255A-53-3 7/24/79 in review |9	J-255A-53-3 7/24/79 in review |9	NCR 1763
				J-255B-25-2, 8/31/76, acceptable	J-255B-25-2, 8/31/76, acceptable	Start Ship: 8/1/76A Rerev: In-process

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)	Submittal expected by 8/15/79 | 9	J-255B-62-3, 4/21/79, Level 3	This report covers Rotork valve operators. Test report from Rotork to be reviewed subject to CCI clarification and verification of Rotork model numbers | 9
J-256/J-603, Rev 6 (7/16/76)	Nuclear service solenoid valves (Target Rock Corp)	Seismic- IEEE Std 344-75*/** | 9	Article 4.0 (IEEE Std 344); Appendix A Article 2, Appendix I (design limits qualification)	J-256-45-5, 5/18/79, Level 1 | 9	J-256-45-5, 5/18/79, Level 1 | 9	Start Ship: 6/78A Rerev: In-process. NCR 1764
				J-256-71-3 6/19/79, Level 1 | 9	J-256-71-3 6/19/79 Level 1 | 9	
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72*/**	Article 4.0 (IEEE Std 323); Paragraph 5.1 and Appendix J (environmental criteria)	J-256-42-1, 12/8/77, acceptable	J-256-42-1, 12/8/77, acceptable	
			Article 4.0 (IEEE Std 382); Paragraph 5.1 and Attachment G (G-29, Rev 1)	J-256-42-1, 12/8/77, acceptable	J-256-42-1, 12/8/77, acceptable	

MR/ Specification (Original P.O. Date)	Item and Manufacturer	Issued IEEE Qualification Standards* and FSAR Qualification Commitments**	Specification Qualification Reference	Qualification Procedur	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 344-75), Paragraph 5.1; Appendix I, Paragraph 4.2 (IEEE Std 344); G-9 Paragraph 7.0.	J-258-21-1, 6/17/76, acceptable	J-258-21-1, 6/17/76, acceptable	Start Ship: 5/79A Rerev: Complete. NCR 1765: Dispositioned 4/20/79.
				J-258-44-3 4/18/79 Level 3	J-258-44-3 4/18/79 Level 3	
				J-258-48-1 1/9/79 Level 1	J-258-48-1 1/9/79 Level 1	
				J-258-54-1 2/21/79 Level 1	J-258-54-1 2/21/79 Level 1	
				J-258-39-1 J-258-55-1, 3/20/78, Level 1	J-258-39-1 J-258-55-1, 3/20/78, Level 1	
		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)	ITT actuator qualifications to be submitted with addendums and letter clarifications. Liner report data required.
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-275-68-2, 6/7/78, Level 1	J-275-58-2, 6/27/78, Level 1	Start Ship: 4/1/78A Rerev: In-process. NCR 1766
					J-275-76-1, 6/28/78, Level 1	Letter to vendor 7/16/79 requesting test procedure and results.

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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
		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 |9
		IEEE Std 383-74*	Paragraphs 2.2, 6.7.1 (IEEE Std 383-74) G-321-F 25.2-PANR		J-275-80-1, 7/11/78, Level 1	Letter to vendor, 11/14/78 requesting test data to verify compliance with IEEE Std 383. Reply from subvendor 5/8/79. |9
					J-275-81-1, 7/13/78, Level 1 (Certificate of compliance)	Letter to vendor 7/16/79 stating that reply is unacceptable and and reiterating previous request. |9
J-278/J-278, Rev. 3 (2/6/79)	Room water level safety monitoring system (Automation Industries) |9	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 |9	Submittal expected by |9 9/79	Start Ship: 9/30/79F Rerev: Not required |9
		Environmental IEEE Std 323-74*/**	Section 3.3.3, 5.1, 6.2.5, 6.6.4 (IEEE Std 323-74)	J-278-14-2 7/2/79 Level 3 |9	Submittal expected by |9 9/79	
				J-278-15-1 5/15/79 Level 1 |9	Submittal expected by |9 9/79	
J-284/J-284, Rev 1 (9/2/79F) |9	Containment post-LOCA hydrogen monitoring equipment (Reissued for bids)	Seismic-IEEE Std 344-75*/**	Section 2B, 3C4 (IEEE Std 344-75); Section 4.A.2 (G-7, Rev 5)	Submittal expected 10/79 |9	Submittal expected by |9 12/79	Start Ship: 8/80F Rerev: Not required |9
		Environmental-IEEE Std 323-74*/**	Section 2B, 3C4, 5A (IEEE Std 323-74); Section 4A (7220-J-1564, Rev. 3)	Submittal expected by |9 10/79	Submittal expected by |9 12/79	

