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BOUCHEY,E.D. Washington Public Power Supply System
RECIP.NAME RECIPIENT AFFILIATION
SCHWENCER,A. Licensing Branch 2

SEE BELOW 3 VOLS

SUBJECT: Forwards facility response to NUREG-0588,Environ Equipment Qualification Rept.Rept will be incorporated into amend to FSAR.

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Washington Public Power Supply System
P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

Docket No. 50-397
January 14, 1982
G02-82-38

Mr. A. Schwencer, Director
Licensing Branch WNP-2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington D. C. 20555

Dear Mr. Schwencer:

Subject: NUCLEAR PROJECT NO. 2
QUALIFICATION OF SAFETY-RELATED ELECTRICAL EQUIPMENT

Reference: Letter, D. F. Ross (NRC) to Operating License Applicants, "Qualification of Safety-Related Electrical Equipment", February 21, 1980

Enclosed are ten (10) copies of the WNP-2 NUREG-0588, Environmental Equipment Qualification Report. This report will be incorporated into an amendment to the WNP-2 FSAR.

Very truly yours,

G. D. Bouchey, Deputy Director
Safety and Security

cc: R Auluck NRC
WS Chin BPA
R Feil NRC

A048
S 1/10 on shelf

8201260255

WNP-2
NUREG 0588 ENVIRONMENTAL EQUIPMENT QUALIFICATION REPORT

Volume 2

January 1982

Washington Public Power Supply System
Richland, Washington 99352

82-057

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER (Note 2)	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Bailey	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER (Note 2) COMPONENT Electronic Power Supply	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Power Supply	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	6.6×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN . (Note 2)	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-572F

NOTES

1. The vendor is currently testing 6 and 10 amp power supplies to the standards of IEEE 323-1974, with test completion scheduled for June 1982. When testing is completed, applicability of the test results to the installed components will be evaluated. Requalification will be initiated if the test results cannot be shown to apply to the installed components.

WP-1061

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

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PAGE NO:
REVISION:
DATE:

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2.

Tag Number	Model Number	Column
CAC-E/S-1A24	9T66Y987	M6/6,5
CAC-E/S-1A43	298	M6/6.5
CAC-E/S-1B24	9T66Y987	M6/8.0
CAC-E/S-1B43		M6/7.2

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-EHC-1A, B MANUFACTURER Chromalox MODEL NUMBER SA213-T347 S.S. COMPONENT Heater FUNCTION/SERVICE Preheater for HR-1A LOCATION: BLDG R ELEVATION 572 COLUMN M7/6.6, M7/7.4	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	2	4,5	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 80 max abnormal 100 max accident	100%	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
	RADIATION (RAD)	6.6×10^6	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	5	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572F 4. Westinghouse Test Report WCAP 7709-L, Supplements 1-7 5. EDS Problem File #0740-004-AAD4	Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-EHO-Note 1	OPERATING TIME	4320 hours	2400 hours	5	3	Simultaneous Test	Note 2
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	150	1	3	Simultaneous Test	Note 2
MANUFACTURER ITT-General Controls	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER NH91 & NH95 COMPONENT Electro-Hydraulic Operator	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	100	1	3	Simultaneous Test	Note 2
FUNCTION/SERVICE Operate FCV (3 phase)	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	6.68×10^6	3.9×10^7	2	3	Sequential Test	Note 2
	AGING	40 years	10.6 years	1	3, 4	Sequential Test Engineering Analysis	Note 3
LOCATION: BLDG R ELEVATION 572 COLUMN M5/6.6 M5/7.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared By: Ann Seiler

Reviewed By: [illegible]

DOCUMENTATION REFERENCES

1. FSAR Par. 311
2. EDS Study 0740-004-572F
3. MCC Powers #377-80.010 with Appendices A-D.
4. Calculation QID 110001
5. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. CAC-EHO-1A, -1A/FCV, -1B, -1B/FCV, -2A, -2A/FCV, -2B, -2B/FCV, -3A, CAC-EHO-3A/FCV, -3B, -3B/FCV, -4A, -4A/FCV, -4B, -4B/FCV, -5A/FCV, -5B/FCV, CAC-EHO-6A/FCV, -6B/FCV

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2. Applicability of the test data and discrepancies in the testing procedures are being resolved with the vendor (letter G02-81-0531). 3. The component will be requalified on a schedule based on the calculated life and manufacturer's recommendation.

WP-1083

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-PIC-67A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 105 Max Abnormal 150 Max Accident.		2			
MANUFACTURER Bailey	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 50-701003AAAA1 COMPONENT Flow Indicating Controller	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE PIC for CAC-FCV-6A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M5/6.6 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572D	1. The vendor is currently testing Model Number 701 and 740 controllers to the standards of IEEE 323-1974, with test completion scheduled for June 1982. When testing is completed, applicability of the test results to the installed components will be evaluated. Requalification will be initiated if the test results cannot be shown to apply to the installed components.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-FS-6A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90° Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Moore	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER DCA/4-20MA/D-X2-X3 COMPONENT Flow Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Flow Switch for CAC-FCA-6A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-572D	1. Qualification documentation is being obtained for these components.

WP-1841

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-220

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-FT-1A, -3A -1B, -3B -2A, -4A -2B, -4B MANUFACTURER Rosemount MODEL NUMBER 1151 COMPONENT Flow Transmitter FUNCTION/SERVICE	OPERATING TIME	6 months	6 months	5	3,4	Engineering Analysis Separate Effects	Note 1
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 accident	300 max	1	3	Separate Effects	None
	PRESSURE (PSIA)	14.7	N/R	1		Separate Effects	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	1	7	Separate Effects	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	1.04×10^5	2×10^6	2	4	Separate Effects	None
	AGING	40 years	Note 2	1	N/A	Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 501, 548 COLUMN H.8/5.8, H.7/8.2, N.8/5.5, L.4/9.3, N.6/5.1	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-548P
3. Rosemount Report 97215A dated 2/9/72
4. Rosemount Report 127227 dated 12/27/72
5. WNP-2 Class 1E Equipment List dated 12/16/81
6. Rosemount Product Data Sheet 2256
7. Rosemount Report 117415 dated 9/19/75

NOTES

Qualified
1. Test data and equipment specification data ensure the component will operate 6 months at the required temperatures.
2. A preventive maintenance/surveillance program is being developed to to address aging of Class 1E equipment.

WP-1981

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-FT-5A CAC-FT-5B MANUFACTURER Barton MODEL NUMBER 386 COMPONENT Flow Transmitter FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 578 COLUMN M.5/6.6 M.5/7.4	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	6.6×10^6		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572F	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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REVISION:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-FT-6A, B -7A, B MANUFACTURER ITT Barton MODEL NUMBER 386 COMPONENT Differential Pressure Transmitter FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 572' COLUMN M.5/6.6 M.5/7.4	OPERATING TIME	6 months	6 months	5	3, 4	Simultaneous Test Operating Experience	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	288	1	3	Simultaneous Test Operating Expereince	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100%	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	6.6×10^6	2×10^7	2	3	Sequential Test	None
	AGING	40 years	6.5 years	1	4	Operating Experience	Note 1
	ACCURACY		±12%		3		

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Report No. 0740-004-572H
3. Westinghouse Test Report WCAP 7410-L, dated 12/70, Volume I of II
4. EDS Problem File 0740-004-AAD7
5. WNP-2 Class 1E Equipment List, 12/16/81

NOTES

1. A preventive maintenance/surveillance program is being implemented to extend the qualified life.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-LS-1A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Moore	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER DCA/4-20MA/D-X1-X4 COMPONENT Level Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Level Indicating Switch for CAC-MS-1A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-572D	1. Qualification documentation is being obtained for these components.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-LT-1A, B	OPERATING TIME	6 months	6 months	5	3, 4	Simultaneous Test Operating Experience	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	288	1	3	Simultaneous Test Operating Experience	None
MANUFACTURER ITT Barton	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER 386	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100%	1	3	Simultaneous Test	None
COMPONENT Differential Pressure Transmitter FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	6.6×10^6	2×10^7	2	3	Sequential Test	None
	AGING	40 years	6.5 years	1	4	Operating Experience	Note 1
LOCATION: BLDG R ELEVATION 572' COLUMN M.5/6.6 M.5/7.4	ACCURACY		±12%		3		

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Rajnit Chi

Reviewed by: Alan Seitem

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Report No. 0740-004-572H 3. Westinghouse Test Report WCAP 7410-L, dated 12/70, Volume I of II 4. EDS Problem File 0740-004-AAD7 5. WNP-2 Class 1E Equipment List, 12/16/81	1. A preventive maintenance/surveillance program is being implemented to extend the qualified life.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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SPEC: 2808-71

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	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-M-1A, B	OPERATING TIME	6 months	6 months	1	5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	2	4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Westinghouse	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER Style No. 75D42473 COMPONENT Fan Motor	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	4	Simultaneous Test Engineering Analysis	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
	RADIATION (RAD)	6.6×10^6	9.4×10^6	3	5	Engineering Analysis	None
	AGING	40 years	40 years	2	5	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 572 COLUMN M.5/7.0	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Para. 3.11 3. EDS Report 0740-004-572F 4. Letter from J. Courtin (Westinghouse) dated April 3, 1981, with attachments 5. EDS Problem File #0740-004-AAD10	Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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SPEC: 2808-41A

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-MO-11, -2 -13, -4 -15, -6 -17, -8 MANUFACTURER Limitorque MODEL NUMBER SMB-000 COMPONENT Motor Operator FUNCTION/SERVICE Operate CAC Valves LOCATION: BLDG R ELEVATION 471, 548, 572 COLUMN M/6, J/7.4, M.2/7.8, M.8/4.3, M5/6.5, J8/6.8, M2/7.1, L9/5	OPERATING TIME	4320 hours	Equivalent of 52284 hours at 150°F	5	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	100%	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.7×10^6	1×10^7	2	3	Sequential Test	None
	AGING	40 years	40 years+	1	3,4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond [illegible]

Reviewed by: W. S. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-471E (worst case) 3. Limitorque Report B0009, 4/30/76 4. Applicability calculations in QID221011 5. WNP-2 Class 1E Equipment List, 12/16/81	Qualfied.

WP-1081

FIGURE 1
TEMPERATURE PROFILE DC ENVIRONMENTAL TEST

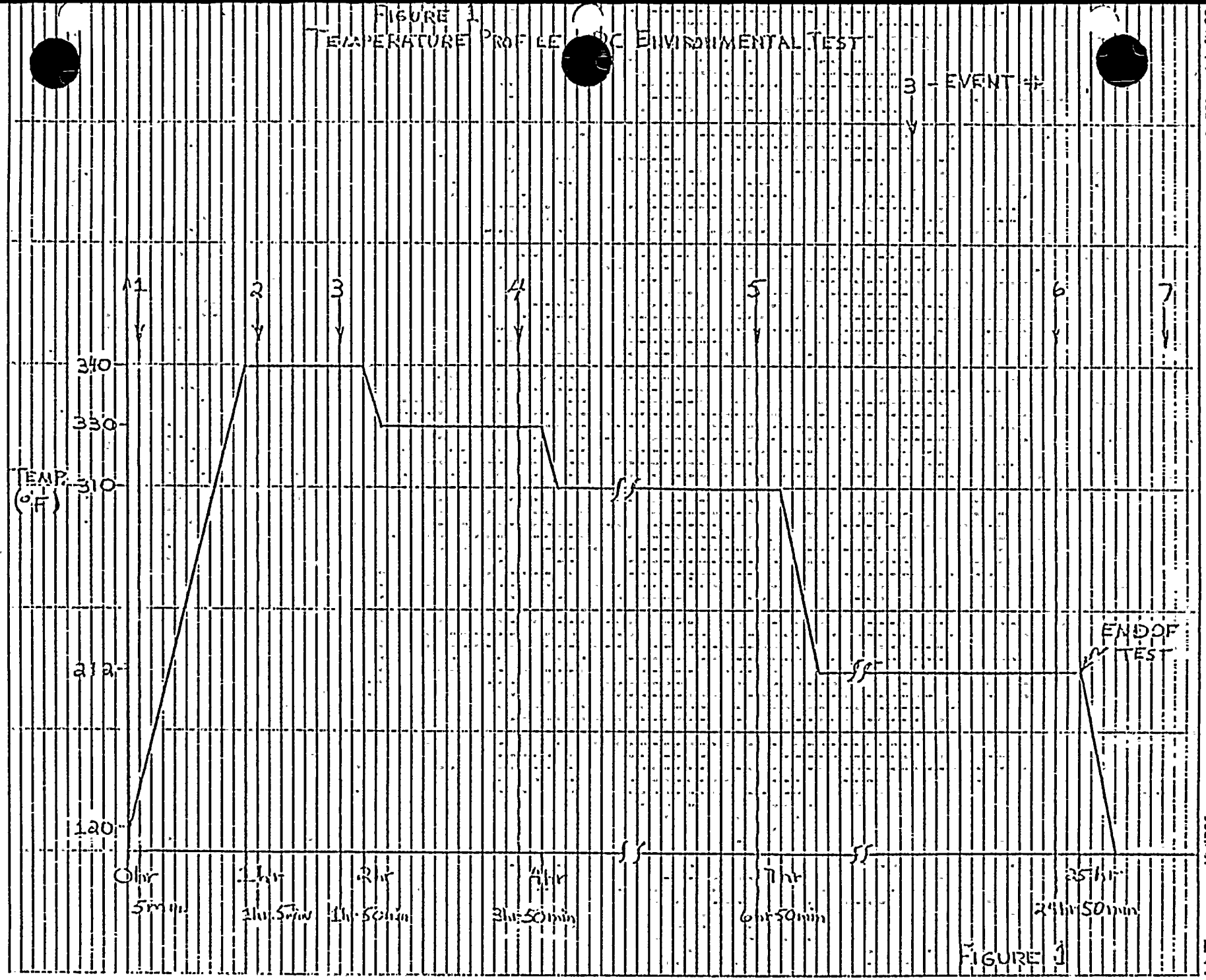

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-PS-68A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Moore	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER DCA/4-20MA/D-X2-X3 COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Pressure Switch to moisture separator 1A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-572D	1. Qualification documentation is being obtained for these components.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-PT-1A CAC-PT-1B	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7		2			None
MODEL NUMBER 386 COMPONENT Pressure Transmitter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
FUNCTION/SERVICE Pressure Transmitter for CAC Fans	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	6.6×10^6		3			None
	AGING	40 years		1			None
LOCATION: BLDG R ELEVATION 572, 575 COLUMN M.5/6.6 M.5/7.4	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572F	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmoshpere Control TAG NUMBER CAC-PT-68A, B	OPERATING TIME	6 months	6 months	5	3, 4	Simultaneous Test Operating Experience	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	288	1	3	Simultaneous Test Operating Expereince	None
MANUFACTURER ITT Barton	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER 386 COMPONENT Differential Pressure Transmitter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100%	1	3	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N?A	1	N/A	N/A	None
	RADIATION (RAD)	6.6×10^6	2×10^7	2	3	Sequential Test	None
	AGING	40 years	6.5 years	1	4	Operating Expereince	Note 1
LOCATION: BLDG R ELEVATION 572' COLUMN M.5/7.4 M.5/6.6	ACCURACY		±12%		3		

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: R. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Report No. 0740-004-572H 3. Westinghouse Test Report WCAP 7410-L, dated 12/70, Volume I of II 4. EDS Problem File 0740-004-AAD7 5. WNP-2 Class 1E Equipment List, 12/16/81	1. A preventive maintenance/surveillance program is being implemented to extend the qualified life.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
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PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-R/I-4A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Bailey	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 50-740320CAAA1	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
COMPONENT Resistance/Current Convertor FUNCTION/SERVICE Current Reset on CAC-HR-1A and Hydrogen Recombiner Outlet Temperature	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572D	1. The vendor is currently testing Model Number 701 and 740 controllers to the standards of IEEE 323-1974, with test completion scheduled for June 1982. When testing is completed, applicability of the test results to the installed components will be evaluated. Requalification will be initiated if the test results cannot be shown to apply to the installed components.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-RLY-CR5A, B -CR6A, B MANUFACTURER Agastat MODEL NUMBER 7012AD, AH COMPONENT Relay FUNCTION/SERVICE Relays for CAC Recombiner LOCATION: BLDG R ELEVATION 572 COLUMN M.6/6.5 M.4/8.0	OPERATING TIME	4320 hours	Equivalent to 4320 hours at 150°F	4	2,5	Simultaneous Test	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 107 max accident	150	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 90 max accident	95	1	2	Sequential Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4	1×10^7	3	2		None
	AGING	40 years	Note 1	1	N/A	Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mal Baker

Reviewed by: Raymond Ch

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. MCC Powers Report 734-79.002, 9/3/79 3. EDS Study 0740-004-572D, H 4. WNP-2 Class 1E Equipment List dated 12/16/81 5. QID No. 338002	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-3

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-RLY-1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B MANUFACTURER ASEA MODEL NUMBER RA225-052-CP COMPONENT Relay FUNCTION/SERVICE Control relays for CAC-FCV's LOCATION: BLDG R ELEVATION 475 COLUMN N/8.3, N.1/9.3	OPERATING TIME	4,320 hours	Note 1	3			
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	6×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reveiwed by: Ann Siebers

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-471D 3. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-RLY-4/1234, 4A/1234, 4B/1234 MANUFACTURER ASEA MODEL NUMBER RK225-052CP COMPONENT Relay FUNCTION/SERVICE Control interlock for CAC-V's and FCV's LOCATION: BLDG R ELEVATION 475 COLUMN N.1/9.3, N.1/8.3	OPERATING TIME	4,320 hours	Note 1	3			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	6.0×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Seiten

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-475D 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-TDS-1A -1B MANUFACTURER Agastat MODEL NUMBER 7012AH COMPONENT Timer Delay Relay FUNCTION/SERVICE Timer Delay for Instrument Warm-Up LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7, M5/8	OPERATING TIME	4320 hours	Equivalent to 4320 hours at 107°F	5	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 107 max accident	150	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/$	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 90 max accident	95	1	3	Sequential Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4	1×10^7	2	3	Sequential Test	None
	AGING	40 years	Note 1	1	3,4	Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N?A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Eli

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-5270 3. MCC Powers 734-79:002, 9/3/79 4. Calculations in QID 338002 5. WNP-2 Class 1E Equipment List dated 12/16/81	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-TE-1A, B -2A, B -3A, B -4A, B -5A, B -6A, B MANUFACTURER Thermoelectric MODEL NUMBER 30500 COMPONENT Temperature Element FUNCTION/SERVICE	OPERATING TIME	4320 hours	4320 hours	2	4	Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	1	4	Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	Note 1	1	4	Engineering Analysis	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	6.6×10^6	6.6×10^6	3	4	Engineering Analysis	None
	AGING	40 years	40 years	1	4	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 572 COLUMN M5/6.6 M5/7.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature] Reviewed by: [signature]

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. WNP-2 Class 1E Equipment List, dated 12/16/81
3. EDS Report #0740-004-572F
4. EDS Problem File #0740-004-AAD9

NOTES

1. Analysis has determined that the ceramic cement may degrade when exposed to 100% R.H. Investigation of requalification methods is continuing.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-TE-1A1, 1A2, 1A3, 1A4, 1A5, 1A6, 1A7 MANUFACTURER Thermo Electric, Inc. MODEL NUMBER COMPONENT Temperature Element FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 576 COLUMN M.3 6.4	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	6.6×10^6		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Che

Reviewed by: H. L. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572F	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-71

MPL:
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PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmosphere Control TAG NUMBER CAC-TE-1B1 CAC-TE-1B6 CAC-TE-1B2 CAC-TE-1B7 CAC-TE-1B3 CAC-TE-1B4 CAC-TE-1B5 MANUFACTURER Thermo Electric, Inc. MODEL NUMBER COMPONENT Temperature Element FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 576 COLUMN M.3/7.2	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	6.6×10^6		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572F	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
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REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-TIC-4A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Bailey	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 50-701003AAAA1 COMPONENT Temperature Indicating Controller	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Temperature Control Discharge for moisture separators CAC-MS-1A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M5/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AJ 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-572D

NOTES

1. The vendor is currently testing Model Number 701 and 740 controllers to the standards of IEEE 323-1974, with test completion scheduled for June 1982. When testing is completed, applicability of the test results to the installed components will be evaluated. Requalification will be initiated if the test results cannot be shown to apply to the installed components.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-TS-1A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Moore	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER RBA/3W-100/D-X1-X4 COMPONENT Temperature Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Temperature Switch for CAC-FN-1A,B discharge	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-572D	1. Qualification documentation is being obtained for these components.

WA-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-TS-6A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Moore	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER RBA/3W-100/D-X1-X4 COMPONENT Temperature Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Discharge Temperature for CAC-HS-1A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M2/5.7 M5/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-572D	1. Qualification documentation is being obtained for these components.

WP-1041

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-71

MPL:
PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Atmospheric Control TAG NUMBER CAC-TT-4A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Bailey	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER Type 740	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
COMPONENT Temperature Transmitter	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
FUNCTION/SERVICE Temperature Trans. for CAC-MS-1A,B moisture separator discharge	RADIATION (RAD)	6.6×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572 COLUMN M6/6.8 M6/7.6	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82

Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572P	1. The vendor is currently testing Model Number 701 and 740 controllers to the standards of IEEE 323-1974, with test completion scheduled for June 1982. When testing is completed, applicability of the test results to the installed components will be evaluated. Requalification will be initiated if the test results cannot be shown to apply to the installed components.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Exhaust Purge System TAG NUMBER CEP-LMS-1A, 1B, 2A, 2B	OPERATING TIME	6 months	6 months	2	4,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	200	1	4	Simultaneous Test	None
MANUFACTURER NAMCO	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER 1703100 COMPONENT Limit Switches	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	1	4	Simultaneous Test	None
FUNCTION/SERVICE Limit Switches for CEP-V-1A, 1B, 2A, 2B	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.7×10^5	2.5×10^6	3	5	Engineering Analysis	None
	AGING	40 years	Note 1	1		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 548 COLUMN J.4/6.5	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Ann Seiler

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List dated 12/16/81 3. EDS Report 0740-004-548Q 4. ACME-Cleveland Report, "Qualification of Namco Control Limit Switch Model EA-170", dated 3/17/78 5. QID No. 200005 6. NAMCO Controls, Limit Switches General Catalog, copyright 1979	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-68

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Exhaust Purge System TAG NUMBER CEP-LMS-3A, B -4A, B	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	340	2	4,5	Simultaneous Test Engineering Analysis	None
MANUFACTURER Namco	PRESSURE (PSIA)	14.7	N/A	2	N/A	N/A	None
MODEL NUMBER 74080100 COMPONENT	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	4	Simultaneous Test	None
Limit Switches FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
Limit Switch for CEP-LMS-3A, 3B -4A, 4B	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4,5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 495 COLUMN H.5/5.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ara Seiler

Reviewed by: M S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-471J 4. Qualification of NAMCO Controls Limit Switch Model EA-740 to IEEE Stds. 344 (1975), 323 (1974) and 382 (1972), Rev. 1, dtd. 2/22/79, Rev. 0, dtd. 2/20/78 5. EDS Problem File #0740-004-AAD20, NAMCO LS	Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-MO-20 -30A -30B	OPERATING TIME	24 hours	16 days	1	3	Simultaneous Testing	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Testing	None
MANUFACTURER Limitorque MODEL NUMBER SMB-000	PRESSURE (PSIA)	14.5	N/A	1	N/A	N/A	None
COMPONENT Valve Motor Operator	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	Steam for 24 hours 100% for 15 days	1	3	Simultaneous Testing	None
FUNCTION/SERVICE Operate CIA Valves	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	2×10^7	2	3	Sequential Testing	None
	AGING	40 years	40 years+	1	3,4	Sequential Testing Engineering Analysis	None
LOCATION: BLDG R ELEVATION 522 COLUMN J3/7, J8/4.7, M5/6.8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M Sirvaine

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522H (worst case) 3. Limitorque Report B0003 with addendum A, 5/8/76 in BWR 054-C-04 4. Calculations in QID221011 (1)	Qualified.

WP-1081

TEMPERATURE PROFILE

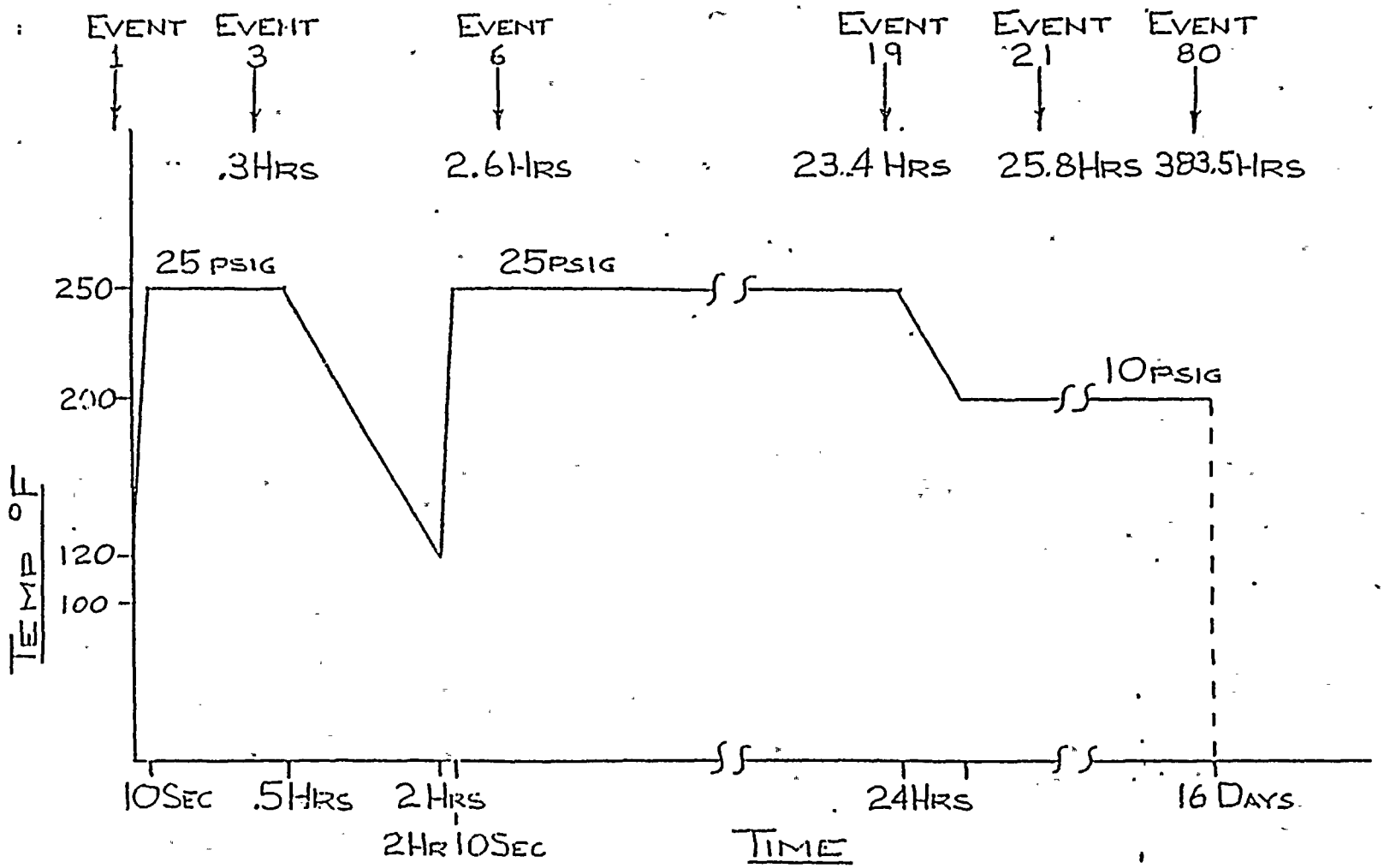

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-PS-21A CIA-PS-21B MANUFACTURER Barton MODEL NUMBER 288 COMPONENT Pressure Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 557 548 COLUMN M8/5.8 N.7/8.1	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	8.5×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Phi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-548G, P	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-PS-22A MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 548 COLUMN	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)			3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: W. S. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1051

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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REVISION:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-PS-29 MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)			3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ron Seiten

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-PS-39A CIA-PS-39B MANUFACTURER Mercoid MODEL NUMBER DAW-7023-804 COMPONENT Pressure Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 525 COLUMN H8/7.0 H4/7.1	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	2.4×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond [illegible]

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522K	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-59

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-PT-20 MANUFACTURER G.E. MODEL NUMBER 712203 COMPONENT Pressure Transmitter FUNCTION/SERVICE P.T. Downstream of CIA-AR-1 LOCATION: BLDG R ELEVATION 522 COLUMN J/G.7	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	1.7×10^6		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: [illegible]

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-5220

NOTES

1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function.

Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER CIA-PT-21A CIA-PT-21B MANUFACTURER Rosemount MODEL NUMBER GP7A22T0003PB COMPONENT Pressure Transmitter FUNCTION/SERVICE CIA Header Pressure LOCATION: BLDG R ELEVATION 548 550 COLUMN H.8/5.7 H.7/8.2	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	8.5×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Solomon

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-548 G, P	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1981

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Instrument Air TAG NUMBER See Note 2.	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 105 accident		2			
MANUFACTURER Marotta	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER MV229MQ-52 COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
Soelnoid Pilot Valve FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
.5" Solenoid Valve	RADIATION (RAD)	8.2×10^3		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 441 COLUMN N/4.3	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Cl

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-441D	1. Environmental qualification testing for these components are currently being performed at Wyle Labs.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2. TAG NUMBERS CIA-SPV-1A -1B -10A -10B -11A -11B -12A -12B -13A -13B -14A -14B -15A -15B -16B -17B -18B -19B -2A -3A -3B -4A -4B -5A -5B -6A -6B -7A -7B -8A -8B -9A -9B

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Isolation Air TAG NUMBER CIA-SV-39A, B MANUFACTURER Marotta MODEL NUMBER COMPONENT Solenoid Valve FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 540 COLUMN K.0/4.3 M.8/7.7	OPERATING TIME	6 months		1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2	1		
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522K, H	1. Environmental Qualification testing for these components are currently being performed at Wyle Labs.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-92B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-AY-1 MANUFACTURER Beckman Instruments, Inc. MODEL NUMBER 7C(H_2) and 755($_2$) COMPONENT H_2, O_2 Analyzer FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 548 COLUMN MG/4.5	OPERATING TIME	6 months	Note 1	3			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		1			
	PRESSURE (PSIA)	14.7					
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	8.9×10^3		2			
	AGING	40 years		1			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Bel

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548E 3. WNP-2 1E Equipment List, 12/16/81	1. The H_2, O_2 analyzer is currently being qualified by Beckman Instruments, Inc. The qualification data will be reviewed when it is received.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-AY-2 MANUFACTURER Beckman Instruments, Inc. MODEL NUMBER 7C(H_2) and 755(O_2) COMPONENT H_2, O_2 Analyzer FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 548 COLUMN M6/4.5	OPERATING TIME	6 months	Note 1	3			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	1.7×10^4		2			
	AGING	40 years		1			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES x NO

Prepared by: Raymond Chu

Reviewed by: W. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 311 2. EDS Study 0740-004-548F 3. WNP-2 1E Equipment List, 12/16/81	1. The H_2, O_2 analyzer is currently being qualified by Beckman Instruments, Inc. The qualification data will be reviewed when it is received.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-59

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Containment Monitoring System TAG NUMBER: CMS-LT-1 MANUFACTURER: Magnetrol MODEL NUMBER: TSI-1X-MFG-M14HY COMPONENT: Level Transmitter FUNCTION/SERVICE: Suppression Chamber Water Level Monitoring LOCATION: BLDG R ELEVATION 465 COLUMN J 5/4.3	OPERATING TIME	24 hours		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81. 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-441J	1. Qualification documentation is being obtained from the vendor.