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-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	Start Ship: 5/24/78A Rerev: Complete. NCR 1767
				M-14-125-1, 3/29/79 in review (turbine driven pumps)	M-14-125-1, 3/29/79 in review	Teletype to vendor 6/28/79 asking for resubmittal of seismic report for the turbine driver, and submittal of seismic report for the turbine driver control panels.
				M-14-34-1, 8/1/78, unacceptable	M-14-34-1, 8/1/78, unacceptable	
				M-14-71-1 M-14-72-1 11/10/77 unacceptable	M-14-71-1 M-14-72-1 11/10/77 unacceptable	Letter to vendor 7/19/79 transmitting comments on seismic qualification reports
				M-14-118-1, 1/5/79, Level 2 (motors)	M-14-118-1, 1/5/79, Level 2	
		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.

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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-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	Refer to M-18-370, 371, 372 for test results	Start Ship: 9/22/78A Rerev: Complete.
				M-18-59-4, 1/25/78, Level 1 (panels)	Refer to M-18-370, 371 372 for test results	
				M-18-277-1 2/22/78 Level 3 |9		
				M-18-362-1 6/29/78 Level 1 (generators- IEEE Std 344-75) |9		
				M-18-370-2, 5/31/79 in review |9	M-18-370-2, 5/31/79 in review |9	
				M-18-371-2, 5/31/79 in review |9	M-18-371-2, 5/31/79 in review |9	
				M-18-372-1, 2/7/79, Level 3	M-18-372-1, 2/7/79, Level 3	
				M-18-391-1 5/31/79 in review |9	M-18-391-1 5/31/79 in review |9	

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 3.b.7, 5.1.1a and c, 9.2.k (IEEE Std 323-74)	M-18-389-1, 5/20/79, Level 3 (switchgear, cabinets per IEEE Std 323-74)		Test results expected early 1980.
						Teletype to vendor 6/29/79 asking for updated schedule information | 9
				M-18-351-2 8/10/78 Level 2 (IEEE Std 323) | 9		See FSAR Table 3.11-4 Test 17 | 9
				M-18-277-1 2/22/78 Level 3 | 9		
				M-18-334-4, 5/22/79, Level 1 (engine control system components)		
				M-18-362-1, 6/29/78, Level 1 (Class 1F motors, etc, per IEEE Stds 323-74, 334-75, 387-76) (generator)		
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 344-75); Appendix H, Subparagraphs 1.6.1, 1.7, 1.8, 1.9 (IEEE Std 344-75); Appendix I, Paragraph 3.5 G-321-D 7.0 PAR	M-19-20-3, 1/3/79, Level 1	M-19-20-3, 1/3/79, Level 1	Start Ship: 8/30/79F Rerev: Not required. | 9

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 323-74); 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	Expected 10/1/79	
M-020/M-020, Rev 2 (8/01/77)	Traveling water screens (FMC)	Seismic-IEEE Std 344-75* |9	Page 3, MR, Paragraphs 1.c and 1.d; Attachment 2, Subparagraphs 3.B.9, 4.A.1, 5.E.6, [illegible].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) |9	See FSAR Table 3.11-4 Test 16 |9		
M-51/M-51, Rev 4 (2/5/74)	Component cooling water heat exchangers (Yuba)	Seismic-none* |9	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 |9	M-51-51-4 2/18/76, Level 1 |9	Start Ship: 3/10/78A Rerev: Complete. NCR 1768
		Environmental-none*	Articles 3.0 3.1.2, 3.2.3, Appendix 1	See FSAR Table 3.11-4, Test 16. |9		

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 (B&W Canada)	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	M-52-27-8, 1/30/78, Level 1	Start Ship: 12/21/77A Rerev: Inprocess. NCR 1769 Pumps and motors will be analyzed in combination in accordance with IEEE Std 344-75. |9
		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	Submittal expected by 12/79 |9	Submittal expected by 12/79 |9	Telex received 5/23/79. Siemens-Allis is presently proceeding with test program.
M-53/M-53, Rev 5 (5/20/77)	Component cooling water pumps (Bingham-Willamette)	Seismic- IEEE Std 344-75*/**	Paragraphs 2.2, 5.4.1, 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	M-53-24-5, 12/30/78, Level 1	Start Ship: 5/1/78A Rerev: Complete See M-52 for CCW pump motors. |9
		Environmental-none* |9	Paragraphs 2.2, 5.4.1; Subparagraphs 5.1.2; Appendix A, 3.0	See FSAR Table 3.11-4 |9 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-54-25-3, 1/16/75, Level 1	Start Ship: 1/20/78A Rerev: Complete. NCR 1770
				M-54-54-1, 1/16/75, Level 1	M-54-54-1, 1/16/75, Level 1	
				M-54-55-1, 1/16/75, Level 1	M-54-55-1, 1/16/75, Level 1	
		Environmental- IEEE 323-71*	Subparagraphs 2.1.2, 2.2	See FSAR Table 3.11-4, |9 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-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; 7.4b (IEEE Std 344); Appendix 1, Article 2.0 (G-7, Rev 4) G-321-D 7.0 PAR	M-55-27-3, 7/27/77, acceptable	M-55-27-3, 7/27/77, acceptable	Start Ship: 4/15/77A Rerev: Complete
		Environmental-none*	Subparagraphs 3.1.2, 3.2.2, 3.2.3.1, Appendix , Article 3.0			9
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-56-70-1, 10/27/77, unacceptable	M-56-70-1, 10/27/77, unacceptable	Start Ship: 2/11/79A Rerev: Complete. (seismic) 9
				M-56-71-1, 10/27/77, unacceptable	M-56-71-1, 10/27/77, unacceptable	Not required. (environmental) NCR 1771
				M-56-72-1, 1/12/78, acceptable	M-56-72-1, 1/12/78, acceptable	
				M-56-73-1, 2/22/78, Level 1	M-56-73-1, 2/22/78, Level 1	
		Environmental-IEEE Std 323-74*/**	Appendix 1, Article 3.0	M-56-69-3, 3/20/79, Level 1	M-56-69-3, 3/20/79, Level 1	See FSAR Table 3.11-4 Test 16. 9
M-61/M-61, Rev 2 (11/13/75)	Makeup filters (Pall Trinity)	Seismic-none*	Paragraph 6.5 (G-7, Rev 4) G-321-D 7.0 PAR	M-61-17-1, 6/15/77, Level 1	M-61-17-1, 6/15/77, Level 1	Start Ship: 5/8/78A, Rerev: Complete. NCR 1772
		Environmental-none*	Paragraphs 5.3 and 6.1 (Table 1 and Appendix A)			9

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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/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		M-64-32-4, 9/13/76, acceptable		Start Ship: 7/8/76A, Rerev: Inprocess. NCR 1773
				M-64-33-4, 4/15/76, acceptable		M-64-33-4, 4/15/76, acceptable		
				M-64-34-5, 6/22/78, acceptable		M-64-34-5, 6/22/78, acceptable		
				M-64-35-4, 4/15/76, acceptable		M-64-35-4, 4/15/76, acceptable		
				M-64-42-2, 11/25/74, acceptable		M-64-42-2, 11/25/74, acceptable		
				M-64-64-4, 5/3/79, acceptable		M-64-64-4, 5/3/79, acceptable		
				M-64-65-4, 5/3/79, acceptable		M-64-65-4, 5/3/79, acceptable		
				Submittal expected by 10/79 (nitrogen tanks)	9	Submittal expected by 10/79 (nitrogen tanks)	9	
				M-64-73-3 4/13/78 Level 1 (pressurized water storage tanks)	9	M-64-73-3 4/13/78 Level 1 (pressurized water storage tanks)	9	
		Environmental-none"	Paragraph 3.1 (temperature)	See FSAR Table 3.11-4, Test 16.	9			