WP-1061

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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REVISION:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Mointoring System TAG NUMBER CMS-LT-2	OPERATING TIME	6 months	6 months	1	3,5	Separate Effects Engineering Analysis	None Note 1
	TEMPERATURE (F)	90 normal 104 Abnormal 150 accident	300 max	2	5	Separate Effects	None
MANUFACTURER Rosemount	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 1151-DP4022T003PB COMPONENT Level Transmitter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	7	Separate Effects	None
FUNCTION/SERVICE Suppression Chamber Water Level Monitor	CHEMICAL SPRAY	N/A	N/R	2	N/A	N/A	None
	RADIATION (RAD)	1.7×10^6	2×10^6	4	6	Separate Effects	None
	AGING	40 years	Note 2	2	N/A	Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 465 COLUMN M.2/7.7	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Che

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. Rosemount Product Data Sheet 2256 4. EDS Study 0740-004-441F 5. Rosemount Report 97215A1 dated 2/9/72 6. Rosemount Report 127227, Rev. b 7. Rosemount Report 117415 dated 9/19/75	Qualified 1. Test date and equipment production specifications indicate the component will operate 6 months at the required temperatures. 2. A preventive maintenance/surveillance program is being developed to address aging of Class 1E equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-ME-1, -2, -3, -4, -5	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	135 max normal 150 max abnormal Accident - profile 1		2			
MANUFACTURER Panametrics	PRESSURE (PSIA)	14.7 normal 16.7 abnormal Accident - profile 1		2			
MODEL NUMBER M2R COMPONENT Moisture Sensor	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE Drywell Moisture	CHEMICAL SPRAY	Demineralized water		2			
	RADIATION (RAD)	4.4×10^7		2			
	AGING	40 years		2			
LOCATION: BLDG C ELEVATION COLUMN	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chu

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E List, dated 12/16/81 2. FSAR Par. 3.11	1. These components are currently being ordered. Qualification documentation will be reviewed when it is received.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-MT-1, -2, -3, -4, -5	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 accident		2			
MANUFACTURER Panametrics	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 600 COMPONENT Moisture Transmitter	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 accident		2			
FUNCTION/SERVICE Drywell Moisture	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 522 COLUMN	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522H	1. These components are currently being ordered. Qualification documentation will be reviewed when it is received.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-PT-1, 2, 2R, 3, 4, 5, 6, 6R MANUFACTURER Rosemount MODEL NUMBER 1151GP4A22MBGE3 COMPONENT Pressure Transmitter FUNCTION/SERVICE Containment Pressure Transmitter LOCATION: BLDG R ELEVATION 555 COLUMN H.7/8.2 M.8/5.8	OPERATING TIME	6 months	6 months	1	3,5	Separate Effects Engineering Analysis	None Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	300 max	2	5	Separate Effects	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	7	Separate Effects	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	N/A	None
	RADIATION (RAD)	8.5×10^4	2×10^6	4	6	Separate Effects	None
	AGING	40 years	Note 2	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List dated 12/16/81
2. FSAR Par. 3.11
3. Rosemount Product Data Sheet 2256
4. EDS Study 0740-004-548P
5. Rosemount Report 97215A dated 2/9/72
6. Rosemount Report 127227 dated 12/27/72
7. Rosemount Report 117415 dated 9/19/75

NOTES

Qualified
1. Test data and equipment specification data ensure the component will operate 6 months at the required temperatures.
2. A preventive maintenance surveillance program is being developed to address aging of Class 1E equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-RE-12A, B	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE RE for drywell	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)						
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION COLUMN	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11	1. These components are on order. The qualification documentation will be reviewed when it is received.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring System TAG NUMBER CMS-RE-27B, D	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE RE for Drywell	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)						
	AGING	40 years		2			
LOCATION: BLDG ELEVATION COLUMN	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11	1. These components are on order. The qualification documentation will be reveiwed when it is received.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring TAG NUMBER CMS-TE-17A, 17B, 17C, 17D, 21, 22, 23	OPERATING TIME	6 months	Note 1	2			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
MANUFACTURER	PRESSURE (PSIA)	14.7		1			
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
FUNCTION/SERVICE	CHEMICAL SPRAY	Demineralized water		1			
	RADIATION (RAD)	4.4×10^7		1			
	AGING	40 years		1			
LOCATION: BLDG C ELEVATION 564, 548, 532, COLUMN 516	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List, 12/16/81	1. These components are on order. The qualification documentation will be reviewed when it is received.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Monitoring TAG NUMBER CMS-TE-41, 42, 43, 44 MANUFACTURER Hy-Cal Engineering MODEL NUMBER TC-113X-T-A-24-3 COMPONENT Thermal Element FUNCTION/SERVICE TE for suppression pool air LOCATION: BLDG C ELEVATION 451, 492 COLUMN 2°, 225°	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	135 normal 150 abnormal Accident - profile 1		2			
	PRESSURE (PSIA)	14.7 normal 16.7 abnormal Accident - profile 1		2			
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 max. accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	2.6×10^7		2			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Alan Sieben

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-DPI-5, 9	OPERATING TIME	1 hour	Note 1	1			
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		2			
MANUFACTURER General Electric	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 13722, 13733 COMPONENT Differntial Pressure	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.8×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 522 COLUMN N.4/3.6	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Aron Seiber

Reviewed by: Raymond Chu

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522C	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-DPIS-15 MANUFACTURER Barton MODEL NUMBER 288 COMPONENT Differential Pressure Indicating Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 426 COLUMN N.8/3.7	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	9.4×10^3	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Par. 3.11
3. EDS Report 0740-004-422E
4. EDS Calculation File 0740-006-002
5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, 10/2/80

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-DPIS-2 MANUFACTURER Barton MODEL NUMBER 288 COMPONENT Differential Pressure Indicating Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN N.4/3.6	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A.	2	N/A	N/A	None
	RADIATION (RAD)	5.8×10^5	$3. \times 10^6$	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventative Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Paul Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522C 4. EDS Calculation File 0740-006-002- 5. Qualification Test Report for Barton 288 Switch, #QSR-027-01, 10/2/80	Qualified. 1. A preventative maintenance/surveillance program is being developed to address aging Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-DPT-11,8 MANUFACTURER Barton MODEL NUMBER 368 COMPONENT Differential Pressure Transmitter FUNCTION/SERVICE CRD Differential Pressure Transmitter LOCATION: BLDG R ELEVATION 522 COLUMN N4/3.6	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	286	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	73.7	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.8×10^5		3			Note 1
	AGING	40 years		2			Note 1
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522C 4. PIRL Report P-C2667, Nov. 1969. Performance Test for three Differential Pressure Transmitters.	1. Materials of Construction are being obtained from the vendor to complete the evaluations.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-E/P-001	OPERATING TIME	1 hour	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 100 accident		2			
MANUFACTURER General Electric	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 158B7013P7 COMPONENT Electroneumatic Converter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.2×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 524 COLUMN H.8/3.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: M. L. Baker

Reviewed by: Ann Seibers

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522P	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-FT-7 -FT-9	OPERATING TIME	6 months	6 months	1	3,5	Separate Effects Engineering Analysis	None Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	30 max	2	5	Separate Effects	None
MANUFACTURER Rosemount	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 1151DP3022T0001PB COMPONENT Flow Transmitter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	7	Separate Effects	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/R	2	N/A	N/A	None
	RADIATION (RAD)	5.8×10^5	2×10^6	4	6	Separate	None Effects
	AGING	40 years	Note 2	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 524 COLUMN N.4/3.6	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin Required by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. Rosemount Product Data Sheet 2256 4. EDS Study 0740-004-522C 5. Rosemount Report 97215A dated 2/9/72 6. Rosemount Report 127227 dated 12/17/72 7. Rosemount Report 117415 dated 9/19/75	Qualified 1. Test data and equipment product specification ensure the component will operate the required time at the required temperatures. 2. A preventive maintenance surveillance program is being developed to address aging of Class 1E equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER See Notes Column Below MANUFACTURER General Electric MODEL NUMBER COMPONENT Instrument Rack FUNCTION/SERVICE Support CRD Components LOCATION: BLDG See Notes ELEVATION Column COLUMN Below	OPERATING TIME	6 months	N/R		N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	1	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	N/R	1	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	Note 1	None
	RADIATION (RAD)	8.7×10^4	N/R	2	N/A	Note 1	None
	AGING	40 years	N/R	1	N/A	Note 1	None
	ACCURACY	N/A	N/R	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES : NO

Prepared by: Raymond Chi Reviewed by: Mark Baker

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-471E, 52D

NOTES

Qualified
1. The instrument racks are metallic and are not subject to environmental degradation.

Tag Number	Elevation	Column	Tag Number	Elevation	Column
CRD-IR-1	R522	N.4/3.6	CRD-IR-1C	R426	N.8/4.8
-1A	R426	N.8/3.7	-2	R522	M.7/3.5
-1B	R426	N.8/3.8	-3	R522	M.8/3.8

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-LS-13A-F MANUFACTURER Magnetrol MODEL NUMBER See Note 2 COMPONENT Level Switch FUNCTION/SERVICE CRD Level Switch LOCATION: BLDG R ELEVATION 522 COLUMN See Note 2	OPERATING TIME	1 minute	1 minute	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	300	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.2×10^4		3			Note 1
	AGING	40		2			Note 1
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81.
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522P
4. EDS Calculation file 0740-006-004
5. BWR Equipment Qualifocation Summary Report QSR-030-H-1

NOTES

1. Materials of construction are being obtained from the vendor to complete the evaluations.
2.

Tag Number	Model #	Column
CRD-LS-A,B	5.0-751-1X-MPG-S13HY	J2/6.9
CRD-LS-C,D	5.0-751-1X-MPG-M13HY	J.4/4.9
CRD-LS-E,F	5.0-751-2X-MPG-M14HY	J.4/4.9

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-M/A-9A, B MANUFACTURER MODEL NUMBER COMPONENT Manual/Auto Station FUNCTION/SERVICE Manual/Auto Station LOCATION: BLDG R ELEVATION 524 COLUMN M.8/3.8	OPERATING TIME	1 hour	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7 psia		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.8×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522C	1. These components are on order. The qualification documentation will be reviewed when it is received.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-12C12

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-MO-3	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER H. K. Porter Company MODEL NUMBER	PRESSURE (PSIA)	14.7		2			
COMPONENT Motor Operator	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE 133 HP Motor Operator for CRD-V-3	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.8×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 524 COLUMN N.0/3.5	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Paul Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522C	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1981

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-PS-1A,B MANUFACTURER Static-O-Ring MODEL NUMBER 6N-AA21-X3VTT COMPONENT Pressure Switch FUNCTION/SERVICE Inlet to CRD-ST LOCATION: BLDG R ELEVATION 422 COLUMN N.8/3.8	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	9.39×10^3	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81.
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-422E
4. EDS Calculation file 0740-006-006
5. Viking Lab Inc. Test letter Report #30203-2 dated 11/20/73. Steam testing of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C12

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER See Note 2 MANUFACTURER Barksdale MODEL NUMBER B1T-GH32SS COMPONENT Pressure Switch FUNCTION/SERVICE Accumulated Pressure 970-940 psig Decrease LOCATION: BLDG R ELEVATION 522 COLUMN See Note 2	OPERATING TIME	1 hour	1 hour	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	6.4×10^5	2×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY		±1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR paragraph 3.11
3. EDS Report No. 0740-004-522B
4. EDS Calculation File No. 0740-006-001
5. Barksdale Environmental Test Delaval Turbine Inc. Test Procedure 9993 Report Dated August 13, 1975.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1881

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

2.

Tag Nos.	Column	Tag Nos.	Column
CRD-PS-130/0219	L5/8.4	CRD-PS-130/2623	L5/8.4
0223		2627	
0227		2631	
0231		3003	
0615		3007	
0619		3011	
0623		3015	
0627		3019	
0631		3023	
1011		3027	
1015		3403	L5/3.7
1019		3407	
1023		3411	
1027		3415	
1031		3419	
1407		3423	
1411		3427	
1415		3803	
1419		3807	
1423		3811	
1427		3815	
1431		3819	
1803		3823	
1807		3827	
1811		4203	
1815		4207	
1819		4211	
1823		4215	
1827		4219	
1831		4223	
2203		4227	
2207		4607	
2211		4611	
2215		4615	
2219		4619	
2223		4623	
2227		4627	
2631		5011	
2603		5015	
2607		5019	
2611		5023	
2615		5027	
2619			

WP-1083

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C12
MPL:
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

2. Cont'd.

Tag Nos.	Column	Tag Nos.	Column
CRD-PS-130/5415	L5/3.7	CRD-PS-130/4647	K2/3.7
5419		4651	
5423		4655	
5427		5031	
5819		5035	
5823		5039	
5827		5043	
3031	K2/3.7	5047	
3035		5051	
3039		5431	
3043		5435	
3047		5439	
3051		5443	
3055		5447	
3059		5831	
3431		5835	
3435		5839	
3439		5843	
3443		0235	K2/8.4
3447		0239	
3451		0243	
3455		0635	
3459		0639	
3831		0643	
3835		0647	
3839		1035	
3843		1039	
3847		1043	
3851		1047	
3855		1051	
3859		1435	
4231		1439	
4235		1443	
4239		1447	
4243		1451	
4247		1455	
4251		1835	
4255		1839	
4259		1843	
4631		1847	
4635		1851	
4639		1855	
4643		1859	

WP-1003

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C12

MPL:
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2. Cont'd.

Tag Nos.	Column
CRD-PS-130/2235	K2/8.4
2239	↓
2243	
2247	
2251	
2255	
2259	
2635	
2639	
2643	
2647	
2651	
2655	
2659	

WP-1083

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-PT-5	OPERATING TIME	4320 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER Bailey	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER K6556110EAAA1 COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
Pressure Transmitter FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.8×10^5		3			
	AGING	40		2			
LOCATION: BLDG R ELEVATION 522 COLUMN M.7/3.5	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES / NO

Prepared by: Raymond Ch

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522C	1. The component is being replaced by a Rosemount 1153 qualified to IEEE 323-74 and IEEE 344-75.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-PT-52	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER Bailey Control Company	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER KG556110EAAA1 COMPONENT Pressure Transmitter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.8×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 526 COLUMN M.8/3.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Ann Seiten

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1 E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522C	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SPV-110A 110B MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HVA-103-632 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE 1.5" Sol. CAS-F-6 Discharge LOCATION: BLDG R ELEVATION 529/528 COLUMN M6/3.8 M8/3.8	OPERATING TIME	1 hour		3			Note 1
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.8×10^5		2			
	AGING	40 years		1			
	ACCURACY	N/A		N/A			

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. P. Robinson

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-522C
3. WNP-2 Class 1E Equipment List, 12/16/81

NOTES

1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SPV-117 -118/Note 2	OPERATING TIME	✓ 1 hour	6 hours	1	3	Simultaneous Test	None
	TEMPERATURE (F)	✓ 90 max. normal 104 max. abnormal 150 max. accident	212	1	3	Simultaneous Test	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	✓ 14.7	N/R	1	N/A	N/A	None
MODEL NUMBER HVA 904052-J COMPONENT	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal	N/R	6	N/A	N/A	None
Solenoid Pilot Valve FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
SCRAM Solenoid Pilot	RADIATION (RAD)	6.4×10^5	4.7×10^6	2	4	Engineering Analysis	None
	AGING	✓ 40 years	7 years	1	5	Operating Experience, Maintenance	Note 1.
LOCATION: BLDG R ELEVATION 522 COLUMN L5/8.4 K2/8.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared By: [illegible] Reviewed By: W.E. Farrone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-522J
3. G. E. Spec. 38 3HA820
4. QID 315004 Calculations
5. E/I-01-81-04-0 (IE Bulletin 78-14)
6. Calculation SCN-79-556

NOTES

1. The solenoid valves will be rebuilt on a schedule based on the 7 year qualified life.

Qualified

WP-1081

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

2. TAG NUMBERS

0219	1803	2643	3823	5019
0223	1807	2647	3827	5023
0227	1811	2651	3831	5027
0231	1815	2655	3835	5031
0235	1819	2659	3839	5035
0239	1823	3003	3843	5039
0243	1827	3007	3847	5043
0615	1831	3011	3851	5047
0619	1835	3015	3855	5051
0623	1839	3019	3859	5415
0627	1843	3023	4203	5419
0631	1847	3027	4207	5423
0635	1851	3031	4211	5427
0639	1855	3035	4215	5431
0643	1859	3039	4219	5435
0647	2203	3043	4223	5439
1011	2207	3047	4227	5443
1015	2211	3051	4231	5447
1019	2215	3055	4235	5819
1023	2219	3059	4239	5823
1027	2223	3403	4243	5827
1031	2227	3407	4247	5831
1035	2231	3411	4251	5835
1039	2235	3415	4255	5839
1043	2239	3419	4259	5843
1047	2243	3423	4607	
1051	2247	3427	4611	
1407	2251	3431	4615	
1411	2255	3435	4619	
1415	2259	3439	4623	
1419	2603	3443	4627	
1423	2607	3447	4631	
1427	2611	3451	4635	
1431	2615	3455	4639	
1435	2619	3459	4643	
1439	2623	3803	4647	
1443	2627	3807	4651	
1447	2631	3811	4655	
1451	2635	3815	5011	
1455	2639	3819	5015	

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SPV-9 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HT832322 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE 1.5" Solenoid CAS to CRD-V-10 LOCATION: BLDG R ELEVATION 528 COLUMN N.0/3.5	OPERATING TIME	1 hour	Equivalent to >10,000 hours at 150°F	5	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal	N/R	6	N/A	N/A	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.8×10^5	4.4×10^6	2	3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 1
	ACCURACY	N/A	N/A	1	4	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. S. Robinson

Reviewed by: W.E. Farson 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522C 3. Calculations in QID 315004 4. E/I-02-81-04-0 (IE Bulletin 78-14) 5. WNP-2 Class 1E Equipment List, 12/16/81 6. SCN-79-556 Calculation	Qualified 1. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SV-120/Note MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HVA1709662A COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE .5" Solenoid Withdraw Exhaust Valve LOCATION: BLDG R ELEVATION 522 COLUMN K2/8.4 L5/8.4	OPERATING TIME	6 months	Note 1	3			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	1.0×10^5		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522J 3. WNP-2 CIE Equipment List dated 12/16/81	1. These components are designed to use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental degredation will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

0219	1803	2643	3823	5019
0223	1807	2647	3827	5023
0227	1811	2651	3831	5027
0231	1815	2655	3835	5031
0235	1819	2659	3839	5035
0239	1823	3003	3843	5039
0243	1827	3007	3847	5043
0615	1831	3011	3851	5047
0619	1835	3015	3855	5051
0623	1839	3019	3859	5415
0627	1843	3023	4203	5419
0631	1847	3027	4207	5423
0635	1851	3031	4211	5427
0639	1855	3035	4215	5431
0643	1859	3039	4219	5435
0647	2203	3043	4223	5439
1011	2207	3047	4227	5443
1015	2211	3051	4231	5447
1019	2215	3055	4235	5819
1023	2219	3059	4239	5823
1027	2223	3403	4243	5827
1031	2227	3407	4247	5831
1035	2231	3411	4251	5835
1039	2235	3415	4255	5839
1043	2239	3419	4259	5843
1047	2243	3423	4607	
1051	2247	3427	4611	
1407	2251	3431	4615	
1411	2255	3435	4619	
1415	2259	3439	4623	
1419	2603	3443	4627	
1423	2607	3447	4631	
1427	2611	3451	4635	
1431	2615	3455	4639	
1435	2619	3459	4643	
1439	2623	3803	4647	
1443	2627	3807	4651	
1447	2631	3811	4655	
1451	2635	3815	5011	
1455	2639	3819	5015	

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SV-121/Note MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HVA1709662A COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE .5" Solenoid Insert Exhaust Valve LOCATION: BLDG R ELEVATION 522 COLUMN L5/8.4 K2/8.4	OPERATING TIME	6 months	Note 1	3			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	1.0×10^5		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522J 3. WNP-2 CIE Equipment List dated 12/16/81	1. These components are designed to use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental degredation will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

0219	1803	2643	3823	5019
0223	1807	2647	3827	5023
0227	1811	2651	3831	5027
0231	1815	2655	3835	5031
0235	1819	2659	3839	5035
0239	1823	3003	3843	5039
0243	1827	3007	3847	5043
0615	1831	3011	3851	5047
0619	1835	3015	3855	5051
0623	1839	3019	3859	5415
0627	1843	3023	4203	5419
0631	1847	3027	4207	5423
0635	1851	3031	4211	5427
0639	1855	3035	4215	5431
0643	1859	3039	4219	5435
0647	2203	3043	4223	5439
1011	2207	3047	4227	5443
1015	2211	3051	4231	5447
1019	2215	3055	4235	5819
1023	2219	3059	4239	5823
1027	2223	3403	4243	5827
1031	2227	3407	4247	5831
1035	2231	3411	4251	5835
1039	2235	3415	4255	5839
1043	2239	3419	4259	5843
1047	2243	3423	4607	
1051	2247	3427	4611	
1407	2251	3431	4615	
1411	2255	3435	4619	
1415	2259	3439	4623	
1419	2603	3443	4627	
1423	2607	3447	4631	
1427	2611	3451	4635	
1431	2615	3455	4639	
1435	2619	3459	4643	
1439	2623	3803	4647	
1443	2627	3807	4651	
1447	2631	3811	4655	
1451	2635	3815	5011	
1455	2639	3819	5015	

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SV-122/Note MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HVA1709662A COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE .5" Solenoid Withdraw Drive Valve LOCATION: BLDG R ELEVATION 522 COLUMN K2/8.4 L5/8.4	OPERATING TIME	6 months	Note 1	3			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	1.0×10^5		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522J 3. WNP-2 CIE Equipment List dated 12/16/81	1. These components are designed to use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental degredation will cause the component to not perform its safety function. Qualified.

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

0219	1803	2643	3823	5019
0223	1807	2647	3827	5023
0227	1811	2651	3831	5027
0231	1815	2655	3835	5031
0235	1819	2659	3839	5035
0239	1823	3003	3843	5039
0243	1827	3007	3847	5043
0615	1831	3011	3851	5047
0619	1835	3015	3855	5051
0623	1839	3019	3859	5415
0627	1843	3023	4203	5419
0631	1847	3027	4207	5423
0635	1851	3031	4211	5427
0639	1855	3035	4215	5431
0643	1859	3039	4219	5435
0647	2203	3043	4223	5439
1011	2207	3047	4227	5443
1015	2211	3051	4231	5447
1019	2215	3055	4235	5819
1023	2219	3059	4239	5823
1027	2223	3403	4243	5827
1031	2227	3407	4247	5831
1035	2231	3411	4251	5835
1039	2235	3415	4255	5839
1043	2239	3419	4259	5843
1047	2243	3423	4607	
1051	2247	3427	4611	
1407	2251	3431	4615	
1411	2255	3435	4619	
1415	2259	3439	4623	
1419	2603	3443	4627	
1423	2607	3447	4631	
1427	2611	3451	4635	
1431	2615	3455	4639	
1435	2619	3459	4643	
1439	2623	3803	4647	
1443	2627	3807	4651	
1447	2631	3811	4655	
1451	2635	3815	5011	
1455	2639	3819	5015	

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Control Rod Drive TAG NUMBER CRD-SV-123/note MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HVA 1709662A COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE .5" Solenoid Insert Drive Valve LOCATION: BLDG R ELEVATION 522 COLUMN K2/8.4, L5/8.4	OPERATING TIME	6 months	Note 1	3			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	1.0×10^5		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522J 3. WNP-2 CIE Equipment List dated 12/16/81	1. These components are designed to use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental degredation will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	0219 1803 2643 3823 5019 0223 1807 2647 3827 5023 0227 1811 2651 3831 5027 0231 1815 2655 3835 5031 0235 1819 2659 3839 5035 0239 1823 3003 3843 5039 0243 1827 3007 3847 5043 0615 1831 3011 3851 5047 0619 1835 3015 3855 5051 0623 1839 3019 3859 5415 0627 1843 3023 4203 5419 0631 1847 3027 4207 5423 0635 1851 3031 4211 5427 0639 1855 3035 4215 5431 0643 1859 3039 4219 5435 0647 2203 3043 4223 5439 1011 2207 3047 4227 5443 1015 2211 3051 4231 5447 1019 2215 3055 4235 5819 1023 2219 3059 4239 5823 1027 2223 3403 4243 5827 1031 2227 3407 4247 5831 1035 2231 3411 4251 5835 1039 2235 3415 4255 5839 1043 2239 3419 4259 5843 1047 2243 3423 4607 1051 2247 3427 4611 1407 2251 3431 4615 1411 2255 3435 4619 1415 2259 3439 4623 1419 2603 3443 4627 1423 2607 3447 4631 1427 2611 3451 4635 1431 2615 3455 4639 1435 2619 3459 4643 1439 2623 3803 4647 1443 2627 3807 4651 1447 2631 3811 4655 1451 2635 3815 5011 1455 2639 3819 5015

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Supply Purge TAG NUMBER CSP-DPIS-4 CSP-DPIS-5 CSP-DPIS-6 MANUFACTURER Barton MODEL NUMBER 288A COMPONENT Differential Pressure Indicating Switch. FUNCTION/SERVICE Primary and Secondary Containment LOCATION: BLDG R ELEVATION 501 COLUMN L.4/9.3 N.0/5.1 N.B/5.5	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	7.78×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-501F	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Supply Purge System TAG NUMBER CSP-LMS-1, 2 MANUFACTURER NAMCO MODEL NUMBER D2400X COMPONENT Limit Switches FUNCTION/SERVICE Limit Switches for CSP-V-1, 2 LOCATION: BLDG R ELEVATION 501 COLUMN M.5/7.6, M.5/7.4	OPERATING TIME	6 months	6 months	2	4,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	200	1	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	1	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.3×10^6	2.5×10^6	3	5	Engineering Analysis	None
	AGING	40 years	Note 1	1		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature] Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501I 4. ACME-Cleveland Report, "Qualification of Namco Control Limit Switch Model EA-170", dated 3/17/78 5. QID No. 200005 6. NAMCO Controls, Limit Switches General Catalog, copyright 1979	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Supply Purge System TAG NUMBER CSP-LMS-3, 4, 5, 6, 9 MANUFACTURER NAMCO MODEL NUMBER D2400X COMPONENT Limit Switches FUNCTION/SERVICE Limit Switches for CSP-V-1, 2, 3, 4, 5, 6, 9 LOCATION: BLDG R ELEVATION 471 COLUMN M.6/7.6, M.7/8.3, M.9/5.1, M.5/7.7	OPERATING TIME	6 months	6 months	2	4,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	200	1	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	1	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.0×10^5	2.5×10^6	3	5	Engineering Analysis	None
	AGING	40 years	Note 1	1		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Sikes

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List dated 12/16/81 3. EDS Report 0740-004-4718, D 4. ACME-Cleveland Report, "Qualification of Namco Controls Limit Switch Model EA-170", dated 3/17/78 5. QID No. 200005 6. NAMCO Controls, Limit Switches General Catalog, copyright 1979	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Supply Purge TAG NUMBER CSP-RLY-10CR, 7CR, 8CR	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
MANUFACTURER Struthers Dunn, Inc.	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
MODEL NUMBER 219BBXP COMPONENT Relay	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.2×10^3	N/R	3	4	Note 1	None
	AGING	40 years	40 years	2	4	Note 2	None
LOCATION: BLDG R ELEVATION 471 COLUMN H3/8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ron Seiler

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471H 4. EDI-4.8, Paragraph 5.1, I	1. These components are located in isolated rooms serviced by Class 1 HVAC systems and the total radiation dose is less than 10^4 rad. Therefore, the area is a mild environment. 2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures. Qualified.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Supply Purge TAG NUMBER See Note Below MANUFACTURER R. B. Denison MODEL NUMBER WE-74/EX-2 COMPONENT Relay FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 471 COLUMN H.3/8	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.2×10^3	N/R	3	4	Note 1	None
	AGING	40 years	40 years	2	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Alan Seiber

Reviewed by: [illegible]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-471H
4. EDI-4.8, Paragraph 5.1, I

NOTES

1. These components are located in isolated rooms serviced by Class 1 HVAC systems and the total radiation dose is less than 10^4 rad. Therefore, the area is a mild environment.
2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

Qualified.
Tag Numbers:
CSP-RLY-10R1, 10R2, 10R5 CSP-RLY-7R1, 7R2, 7R5
CSP-RLY-8R1, 8R2, 8R5

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Containment Supply Purge TAG NUMBER CSP-SPV-9	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER Fisher and Porter MODEL NUMBER 67ER	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Solenoid Pilot for SCP-CSP-V-9	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	4.6×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 501 COLUMN N.0/5.1	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004- 501F	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CB-MC7BA E-CB-MC7BB MANUFACTURER ITE Imperial MODEL NUMBER COMPONENT Circuit Breaker FUNCTION/SERVICE MCC 7 B LOCATION: BLDG R ELEVATION 522 COLUMN H.4/8.1	OPERATING TIME	6 months	N/A	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/A	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/A	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/A	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.5×10^3	N/A	3	4	Note 1	None
	AGING	40 years	40 years	2	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seiler

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522N
4. EDI-4.8, Paragraph 5.1, I

NOTES

1. The equipment is located in an isolated room serviced by Class 1 HVAC and the radiation is less than 10^4 rad. Therefore, the area is a mild environment.
2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

Qualified.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Electrical TAG NUMBER: E-CB-MC/8B/A, E-CB-MC/8B/B MANUFACTURER: ITE Imperial MODEL NUMBER: Type M COMPONENT: Circuit Breaker FUNCTION/SERVICE: MCC-8B LOCATION: BLDG R ELEVATION: 522 COLUMN: N/3.8	OPERATING TIME	6 months	N/A	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/A	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/A	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/A	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.6×10^4	Note 2	3	5	Note 2	Note 2
	AGING	40 years	40 years	2	4	Note 3	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seiler

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522D

NOTES

1. The equipment is located in an isolated room serviced by Class 1 HVAC. Therefore, the area is a mild environment for these service conditions.
2. Shielded doors are being installed to make this area a mild environment (TID < 10^4 rad).
3. Aging of equipment in mild environments is adequately addressed in current maintenance and surveillance procedures.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical System TAG NUMBER E-CONN-X100 A-D/01 E-CONN-X100 A-D/02 MANUFACTURER Amphenol MODEL NUMBER 82-503 28650 COMPONENT -JACK -PLUG FUNCTION/SERVICE Electrical Connectors LOCATION: BLDG C ELEVATION 507 COLUMN Radius 40 AZ: 98 ,102,315,322	OPERATING TIME	6 months	6 months	1	3,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	340	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	119	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	Note 1	2	7	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	4.4×10^7	2	6	Engineering Analysis	None
	AGING	40 years	40 years	2	7	Engineering Analysis	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/7/82

Reviewed by: JPM 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. W Test Report, PEN-ACD-5-72-03 4. W letter by R.L. Korner, RE: Addendum to Report #PEN-ACD-4-72-03, dated 5/4/76 5. W letter to Supply System dated 1/9/81, RE: Hanford II Nuclear Plant - Electric Penetration. 6. EPRI Report #RP 1707-3 7. OID No. 049001	Qualified 1. The electrical connectors are located inside the inboard penetration enclosure and are, therefore, not exposed to demineralized water spray.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CONN-102A/02 -102B/02 MANUFACTURER Raychem MODEL NUMBER WCSF-N COMPONENT Shrink Tube FUNCTION/SERVICE Insulate and Protect Solistrand Splice Connectors LOCATION: BLDG C ELEVATION 534 COLUMN 185 & 219 Az	OPERATING TIME	4320 hours	720 hours	1	2	Simultaneous Test	None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal accident--profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	17 max. normal accident--profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 max. normal 90 max. abnormal 100 max. accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	50 ppm hydrazene to pH 10.5 with trisodium phosphate	1	2	Simultaneous Test	None
	RADIATION (RAD)	2.74×10^7	2×10^8	1	2	Sequential Test	None
	AGING	40 years	40 years	1	2,3	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: J. L. Sullivan

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Wyle 58442-1, 5/15/80 } BWR 123-A-01 3. Raychem EPR2001, 8/10/78 } BWR 123-A-01	Qualified NOTE: Although accident time was only 720 hours, there was no deterioration in IR and samples were in same condition as at start. ∴ They would have survived 4320 hrs.

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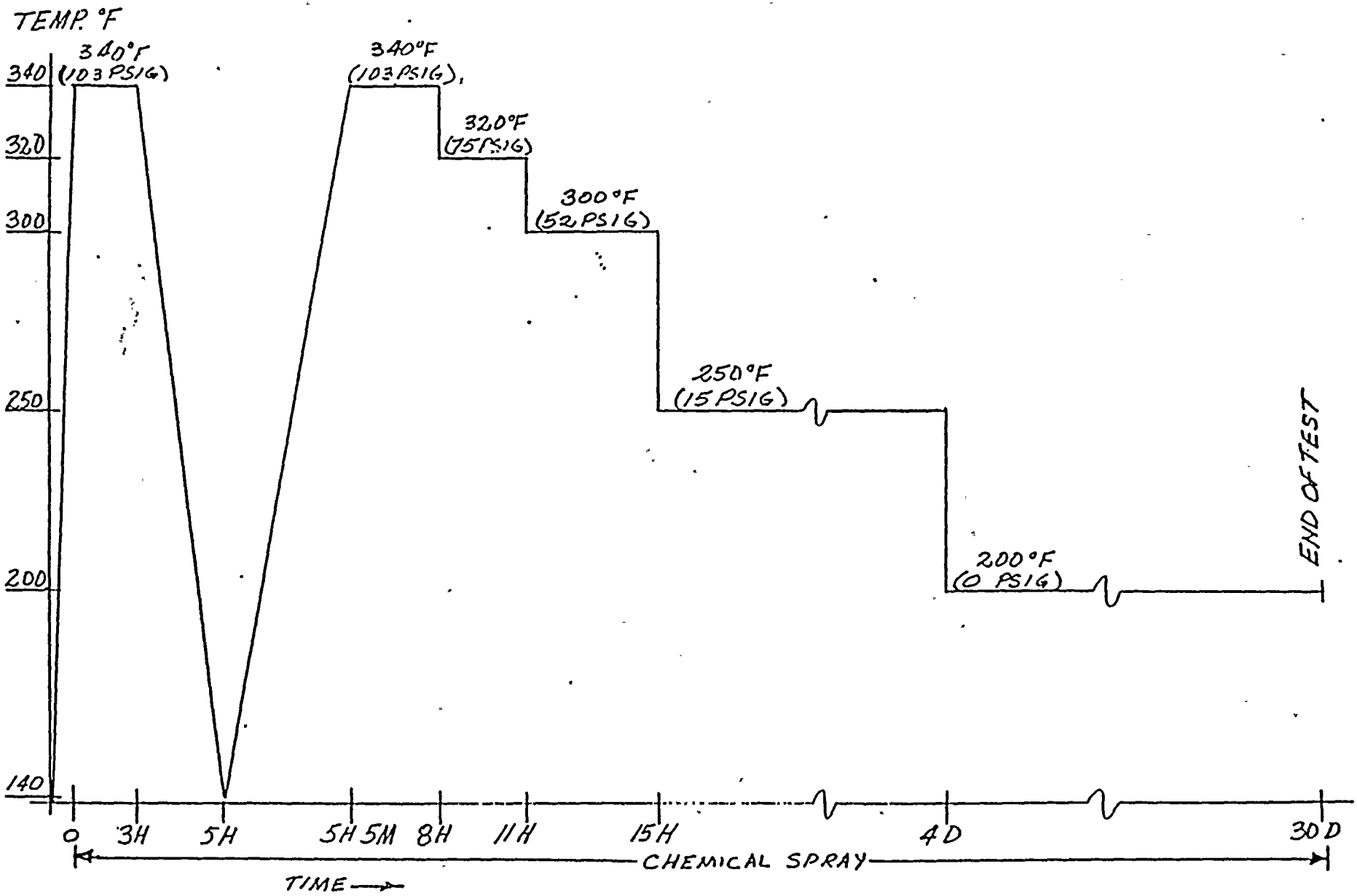

ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR RAYCHEM SPLICES

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CONN-X-102A/01 -X-102B/01 MANUFACTURER AMP MODEL NUMBER 34130 COMPONENT Parallel Splice Connector FUNCTION/SERVICE Splice Wires LOCATION: BLDG C ELEVATION 534 COLUMN 185 & 219 Az	OPERATING TIME	4320 hours	N/R (solid metal)	1	2	Engineering Analysis	None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal Accident--profile 1	N/R (solid metal)	1	2	Engineering Analysis	None
	PRESSURE (PSIA)	17 max. normal accident--profile 1	N/R (solid metal)	1	2	Engineering Analysis	None
	RELATIVE HUMITY (%)	55 max. normal 90 max. abnormal steam max.-accident	100 (salt fog)	1	3	Separate Effect	None
	CHEMICAL SPRAY	Deionized water	Salt fog	1	3	Separate Effect	None
	RADIATION (RAD)	2.74×10^7	N/R (solid metal)	1	2	Engineering Analysis	None
	AGING	40 years	N/R (solid metal)	1	2	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible]

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. AMP Catalog No. 2005-8, 2/81 3. AMP technical report ELR221-11, 5/24/70	Qualified.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CP-CAC/HR1A -CAC/HR1B MANUFACTURER Air Products MODEL NUMBER COMPONENT Control Panel FUNCTION/SERVICE House Components LOCATION: BLDG R ELEVATION 575 COLUMN M.4/5.8 M.7/8.5	OPERATING TIME	6 months	N/R	2	N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	1	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	N/R	1	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	Note 1	None
	RADIATION (RAD)	5.4×10^5	N/R	3	N/A	Note 1	None
	AGING	40 years	N/R	1	N/A	Note 1	None
	ACCURACY	N/A	N/R		N/A	Note 1	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNLP-2 Class 1E Equipment List dated 12/16/81 3. EDS Study 0740-004-572D, H	Qualified 1. The control panels are metallic and are not subject to environmental degradation.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CP-VB/1A MANUFACTURER MODEL NUMBER COMPONENT Control Panel FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 471 COLUMN H7/8.3	OPERATING TIME	6 months	N/R	1	N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	2	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	N/R	2	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	Note 1	None
	RADIATION (RAD)	6×10^4	N/R	3	N/A	Note 1	None
	AGING	40 years	N/R	2	N/A	Note 1	None
	ACCURACY	N/A	N/R		N/A	Note 1	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 2. FSAR Par. 3.11 3. EDS Study 0740-004-472D	Qualified 1. The control panels are metallic and are not subject to environmental degradation.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-EMSQ-CACFN1B E-EMSQ-SGTFN1A2 MANUFACTURER ITE Imperial MODEL NUMBER 5641-DBDAR 5641-DACAB COMPONENT Mean Square Voltage Device FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 572 COLUMN M.7/8.2	OPERATING TIME	6 months	N/A	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 107 accident	N/A	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/A	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.9×10^4	Note 2	3	5	Note 2	Note 2
	AGING	40 years	40 years	2	N/A	Note 3	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Alan Seiler

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572H 4. EDI-4.8, Paragraph 5.1, I 5. Letter WPBR-RO-81-105, dated 7/29/81	1. This area is serviced by a Class 1 HVAC system, therefore, it is a mild environment for these service conditions. 2. The doors to this room are being modified to make the area a mild environment (TID < 10^4 rad.). 3. Aging of equipment in mild environments is adequately addressed in current maintenance and surveillance procedures.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER See Notes Below for a List of Applicable Tag Numbers MANUFACTURER GE MODEL NUMBER COMPONENT Instrument Rack FUNCTION/SERVICE Support Class 1E Instruments LOCATION: BLDG R ELEVATION COLUMN Various Locations	OPERATING TIME	6 months	N/R	1	N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	2	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 max normal 90 abnormal 100 accident	N/R	2	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	Note 1	None
	RADIATION (RAD)	1.1×10^7	N/R	3	N/A	Note 1	None
	AGING	N/A	N/A		N/A	N/A	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ohi

Reviewed by: M. S. Nelson

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-002-422L (worst case)

NOTES

1. The instrument racks are metallic. Therefore, the instrument racks are not susceptible to the environmental conditions. Qualified.

Tag Numbers:

E-IR-P001	E-IR-P008	E-IR-P017	E-IR-P025	E-IR-P032
-P002	-P009	-P018	-P026	-P033
-P004	-P010	-P021	-P027	-P039
-P005	-P011	-P022	-P029	-P040
-P006	-P015	-P024	-P030	

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Electrical TAG NUMBER: See Note Below MANUFACTURER: General Electric MODEL NUMBER: COMPONENT: Instrument Rack FUNCTION/SERVICE: Support Class IE Instruments LOCATION: BLDG R ELEVATION COLUMN Various Locations	OPERATING TIME	6 months	N/R	1	N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	2	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 max accident	N/R	2	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	Note 1	None
	RADIATION (RAD)	1.1×10^7	N/R	3	N/A	Note 1	None
	AGING	40 years	N/A	2	N/A	N/A	None
	ACCURACY	N/A	N/A	N/A		N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: M. S. Adamson

DOCUMENTATION REFERENCES

1. WNP-2 Class IE Equipment List, dated 12/16/82
2. FSAR Paragraph 3.11
3. EDS Report 0740-002-472L (Worse Case Rad Levels)

NOTES

1. The instrument racks are metallic. Therefore, the instrument racks are not susceptible to the environmental conditions. Qualified.

Tag Numbers:

E-IR-61	E-IR-66	E-IR-71
-62	-67	-72
-63	-68	-73
-64	-69	-74
-65	-70	

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Electrical TAG NUMBER: E-MC-7B, 7BA -S2/1A MANUFACTURER: ITE Imperial Corp. MODEL NUMBER: 5G40VB-111C108-C1090 COMPONENT: MCC FUNCTION/SERVICE: Motor Starters LOCATION: BLDG R ELEVATION 522 COLUMN H.5/8.3, H.7/8.3	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.5×10^3	N/R	3	4	Note 1	None
	AGING	40 years	40 years	2	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seeber

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522N 4. EDI-4.8, Paragraph 5.1, I	1. These components are located in isolated rooms serviced by Class 1 HVAC systems and the total radiation dose is less than 10^4 rad. 2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures. Qualified.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Electrical TAG NUMBER: E-MC-8B, 8BA, 8BB, 7BB MANUFACTURER: ITE Imperial Corp. MODEL NUMBER: 5640VC-111SPL-C1090 COMPONENT: MCC FUNCTION/SERVICE: Motor Starter LOCATION: BLDG R ELEVATION: 522,572 COLUMN: N/3.5, N/3.9, N.7/8.2	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	Note 1	None
	RADIATION (RAD)	8.6×10^4	Note 2	3	5	Note 2	Note 2
	AGING	40 years	40 years	2	4	Note 3	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ron Seiler

Reviewed by: [illegible]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Reports 0740-004-522D, 572D, 572H
4. EDI-4.8, Paragraph 5.1, I
5. Letter WPBR-RO-81-105, dated 7/29/81

NOTES

1. These components are located in isolated rooms serviced by Class 1 HVAC. Therefore, the room is a mild environment for these service conditions.
2. Shielded doors are being installed in these rooms to make these rooms mild environments (TID < 10^4 rad.)
3. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-PP-7AE E-PP-8AE	OPERATING TIME	6 months	Note 1	1	N/A	N/A	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	Note 1	2	N/A	N/A	None
MANUFACTURER Square D	PRESSURE (PSIA)	14.7	Note 1	2	N/A	N/A	None
MODEL NUMBER QM-02653-28EE6 COMPONENT Power Panel	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	Note 1	2	N/A	N/A	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	Note 1	2	N/A	N/A	None
	RADIATION (RAD)	6×10^4	Note 1	3	N/A	N/A	None
	AGING	40 years	Note 1	1	N/A	N/A	None
LOCATION: BLDG R ELEVATION 474 COLUMN N.2/9.3 N/8.5	ACCURACY	N/A	Note 1		N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chin

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-474D	Qualified. 1. The components are metallic and are not subject to environmental degradation.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Electrical TAG NUMBER: See Following Page MANUFACTURER: Struthers Dunn, Inc. MODEL NUMBER: 219BBXP COMPONENT: Relay FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522,572 COLUMN N.0/3.5 M.4/5.8, N.7/8.2	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.6×10^4	Note 2	3	5	Note 2	Note 2
	AGING	40 years	40 years	2	4	Note 3	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible]

Reviewed by: [illegible]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Reports 0740-004-522D, 572D, 572H
4. EDI-4.8, Paragraph 5.1, I
5. Letter WPBR-RO-81-105, dated 7/29/81

NOTES

1. These components are located in isolated rooms serviced by Class 1 HVAC. Therefore, the room is a mild environment for these service conditions.
2. Shielded doors are being installed in these rooms to make them mild environments (TID < 10^4 rad).
3. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	TAG NUMBERS E-RLY-CACFN1A CACFN1B MSLCV10 MSLCV12 MSLCV4 MSLCV5 MSLCV9 RCICV63 RHRV11B RHRV16A, B RHRV17A, B RHRV21 RHRV24B RHRV26B RHRV27B RHRV3A, B RHRV4B, C RHRV42B, C RHRV47A, B RHRV48A, B RHRV52A, B RHRV6B RHRV68A, B RHR87A, B RHRV9 SGT/5A2 SGTEHC1A2, 1B2 SGTEH1A1, 1B1 SGTFH1A1, 1A2 SGTFN1B1, 1B2 SGTTK2B1 SGTV1A SGTV3A1, A2, B1, B2 SGTV4A1, A2, B1, B2 SGTV5A1, A2, B1, B2 SLCP1B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER See Following Page MANUFACTURER Struthers Dunn, Inc. MODEL NUMBER 219BBXP COMPONENT Relay FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN H.7/8.3	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.5×10^3	N/R	3	4	Note 1	None
	AGING	40 years	40 years	2	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible] Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522N 4. EDI-4.8, Par. 5.1, I	1. These components are located in isolated rooms serviced by Class 1 HVAC systems and the total radiation dose is less than 10^4 rad. Therefore, the area is a mild environment. 2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures. Qualified.

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DATE:

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	Tag Numbers: E-RLY-LPCSFCV11 -LPCSV1 -LPCSV12 -LPCSV5 -MSLCHTRA -MSLCHTRB -MSLCHTRC -MSLCHTRD -MSLCV1A -MSLCV1B -MSOCV1C -MSLCV1D -MSLCV2A -MSLCV2B -MSLCV2C -MSLCV2D -MSLCV3A -MSLCV3B -MSLCV3C -MSLCV3D E-RLY-RHRV11A -RHRV24A -RHRV26A -RHRV27A -RHRV3A -RHRV4A -RHRV42A -RHRV53A, B -RHRV6A -SLCP1A -SLCV1A -SHV44

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-47A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-SH-10+ -11+ -12+ - 9+ MANUFACTURER Westinghouse MODEL NUMBER 75-DHP-500 COMPONENT 6.4KV Switchgear FUNCTION/SERVICE (Note 2) LOCATION: BLDG R ELEVATION (Note 2) COLUMN (Note 2)	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82 Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report #0740-004-522H

NOTES

1. Failure modes are being evaluated for this component. Preliminary results of the evaluation indicate the component will not fail in a manner detrimental to plant safety.
2.

Tag Number	Function/Service	Elev.	Column
E-SH-10+	Switchgear 10+	471	L2/9.0
-11+	11+	522	M8/7.4
-12+	12+	522	M5/8.0
- 9+	9+	471	K3/9.0

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

[illegible]: WPPSS
FACILITY: WNP-2
SPEC: 2808-218

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-TR-7BA -7BB MANUFACTURER Sorgel MODEL NUMBER 3503/12B15 COMPONENT Transformer FUNCTION/SERVICE ELP-7B-A Transformer LOCATION: BLDG R ELEVATION 606, 478 COLUMN J.6/3.7, H.4/3.8	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A					
	RADIATION (RAD)	5.0×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471A	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-TRB-X104A/01 E-TRB-X104B/01 E-TRB-X104C/01 E-TRB-X104D/01 MANUFACTURER Curtis Industries MODEL NUMBER BT-17 COMPONENT Terminal Block FUNCTION/SERVICE Terminal Block for X-104A to D LOCATION: BLDG C ELEVATION (Note 2) COLUMN (Note 2)	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None Note 3
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	Note 1	2	6	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.2×10^8	3	5	Sequential Test and Engineering Analysis	None
	AGING	40 years	40 years	2	6	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDM 1/6/82 Reviewed by: AJ 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. W Test Report PEN-TR-77-83, dated 9/13/77
5. W Test Report PEN-TR-79-23, Rev. 1, dated 5/12/80
6. QID No. 049001, 352001

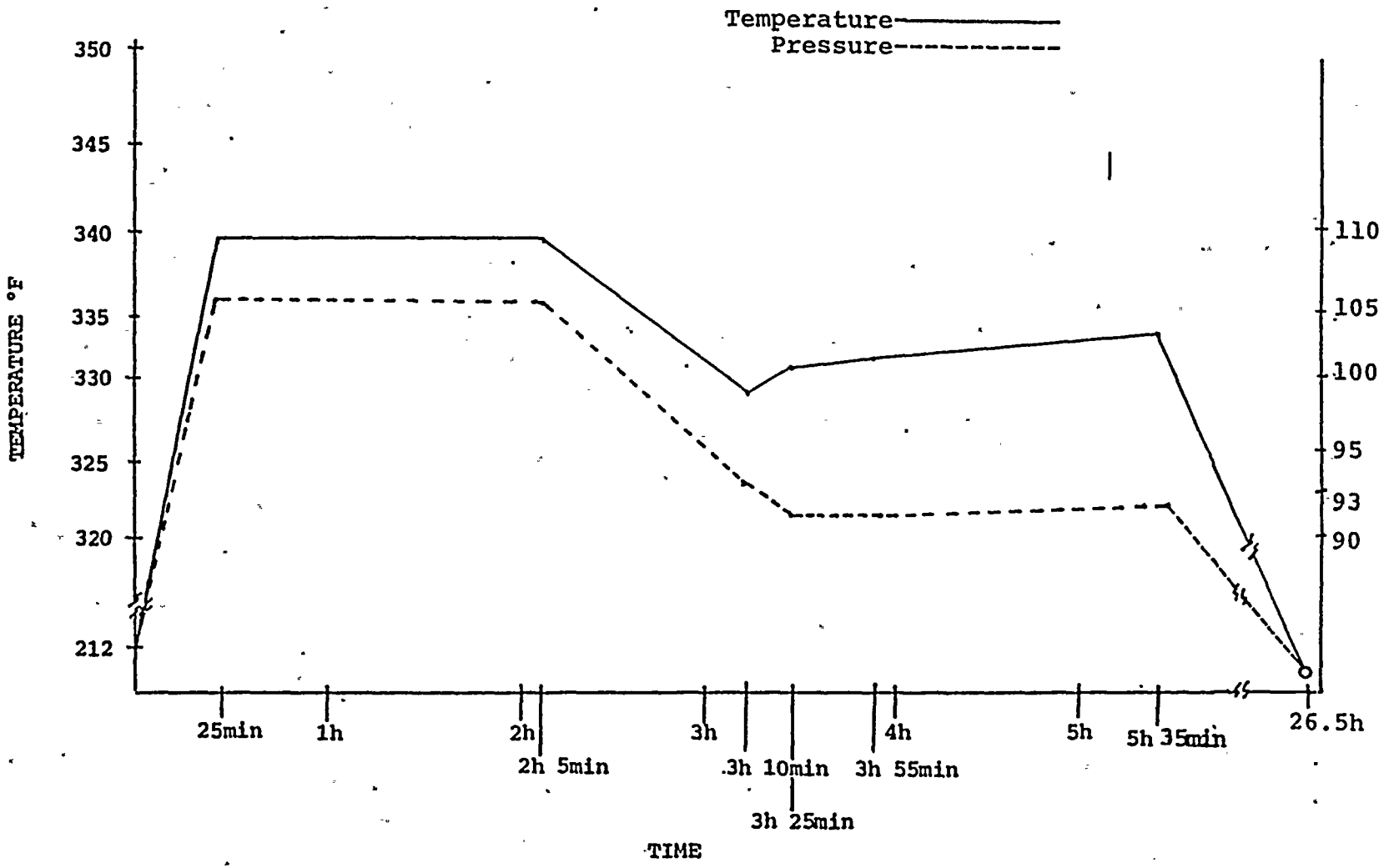
NOTES

1. The Terimal Blocks are located inside the inboard penetration enclosures and are, therefore, not exposed to demineralized water spray.
2.

Tag Number	Elev.	Azimuth	Tag Number	Elev.	Azimuth
E-TRB-X104A/01	501	109D	E-TRB-X104C/01	522	188D
E-TRB-X104B/01	501	110D	E-TRB-X104D/01	522	223D

3. The long-term oporability of these terminal blocks for post-LOCA service is currently being investigated. Requalification/replacement will be implemented if required.

WP-1061



TERMINAL BLOCK TEST PROFILE

W Report No. PEN-TR-77-83

Prepared by DN 1/8/82

Reviewed by AN 1/8/82

Borated H_2O introduced for 1 hour
3h 15 min to 4h 15 min

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER (Note 2)	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None Note 3
	TEMPERATURE (F)	135 Max. Normal 150 Max. Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
MANUFACTURER TRW-Cinch	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
MODEL NUMBER (Note 2) COMPONENT Terminal Block	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE Terminal Block for X-105A to D	CHEMICAL SPRAY	Demineralized Water	Note 1	2	6	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.2×10^8	3	5	Sequential Test and Engineering Analysis	None
	AGING	40 years	40 years	2	6	Engineering Analysis	None
LOCATION: BLDG C ELEVATION (Note 2) COLUMN (Note 2)	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDM 1/6/82 Reviewed by: AN 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. W Test Report PEN-TR-77-83, dated 9/13/77
5. W Test Report PEN-TR-79-23, Rev. 1, dated 5/12/80
6. QID No. 049001, 352002, 352003, 352005

NOTES

1. The Terminal Block is located inside the inboard penetration enclosure and is, therefore, not exposed to demineralized water spray.

WP-1881

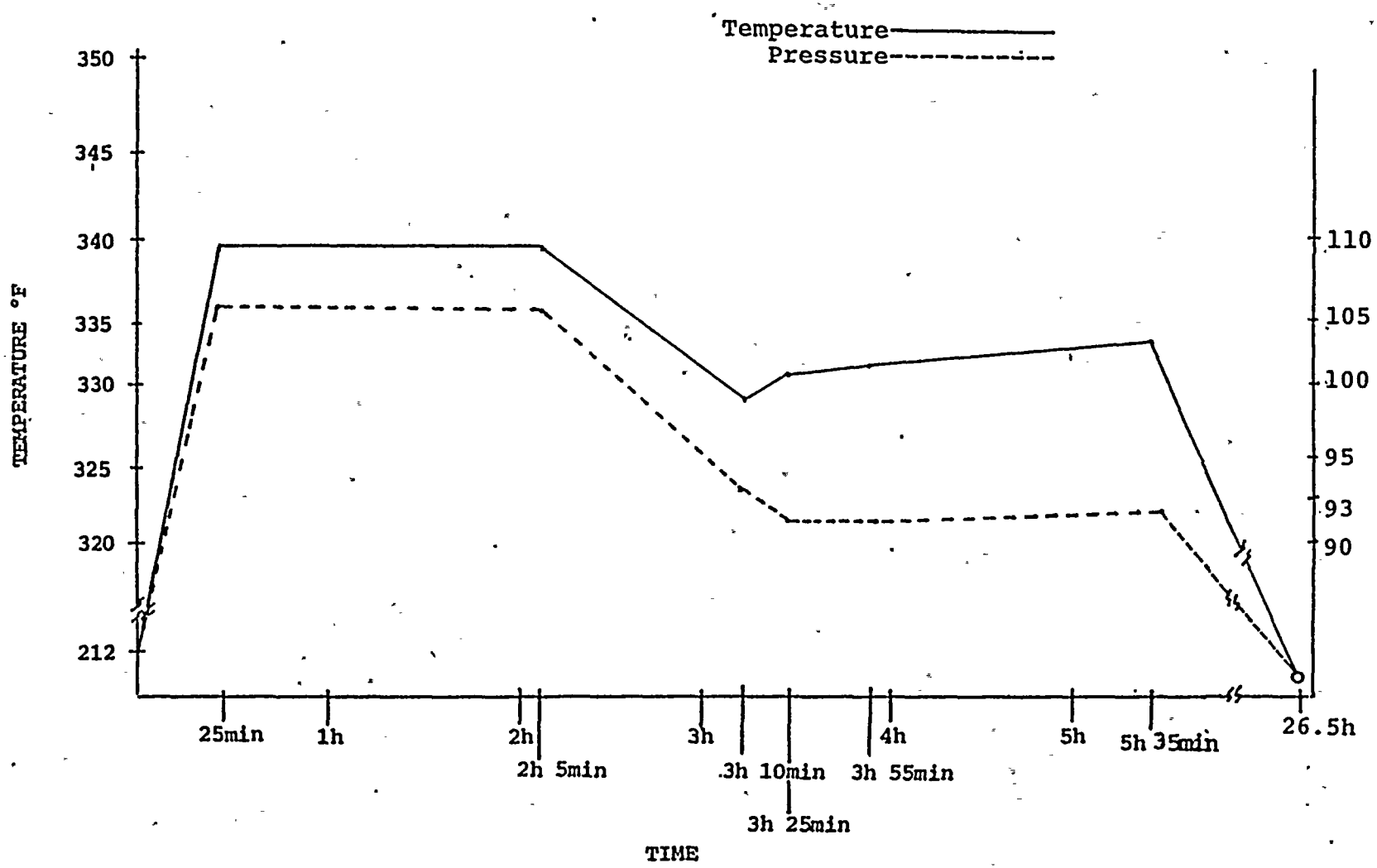
DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

2.

Tag Number	Model Number	Elev.	Azimuth
E-TRB-X105A/01	27-541	501	100 D AZ
-X105A/02	13-541	501	100 D AZ
-X105B/01	27-541	501	135 D AZ
-X105B/02	13-541	501	135 D AZ
-X105C/01	27-541	523	195 D AZ
-X105C/02	13-541	523	195 D AZ
-X105D/01	27-541	501	225 D AZ
-X105D/02	13-541	501	225 D AZ

3. The long-term operability of these terminal blocks for post-LOCA service is currently being investigated. Requalification/replacement will be implemented if required.

Prepared by: JDM 1/6/82 Reviewed by: AJ 1/6/82



TERMINAL BLOCK TEST PROFILE

W Report No. PEN-TR-77-83

Prepared by DN 1/8/82

Reviewed by AN 1/8/82

Borated H_2O introduced for 1 hour
3h 15 min to 4h 15 min

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-TRB-X107A/01 MANUFACTURER Curtis Industries MODEL NUMBER BT-15 COMPONENT Terminal Block FUNCTION/SERVICE Terminal Block for X-107A LOCATION: BLDG C ELEVATION 501 COLUMN 52 D AZ	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None Note 2
	TEMPERATURE (F)	135 Max. Normal 150 Max. Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	Note 1	2	6	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.2×10^8	3	5	Sequential Test and Engineering Analysis	None
	AGING	40 years	40 years	2	6	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES < NO

Prepared by: JDM 1/6/82 Reviewed by: AN 1/6/82

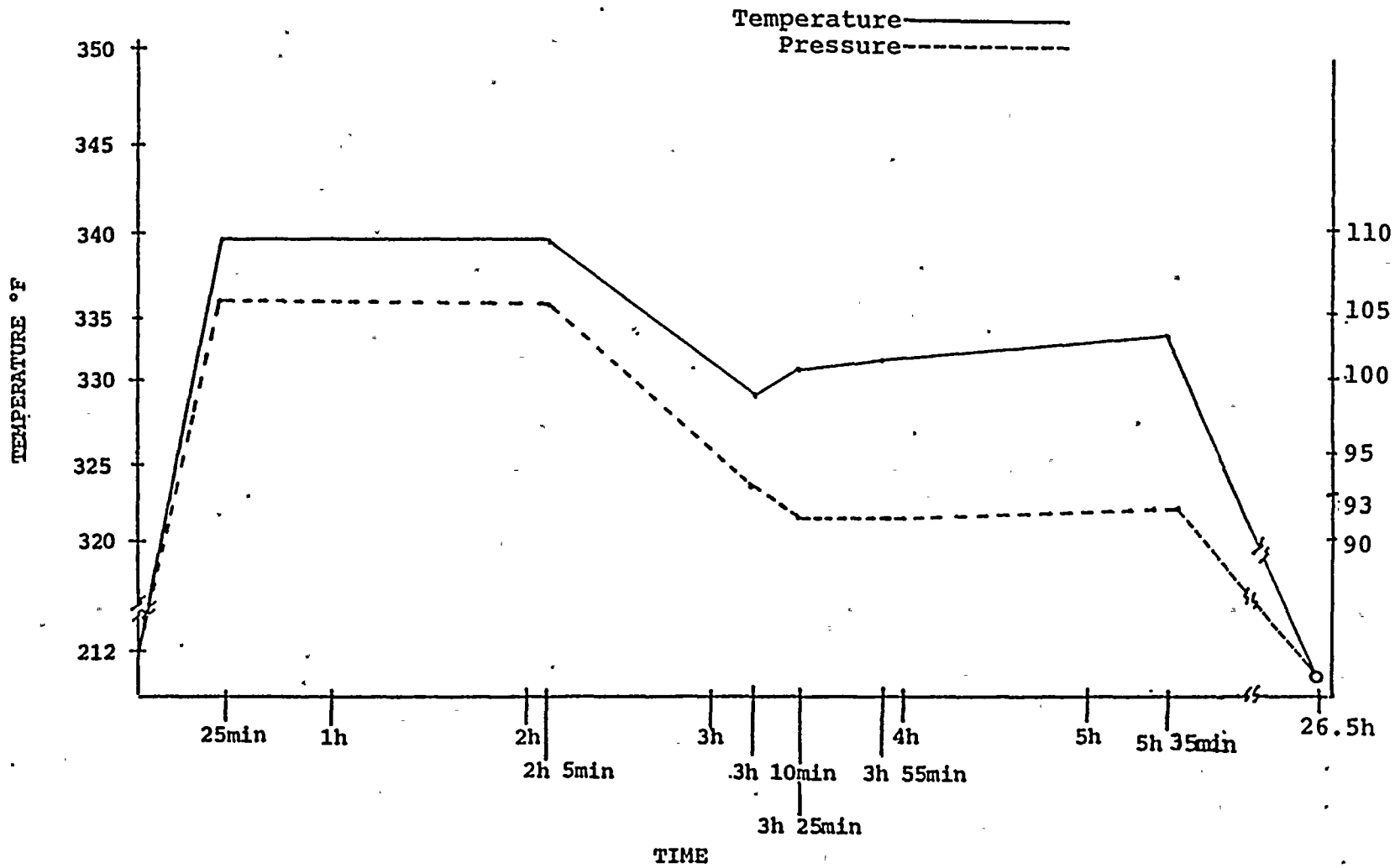
DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. W Test Report PEN-TR-77-83, dated 9/13/77
5. W Test Report PEN-TR-79-23, Rev. 1 dated 5/12/80
6. QID No. 049001, 352001

NOTES

1. The Terminal Block is located inside the inboard penetration enclosure and is, therefore, not exposed to demineralized water spray.
2. The long-term operability of these terminal blocks for post-LOCA service is currently being investigated. Requalification/replacement will be implemented if required.