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-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 7.1.8-11, 9.3.2 (G-30, Rev 1); Article 13.0; Appendix 1, Article 2.0; Appendix 2, Paragraph 2.4 (G-30, Rev 1); Article 1.0 (IEEE Std 344-75)	M-75-21-6, 1/28/78, Level 1 (pumps) M-75-38-3, 8/22/78, Level 1 (motors)	M-75-21-6, 1/28/78, Level 1 (pumps) M-75-38-3, 8/22/78, Level 1 (motors)	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 G-321-D 7.0 PAR	M-75-28-1, 11/28/77, Level 1	M-75-6[illegible]-1, 4/4/79, Level 3	Request to vendor 4/23/79 requesting more data on motor testing.
M-90/M-90, Rev 2 (5/17/77)	Incore instrument tank (CBI)	Seismic-none*	Paragraphs 5.12, 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, [illegible]/27/78, Level 1	M-90-34-3, 6/27/78, Level 1	Shipped 4/1/78A Rerev: Complete
		Environmental- none*	Paragraphs 4.1; Appendix 1, Article 3.0 (G-26, Rev 1)	9	9	
M-92/M-92, Rev 4 (1/26/70)	Reactor building cranes (Harni-schfeger)	Seismic- none*	Paragraph 3.2 (G-6); E-10, Rev 5, Paragraphs 2.10, 3.0 (G-7, Rev 4)	M-92-34-3, 3/7/78, In review	M-92-34-3, 3/7/78, In review	Start Ship: 3/14/75A Rerev: Inprocess. NCR 1775
		Environmental- none*	Paragraph 2.2 E-10, Rev 5, Paragraph 3.1	9	9	
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 4) 4.22 (E-10) G-321-D 7.0-PAR	M-93-1-3, 8/18/76, acceptable	M-93-1-3, 8/18/76, acceptable	Start Ship: 9/17/76A Rerev: Complete. NCR 1776: Dispositioned 4/20/79.

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- none*	Paragraph 2.2 Paragraph 4.22 (E-10)		9		9	
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 5/15/79 In review	9	M-117-93-1 5/15/79 In review	9	
		Environmental- IEEE Std 323-74* IEEE Std 382-72*/** (solenoid valves inside containment) IEEE Std 382-72, Draft 1??? (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	9	M-117-90-1 7/8/79 Level 1	9	
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		M-118A-55-2, 3/17/78, acceptable		Start Ship: 4/24/78A Rerev: Complete. NCR 1778
				Additional submittal expected by 3/80	9	Additional submittal expected by 3/80	9	
		Environmental- IEEE Std 323-74*	21, Paragraph 3.1, Appendix 1, Paragraphs A1.4, A1.19.20					
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-48-2, 6/6/77, acceptable		Start Ship: 1/79A Rerev: Inprocess. NCR 1979
				M-118B-78-2 5/29/79 Level 1	9	M-118B-78-2 5/29/79 Level 1	9	

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*/** (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 323-72, IEEE Std 382-72)	M-118B-81-2, 4/3/79, Level 1	M-118B-94-1, 7/23/79 Level 1 | 9	
				M-118B-82-1 3/13/79 Level 1 (radiation) | 9	M-118B-95-1 7/18/79 Level 1 | 9	
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-120-77-2, 8/5/76, acceptable	M-120-77-2, 8/5/76, acceptable	Start Ship: 9/13/78A Rerev: Complete. NCR 1780
				M-120-95-1 through 97-1, 8/5/76, acceptable	M-120-95-1 through 97-1, 8/5/76, acceptable	
				M-120-105-1, and -106-1, 12/9/77, acceptable	M-120-105-1, and -106-1, 12/9/77, acceptable	
				M-120-107-2, 6/16/78, Level 1	M-120-107-2, 6/16/78, Level 1	
		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-120-120-1 2/26/79 Level 1 | 9	M-120-120-1 2/26/79 Level 1 | 9	
M-123A/123A, Rev 2 (5/24/74)	Nuclear valves, 2 1/2" and larger (Westing- house)	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	M-123A-93-2 1/25/77 acceptable | 9	Start Ship: 4/30/76A Rerev: In-process.