WP-1041



TERMINAL BLOCK TEST PROFILE

W Report No. PEN-TR-77-83

Prepared by DN 1/8/82

Reviewed by AN 1/8/82

Borated H_2O introduced for 1 hour
3h 15 min to 4h 15 min

WPPSS

WASHINGTON POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-TRB-X107A/02 MANUFACTURER TRW-Cinch MODEL NUMBER 25-541 COMPONENT Terminal Block FUNCTION/SERVICE Terminal Block for X-107A LOCATION: BLDG C ELEVATION 501 COLUMN 52 D AZ	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None Note 2
	TEMPERATURE (F)	135 Max. Normal 150 Max. Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	Note 1	2	6	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.2×10^8	3	5	Sequential Test and Engineering Analysis	None
	AGING	40 years	40 years	2	6	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDN 1/6/82 Reviewed by: AN 1/6/82

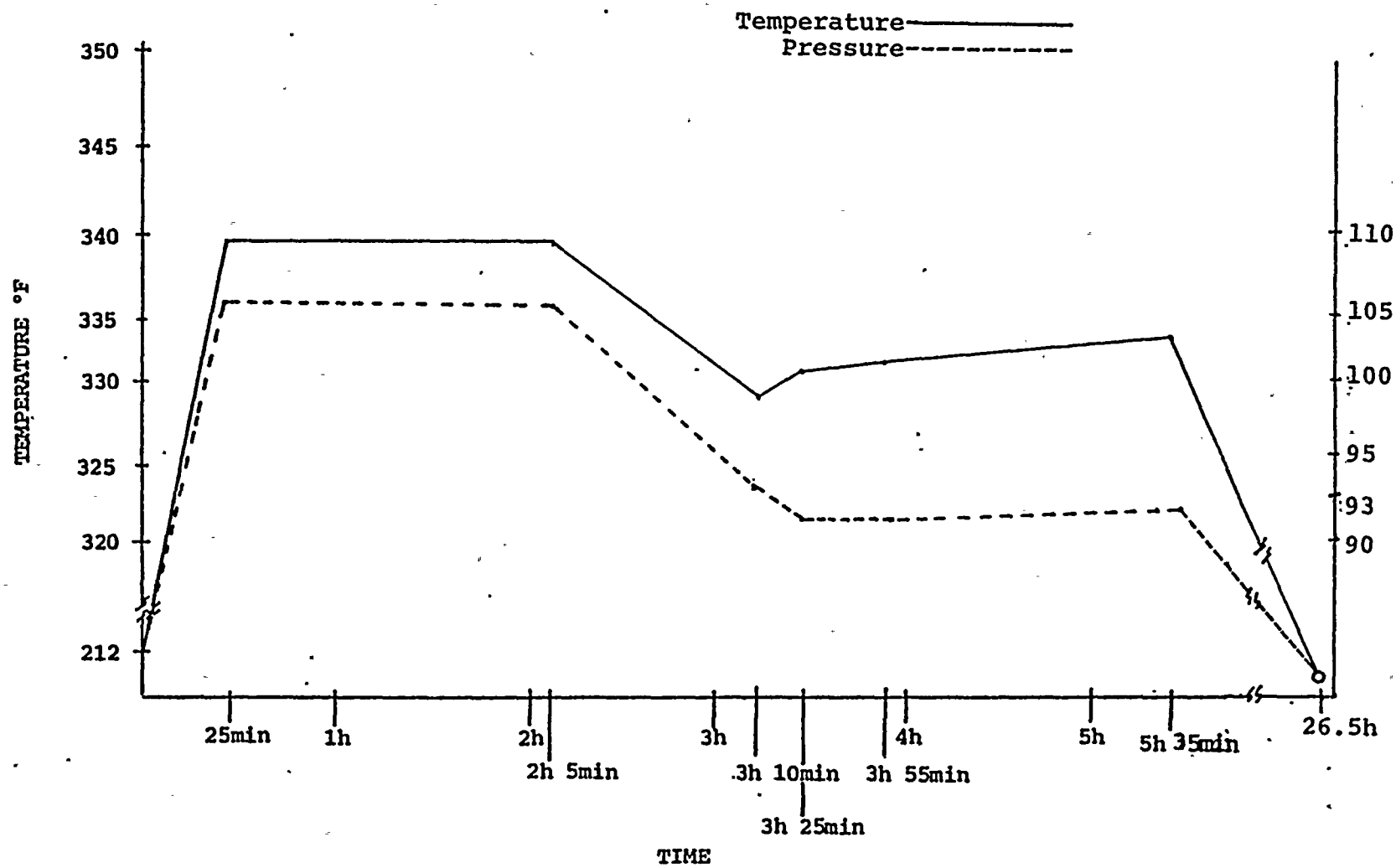
DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. W Test Report PEN-TR-77-83 dated 9/13/77
5. W Test Report PEN-TR-79-23, Rev. 1 dated 5/12/80
6. QID No. 049001, 352004

NOTES

1. The Terminal Block is located inside the inboard penetration enclosure and is, therefore, not exposed to demineralized water spray.
2. The long-term operability of these terminal blocks for post-LOCA service is currently being investigated. Requalification/replacement will be implemented if required.

WP-1081



TERMINAL BLOCK TEST PROFILE

W Report No. PEN-TR-77-83.

Prepared by DN

Reviewed by AN

Borated H_2O introduced for 1 hour
3h 15 min to 4h 15 min

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-TRB-X107B/01 MANUFACTURER Curtis Industries MODEL NUMBER BT-15 COMPONENT Terminal Block FUNCTION/SERVICE Terminal Block for X-107B LOCATION: BLDG C ELEVATION 441 COLUMN 150 D AZ	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None Note 2
	TEMPERATURE (F)	135 Max. Normal 150 Max. Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	Note 1	2	6	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.2×10^8	3	5	Sequential Test and Engineering Analysis	None
	AGING	40 years	40 years	2	6	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDM 1/6/82 Reviewed by: AN 1/6/82

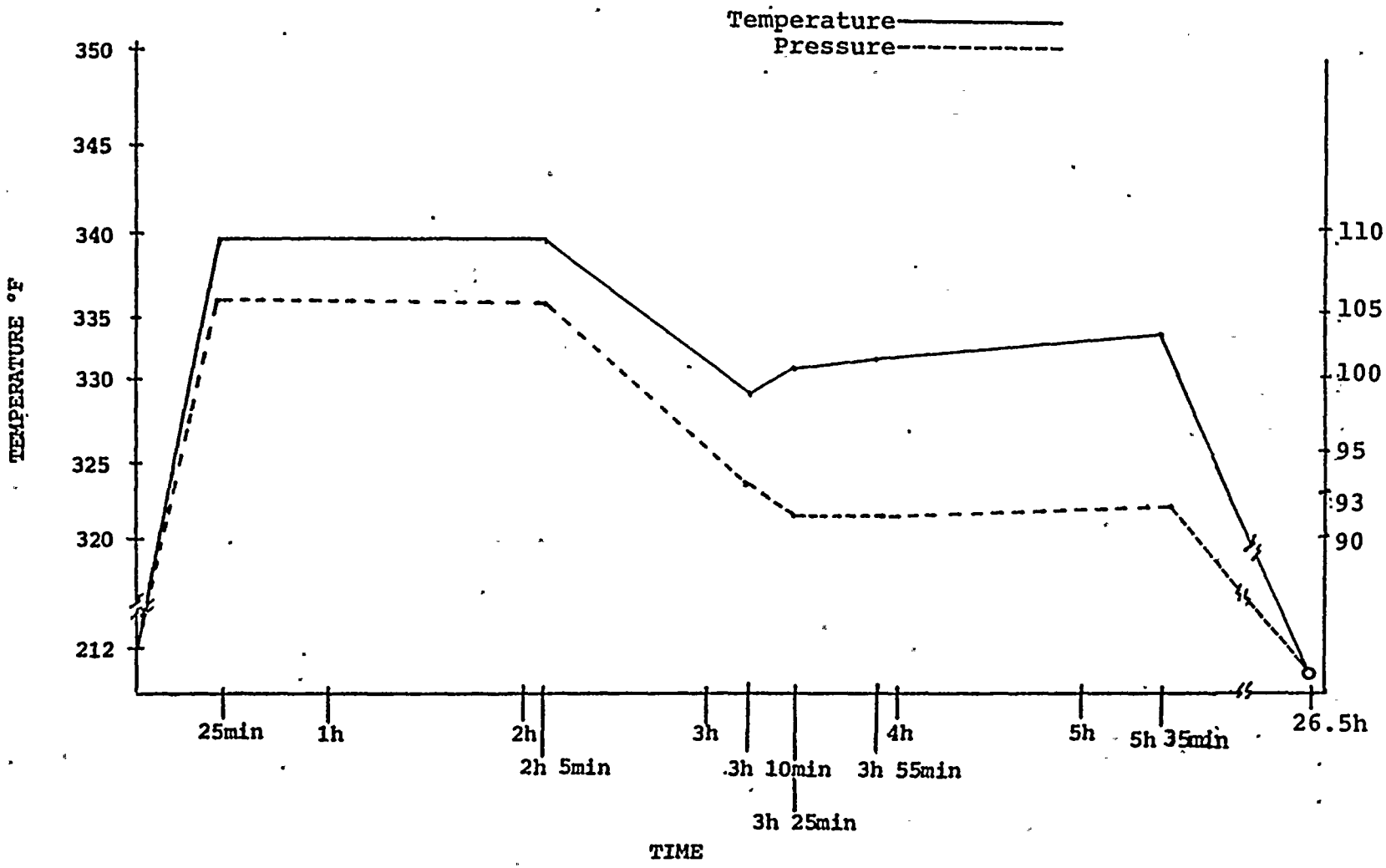
DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. W Test Report PEN-TR-77-83 dated 9/13/77
5. W Test Report PEN-TR-79-23, Rev. 1 dated 5/12/80
6. QID No. 049001, 352001

NOTES

1. The Terminal Block is located inside the inboard penetration enclosure and is, therefore, not exposed to demineralized water spray.
2. The long-term operability of these terminal blocks for post-LOCA service is currently being investigated. Requalification/replacement will be implemented if required.

WP-1081



TERMINAL BLOCK TEST PROFILE

W Report No. PEN-TR-77-83

Prepared by DN

Reviewed by AN

Borated H_2O introduced for 1 hour
3h 15 min to 4h 15 min

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-TRB-X107B/02 MANUFACTURER TRW-Cinch MODEL NUMBER 25-541 COMPONENT Terminal Block FUNCTION/SERVICE Terminal Block for X-107B LOCATION: BLDG C ELEVATION 441 COLUMN 135 D AZ	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None Note 2
	TEMPERATURE (F)	135 Max. Normal 150 Max. Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	Note 1	2	6	Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.2×10^8	3	5	Sequential Test and Engineering Analysis	None
	AGING	40 years	40 years	2	6	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDM 1/6/82

Reviewed by: AN 1/6/82

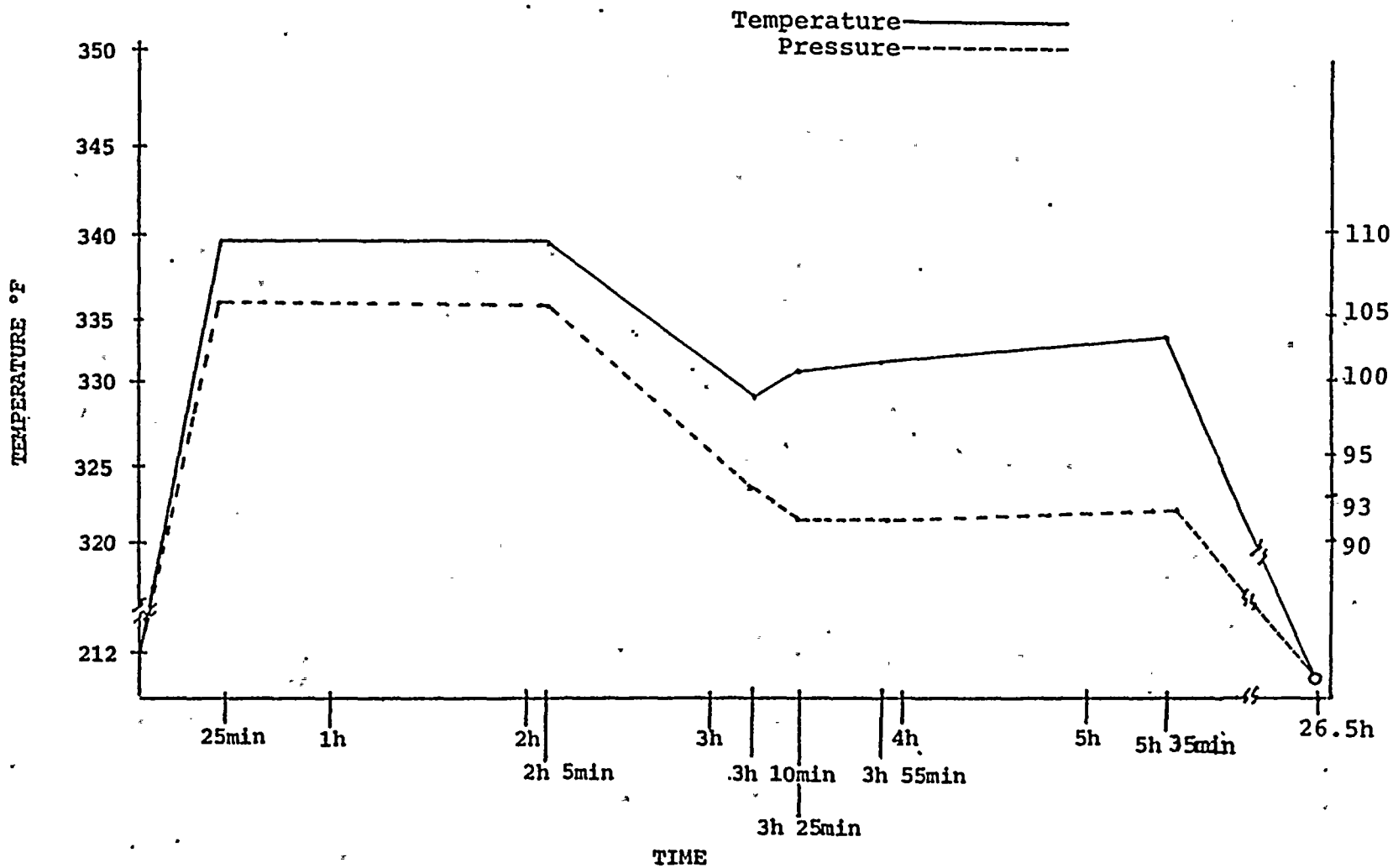
DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. W Test Report PEN-TR-77-83, dated 9/13/77
5. W Test Report PEN-TR-79-23, Rev. 1, dated 5/12/80
6. QID No. 049001, 352004

NOTES

1. The Terminal Block is located inside the inboard penetration enclosure and is, therefore, not exposed to demineralized water spray.
2. The long-term operability of these terminal blocks for post-LOCA service is currently being investigated. Requalification/replacement will be implemented if required.

WP-1881



TERMINAL BLOCK TEST PROFILE

W Report No. PEN-TR-77-83

Prepared by DN 1/8/82

Reviewed by AN 1/8/82

Borated H_2O introduced for 1 hour
3h 15 min to 4h 15 min

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-55

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER (Note 2) MANUFACTURER Westinghouse MODEL NUMBER 55-00-0002 COMPONENT Primary Containment Penetration FUNCTION/SERVICE (Note 2) LOCATION: BLDG C ELEVATION (Note 2) COLUMN (Note 2)	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 3	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	8×10^7	3	4	Sequential Test and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDM 1/6/82 Reviewed by: AN 1/6/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1 Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. The Qualification of a Modular Type Electrical Penetration Following the Requirements of IEEE STDS 317-1972 and 323-1974, W Report No. PEN-TR-75-19, dated 9/11/75.	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1981

DOCUMENTATION REFERENCES (Cont'd)

NOTES (Cont'd)

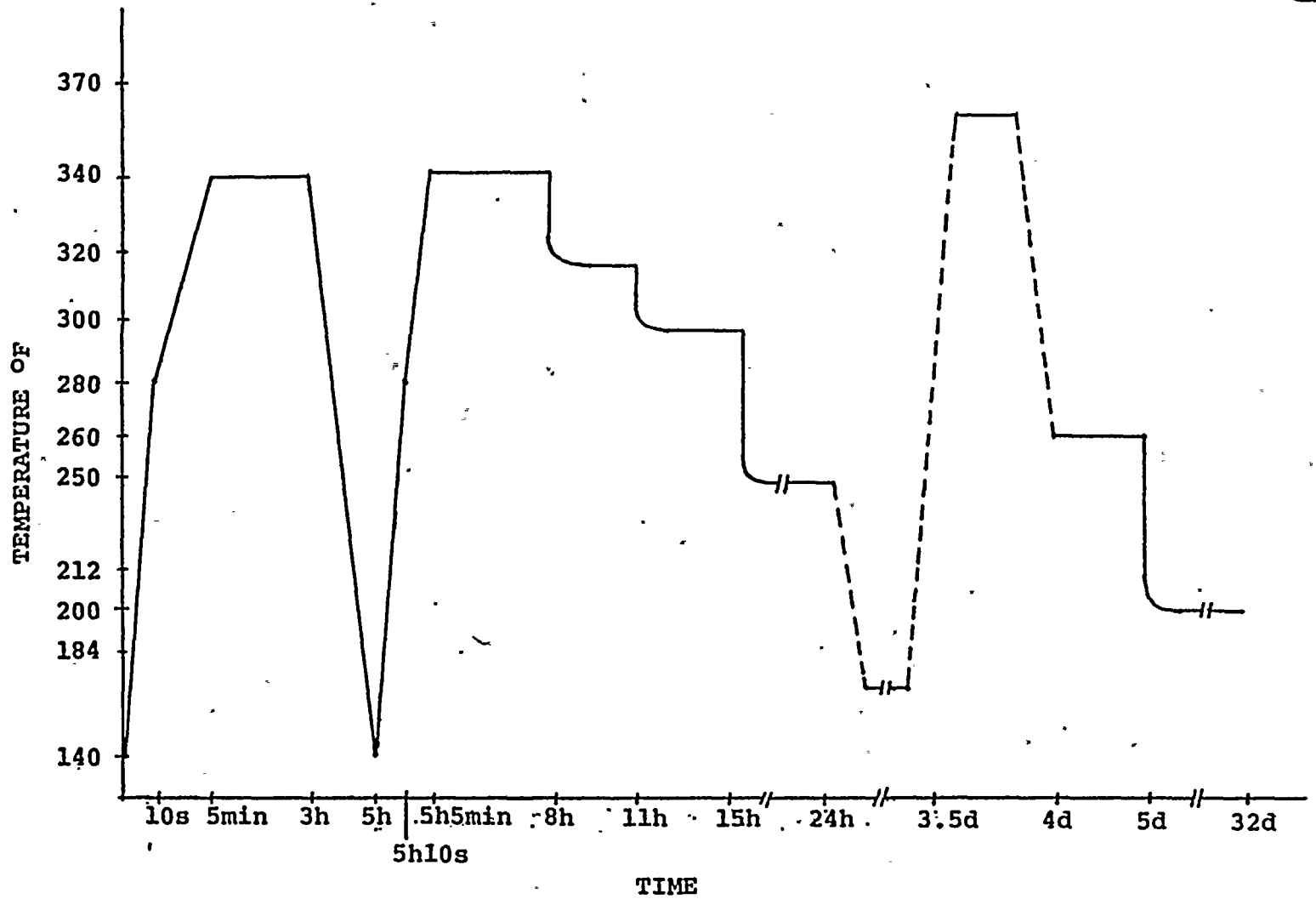
2.

Tag Number	Function/Service	Elev.	Azimuth
E-X-100A	Neu. Mont. Sys. Penetration	501	98
-100B	Neu. Mont. Sys. Penetration	501	105
-100C	Neu. Mont. Sys. Penetration	501	315
-100D	Neu. Mont. Sys. Penetration	501	330
-101A	CRD Position Ind. Penetration	501	130
-101B	CRD Position Ind. Penetration	501	140
-101C	CRD Position Ind. Penetration	501	312
-101D	CRD Position Ind. Penetration	501	320
-102A	T/C and RTD Penetration	522	183
-102B	T/C and RTD Penetration	522	220
-103A	Med. Voltage Power Penetration	522	208
-103B	Med. Voltage Power Penetration	522	213
-103C	Med. Voltage Power Penetration	522	305
-103D	Med. Voltage Power Penetration	522	325
-104A	Low Voltage Power Penetration	501	109
-104B	Low Voltage Power Penetration	501	110
-104C	Low Voltage Power Penetration	522	188
-104D	Low Voltage Power Penetration	522	223
-105A	Control & Indication Penetration	501	100
-105B	Control & Indication Penetration	501	135
-105C	Control & Indication Penetration	523	195
-105D	Control & Indication Penetration	501	225
-107A	Low Volt. Pwr./Cntl./Ind. Pene.	501	52
-107B	Low Volt. Pwr./Cntl./Ind. Pene.	441	250

3. The inboard end of the penetration is enclosed by the inboard penetration enclosure and, therefore, will not be exposed to demineralized water spray.

Prepared by: JDM 1/6/82

Reviewed by: AN 1/6/82



TEST PROFILE FOR W PENETRATION

Pressure Corresponds to
Saturated Steam Pressure

Prepared by: DN 1/7/82

Reviewed by: AN 1/7/82

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER See Next Page MANUFACTURER ITE Imperial MODEL NUMBER Various sizes COMPONENT Motor Starter FUNCTION/SERVICE Motor Starters LOCATION: BLDG R ELEVATION 522-N.0/3.8 COLUMN 572-H.5/6.0 522-H.7/8.3	OPERATING TIME	6 months	N/R	2	4	Note 1	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 108 max. accident	N/R	1	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	1	4	Note 1	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal	N/R	1	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.6×10^4	Note 2	3	5	Note 2	Note 2
	AGING	40 years	40 years	1	4	Note 3	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ron Seiler

Reviewed by: W. S. [illegible]

DOCUMENTATION REFERENCES

1. FSAR Para. 3.11
2. WNP-2 1E Equipment List 12/16/81
3. EDS Reports 0740-004-522D, -572D and -572H
4. EDI-4.8, Paragraph 5.1, I.
5. Letter WPBR-RO-81-105, dated 7/29/81

NOTES

1. These components are located in an isolated room serviced by Class 1 HVAC. Therefore, the room is a mild environment for these service conditions.
2. Shielded doors are being installed in this room to make it a mild environment (TID $<10^4$ rad).
3. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

WP-1081

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	Tag Numbers E-42-CAC/EHC1A,1B CAC/FN1A,1B CAC/1AFDR CAC/1BFDR CACEHC1A CIA/V30B FPC/V153 FPC/V173 FPC/V175 FPC/V181B FPC/V184 MS/V16 MSLC/FN2 MSLC/V10 MSLC/V4 MSLC/V5 MSLC/V9 RHR/V24A,B RHR/V26A RHR/V27A RHR/V3A,B RHR/V4A,B,C RHR/V42A,B,C RHR/V47A,B RHR/V48A,B RHR/V49 RHR/V52A,B RHR/V6B RHR/V68A,B RHR/73A,B RHR/74A,B RHR/V87A,B RHR/V9 SLC/V1B SW/V187B SW/V24B,C RCC/V104 RCC/V129 RCIC/V63 RCIC/V76 RHR/FCV64B,C RHR/V11B RHR/V115 RHR/V116 RHR/V123A,B RHR/V124B RHR/V125A,B RHR/V134AB RHR/V16A,B RHR/V17A,B RHR/V21 RRA/FN1,10,13,14,15,17,20,3,6 RWCU/V1 SGT/EHC1B1 SGT/FN1A1,1A2,1B1,1B2 SGT/V1A,B SGT/V3A1,2 SGT/V3B1,2 SGT/V4A1,2 SGT/V4B1,2 SGT/V5A1,2 SGT/V5B1,2 SGT/EHC1A2 SGT/EHC1B1,2 SLC/P1B

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Electrical TAG NUMBER: See Next Page MANUFACTURER: ITE Imperial MODEL NUMBER: Various Sizes COMPONENT: Motor Starters FUNCTION/SERVICE: Motor Starters LOCATION: BLDG R ELEVATION 471-H.7/7.8 COLUMN 522-H.7/8.3	OPERATING TIME	6 months	N/R	2	4	Note 1	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 108 max accident	N/R	1	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	1	4	Note 1	None
	RELATIVE HUMITY (%)	40 max normal 90 abnormal	N/R	1	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.5×10^3	N/R	3	4	Note 1	None
	AGING	40 years	40 years	1	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES

1. FSAR Paragraph 3.11
2. WNP-2 1E Equipment List, dated 12/16/81
3. EDS Reports 0740-004-471H and 522H
4. EDI-4.8, Paragraph 5.1, I

NOTES

1. These components are located in isolated rooms serviced by Class 1 HVAC systems and the total radiation dose is less than 10^4 rad. Therefore, the area is a mild environment.
2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

Qualified.

WP-1081

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	TAG NUMBERS E-42-CIA/V20 CIA/V30A FPC/V154 FPC/V156 FPC/V172 FPC/V181A LPCS/FCV11 LPCS/P2 LPCS/V1 LPCS/V12 LPCS/V5 MS/V67A, B, C, D MS/V67D MSLC/FN1 MSLC/V1A, B, C, D MSLC/V2A, B, C, D MSLC/V3A, B, C, D RCC/V21 RCC/V40 RCC/V5 RCIC/V13 RCIC/V64 RCIC/V69 RHR/FCV64A RHR/P3 RHR/V8 RHR/V11A RHR/V124A RHR/V134A RHR/V23 RHR/V53A, B RHR/V6A RRA/FN11, 12, 2, 5, 6 RRC/V16A, B RWCU/V4 SLC/P1A SLC/V1A SW/V187A SW/V-24A SW/V44 SW/V75A, B

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-47A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CB-RPT3A -RPT3B -RPT4A -RPT4B MANUFACTURER Westinghouse MODEL NUMBER 24Y9836B11 COMPONENT Circuit Breaker FUNCTION/SERVICE (Note 2) LOCATION: BLDG R ELEVATION (Note 2) COLUMN (Note 2)	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82 Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522II

NOTES

1. Failure modes are being evaluated for this component. Preliminary results of the evaluation indicate the component will not fail in a manner detrimental to plant safety.
2.

Tag Number	Function/Service	Elev.	Column
E-CB-RPT3A	Dual Trip Brkr to	471	L/9.0
RPT4A	RRC-P-1A	522	M8/7.4
RPT3B	Dual Trip Brkr to	471	K3/9.0
RPT4B	RRC-P-1B	522	M7/8.2

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-62 B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-G2/1 E-CBL-H1/1 MANUFACTURER Raychem MODEL NUMBER WITC12B6 J2TC10B10 COMPONENT Electrical Cable FUNCTION/SERVICE Conduct Current LOCATION: BLDG General Plant ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES

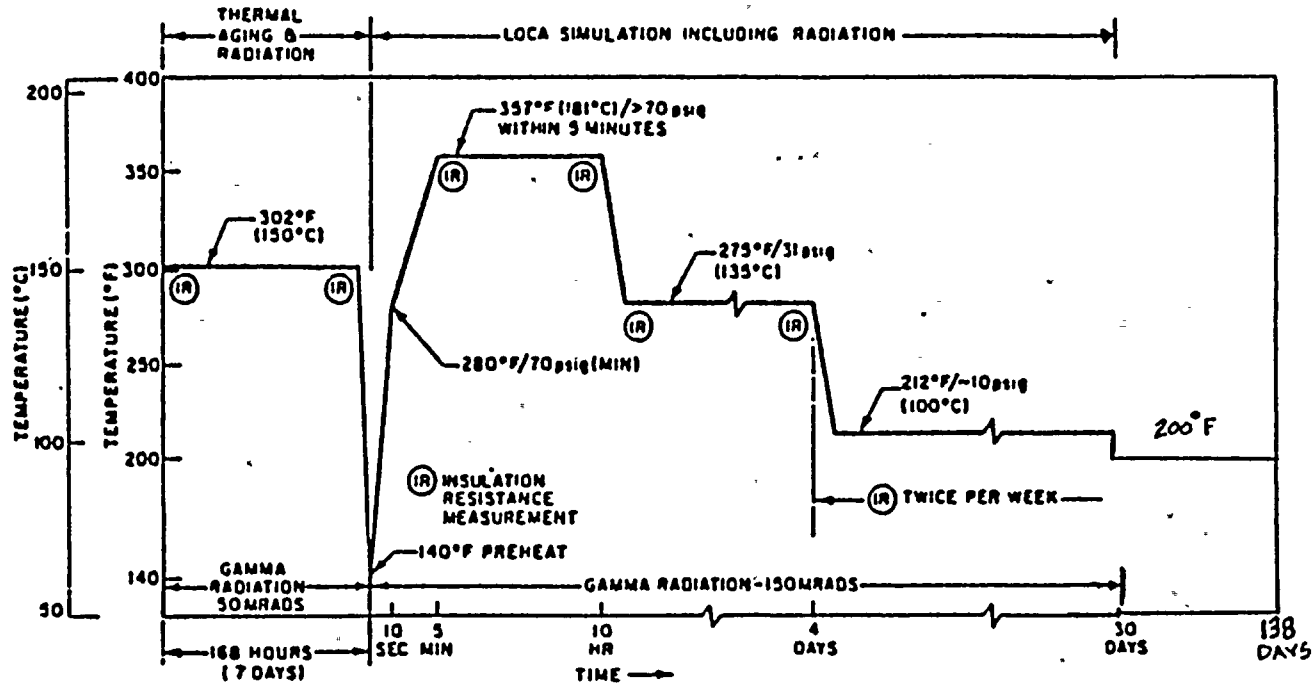
1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray. PIRL Report C4033-3, dated 1/75.
5. Raychem Report RABR-62B-75-028 Trans. 187-36B

NOTES

Qualified

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1681



RAYCHEM CABLE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-K2/1	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
MANUFACTURER Raychem	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
MODEL NUMBER 60/7174-20 COMPONENT Electrical Cable	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
FUNCTION/SERVICE Conduct Current	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
LOCATION: BLDG General Plant ELEVATION COLUMN	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

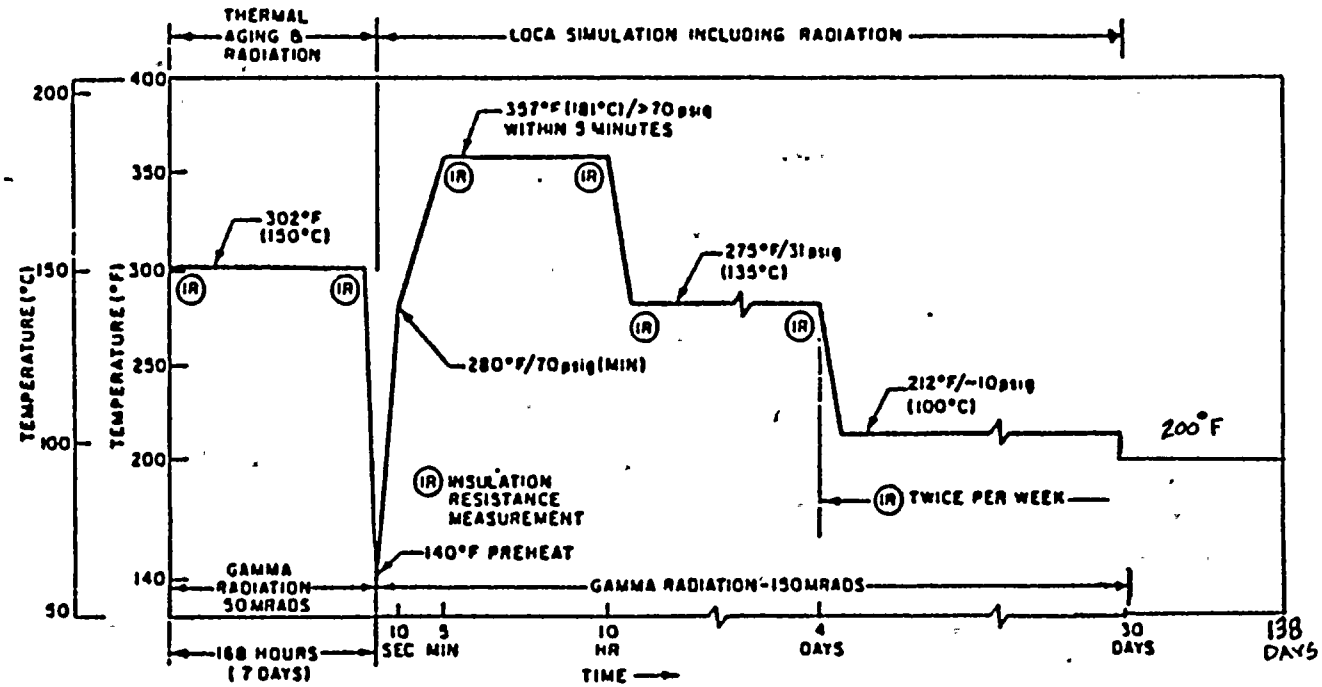
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray. FIRL Report F-C4033-3, dated 1/75 5. Raychem Report RABR-62B-75-028 Trans. 187-36B	Qualified 1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1881



RAYCHEM CABLE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-62 B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-J2/1, E-CBL-J3/1, E-CBL-J4/1, E-CBL-K1/1 MANUFACTURER Raychem MODEL NUMBER See Note 2 COMPONENT Electrical Cable FUNCTION/SERVICE Conduct Current LOCATION: BLDG General Plant ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AJ 1/8/82 Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray. FIRL Report F-C4033-3, dated 1/75. 5. Raychem Report RABR-62B-75-028 Trans. 187-36B	Qualified 1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables. 2. F6T2KX18A6 P2T2JX16A6 P2EX16A6 J2TC14B6C1

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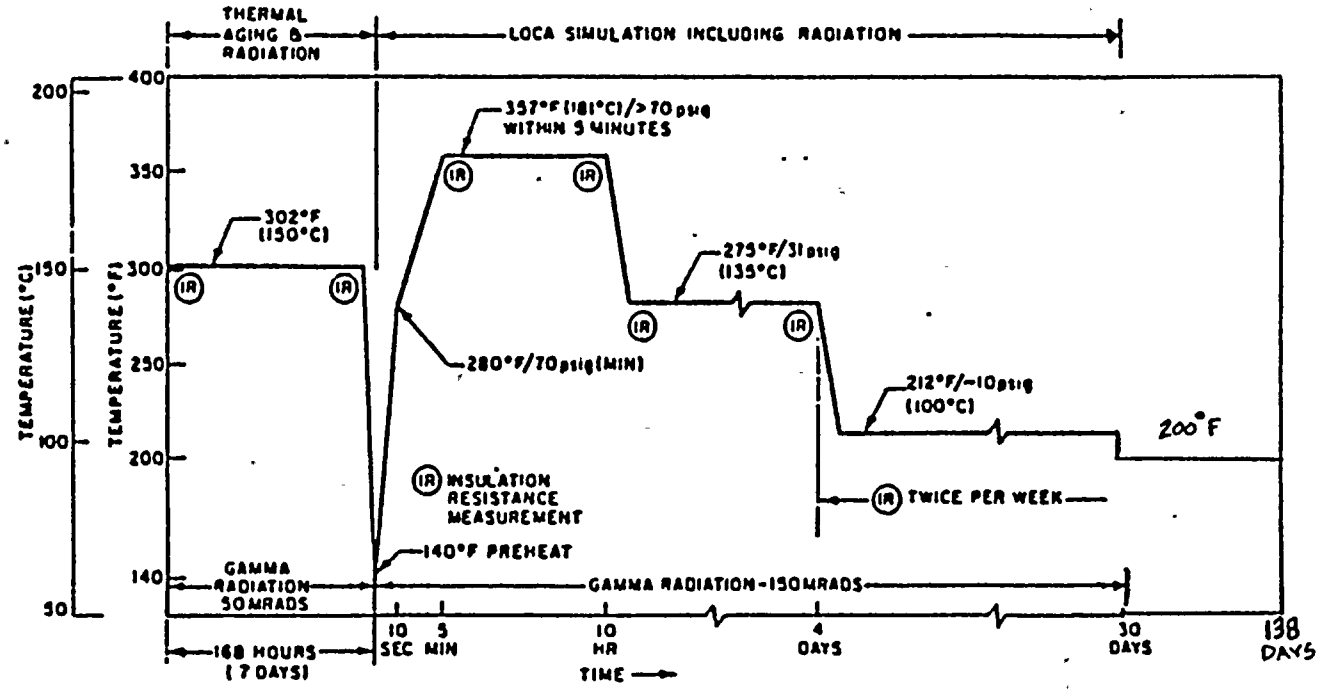

RAYCHEM CABLE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-62B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-H4/3 E-CBL-J1/1 MANUFACTURER Raychem MODEL NUMBER 60/7176-14 F2T2X16A6 COMPONENT Electrical Cable FUNCTION/SERVICE Conduct Current LOCATION: BLDG General Plant ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDKA 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray. FIRL Report F-C4033-3, dated 1/75 5. Raychem Report RABR-62B-75-028 Trans. 187-36B	Qualified 1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

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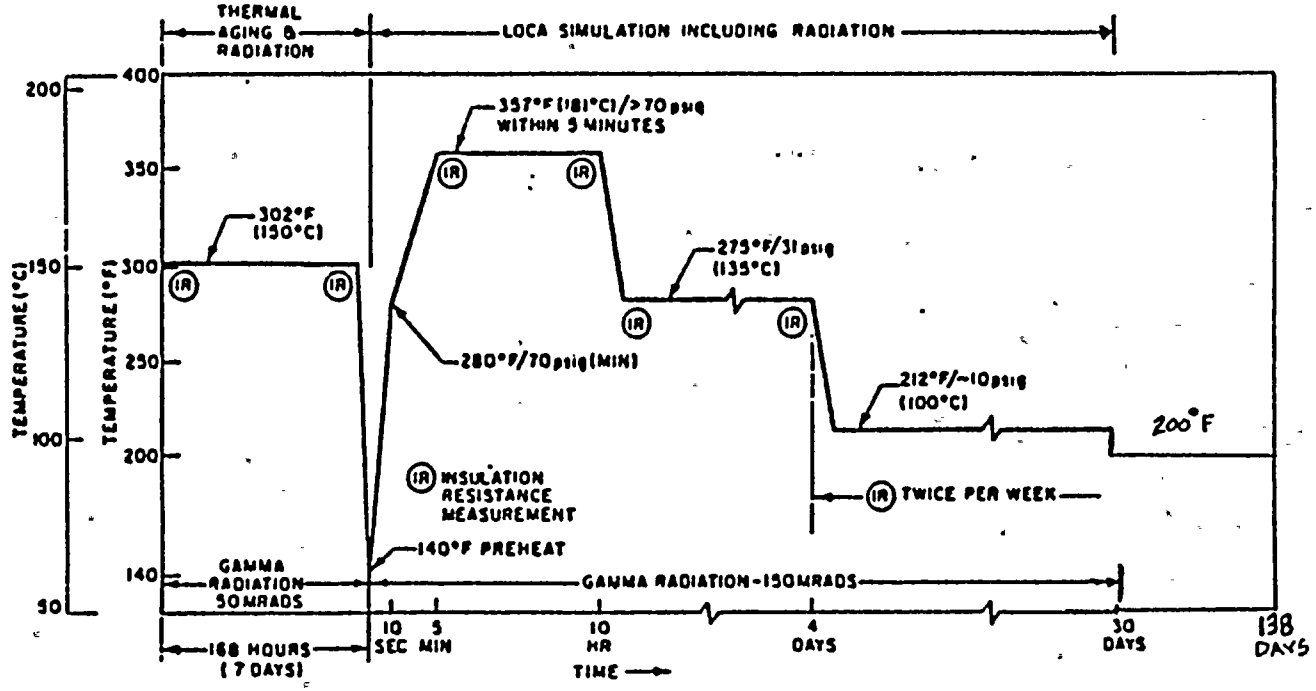

RAYCHEM CABLE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-62B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-H3/1 E-CBL-H4/1 MANUFACTURER Raychem MODEL NUMBER P5TC10B10 FB/2TC16B10 COMPONENT Electrical Cable FUNCTION/SERVICE Conduct Current LOCATION: BLDG General Plant ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1.	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AJ 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES

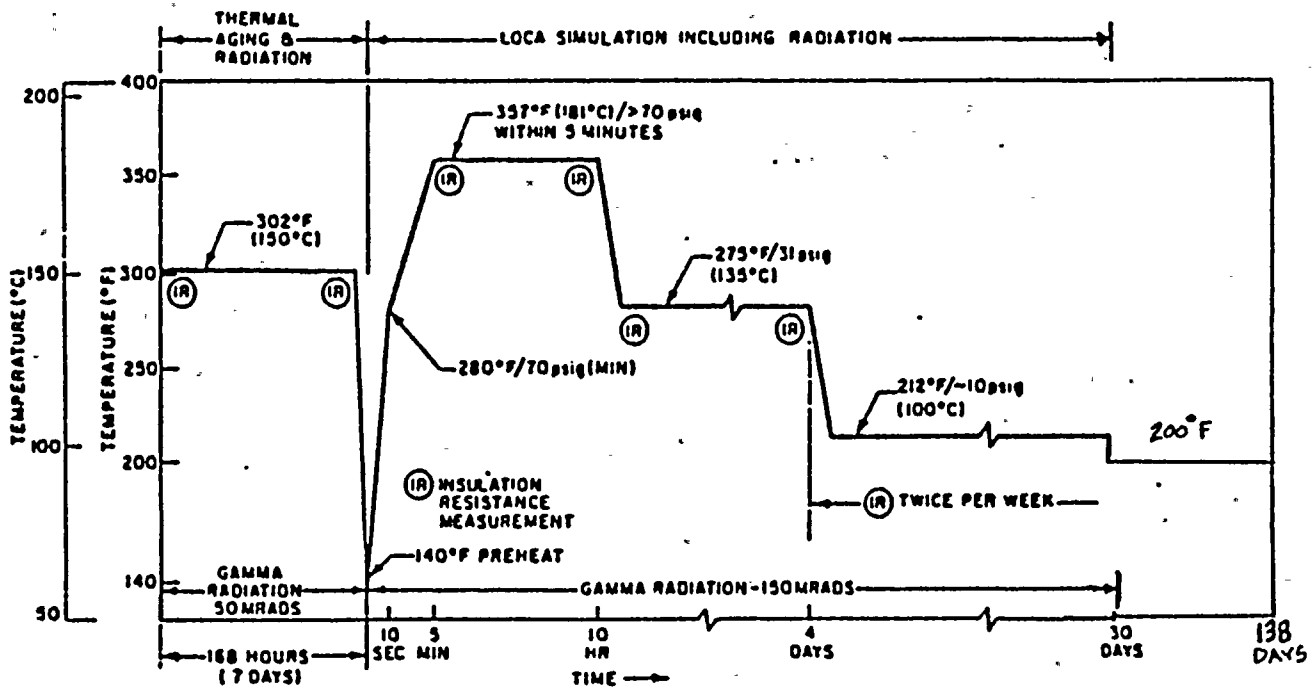
1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray.PIRL Report F-C4033-3, dated 1/75
5. Raychem Report RABR-62B-75-028 Trans. 187-36B

NOTES

Qualified

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1681



RAYCHEM CABLE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-62B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER Note 2 MANUFACTURER Raychem MODEL NUMBER Note 2 COMPONENT Electrical Cable FUNCTION/SERVICE Conduct Current LOCATION: BLDG General Plant ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Accident See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray. FIRL Report P-C4033-3, dated 1/75, 5, Raychem Report RABR-62B-75-028 Trans. 187-36B	Qualified 1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

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OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-628

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

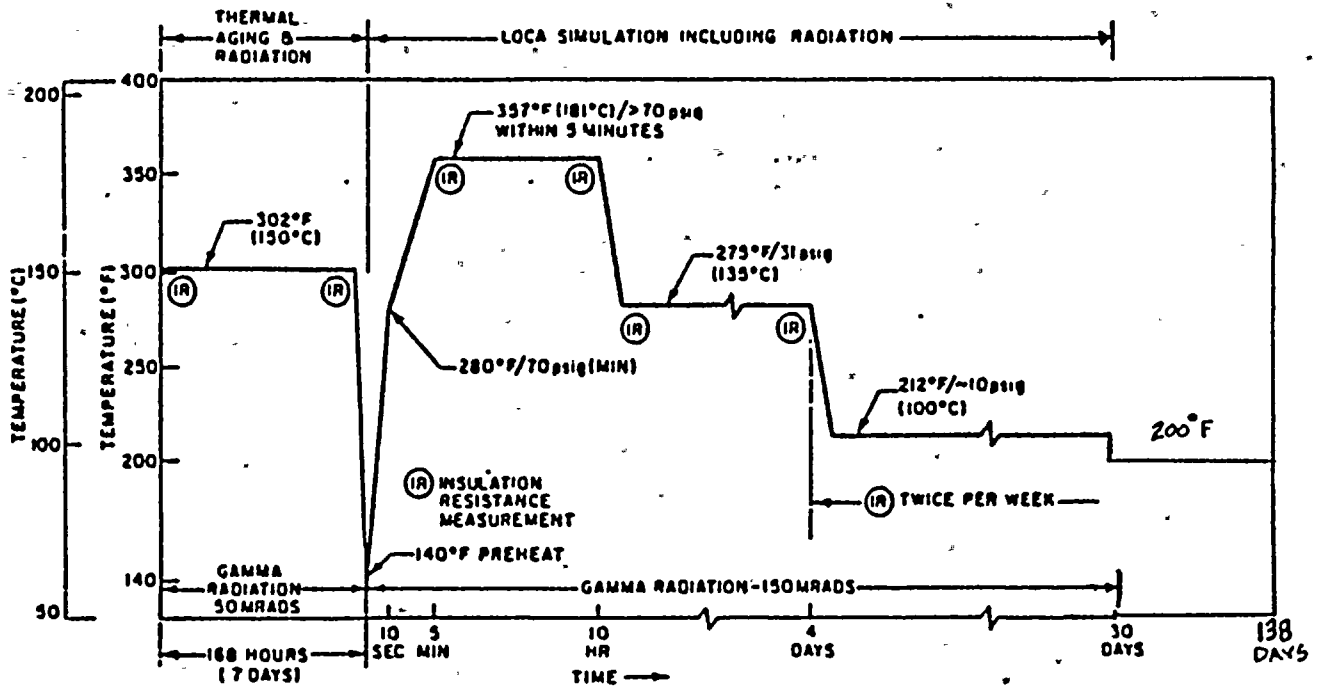
2.

Tag No.	Model No.
E-CBL-K3/3	W1TC20B20
E-CBL-K4/1	60/7237
E-CBL-L1/1	F1TC1686
E-CBL-L1/2	J3T1TC16B6
E-CBL-L1/3	J3T1TC12B10
E-CBL-L2/1	J12T2TC20B6
E-CBL-L4/1	B12C20B10
E-CBL-M1/21	7521D3330
E-CBL-M4/22	10483
E-CBL-M5/22	10481
E-CBL-M6/26	10567 R.F.
E-CBL-M7/18	10566 R.P.
E-CBL-X100A/01	10496-750HM
E-CBL-X100A/02	10495-1350HM

WP-1083

Prepared by: AJ 1/8/82

Reviewed by: JDM 1/8/82



RAYCHEM CABLE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-62B

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-G1/1 E-CBL-G1/14 MANUFACTURER Raychem MODEL NUMBER WITC750B10 60/7175 COMPONENT Electrical Cable FUNCTION/SERVICE Conduct Current LOCATION: BLDG General Plant ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Test	None
	RADIATION (RAD)	4.4×10^7	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES

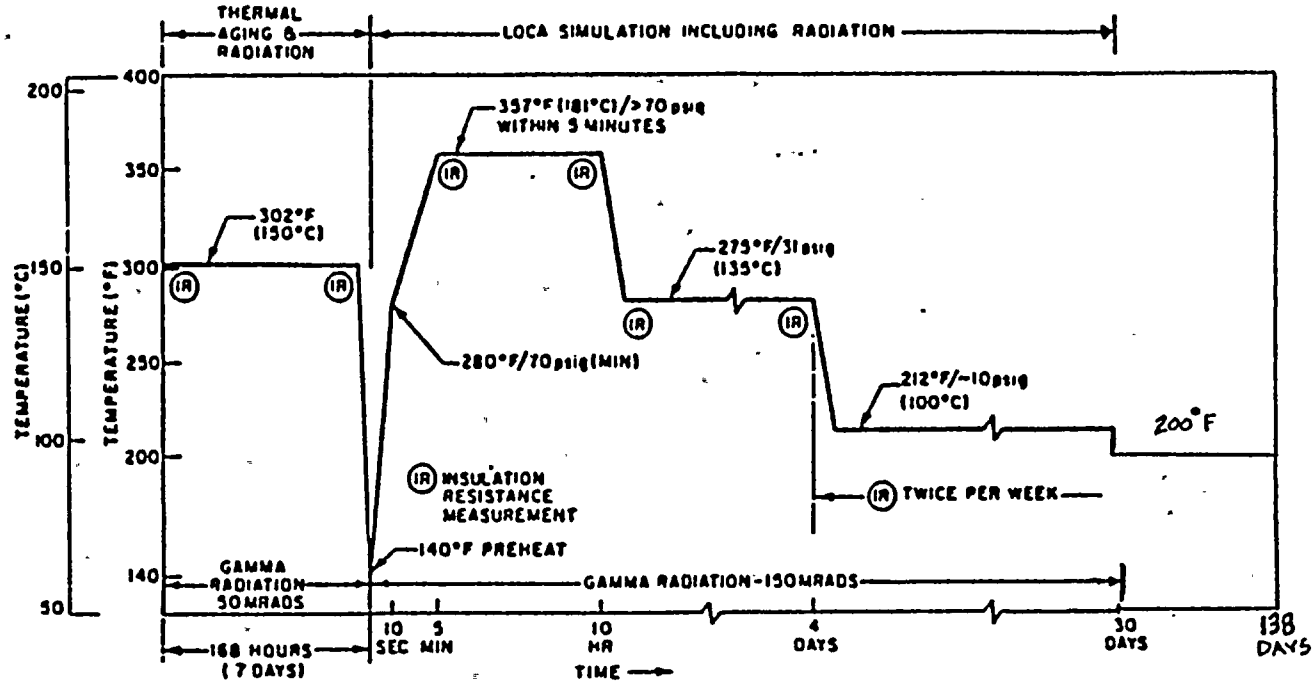
1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Tests of Raychem Thermofit Insulation Systems Under Simultaneous Exposure of Heat, Gamma Radiation, Steam and Chemical Spray. FIRL Report F-C4033-3, dated 1/75.
5. Raychem Report RABR-62B-75-028 Trans. 187-36B

NOTES

Qualified

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1081



RAYCHEM CABLE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Eletrical TAG NUMBER: E-CBL-J1/1/C MANUFACTURER: Rockbestos MODEL NUMBER: I67-3154 COMPONENT: Electrical Cable FUNCTION/SERVICE: Thermocouple Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82 Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Rockbestos Report "Qualification of Firewall III Class 1E Electric Cable" and associated documents, revised 9/25/80
5. "A Review of Class 1E Electrical Cable Qualification Data" FIRL Report No. F-C4598-1, dated 5/77, Table 2-1

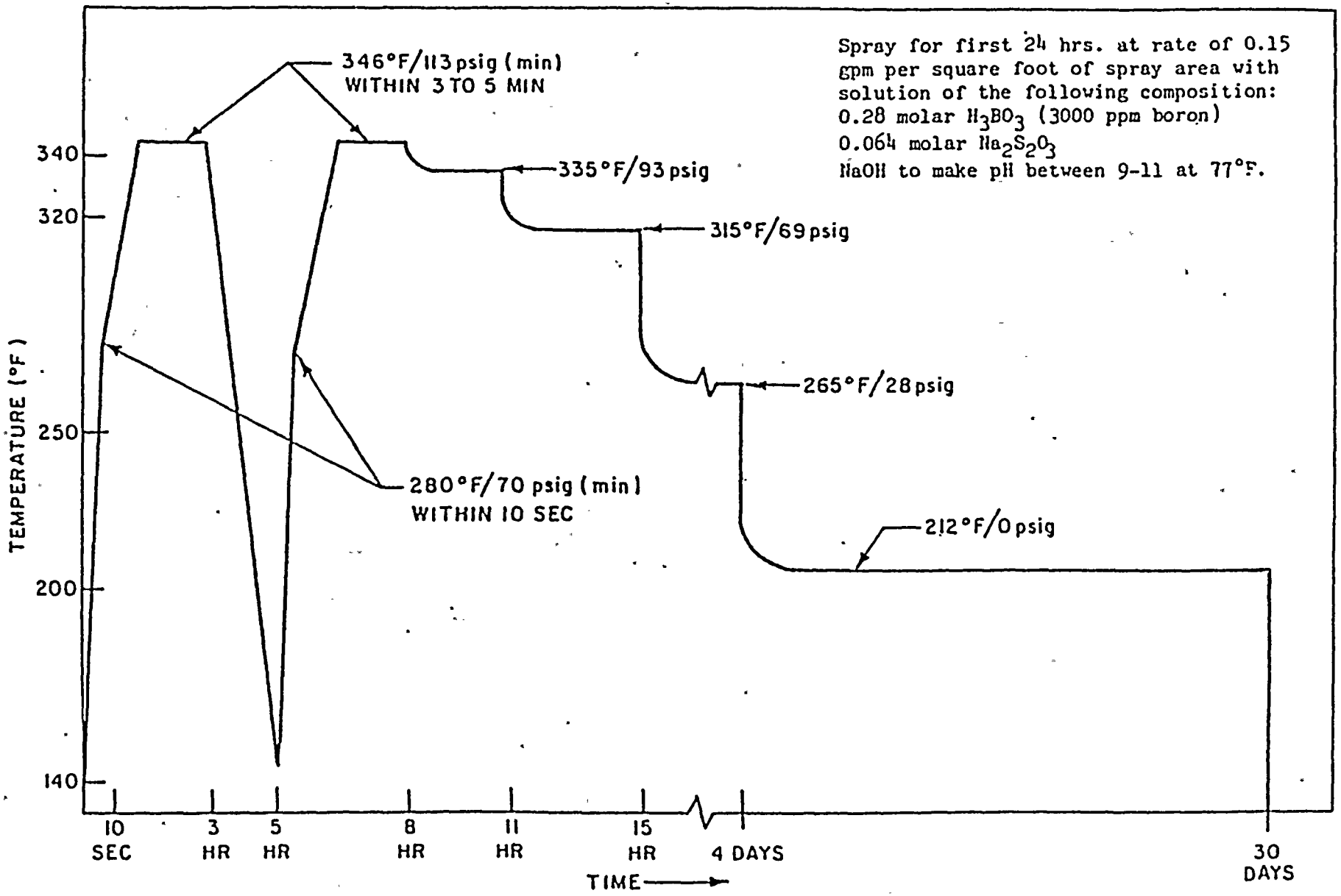
NOTES

Qualified:

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no affect on the cables.

WP-1001

LOCA Profile



ROCKBESTOS CABLE

LOCA PROFILE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-K2/1/C MANUFACTURER Rockbestos MODEL NUMBER I46-3633 COMPONENT Electrical Cable FUNCTION/SERVICE Control Rod Indication and Thermocouple Instrumentation Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82 Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Rockbestos Report "Qualification of Firewall III Class 1E Electrical Cable" and associated documents, revised 9/25/80
5. "A Review of Class 1E Electrical Cable Qualification Data" FIRL Report No. F-C4598-1, dated 5/77, Table 2-1

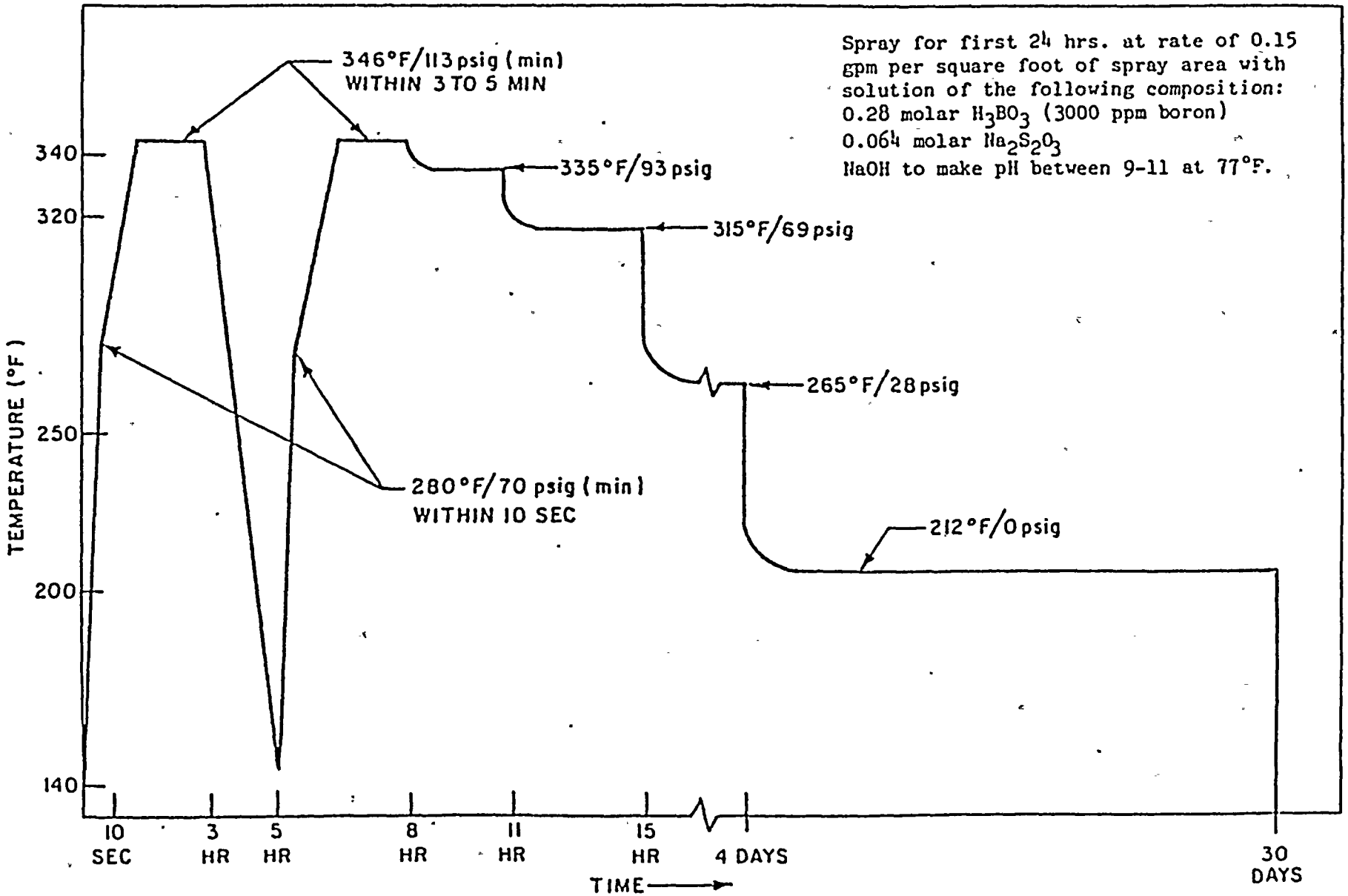
NOTES

Qualified:

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1881

LOCA Profile



ROCKBESTOS CABLE

LOCA PROFILE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM.

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-H1/9	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
MANUFACTURER Rockbestos	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
MODEL NUMBER C52-3220 COMPONENT Electrical Cable	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE 120 Vac and 125 Vdc Control Cable	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test Engineering Analysis	None
LOCATION: BLDG All ELEVATION COLUMN	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82

Reviewed by: AJ 1/8/82

DOCUMENTATION REFERENCES

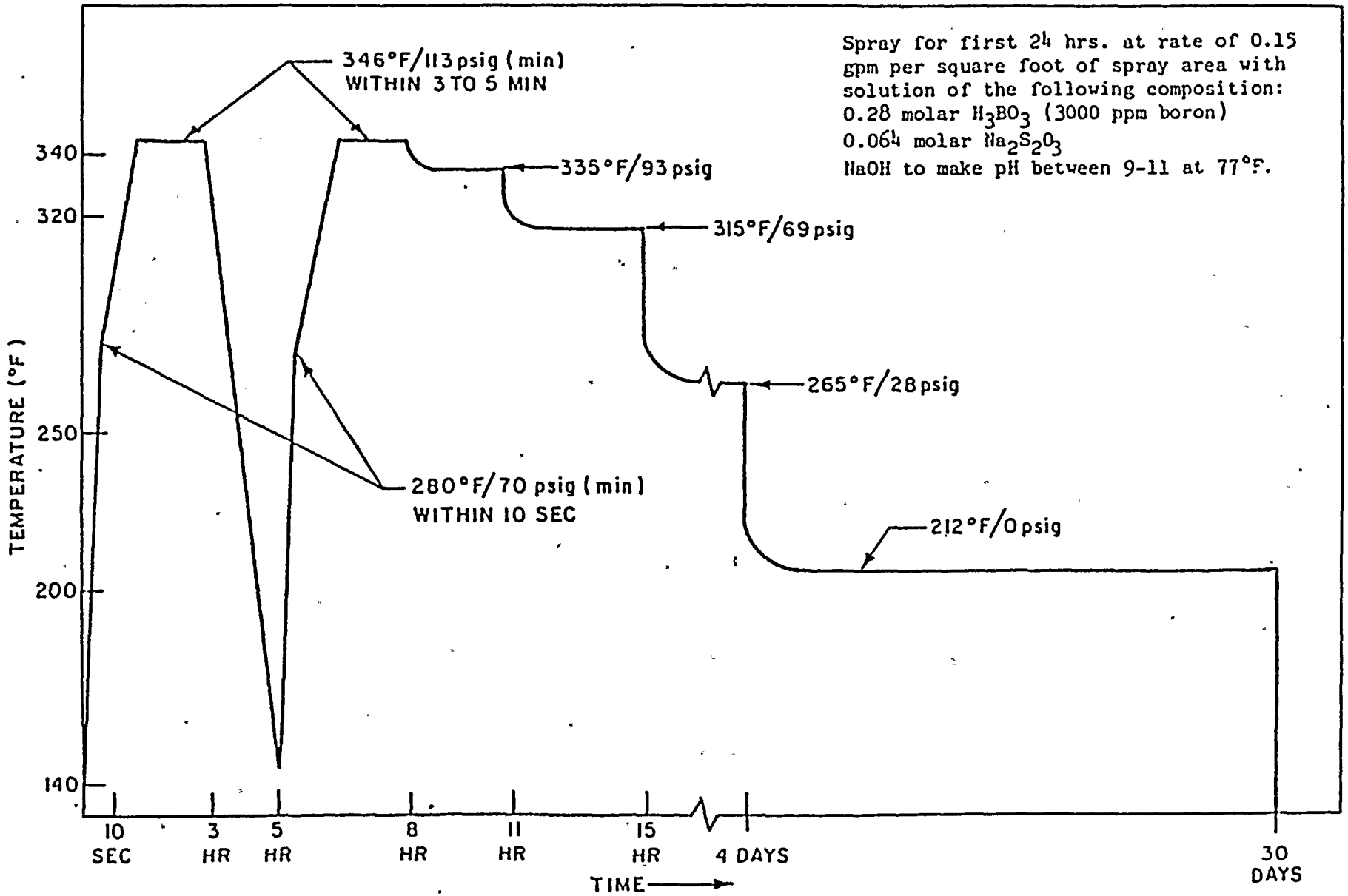
1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Rockbestos Report "Qualification of Firewall III Class IE Equipment Electric Cable" and associated documents, revised 9/25/80
5. "A Review of Class 1E Electrical Cable Qualification Data" FIRL Report No. F-C4598-1, dated 5/77, Table 2-1

NOTES

Qualified:

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

LOCA Profile



ROCKBESTOS CABLE

LOCA PROFILE

WPPSS

WASHINGTON PO[illegible]WER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-H4/1/C MANUFACTURER Rockbestos MODEL NUMBER I46-3632 COMPONENT Electrical Cable FUNCTION/SERVICE Instrumentation Cable LOCATION: BLDG A11 ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82 Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Rockbestos Report "Qualification of Firewall III Class 1E Electric Cable" and associated documents, revised 9/25/80
5. "A Review of Class 1E Electrical Cable Qualification Data" FIRL Report No. F-C4598-1, dated 5/77, Table 2-1