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 A1.1, G-9, Paragraphs 4.2, 7.1 (IEEE Std 323 and 382) G-321-D 26.0 PAR	M-123A-96-2, 5/29/79 Level 1 | 9	M-123A-96-2 5/29/79 Level 1 | 9	
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-48-1, 5/19/77, Level 1	M-123B-48-1, 5/19/77, Level 1	Start Ship: 4/30/77A Rerev: Inprocess. NCR 1781 New QTRs issued for M-123B-48-1 and M-123B-54-2 | 9
		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 323 and 382) G-321-D 7.0 PAR	M-123B-54-2 5/29/79 Level 1 | 9	M-123B-54-2 5/29/79 Level 1 | 9	
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	M-123C-44-1, 8/5/76, acceptable	Start Ship: 4/12/78A Rerev: Inprocess. NCR 1782
		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 | 9	M-123C-37-2 12/19/78, Level 1 | 9	
M-125A/M-125A, Rev 3 (6/14/74)	Nuclear valves, globe 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	M-125A-88-2, 12/13/76, acceptable	Start Ship: 9/28/76A Rerev: Complete. NCR 1783

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 | 9	M-125A-92-1 2/8/79 Level 1 | 9	
M-125B/M-125, Rev 3 (6/21/74)	Nuclear check valves (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 32-1, 10/16/75, Level 1	M-125B-26-1 through 32-1, 10/16/75, Level 1	Start Ship: 1/5/77A Rerev: Complete. NCR 1784 Dispositioned 4/20/79.
		Environmental-none*		Not required	Not required	
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-54-3, 11/9/79, Level 1	Start Ship: 4/12/78A Rerev: Complete. NCR 1785
				M-125C-59-1 through -62-1, 8/5/76, acceptable	M-125C-59-1 through -62-1, 8/5/76, acceptable	
				M-125C-92-1, 2/1/78, Level 1	M-125C-92-1, 2/1/78, Level 1	
		Environmental- IEEE Std 323-74* IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor cperated 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 | 9	M-125C-111-1, 2/8/79 Level 1 | 9	

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-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			Start Ship: 3/31/78A Rerev: Complete. NCR 1786
				M-127A-20-1 9/20/76 acceptable (air operated valves) 9	M-127A-20-1 9/20/76 acceptable (air operated valves) 9	Air operated valves on surplus. 9
		Environmental- none*		Not required (manual valves)	Not required (manual valves)	
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			Start Ship: 9/18/78A Rerev: Complete. NCR 1787
		Environmental- none*	M-225 Paragraph 3.2; Appendix A1, Paragraph A1.1, A1.9; G-26	Not required (manual valves) 9	Not required (manual valves) 9	
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 9	Start Ship: 10/13/78A Rerev: Complete. NCR 1788
		Environmental- none*	M-225, Paragraph 3.1, Appendix A1, Paragraph A1.1, Appendix A1, Paragraph A1.9; G-26	Not required (manual valves) 9	Not required (manual valves) 9	
M-129A/M-129, Rev 2 (9/16/74)	Nuclear valves, sst, manual and air-operated 2" and under (Kerotest) 9	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: In-process.