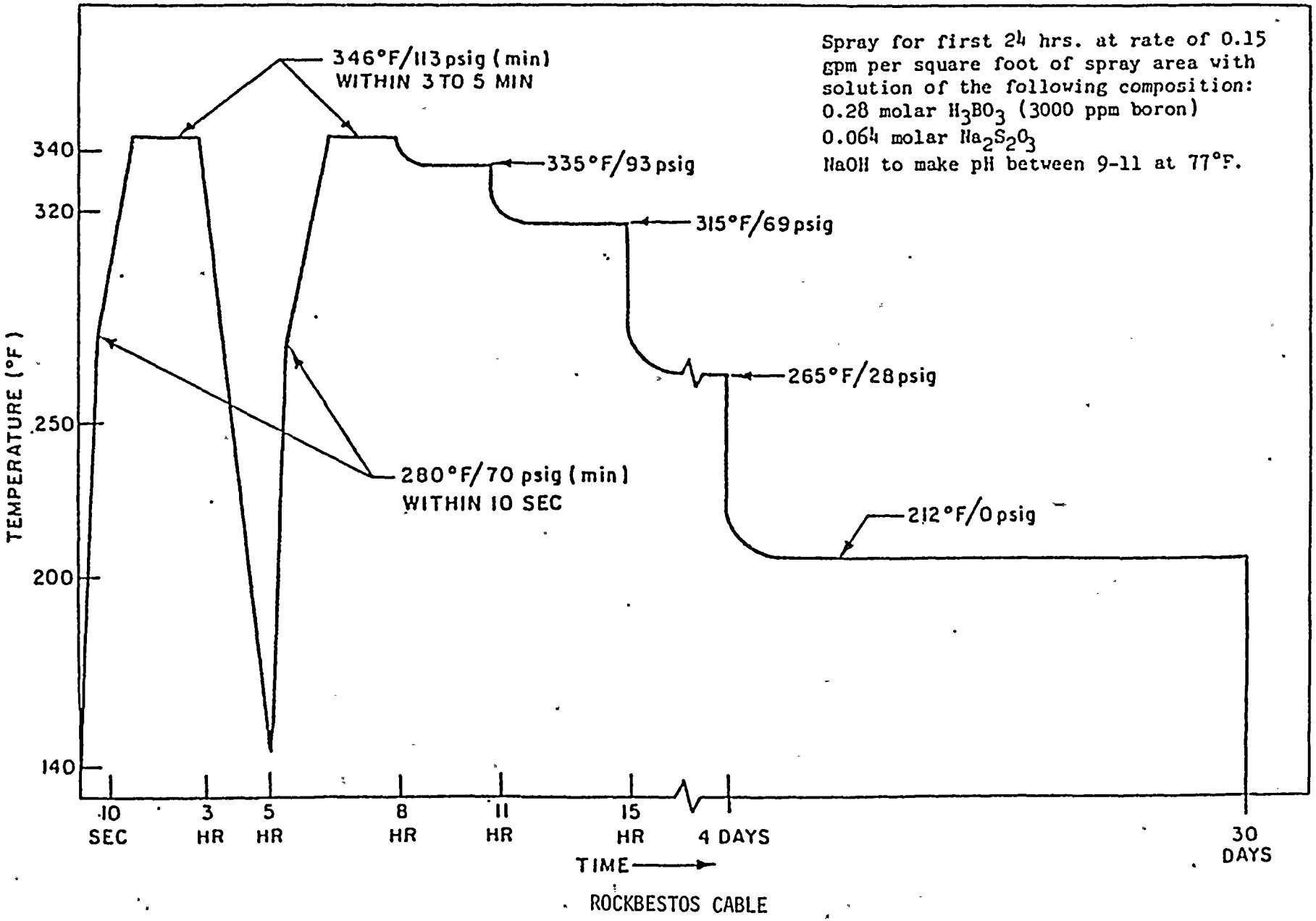
NOTES

Qualified:

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1001

LOCA Profile



LOCA PROFILE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-G1/14/C -G1/5/C MANUFACTURER Rockbestos MODEL NUMBER P62-3296 -3289 COMPONENT Electrical Cable FUNCTION/SERVICE 480 Vac and 250 Vdc Power Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES x NO

Prepared by: JDM 1/8/82

Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

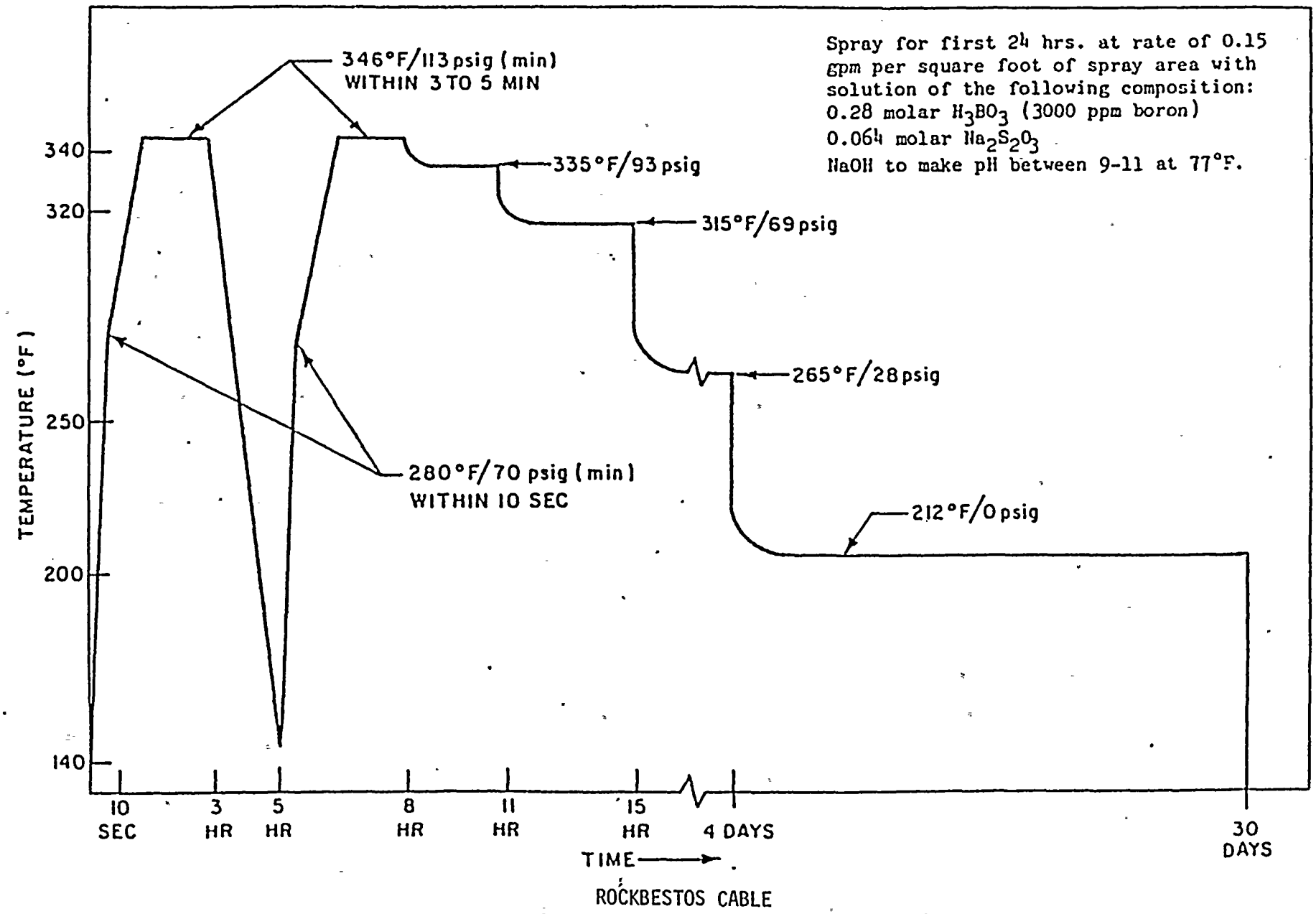
1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Rockbestos Report "Qualification of Firewall III Class 1E Electric Cable" and associated documents, revised 9/25/80
5. "A Review of Class 1E Electrical Cable Qualification Data" FIRL Report No. F-C4598-1, dated 5/77, Table 2-1

NOTES

Qualified:

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

LOCA Profile



ROCKBESTOS CABLE

LOCA PROFILE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-K1/1/C MANUFACTURER Rockbestos MODEL NUMBER C53-3244 COMPONENT Electrical Cable FUNCTION/SERVICE Indication, Annunciation, SV and Logic Control Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident.	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82

Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Rockbestos Report "Qualification of Firewall III Class 1E Electric Cable" and associated documents, revised 9/25/80
5. "A Review of Class 1E Electrical Cable Qualification Data" FIRL Report No. F-C4598-1, dated 5/77, Table 2-1

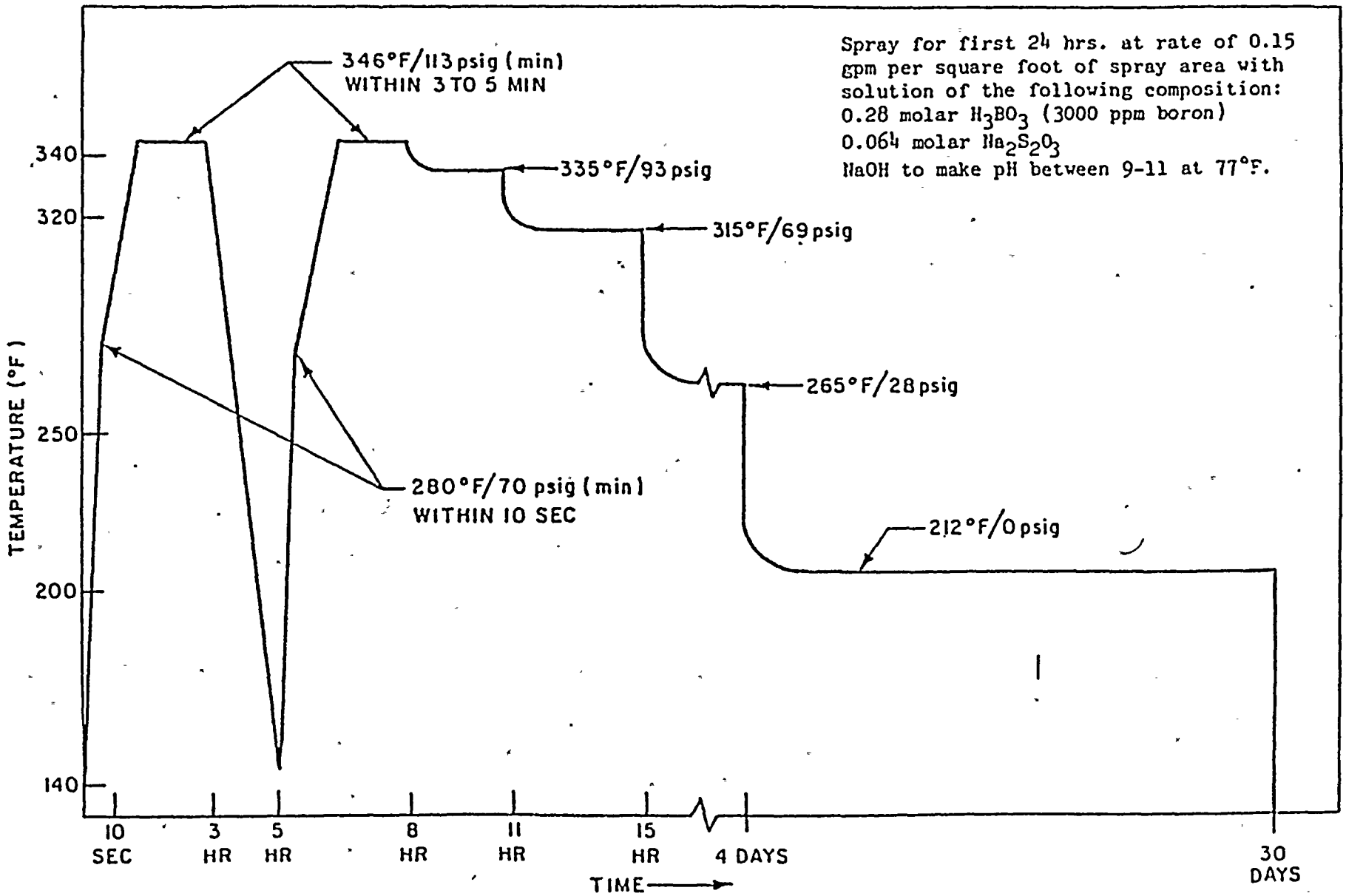
NOTES

Qualified:

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1081

LOCA Profile



ROCKBESTOS CABLE

LOCA PROFILE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-C/8 MANUFACTURER Okonite MODEL NUMBER 115-21-3180 COMPONENT Electrical Cable FUNCTION/SERVICE 14.4kV Power Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

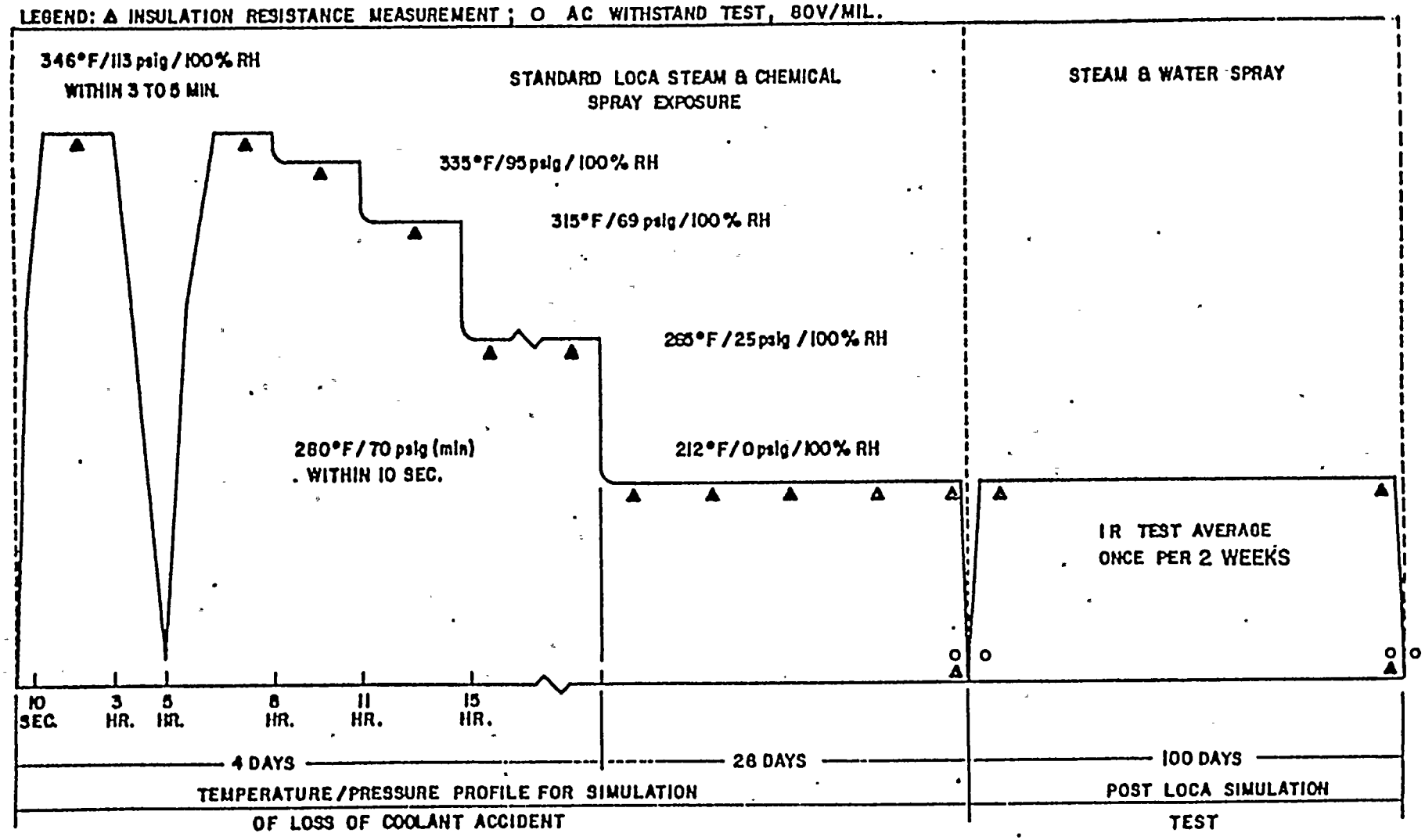
Prepared by: JDM 1/8/82

Reviewed by: AN 1/8/81

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. Okonite Engineering Report No. 266, dated 7/17/75	Qualified 1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1081

FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS



OKONNITE CABLE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-A/1 MANUFACTURER Okonite MODEL NUMBER 115-21-1029 COMPONENT Electrical Cable FUNCTION/SERVICE 6.9kV Power Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82

Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Okonite Engineering Report No. 266, dated 7/17/75

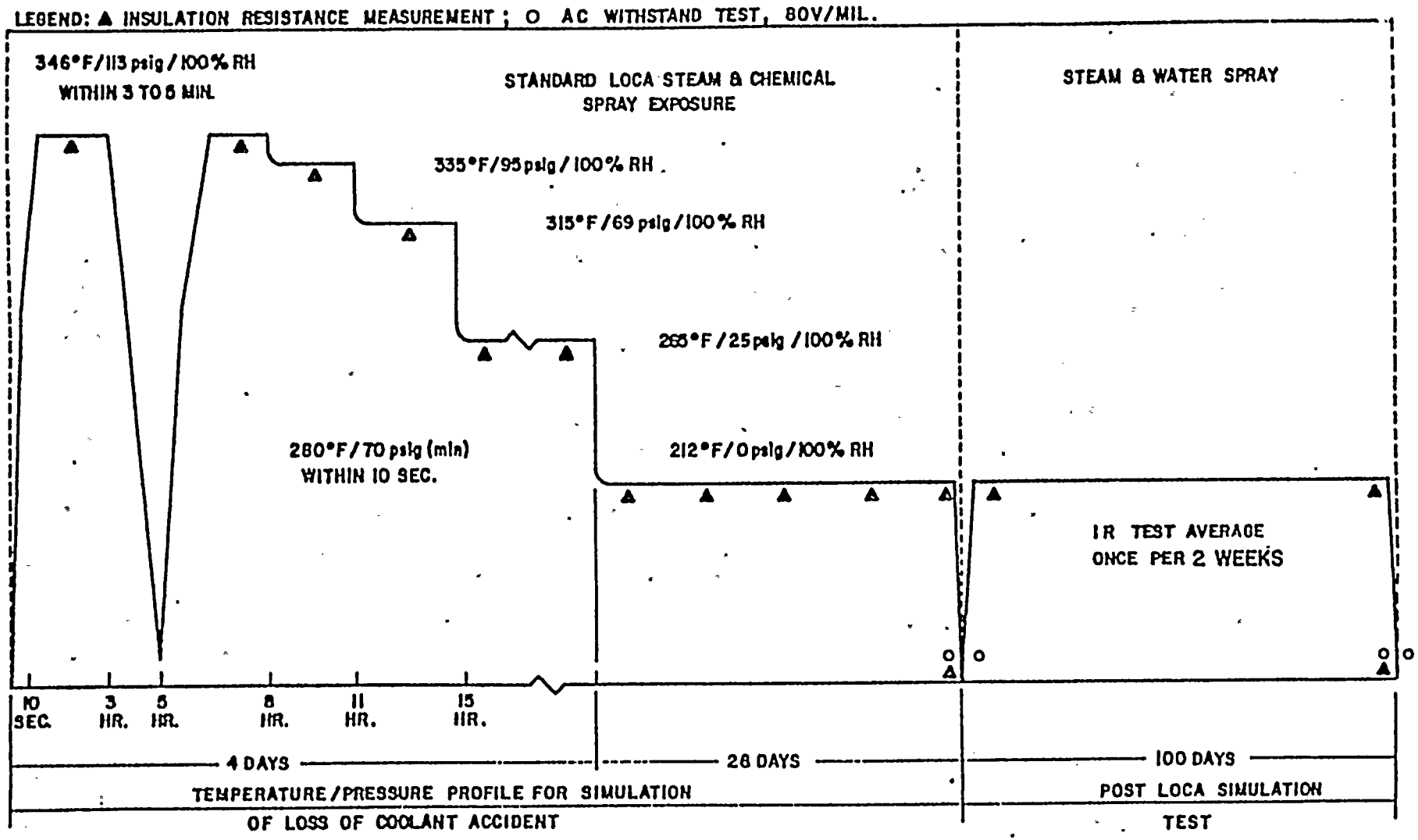
NOTES

Qualified

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1081

FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS



OKONNITE CABLE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-B/4 MANUFACTURER Okonite MODEL NUMBER 114-21-1013 COMPONENT Electrical Cable FUNCTION/SERVICE 4.16kV Power Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82

Reviewed by: AN 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. FSAR Table 3.11-4 4. Okonite Engineering Report No. 266, dated 7/17/75	Qualified 1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

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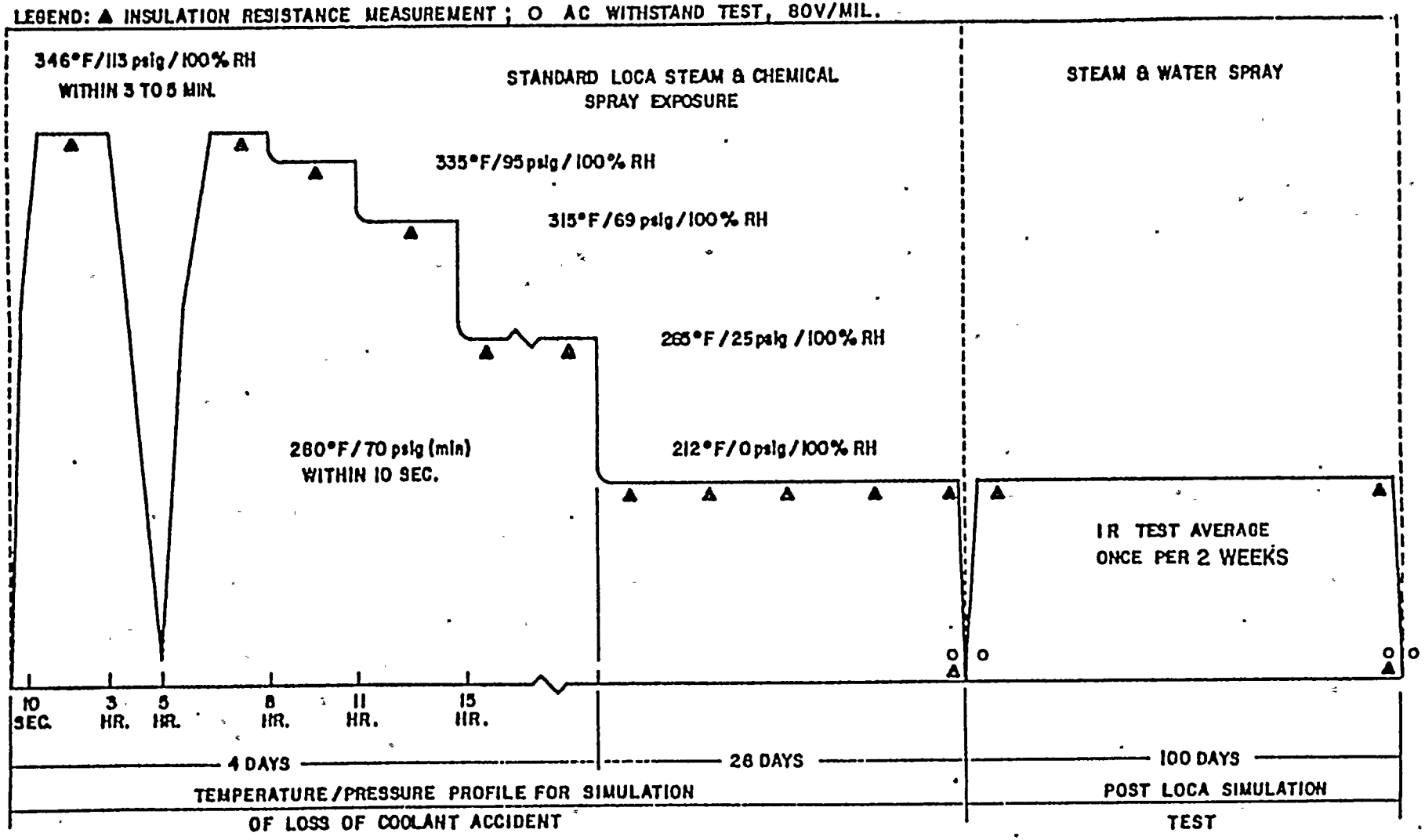
FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS



OKONNITE CABLE

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Electrical TAG NUMBER E-CBL-C/9 MANUFACTURER Okonite MODEL NUMBER 115-21-3182 COMPONENT Electrical Cable FUNCTION/SERVICE 14.4kV Power Cable LOCATION: BLDG All ELEVATION COLUMN	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	135 Max Normal 150 Max Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 Normal 16.7 Abnormal See Profile 1 Accident	See Enclosed Profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 Normal 90 Abnormal 100 Accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water Spray	Note 1	2		Engineering Analysis	None
	RADIATION (RAD)	4.4×10^7	2.0×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4	Sequential Test and Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/8/82 Reviewed by: AJ 1/8/81

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. FSAR Table 3.11-4
4. Okonite Engineering Report No. 266, dated 7/17/75

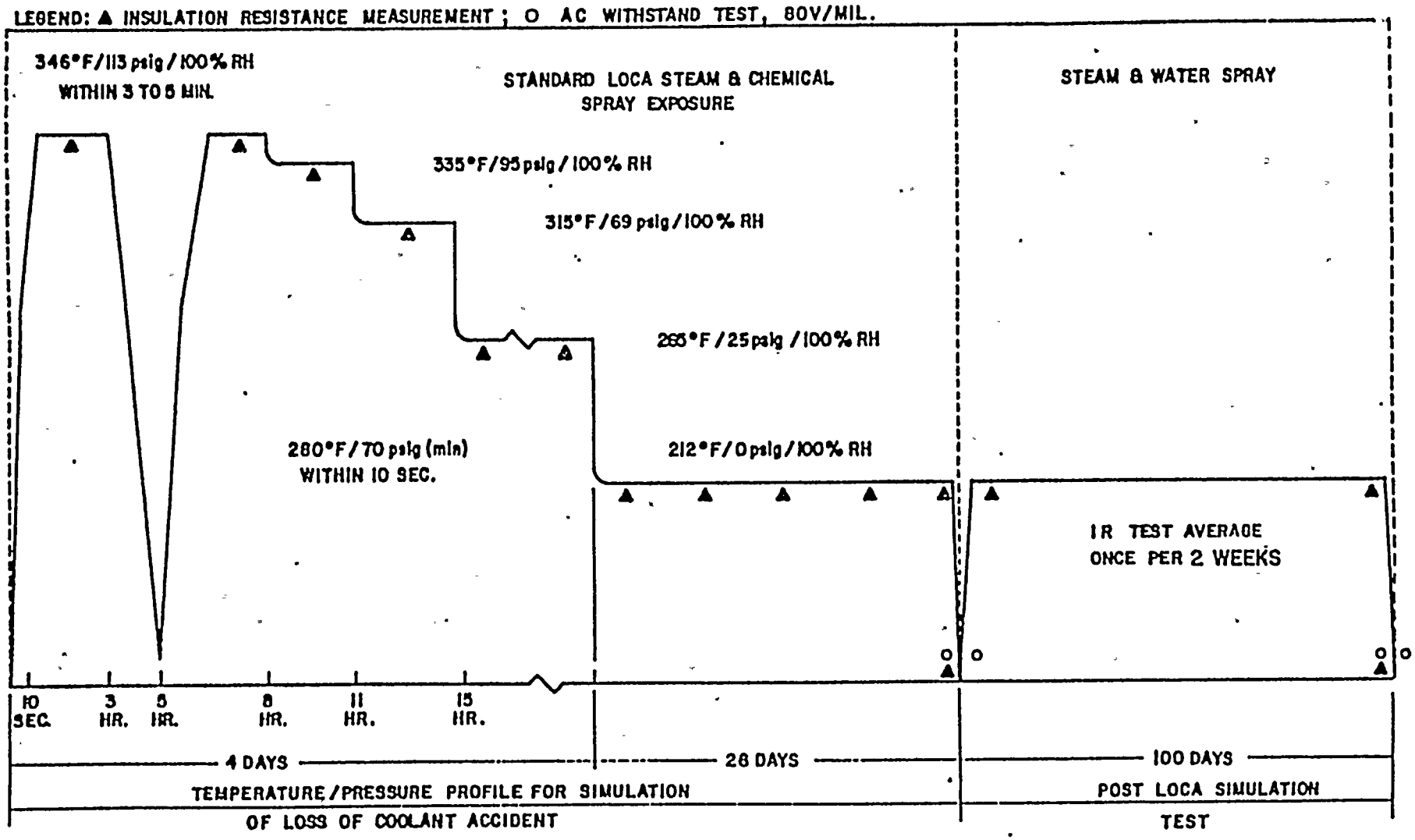
NOTES

Qualified

1. Cables are protected by electrical conduits. The demineralized water spray impingement will have no effect on the cables.

WP-1081

FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS



OKONNITE CABLE

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Equipment Drain Radioactive TAG NUMBER EDR-LMS-V19, V20	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A.		2			
	RADIATION (RAD)	1.4×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 468 COLUMN M.8/4.5	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Bohn

Reviewed by: Raymond Shin

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-441C	1. These components are on order. The qualification documentation will be reveiwed when it is received.

WP-1001

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Equipment Drains Radioactive TAG NUMBER EDR-SPV-19 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Containment Isolation Valve V-19 LOCATION: BLDG R ELEVATION 426 COLUMN N1/3.6	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.8	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.4×10^3	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible]

Reviewed by: W.E. Farson 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-422 E 3. Calculations in QID 315004 4. E/I-02-81-04-0 (IE Bulletin 73-14) 5. REIC Report No. 21 (Battelle) 6. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity. 2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1061

WPPSS

WASHINGTON P[illegible]OWER SUPPLY SYSTEM

EQUIPMENT Q[illegible]IFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Equipment Drains Radioactive TAG NUMBER EDR-SPV-20	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 831654	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE Containment Isolation Valve V-20	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.0×10^5	4.4×10^6	2	5, 3	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 471 COLUMN N/3.9	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible]

Reviewed by: W.E. Farone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-471B
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1081

WPPSS

WASHINGTON POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-LMS-3, 4 MANUFACTURER Namco MODEL NUMBER SAI-133 COMPONENT Limit Switch FUNCTION/SERVICE Limit Switch for FDR valves 3 and 4 LOCATION: BLDG R ELEVATION 467 COLUMN M.0/4.1	OPERATING TIME	6 months	note 1	1	4		
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.4×10^6		3			
	AGING	40 years		1			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mel Bah

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-441C 4. WPPSS letter GE-02-81-021	1. These limit switches are being replaced by Namco Limit Switch EA 740 which is qualified to IEEE-323-74 and 344-75 (Ref. 4).

EQ-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-RMS-601, 602 MANUFACTURER Miller Fluid Power Company MODEL NUMBER COMPONENT Remote Manual Switch FUNCTION/SERVICE RMS for FDR-V-601, 602 LOCATION: BLDG R ELEVATION 428 COLUMN H.7/9.4	OPERATING TIME	6 months	Note 1	2			None
	TEMPERATURE (F)	90 normal 104 abnormal	N/R	1			None
	PRESSURE (PSIA)	14.7	N/R	1			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	1			None
	CHEMICAL SPRAY	N/A	N/R	1			None
	RADIATION (RAD)	1.1×10^5	N/R	3			None
	AGING	40 years	40 years	1	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-422J 4. EDI-4.8, Paragraph 5.1, I	1. This component is only required for operation under normal environmental conditions and is, therefore, considered a mild environment component. Specific qualification of components in mild environments is not required at this time.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-RMS-603, 604 MANUFACTURER MODEL NUMBER COMPONENT Remote Manual Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 441 COLUMN	OPERATING TIME	6 months	Note 1	2			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)						
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Burke

Reviewed by: Alan Seiberg

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List dated 12/16/81	1. The qualification status of this component has not yet been determined. Requalification will be conducted if required.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-SPV-3	OPERATING TIME	4320 Hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER WJHT 8344A72 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE Containment Isolation FDR Valve 1X Pilot Valve	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.4×10^3	4.4×10^6	2	3, 5	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
LOCATION: BLDG R ELEVATION 426 COLUMN N1/3.6	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared By: W. S. Johnson

Reviewed By: W.E. Farmer 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study #0740-004-422E
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/15/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-SPV-4	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch MODEL NUMBER WJHT 831654	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Valve EDR-V-4	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5×10^5	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	Note 2
LOCATION: BLDG R ELEVATION 471 COLUMN N/3.9	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared By: [illegible]

Reviewed By: W.E. Farrar 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-471B 3. Calculations in QID-315004 4. E/I-02-81-04-0 (IE Bulletin 78-14) 5. REIC Report No. 21 (Battelle) 6. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity. 2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1981

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-SPV-601 -602 -604 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Reactor Area Building Drains to Sump, Pilot Valve LOCATION: BLDG R ELEVATION 476 COLUMN H4/6.8	OPERATING TIME	4320 Hours	Equivalent to greater than 10,000 hours at 150°F.	6	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 accident	310	1	3,4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.7×10^5	4.4×10^6	2	3, 4	Engineering Analysis	None
	AGING	40 years	7 years	1	5	Operating Experience Maintenance	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared By: [illegible]

Reviewed By: W. E. Faraone 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-471J 3. Calculations in QID 315004 4. REIC Report No. 21 (Battelle) 5. E/I-02-81-04-0 (IE Bulletin 78-14) 6. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity. 2. The solenoid valves will be rebuilt on a schedule based on the 7 year qualified life.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-SPV-603 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE V-603, Pilot Valve LOCATION: BLDG R ELEVATION 427 COLUMN N1/3.4	OPERATING TIME	4320 hours	Equivalent to >10,000 at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1.	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.39×10^3	4.4×10^6	2	3, 5	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operation Experience Maintenance	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared By: A. L. Adamson

Reviewed By: W E Farrar 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-422E
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-DPIC-1	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
MANUFACTURER Fisher Controls MODEL NUMBER	PRESSURE (PSIA)	14.7		2			None
COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
FUNCTION/SERVICE Bypass Flow Control	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.4×10^7		3			None
	AGING	40 years		2			None
LOCATION: BLDG R ELEVATION 476 COLUMN H4/6.8	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature] Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471J	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-FIC-21	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
MANUFACTURER	PRESSURE (PSIA)	14.7		2			None
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)			3			None
	AGING	40 years		2			None
LOCATION: BLDG R ELEVATION COLUMN	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-LIS-1A, 2A, 3A1, 3A2, 3B1 MANUFACTURER Barton MODEL NUMBER 289A COMPONENT Level Indication Switch FUNCTION/SERVICE FPC-TK Level Control LOCATION: BLDG R ELEVATION 572 COLUMN K.0/6.8	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 104 max accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.9×10^8	3×10^6	3	4	Engineering Analysis	Note 1
	AGING	40 years	Note 2	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 289 Switch, Report #027A-01, dated 10/9/80	1. Radiation levels in the SGT area are currently being reevaluated. 2. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-LIS-1B, 2B, 3B2	OPERATING TIME	6 months	6 months	1	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 289A COMPONENT Level Indication Switch	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE FPC-TK Level Control	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	6.6×10^6	3×10^6	3	4	Engineering Analysis	Note 1
	AGING	40 years	Note 2	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION, 572 COLUMN M.0/6.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Par. 3.11
3. EDS Report 0740-004-572F
4. EDS Calculation File 0740-006-002
5. Qualification Test Report for Barton 289 Switch, Report #027A-01, dated 10/9/80

NOTES

1. The components will be requalified to the required radiation level. Requalification methods are currently under investigation.
2. A preventive maintenance/surveillance program is currently being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-M-1A FPC-M-1B MANUFACTURER Westinghouse MODEL NUMBER W120 COMPONENT Motor, 50 HP FUNCTION/SERVICE Motors for FPC-P1A, -P1B LOCATION: BLDG R ELEVATION 550 COLUMN L7/9	OPERATING TIME	4320 hours		1	1		Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7	N/R	2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.5×10^5		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: J. Sullivan

Reviewed by: R. Abbott

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-548L	1. Items qualified to NUREG 0588 Category I are being procured.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-MO-153 FPC-MO-154 FPC-MO-156	OPERATING TIME	4320 hours	Equivalent to 35,000 hours at 150°F	1	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 maximum accident	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER SMB-000	RELATIVE HUMITY (%)	40 normal 90 maximum abnormal 100 maximum accident	Steam 24 hours 100% 15 days	1	3	Simultaneous Test	None
COMPONENT Motor Operator	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
FUNCTION/SERVICE Operate FPC Valves	RADIATION (RAD)	9.94×10^5	2×10^7	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3,5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 441 COLUMN K/7.9, J 9/8, K2/8.2	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-441G 3. Limitorque report B0003 with addendum A 4. Calculation in QID 221011(2) 5. Calculation in QID 2210(1)	1. Qualified

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TEMPERATURE PROFILE

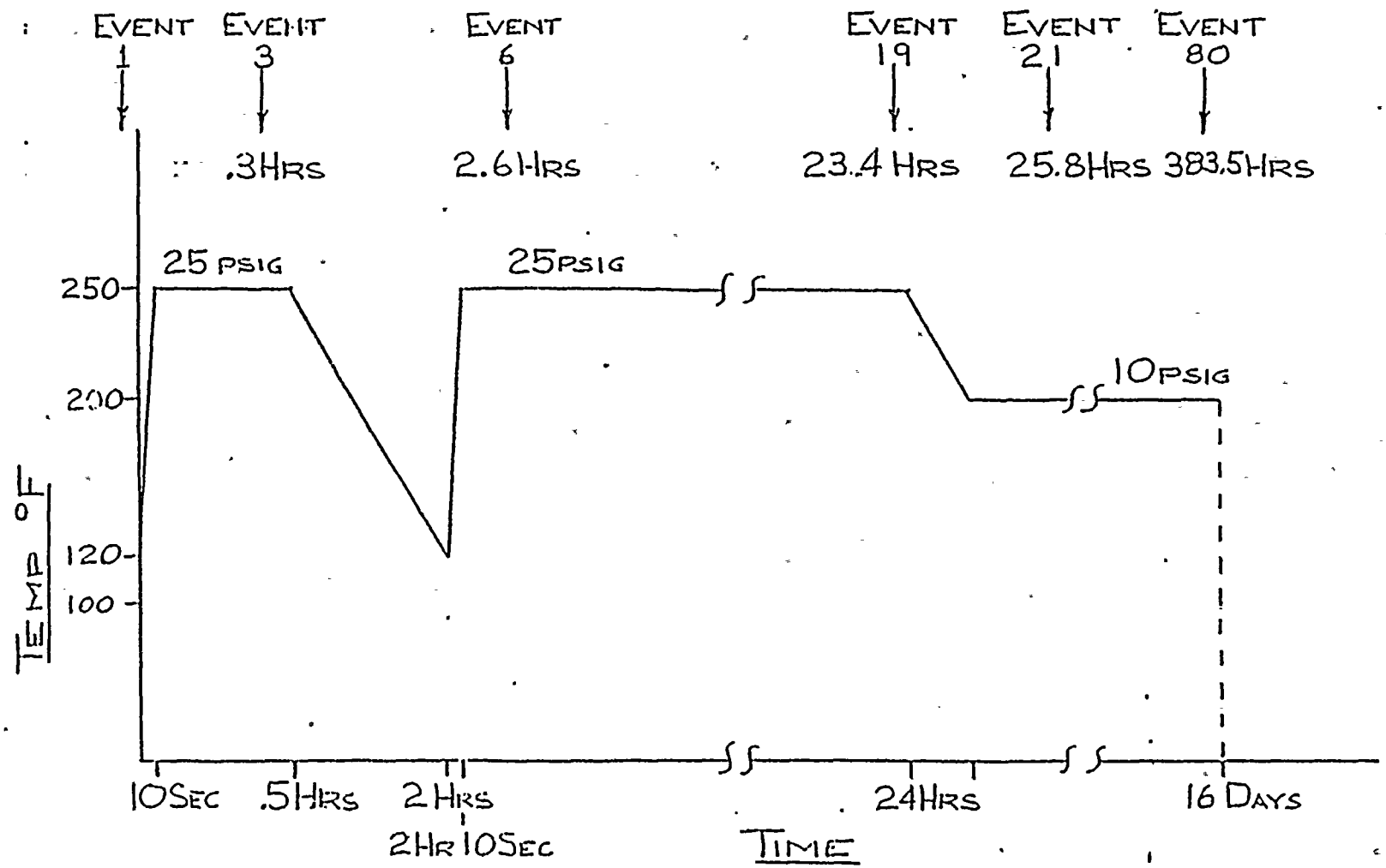

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-MO-172, 173, 175 -181A, 181B, 184	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER Limitorque MODEL NUMBER	PRESSURE (PSIA)	14.7	N/R	2			
COMPONENT Valve Motor Operator	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE Operate FPC Valves	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.5×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 548 COLUMN L7/9	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: W. D. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-548L	1. Items qualified to NUREG 0588, Category I, are being procured. Qualified.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-PS-6A FPC-PS-6B FPC-PS-9A FPC-PS-9B MANUFACTURER Barksdale MODEL NUMBER D2T-M150SS B2T-M12SS COMPONENT Pressure FUNCTION/SERVICE Measures Suction and Discharge Pressure LOCATION: BLDG R ELEVATION 522 COLUMN J.0/6.9 N/8.2	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	8.3×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature] Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522K, H	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-RMS-P1A, P1B MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN J.0/6.9, N.0/8.1	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			Note 1
	PRESSURE (PSIA)	14.7		2			Note 1
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			Note 1
	CHEMICAL SPRAY	N/A		2			Note 1
	RADIATION (RAD)	2.8×10^7		3			Note 1
	AGING	40 years	Note 2	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Alan Seiber

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522J, 522K	1. These components are Use Code 2 and are, therefore, not required to perform an active safety function following an accident. However, failure modes will be evaluated to determine whether failure would be detrimental to plant safety. This evaluation is currently being performed. 2. A preventive maintenance/surveillance program is currently being developed to address aging of Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-SPV-1 MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 471 COLUMN H.4/6.8	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.4×10^7		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471J	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Fuel Pool Cooling TAG NUMBER FPC-SPV-113 MANUFACTURER ASCO Valves MODEL NUMBER WTHT831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 525 COLUMN N.0/8.0	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	8.3×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible]

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522H	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundry under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E22

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PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-DPIS-9	OPERATING TIME	24 hours	24 hours	1	4, 5	Simulation Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 max accident	150	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 289 COMPONENT Differential Pressure Indicating Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.0×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 471 COLUMN L2/3.9	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-422B 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 289 Switch, Report #027A-01, dated 10/9/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-FIS-6	OPERATING TIME	24 hours	24 hours	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 max accident	150	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 289 COMPONENT Flow Indicating Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE HPCS-P-1 Discharge Flow Indication	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 471 COLUMN L.2/3.9	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-471B 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 289 Switch, Report #027A-01, dated 10/9/80	Qualified. 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-FT-5 MANUFACTURER GE MODEL NUMBER 50-555-11CMA4WCF COMPONENT Flow Transmitter FUNCTION/SERVICE HPCS-P-1 Discharge Flow Transmitter LOCATION: BLDG R ELEVATION 471 COLUMN L.2/3.9	OPERATING TIME	24 hours	Note 1	2	4		
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.0×10^5		3			
	AGING	40 years		1			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 CIE Equipment List, dated 12/16/81 3. EDS Report 0740-004-471B 4. WPPSS Letter GE-02-JLS-81-022	1. This component will be replaced by a Rosemount 1153 qualified to IEEE 323-1974 and 344-1975.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-69

MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-LMS-5 MANUFACTURER Namco MODEL NUMBER COMPONENT Limit Switch FUNCTION/SERVICE LMS for V-5 Containment Isolation LOCATION: BLDG C ELEVATION 543 COLUMN 247 degrees, AZ	OPERATING TIME	24 hours	Note 1	1	3		
	TEMPERATURE (F)	135 normal 150 abnormal accidents - profile 1		2			
	PRESSURE (PSIA)	14.7 normal 16.7 abnormal accident - profile 1		2			
	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	4.4×10^7		2			
	AGING	40 years					
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/87 2. FSAR paragraph 3.11 3. WPPSS letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit switch model EA180 which is qualified to IEEE 323-74 and 344-75. (Ref. 3).

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-LS-2A,B	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	300	2	5	Simultaneous Test	None
MANUFACTURER Magnetrol	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
MODEL NUMBER 3.5-751-1X-MPG-M148Y COMPONENT Level Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE Pool Level HPCS Valve Control	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6		3			Note 1
	AGING	40		2			Note 1
LOCATION: BLDG R ELEVATION 465, 441 COLUMN J.5/4.1, M/8.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AJ 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-441J 4. EDS Calculation file 0740-006-004 5. BWR Equipment Qualification Summary Report #QSR-030-H-1	1. Materials of construction are being obtained from the vendor to complete the evaluations.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-M-1 MANUFACTURER General Electric MODEL NUMBER 5K6357XC10A COMPONENT Motor FUNCTION/SERVICE Drive Pumps LOCATION: BLDG R ELEVATION 422 COLUMN M/4	OPERATING TIME	24 hours	Equivalent of 4320 hours at 150°F	5	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	1	3,4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100%	1	3,4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.6×10^6		2			Note 1
	AGING	40 years	180 starts = 10 year + 10 33 years (worst fit)	1	3,4	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Ann Seiler

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004- 3. GE #491HA911, 3/25/80 (BWR 111-A-04) 4. GE #NEDM-10627, 8/72 (BWR 111-A-05) 5. WNP-2 Class 1E Equipment List	1. Radiation test data on representative motorettes are being obtained from the manufacturer.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-67

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-M-3	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
MANUFACTURER Westinghouse	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
MODEL NUMBER 75D40786 COMPONENT Motor	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
FUNCTION/SERVICE 15hp motor for HPCS-P-3+	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.6×10^6	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 430 COLUMN L 5/3.5	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report #0740-004-422D
4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures
5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Electric Motor Qualification at WPPSS Plant, w/Enclosures
6. EPRI Report #RP-1707-3

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E22-F001
PPD: 21A1883

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-1 MANUFACTURER Limitorque MODEL NUMBER SMB-00 COMPONENT Valve Motor Operator (Reliance Class B) FUNCTION/SERVICE Operate HPCS Valve 1 LOCATION: BLDG R ELEVATION 435 COLUMN M/4	OPERATING TIME	24 hours	16 days	4	2	Simultaneous Test	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	Steam for 24 hours 100% for 15 days	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.6×10^6	2×10^7	3	2	Sequential Test	None
	AGING	40 years	40 years	1	2,5	Sequential Test	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ch

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Test Report B0003, with Addendum A, prepared 5/8/76 3. EDS Study 0740-00-422D 4. WNP-2 1E Equipment List 5. Calculations in QID 221011(1)	Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E22-F010
PPD: 21A1881

EQUIPMENT DESCRIPTION	ENVIRONMENT	
	PARAMETER	FSAR
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-10	OPERATING TIME	24 hours
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7
MODEL NUMBER SMB-3 COMPONENT Valve Motor Operator*	RELATIVE HUMIDITY (%)	40 normal 90 max abnormal 100 max accident
FUNCTION/SERVICE Operate HPCS Valve 10	CHEMICAL SPRAY	N/A
	RADIATION (RAD)	1.6×10^6
	AGING	40 years
LOCATION: BLDG R ELEVATION 452 COLUMN M/3.8	ACCURACY	N/A
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL? YES: NO		

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*(Reliance Class B)

MPL: E22-F011
PPD: 21A1881

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT	
	PARAMETER	FSAR
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-11	OPERATING TIME	24 hours
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7
MODEL NUMBER SMB-3 COMPONENT Valve Motor Operator*	RELATIVE HUMIDITY (%)	40 normal 90 max abnormal 100 max accident
FUNCTION/SERVICE Operate HPCS Valve 11	CHEMICAL SPRAY	N/A
	RADIATION (RAD)	1.6×10^6
	AGING	40 years
LOCATION: BLDG R ELEVATION 452 COLUMN M/3.8	ACCURACY	N/A
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL? YES NO		

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E22-F012
PPD: 21A1880

EQUIPMENT DESCRIPTION	ENVIRONMENT	
	PARAMETER	FSAR
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-12	OPERATING TIME	24 hours
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident
MANUFACTURER Limitorque MODEL NUMBER SMB-2	PRESSURE (PSIA)	14.7
	RELATIVE HUMIDITY (%)	40 normal 90 max abnormal 100 max accident
COMPONENT Valve Motor Operator* FUNCTION/SERVICE Operate HPCS Valve 12	CHEMICAL SPRAY	N/A
	RADIATION (RAD)	1.4×10^6
	AGING	40 years
LOCATION: BLDG R ELEVATION 430 COLUMN M/3.4	ACCURACY	N/A
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL? YES NO	Reference: 3. EDS Report 0740-004-441C	

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*(Reliance Class B)

MPL: E22-F015
PPD: 21A1883

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EQUIPMENT DESCRIPTION	ENVIRONMENT	
	PARAMETER	FSAR
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-15	OPERATING TIME	24 hours
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident
MANUFACTURER Limitorque MODEL NUMBER SMB-2	PRESSURE (PSIA)	14.7
	RELATIVE HUMIDITY (%)	40 normal 90 max abnormal 100 max accident
COMPONENT Valve Motor Operator* FUNCTION/SERVICE Operate HPCS Valve 15	CHEMICAL SPRAY	N/A
	RADIATION (RAD)	1.4×10^6
	AGING	40 years
LOCATION: BLDG R ELEVATION 455 COLUMN L4/3.6	ACCURACY	N/A
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL? YES NO	Reference: 3. EDS Report 0740-004-441C	

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E22-F023
PPD: 21A1882

EQUIPMENT DESCRIPTION	ENVIRONMENT	
	PARAMETER	FSAR
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-23	OPERATING TIME	24 hours
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident
MANUFACTURER Limitorque MODEL NUMBER SMB-4	PRESSURE (PSIA)	14.7
	RELATIVE HUMIDITY (%)	40 normal 90 max abnormal 100 max accident
COMPONENT Valve Motor Operator*	CHEMICAL SPRAY	N/A
FUNCTION/SERVICE Operate HPCS Valve 23	RADIATION (RAD)	1.4×10^6
	AGING	40 years
LOCATION: BLDG R ELEVATION 451 COLUMN L6/3.9	ACCURACY	N/A
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL? YES NO	Reference: 3. EDS Report 0740-004-441C	

WP-1662

*(Reliance Class B)

MPL: E22-F004
PPD: 21A1884

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EQUIPMENT DESCRIPTION	ENVIRONMENT	
	PARAMETER	FSAR
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-MO-4	OPERATING TIME	24 hours
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident
MANUFACTURER Limitorque MODEL NUMBER SMB-4	PRESSURE (PSIA)	14.7
	RELATIVE HUMIDITY (%)	40 normal 90 max abnormal 100 max accident
COMPONENT Valve Motor Operator*	CHEMICAL SPRAY	N/A
FUNCTION/SERVICE Operate HPCS Valve 4	RADIATION (RAD)	8.3×10^5
	AGING	40 years
LOCATION: BLDG R ELEVATION 547 COLUMN M3/7.3	ACCURACY	N/A
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL? YES NO	Reference: 3. EDS Study 0740-004-522H	

TEMPERATURE PROFILE

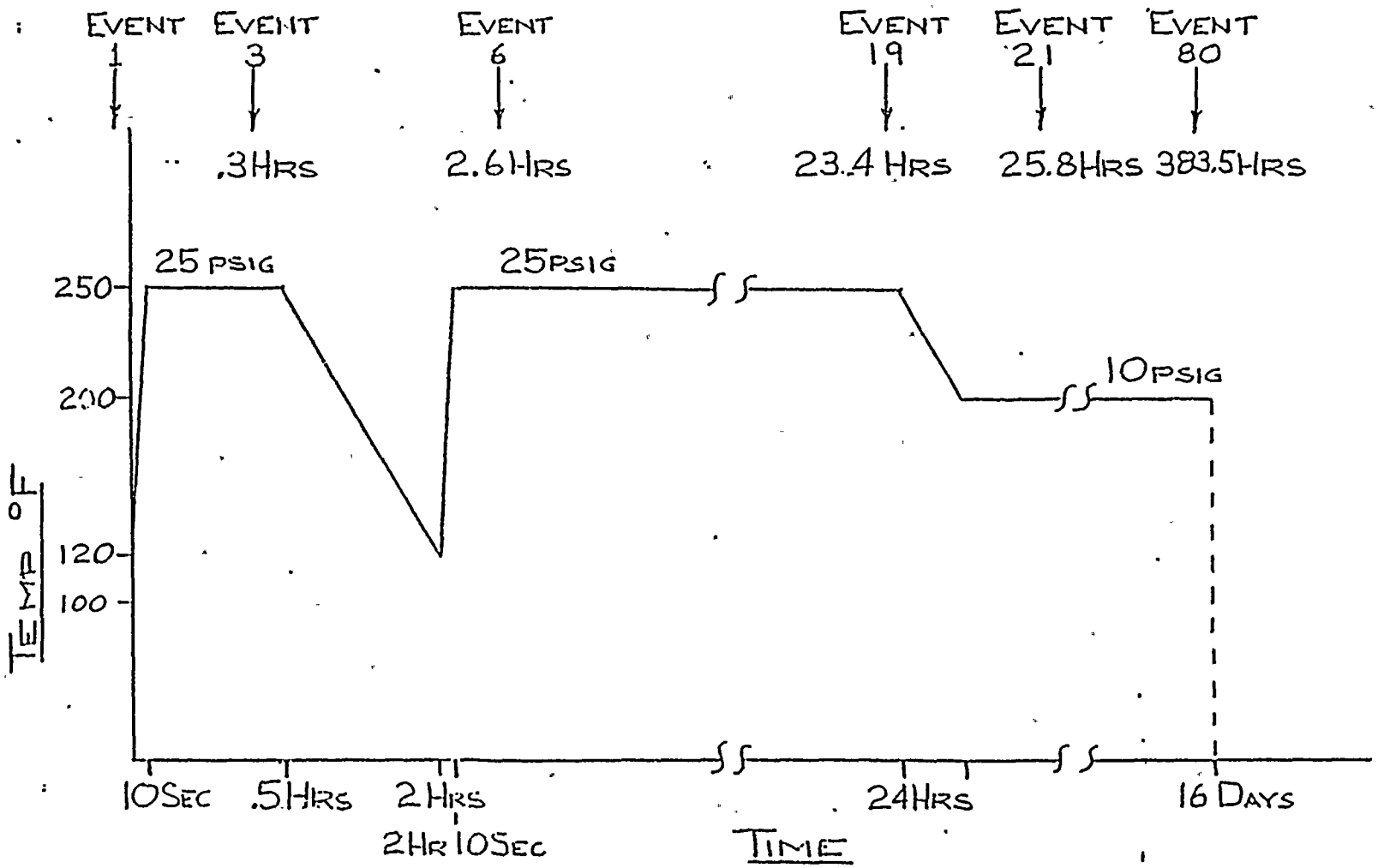

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E22

MPL:
PPD:

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-PIS-13 MANUFACTURER Barton MODEL NUMBER 288A COMPONENT Pressure Indicating Switch FUNCTION/SERVICE Low Pressure Alarm LOCATION: BLDG R ELEVATION 471 COLUMN L.2/3.9	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	5	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-471B 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-PS-12 MANUFACTURER Static-O-Ring MODEL NUMBER 5N-AA3-X105TT COMPONENT Pressure Switch FUNCTION/SERVICE HPCS Pump Discharge Pressure Switch LOCATION: BLDG R ELEVATION 471 COLUMN L.2/3.9	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4.97×10^5	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-471B
4. EDS Calculation file 0740-006-006
5. Viking Lab.Inc. Test letter Report #30203-2 dated November 20, 1973. Steam testing of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-PS-3	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Static-O-Ring	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
MODEL NUMBER 5N-AA-X105TT COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE HPCS Pump 1 Suction Pressure Switch	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.0×10^5	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 471 COLUMN L2/4	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/7/82 Reviewed by: JDM 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-471B
4. EDS Calculation File 0740-006-006
5. Viking Lab. Inc. Test Report #30203-2 dated 11/20/73. Steam testing of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-16-1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM High Pressure Core Spray TAG NUMBER HPCS-SP-20 MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION COLUMN	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)						None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES : NO

Prepared by: Raymond Chin

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C51

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Intermediate Range Monitor TAG NUMBER IRM-DET-2H MANUFACTURER General Electric MODEL NUMBER 112C-3144G8 COMPONENT Radiation Detector FUNCTION/SERVICE Intermediate range radiation detector LOCATION: BLDG C ELEVATION COLUMN	OPERATING TIME		Note 1				
	TEMPERATURE (F)	135°F normal 150°F abnormal Accident - profile 1		1			
	PRESSURE (PSIA)	16.7 normal Accident - profile 1		1			
	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY						
	RADIATION (RAD)	4.4×10^7		1			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WPPSS

WASHINGTON POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E21

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Leak Detection System TAG NUMBER LD-TE-18A, 18B, 18C, 18D	OPERATING TIME	6 months	3 months	2	4, 5 6, 7	Simultaneous Test Engineering Analysis	Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	250	1	4, 5 6	Simultaneous Test	Note 1
MANUFACTURER PYCO	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER 282-N1A72	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	1	4, 5	Simultaneous Test	Note 1
COMPONENT Temperature Element	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
FUNCTION/SERVICE Leak Detection in RHR Equipment Area	RADIATION (RAD)	2.5×10^6	2×10^8	3	5, 6	Sequential Test	Note 1
	AGING	40 years		1			Note 1
LOCATION: BLDG R ELEVATION 467 COLUMN M.7/9.0, K.0/9.0	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Alan Seiben

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. WNP-2 Class 1E Equipment List, date 12/16/81
3. EDS Report 0740-004-
4. G.E. Environmental Qualification Summary for NECI Temperature Element, NECI Model No. N145C3224, Document No. 248A9456.
5. PYCO Test Report, "Environmental Aging of PYCO Thermocouple #12-9039-08-6", Document No. 122375, Rev. "0", dated 12/23/75.

NOTES

1. Functional accuracy of the components was not tested during the simulated environmental conditions. Further qualification documentation will be obtained to reevaluate qualification for functional accuracy, operating time and aging.

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
6. PYCO Qualification Test Report, "Air Temperature Thermocouple PYCO Model No. 02-9036", Document No. 122675, Rev. "0", dated 12/26/75. 7. QID No. 339004	

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Leak Detection System TAG NUMBER LD-TE-27A, 27B, 27C, 27D MANUFACTURER Nuclear Engineering and Components, Inc. MODEL NUMBER N145C3224P1 COMPONENT Temperature Element FUNCTION/SERVICE Leak Detection in RHR Equipment Area LOCATION: BLDG R ELEVATION 432 COLUMN L.5/9.4 K.0/9.4	OPERATING TIME	6 months	3 months	2	4, 5 6, 7	Simultaneous Test Engineering Analysis	Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	250	1	4, 5 6	Simultaneous Test	Note 1
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	1	4, 5	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	2.5×10^6	2×10^8	3	5, 6	Sequential Test	Note 1
	AGING	40 years		1			Note 1
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Seiler

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. WNP-2 Class 1E Equipment List, dated 12/17/81
3. EDS Report 0740-004-422I
4. G.E. Environmental Qualification Summary for NECI Temperature Element, NECI Model No. N145C3224, Document No. 248A9456.
5. PYCO Test Report, "Document No. 122375, Rev. "0", dated 12/23/75.

NOTES

1. Functional accuracy of the components was not tested during the simulated enviornmental conditions. Further qualification documentation will be obtained to reevaluate qualification for functional accuracy, operating time and aging.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
6. PYCO Qualification Test Report, "Air Temperature Thermocouple PYCO Model.No. 02-9036", Document No. 122675, Rev. "0", dated 12/26/75. 7. QID No. 339004	

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E21

MPL:
PPD:

PAGE NO:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-DPIS-6 MANUFACTURER Barton MODEL NUMBER 288 COMPONENT Differential Pressure Indicating Switch FUNCTION/SERVICE Inject valve differential pressure indication LOCATION: BLDG R ELEVATION 471 COLUMN K.0/K.2	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Ocar Sitkes

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment list, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-471A 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #*SR-027-01, 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E21

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-FIS-4 MANUFACTURER Barton MODEL NUMBER 289 COMPONENT Flow Indication Switch FUNCTION/SERVICE LPCS-P-1 Discharge Flow Indication LOCATION: BLDG R ELEVATION 471 COLUMN K.0/4.2	OPERATING TIME	24 hours	24 hours	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 max accident	150	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.0×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Beck

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-471A 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 289 Switch, Report #027A-01, dated 10/9/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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EQUIPMENT QUALIFICATION REPORT

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-FT-3 MANUFACTURER GE MODEL NUMBER 555 COMPONENT Flow Transmitter FUNCTION/SERVICE LPCS Discharge Flow Indication LOCATION: BLDG R ELEVATION 471 COLUMN K.0/4.2	OPERATING TIME	24 hours	Note 1	2	4		
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.0×10^5		3			
	AGING	40 years		1			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 CIE Equipment List, dated 12/16/81 3. EDS Report #0740-004-471A 4. WPPSS Letter GE-02-JLS-81-022	1. This component will be replaced by Rosemount 1153 qualified to IEEE 323-1974 and 344-1975.

WP-1881

WPPSS

WASHINGTON POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E21-C001
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-M-1. MANUFACTURER General Electric MODEL NUMBER 5K437X665A COMPONENT Motor FUNCTION/SERVICE Drive Pumps LOCATION: BLDG R ELEVATION 422 COLUMN K4/3.8	OPERATING TIME	24 hours	Equivalent of 4320 hours at 150°F	5	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	1	3,4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100%	1	3,4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.7×10^6		2			Note 1
	AGING	40 years	180 starts = 10 year + 10 33 years (worst fit)	1	3,4	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seiler

Reviewed by: M. F. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004- 3. GE #491HA911, 3/25/80 (BWR 111-A-04) 4. GE #NEDM-10672, 8/72 (BWR 111-A-05) 5. WNP-2 Class 1E Equipment List	1. Radiation test data on representative motorettes are being obtained from the manufacturer.

WP-1001

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-MO-1	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
MODEL NUMBER SMB-0-40-/T56 COMPONENT - Motor Operator Motor: Reliance Insulation: Class B	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
1.62 HP Motor Operator LPCS-V-1	RADIATION (RAD)	1.4×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5.	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 460 COLUMN K/4.1	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study #0740-004-441B 4. Limitorque Test Report B0003 5. QID 221011	Qualified

WP-1081

TEMPERATURE PROFILE

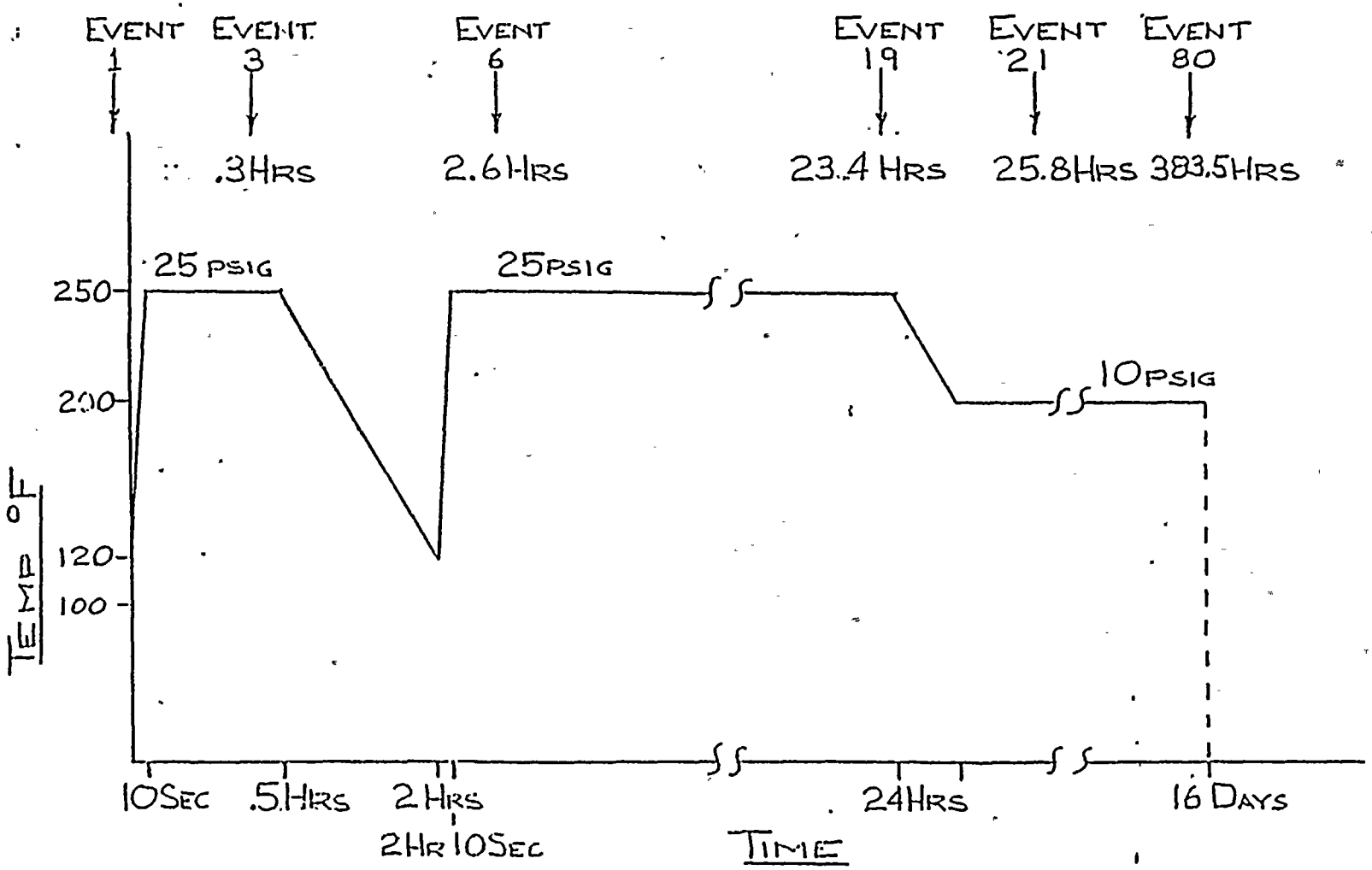

FIGURE 1

WPPSS

WASHINGTON PO[illegible]WER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E21-F011
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-MO-11 MANUFACTURER Limitorque MODEL NUMBER SMB-000 COMPONENT Valve Motor Operator (Reliance Class B) FUNCTION/SERVICE Operate LPCS Valve LOCATION: BLDG R ELEVATION 424 COLUMN K1/3.5	OPERATING TIME	24 hours	16 days	4	2	Simultaneous Test	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max normal 100 max accident	Steam for 24 hours 100% for 15 days	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.7×10^6	2×10^7	3	2	Sequential Test	None
	AGING	40 years	40 years	1	2,5	Sequential Test	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Test Report B0003, with Addendum A, prepared 5/8/76 3. EDS Study 0740-004-422C 4. WNP-2 Class 1E Equipment List, dated 12/16/81 5. Calculations in QID 221011(1)	Qualified.