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*	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) | 9 See FSAR Table 3.11-4 Test 16 (air-operated valves) | 9	Not required (manual valves) | 9	
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-32-5, 3/20/79, Level 1 M-129B-33-2, 11/18/76, acceptable	M-129B-31-1, 6/25/76, acceptable M-129B-32-5, 3/20/79, Level 1 M-129B-33-2, 11/18/76, acceptable	Start Ship: 2/15/78A Rerev: Inprocess. All valves currently surplus.
		Environmental- IEEE Std 323-74* IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	M- 25, 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	| 9		Letter from vendor 3/1/79 clarifying applicability of Limitorque Reports | 9
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 | 9	M-131-27-3 7/23/79 Level 1 | 9	Start Ship: On hold (audit) Rerev: Not required | 9
		Environmental- IEEE Std 323-7*	Paragraphs 4.A.1, 4.A.4, Appendix A; Article 3.0 Attachment E, Table C-1	See FSAR Table 3.11-4 Test 16. | 9		
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-132-83-1 and -84-1, 9/24/76, acceptable	M-132-67-3, through -72-3, 9/7/76, acceptable M-132-83-1 and -84-1, 9/24/76, acceptable	Start Ship: 11/22/7 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-132-87-1 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-228, Paragraph 3.1; Appendix 1, Paragraph A1.1	M-132-108-1, 3/20/79 Level 1	M-132-108-1, 3/20/79 Level 1		
M-134/M-134, Rev 3 (1/7/77)	Steel plug valves (1 ine)	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 through -45-1, 6/9/78, Level 1	M-134-36-1 through -45-1, 6/9/78, Level 1	Start Ship: 3/23/79A Rerev: Inprocess. NCR 1790	
				M-134-46-2, 7/10/78, Level 1	M-134-46-2, 7/10/78, 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	M-134-85-1, 11/15/78, Level 1	See FSAR Table 3.11-4 Test 16.	9
M-140/M-140, Rev 2 (5/6/77)	Nuclear service pressure relief valves (Crosby)	Seismic-none* IEEE Std 344-75*/** (1 and 2 PSV-1016 only)	Page 5, Item 18; Attachment 1.0, Paragraph 3.6; Appendix D, Paragraphs 2.4, 2.5 G-321-D 7.0-PAR	M-140-70-1, 4/26/78, Level 1	M-140-70-1, 4/26/78, Level 1	Start Ship: 6/21/79A Rerev: Complete	9

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-140-76-3, 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	
				M-140-77-4, 5/22/79, Level 1 | 9	M-140-77-4, 5/22/79, Level 1 | 9	
				M-140-78-6, 5/22/79, Level 1 | 9	M-140-78-6, 5/22/79, Level 1 | 9	
				M-140-79-4, 3/29/79, Level 1	M-140-79-4, 3/29/79, Level 1	
				M-140-85-4, 4/30/79, Level 1	M-140-85-4, 4/30/79, Level 1	
				M-140-86-4, 5/22/79, Level 2 | 9	M-140-86-4, 5/22/79, Level 2 | 9	
		Environmental- none*	Section 3.2, Appendix D Paragraphs 2.1, 3.0, Appendix F	M-140-41-1 10/3/77 Level 5 | 9		
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-146-16-2, 1/23/76, Level 1	Start Ship: 10/29/76A Rerev: Inprocess. NCR 1791
		Environmental- IEEE Std 323-74*/**	Section 3.5; M-146-Sk-1, Section 1.11; E-10 Section 3.1 (IEEE Std)	See FSAR Table 3.11-4 3.11-4, Test 16. | 9		

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-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)	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
			E-10, Article 3.0 G-321-D 7.0-PAR	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. |9		
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-150-64-4, 12/19/78, Level 1	M-150-64-4, 12/19/78, 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, 11/28/78 Level 1	Submittal expected by |9 12/79	Procedures expected by 4/20/79. Test results will take 8 months according to Wyle lab schedule.
				M-150-145-2 5/14/79 |9 Level 1 (electric heaters and controls)	Submittal expected by |9 12/79	
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			Start Ship: 10/26/77A Rerev: Not required. Telex to vendor 7/11/79 requesting seismic qualification. |9
		Environmental- none*				

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-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	M-154-38-4, 3/20/79, Level 1	Start Ship: 6/29/79A Rerev: Complete	9
				M-154-39-3, 1/24/79; Level 1	M-154-39-3, 1/24/79, Level 1		
				M-154-40-3, 3/22/79, Level 1	M-154-40-3, 3/22/79, Level 1		
				M-154-41-3, 1/22/79, Level 1	M-154-41-3, 1/22/79, Level 1		
				M-154-43-3 4/9/79, Level 1	M-154-43-3 4/9/79, Level 1		
		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-154-40-3, 3/22/79, Level 1	M-154-40-3, 3/22/79, Level 1	See FSAR Table 3.11-4 Test 16.	9
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 -39-1, 6/15/77, acceptable	M-157-33-1 through -39-1, 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		
		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 PAR G-321-D 26.2 PAR	M-157-24-1 through -26-1, 5/9/77, Level 1	M-157-24-1 through -26-1, 5/9/77, Level 1		
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	M-163-40-2, 10/25/77, acceptable	Start Ship: 3/9/78A Rerev: Inprocess. NCR 1794	

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 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, Paragraphs 2.9, 2.10	M-163-22-2, 6/9/77, Level 1 M-163-48-3, 4/7/78, Level 1	M-163-22-2, 6/9/77, Level 1 M-163-48-3, 4/7/78, Level 1		
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)	M-168-48-1, 9/8/78, Level 1 M-168-49-1, 9/8/78, Level 1	M-168-48-1 9/8/78, Level 1 M-168-49-1, 9/8/78, Level 1	Start Ship: 10/16/78A Rerev: Inprocess. NCR 1795 New QTRs issued for M-168-46-1 and M-168-47-1	9
						Letter to vendor 7/17/79 asking for functional test documentation for 18-inch valves.	9
		Environmental- IEEE Std 323-74*/** IEEE Std 382-72* IEEE Std 382-72, Draft 13** (motor operated valves inside containment)	Article 5.1 (G-26) G-9, Section 4.2, 7.1 (IEEE Std 382); G-6 G-321-D 7.0 PAR G-321-D 26.0 PAR	M-168-46-1, 9/7/78, Level 1 M-168-47-1, 9/7/78, Level 1	M-168-46-1, 9/7/78, Level 1 M-168-47-1, 9/7/78, Level 1		
M-169/M-169, Rev 2 (7/8/77)	Electric hydrogen recombiners (Westinghouse)	Seismic- IEEE Std 344-75*/**	Paragraphs 6.8, 9.2.7c, Section 4.2 (IEEE Std 344-75); G-7, Rev 4; G-6, Rev 4 G-321-D 7.0 PAR	M-169-39-1 through -41-1, 1/23/78, Level 1	M-169-39-1 through -41-1, 1/23/78, Level 1	Start Ship: 1/78A Rerev: In-process. NCR 1796	
		Environmental- IEEE Std 323-74*/** 9	Section 4.2, (IEEE Std 323-74) Section 6.2 (RG 1.17) G-26, Rev 1	M-169-5-2 and -6-2, 11/1/77, Level 1	M-169-5-2 and -6-2, 11/1/77, 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-169-7-2, 1/23/78, Level 1	M-169-7-2, 1/23/78, Level 1	
				M-169-8-1 and -9-1, 9/20/77, Level 5	M-169-8-1 and -9-1, 9/20/77, Level 5	For information only
				M-169-10-1 and -11-1, 9/26/77, Level 5	M-169-10-1 and -11-1, 9/26/77, Level 5	For information only
				M-169-18-1, 11/10/77, Level 1	M-169-18-1, 11/10/77, Level 1	
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	M-180-16-5, 5/10/78, Level 1	Start Ship: 7/15/79A Rerev: In-process. |9
				M-180-27-3, 5/18/78, Level 1	M-180-27-3, 5/18/78, Level 1	
				M-180-34-3, 5/22/79 Level 1 |9	M-180-34-3 5/22/79 Level 1 |9	
		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	M-180-27-3, 5/18/78, Level 1	See FSAR Table 3.11-4 Test 16. |9
M-333/M-333, Rev 3 (11/26/77)	Nuclear service pressure relief valves (Crosby)	Seismic-none* |9	Section 2.4, 2.5; 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: 9/7/79F Rerev: Complete |9
					M-333-16-3 7/12/79 Level 3 |9	

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*	Section 2.0, 3.0; Appendix E; Appendix A, 2.0; Appendix D, 3.0 G-321-D 26.1 PAR	M-333-11-1, 5/1/78, Level 1	M-333-11-1, 5/1/78, Level 1	
M-336/M-336, Rev 1 (8/8/77)	Nuclear wye strainers (Leslie Co.)	Seismic-none* |9	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, Attachment	See FSAR Table 3.11-4 |9 Test 16.		

*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. |9

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 1.73	Class 1E solenoid valves installed inside containment	IEEE 382-72	4-10-73
	Class 1E motor operated valves installed inside containment	IEEE 382-72, draft 13	
RG 1.89	Class 1E equipment	IEEE 323-74	11-15-74
FSAR Table 3.11-1			
RG 1.100	Class 1E equipment	IEEE 344-75	Not specified
FSAR Subsection 3.10.4 |9		IEEE 344-71	Not specified