WP-1081

TEMPERATURE PROFILE

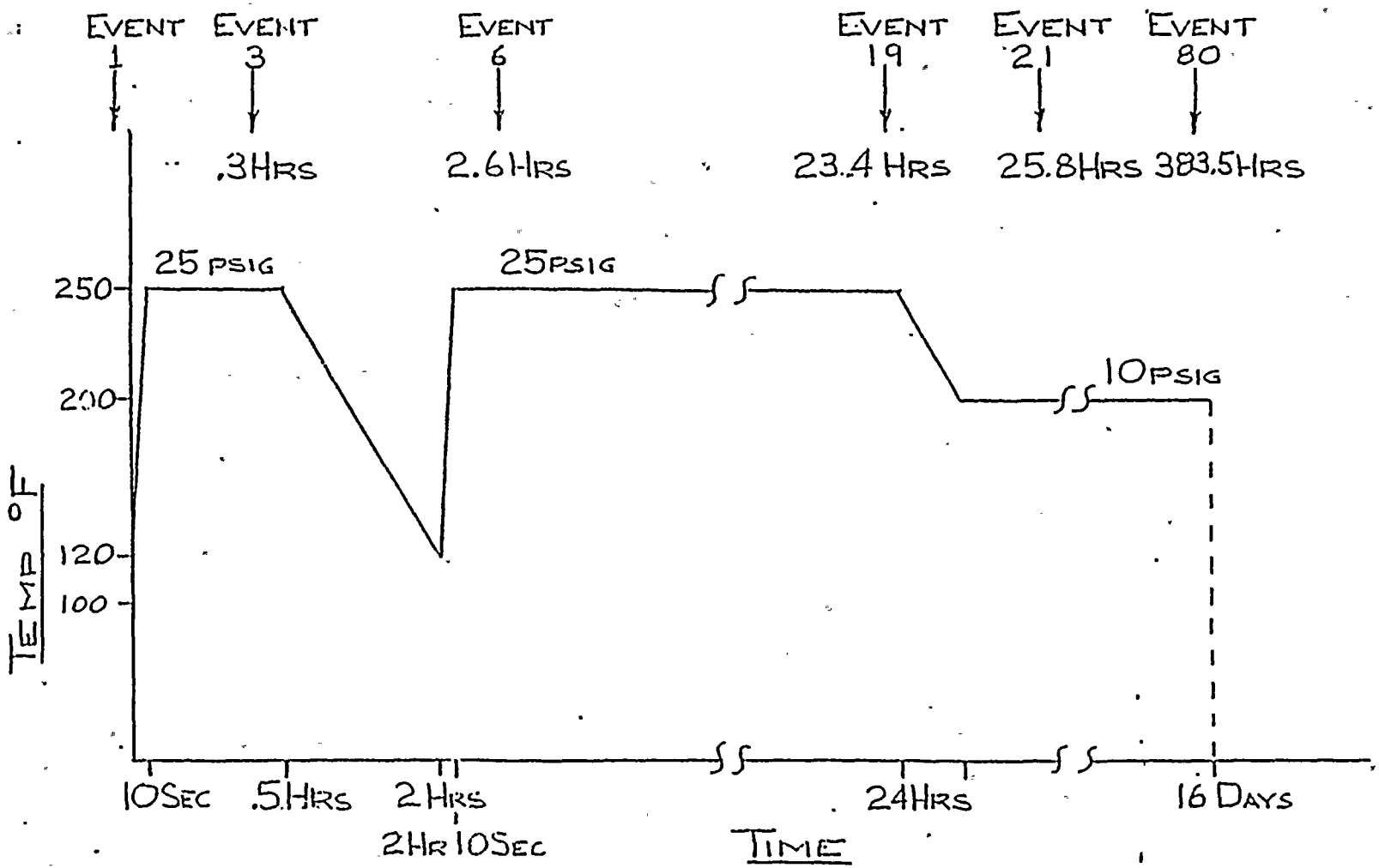

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41B

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-MO-12	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
MODEL NUMBER SMB-3-60/184R COMPONENT - Motor Operator Motor: Reliance Insulation: Class B	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE 3.89 HP Motor Operator LPCS-V-12	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	1.4×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	
LOCATION: BLDG R ELEVATION 460 COLUMN K/4.1	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-441C 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

WP-1081

TEMPERATURE PROFILE

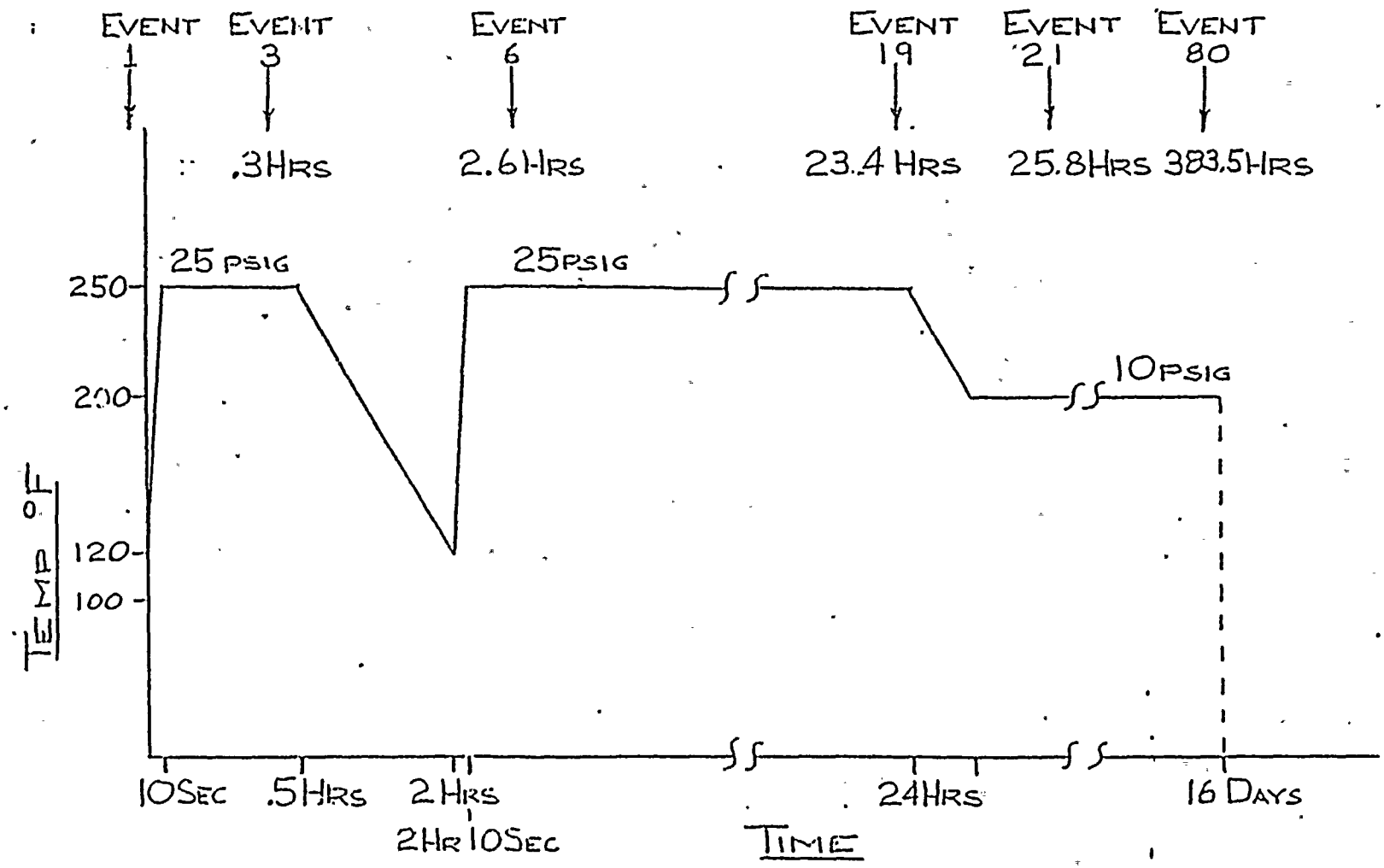

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-MO-5	OPERATING TIME	6 months	Equivalent to 6 months 15 150°F	4	3, 6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque MODEL NUMBER SMB-3-100/254UR3	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
COMPONENT Motor Operator - Reliance, RH insulation	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous	
FUNCTION/SERVICE Operates LPCS injection valve (isolation valve)	CHEMICAL SPRAY	N/A	N/R	N/A	N/A.	N/A	None
	RADIATION (RAD)	6.4×10^5	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3 6	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 530 COLUMN L8/4.3	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ohr

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List, 12/16/81 5. EDS Report 0740-004-522B 6. E/IC-02-80-04-0	Qualified.

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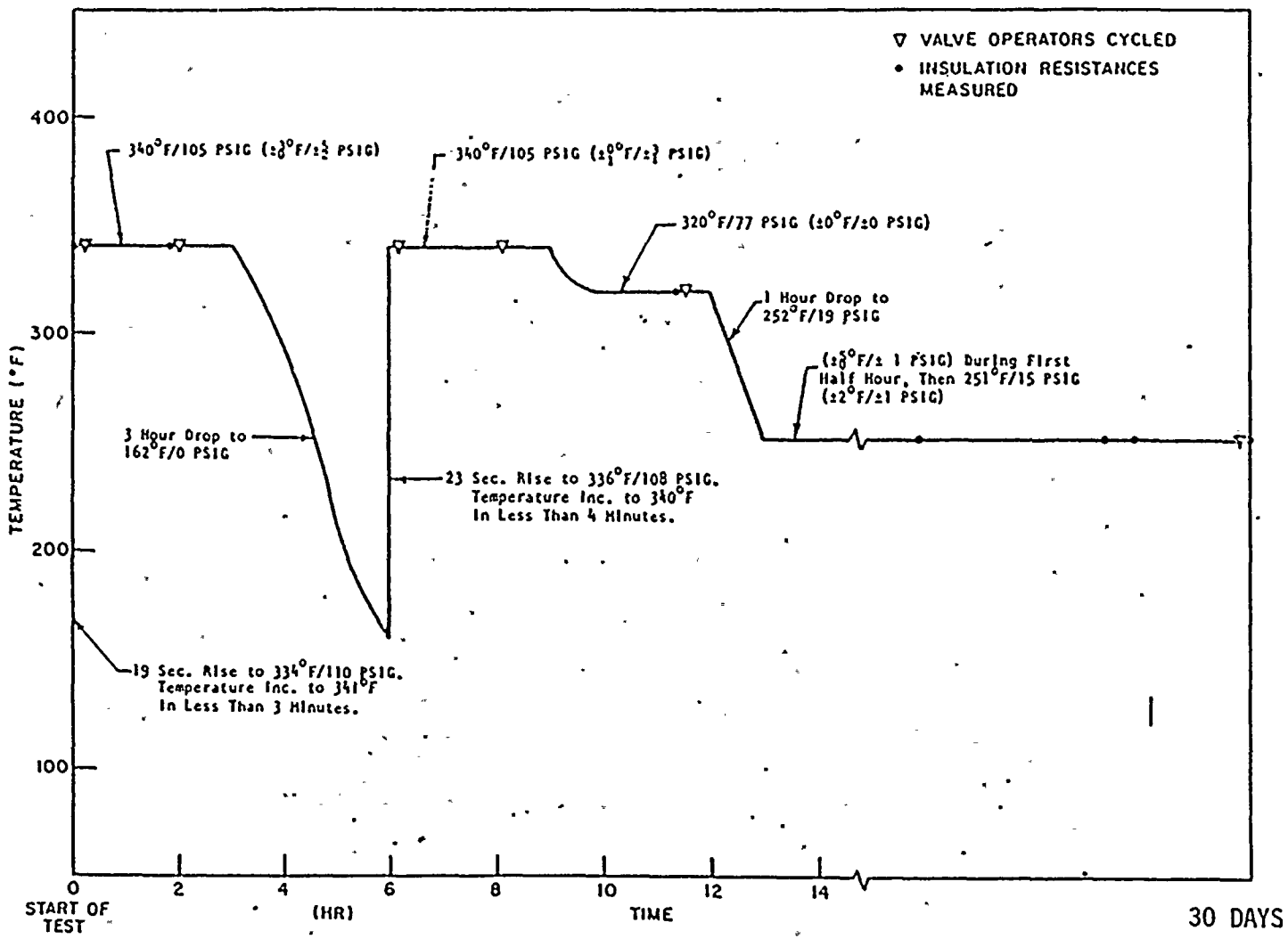

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Floor Drain Radioactive TAG NUMBER FDR-RMS-603, 604 MANUFACTURER MODEL NUMBER COMPONENT Remote Manual Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 441 COLUMN	OPERATING TIME	6 months	Note 1	2			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)						
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: _____ Reviewed by: _____

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List dated 12/16/81	1. The qualification status of this component has not yet been determined. Requalification will be conducted if required.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Low Pressure Core Spray TAG NUMBER: LPCS-PIS-1, LPCS-PS-5 MANUFACTURER: Robertshaw MODEL NUMBER: SP-222-C COMPONENT: Pressure Indicating Switch FUNCTION/SERVICE: LPCS Pump 1 Pressure Indicating Switch LOCATION: BLDG R ELEVATION: 471 COLUMN: K/4.2	OPERATING TIME	24 hours		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/7/82

Reviewed by: JDM 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-471A	1. Qualification documentation is being obtained from the vendor.

WP-1961

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E21

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Low Pressure Core Spray TAG NUMBER LPCS-PS-9	OPERATING TIME	24 hours	24 hours	1	4,5	Engineering Analysis and Simultaneous Test	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barksdale	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
MODEL NUMBER P1H-M600SS-V COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE LPCS Pump discharge to ADS	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5×10^5	2×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 471 COLUMN K/4.2	ACCURACY		±1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/7/82 Reviewed by: JDM 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-471A 4. EDS Calculation file 0740-006-001 5. Barksdale Environmental (Steam) Test Delaval Turbine Inc., Barksdale Controls Division Test Procedure 9993, dated August 13, 1975.	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1861

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WNP-2
NUREG 0588 ENVIRONMENTAL EQUIPMENT QUALIFICATION REPORT

Volume 3

January 1982

Washington Public Power Supply System
Richland, Washington 99352

82-057

APPENDIX C (Continued)

EQUIPMENT QUALIFICATION REPORTS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-98

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-DPIS-10D	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288 COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
Differential Pressure Switch FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4.6×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 501 COLUMN L9/3.7	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-501B 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E31

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-DPIS-8A, B, C, D 9A, B, C. D MANUFACTURER ITT Barton MODEL NUMBER 288, 288A COMPONENT Differential Pressure Indicating Switch FUNCTION/SERVICE PCIS Hi Steam Flow Line A LOCATION: BLDG R ELEVATION 501, 471 COLUMN H.6/7.3, L.9/3.6, M.6/8.1, M.5/4.5	OPERATING TIME	6 months	Equivalent to >6 months at 150°F	1	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident.	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.7×10^6	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ch

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment list, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471B, E, -571B, K 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report QSR-027-01, 10/2/80	Qualified. 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E31

MPL:
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REVISION:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-DPIS-11A, B, C, D MANUFACTURER Barton MODEL NUMBER 288A COMPONENT Differential Pressure Indicating Switch FUNCTION/SERVICE Isolation Valve Control LOCATION: BLDG R ELEVATION 506, 471 COLUMN H6/7.3 M6/8.1 L9/3.6 M5/4.5	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-471B 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-DPT-32 MANUFACTURER G.E. MODEL NUMBER C555011NAA4WCA COMPONENT Differential Pressure Transmitter FUNCTION/SERVICE Main Steam Differential Pressure LOCATION: BLDG R ELEVATION 472 COLUMN J.7/8.0	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	6.0×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471D	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WPPSS

WASHINGTON POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER See Next Page MANUFACTURER G. E. MODEL NUMBER 50555111BHAAHCA COMPONENT Flow Transmitter FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 471 COLUMN M.5/4.5, M.7/4.4 M5/4.5, J6/81, J7/80	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	5.0×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471B and D	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	MS-FT-33A 33B 33C 33D 34A 34B 34C 34D 34E 34F 34G 34H 34J 34K 34M 34N 34P 34S 34U 34V 34W

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LIS-24A, B, C, D	OPERATING TIME	24 hours	24 hours	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288A COMPONENT Level Indicating Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE Main Steam Level Indication	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 525 COLUMN H4/7.1 M7/6.8 N8/5.8 J9/4.5	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bo

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522H 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LIS-31A, B, C, D	OPERATING TIME	24 hours	24 hours	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288A COMPONENT Level Indicating Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE Vessel Level for HPCS	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.8×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 525 COLUMN J5/7.4 N8/5.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522C 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LIS-36A-D MANUFACTURER Yarway MODEL NUMBER 4418C COMPONENT Level Indicating Switch FUNCTION/SERVICE Main Steam Level Indicating Switch LOCATION: BLDG R ELEVATION 522 COLUMN J6/4.5 M7/6.8 J6/4.5 M7/6.8	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	250	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5		3			Note 1
	AGING	40 years		2			Note 1
	ACCURACY		1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522H
4. EDS Calculation File 0740-006-007
5. Lockheed Electronics Test Report #5628-3509 dated 3/29/79.

NOTES

1. The materials of construction are being obtained from the vendor to complete the evaluations.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LIS-37A, B, C, D	OPERATING TIME	24 hours	24 hours	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288A COMPONENT Level Indicating Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE Main Steam Level Indication	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 525' COLUMN J9/4.5 M7/6.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522H 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LIS-38A, B	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288A COMPONENT Level Indicating Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
Main Steam Level Indication	RADIATION (RAD)	8.3×10^5	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 525 COLUMN J9/4.5 M7/6.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522H 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LITS-26A,B	OPERATING TIME	24 hours		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Barton	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 760 COMPONENT Level Indicating Transmitter Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE MS Level	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 522 COLUMN J5/7.1 M7/6.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522H	1. Qualification Documentation is being obtained for this component.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LITS-26C	OPERATING TIME	24 hours		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal See Profile 21 Accident		2			
MANUFACTURER Barton	PRESSURE (PSIA)	14.7 Normal See Profile 21 Accident		2			
MODEL NUMBER 760 COMPONENT Level Indicating Transmitter Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE MS Level	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.8×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 522 COLUMN N8/5.8	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82 Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522C	1. Qualification Documentation is being obtained for this component.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LITS-26D	OPERATING TIME	24 hours		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Barton	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 760 COMPONENT Level Indicating Transmitter Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE MS Level	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.2×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 522 COLUMN J8/4.6	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522P	1. Qualification Documentation is being obtained for this component.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LITS-44A,B	OPERATING TIME	24 hours		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max. Abnormal 150 Max Accident		2			
MANUFACTURER Barton	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 760	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
COMPONENT Level Indicating Transmitter Switch FUNCTION/SERVICE MS Level	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.0×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 471 COLUMN J5/8.2 M5/4.5	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471B	1. Qualification Documentation is being obtained for this component.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER See Note Below MANUFACTURER Namco MODEL NUMBER EA700-86010 COMPONENT Limit Switch FUNCTION/SERVICE LOCATION: BLDG C ELEVATION 513 COLUMN 255°	OPERATING TIME	24 hours	Note 1	1	3		
	TEMPERATURE (F)	135 normal 150 abnormal accident--profile 1		2			
	PRESSURE (PSIA)	14.7 normal 16.7 abnormal accident--profile 1		2			
	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	3.48×10^7		2			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List, 12/16/81 2. FSAR Paragraph 3.11 3. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch EA180, which is qualified to IEEE 323-74 and 344-75 (Ref. 3). MS-LMS-22A1 MS-LMS-22C1 -22A2 -22C2 -22A3 -22C3 -22B1 -22D1 -22B2 -22D2 -22B3 -22D3

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER See Note Below MANUFACTURER Namco MODEL NUMBER EA700-86010 COMPONENT Limit Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 543 COLUMN H.7/6.1	OPERATING TIME	24 hours	Note 1	1	4		
	TEMPERATURE (F)	125 normal 140 abnormal accident--profile 2		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	50 normal 98 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.7×10^6		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M.L. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List, 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-5220 4. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch EA 740, which is qualified to IEEE 323-74 and IEEE 344-75 (Ref. 4) MS-LMS-28A1 MS-LMS-28C1 -28A2 -28C2 -28A3 -28C3 -28B1 -28D1 -28B2 -28D2 -28B3 -28D3

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-LT-27	OPERATING TIME	24 hours	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
MANUFACTURER G.E.	PRESSURE (PSIA)	14.7		2			None
MODEL NUMBER C-50-555 COMPONENT Level Transmitter	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
FUNCTION/SERVICE Level Transmitter for Main Steam	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	8.3×10^5		3			None
	AGING	40 years		2			None
LOCATION: BLDG R ELEVATION 524 COLUMN M.8/6.6	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Phi

Reviewed by: M. S. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-522H	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-MO-16	OPERATING TIME	24 hours	30 days	4	3	Simultaneous Test Engineering Analysis	
	TEMPERATURE (F)	135 max. normal 150 max. abnormal Accident: see profile 1	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7 normal 16.7 abnormal Accident: see profile 1	See enclosed profile	1	3	Simultaneous Test	None
MODEL NUMBER SMB-000-7.5/L56 COMPONENT	RELATIVE HUMITY (%)	55 max. normal 90 max. abnormal 100 max. accident	100	1	3	Simultaneous Test	None
Motor Operator - Reliance, RH insulation FUNCTION/SERVICE	CHEMICAL SPRAY	Demineralized water	Chemical Spray pH 10	1	3	Simultaneous Test	None
Operates drain isolation valve	RADIATION (RAD)	2.74×10^7	2.04×10^8	1	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3	Sequential Test Engineering Analysis	None
LOCATION: BLDG C ELEVATION 504° COLUMN 0 Deg. Az	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond [illegible]

Reviewed by: M. P. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600367A 4. WNP-2 Class 1E Equipment List, 12/16/81	Qualified.

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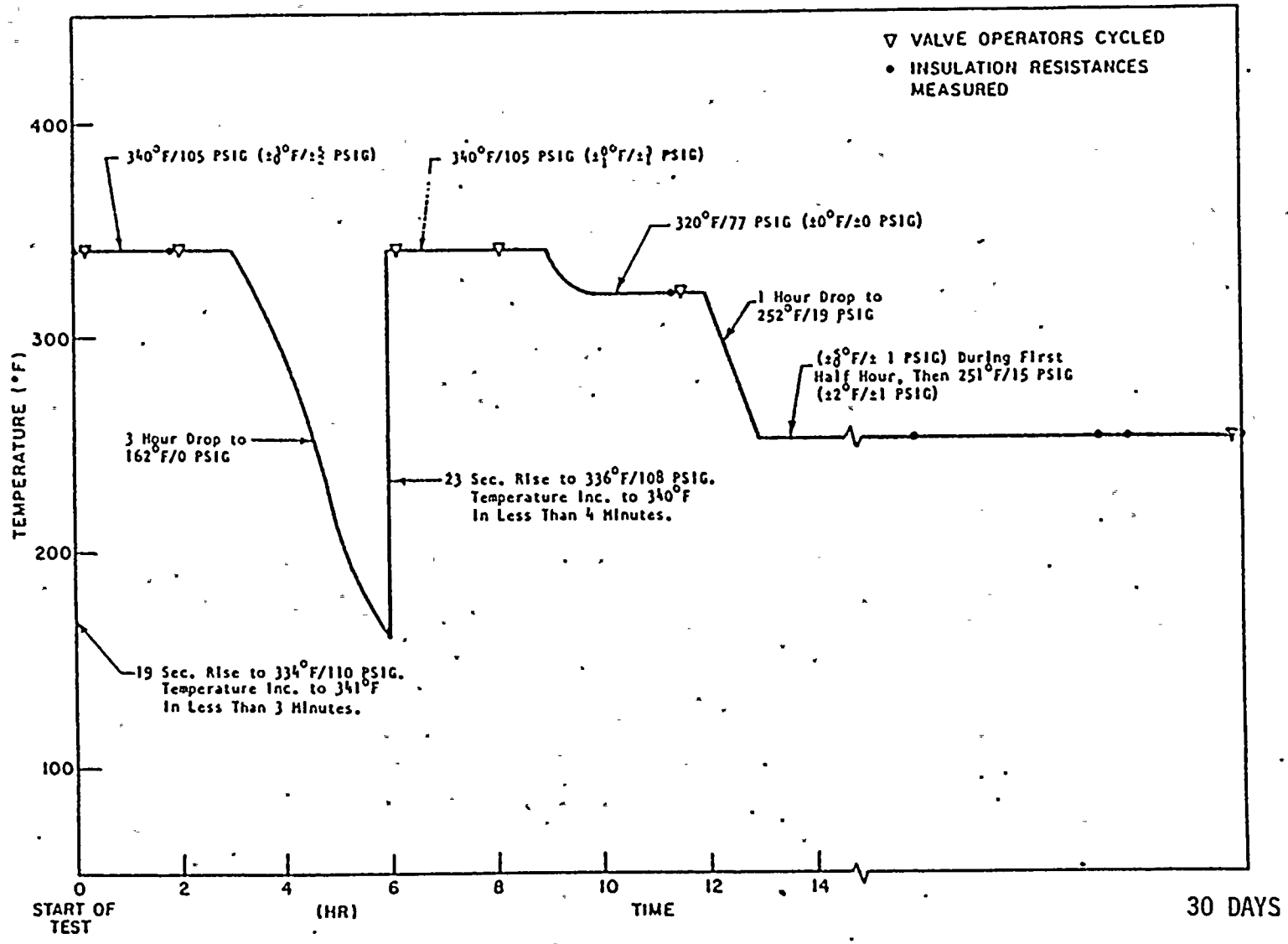

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-MO-19 MANUFACTURER Limitorque MODEL NUMBER SMB-000 COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate MS Valve 19 LOCATION: BLDG R ELEVATION 501 COLUMN H8/6.2	OPERATING TIME	24 hours	24 hours	1	3	Simultaneous Testing	None
	TEMPERATURE (F)	125 normal 140 max. abnormal accident--profile 2	See enclosed profile	1	3	Simultaneous Testing	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	50 normal 98 max. abnormal 100 accident	100%	1	3	Simultaneous Testing	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	4.2×10^6	1×10^7	2	3	Sequential Testing	None
	AGING	40 years	40 years+	1	3,4	Sequential Testing Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chen

Reviewed by: M. S. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-5010 3. Limitorque Report B0009, 4/30/76 4. Applicability calculations in QID221011 5. WNP-2 Class 1E Equipment List, 12/16/81	Qualified.

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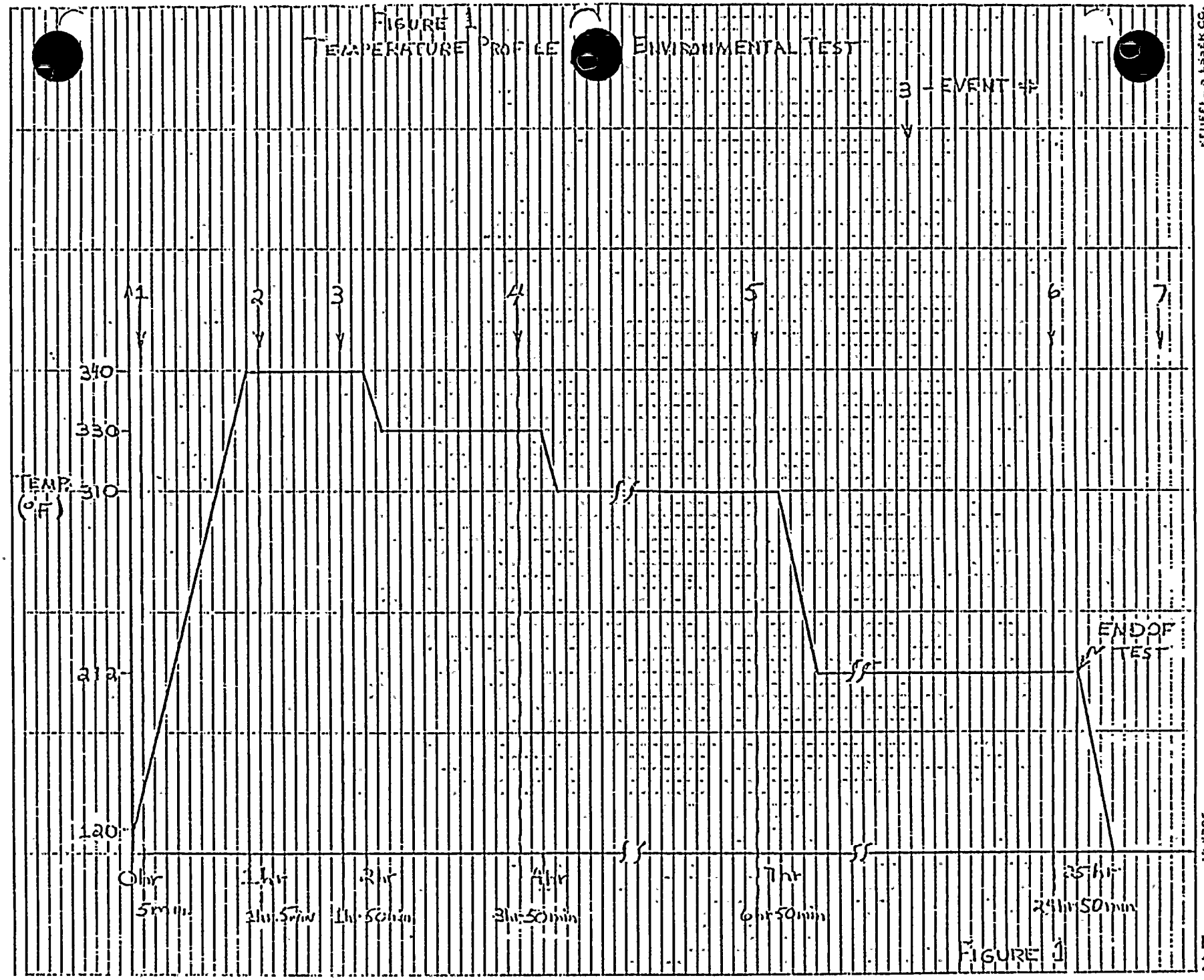
FIGURE 1
TEMPERATURE PROFILE ENVIRONMENTAL TEST
3 - EVENT #
1
2
3
4
5
6
7
340
330
TEMP. (°F)
310
212
120
0hr
5min
1hr
2hr.5min
2hr
1hr.50min
4hr
3hr.50min
7hr
6hr.50min
25hr
24hr.50min
END OF TEST
FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-MO-20 MANUFACTURER Limitorque MODEL NUMBER Valve Motor Operator COMPONENT FUNCTION/SERVICE Operate MS Valve LOCATION: BLDG R ELEVATION 501 COLUMN H1/5.9	OPERATING TIME	24 hours	30 days	1	3	Simultaneous Test	None
	TEMPERATURE (F)	125 maximum normal 140 maximum abnormal accident--profile 2	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	N/A	None
	RELATIVE HUMITY (%)	50 normal 98 maximum abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	4.20×10^6	2.04×10^8	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3,4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: M. L. Johnson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-501 0 3. Limitorque Report 600376A, 5-13-76 4. E/IC 02-80-40-0	1. Qualified

WP-1081

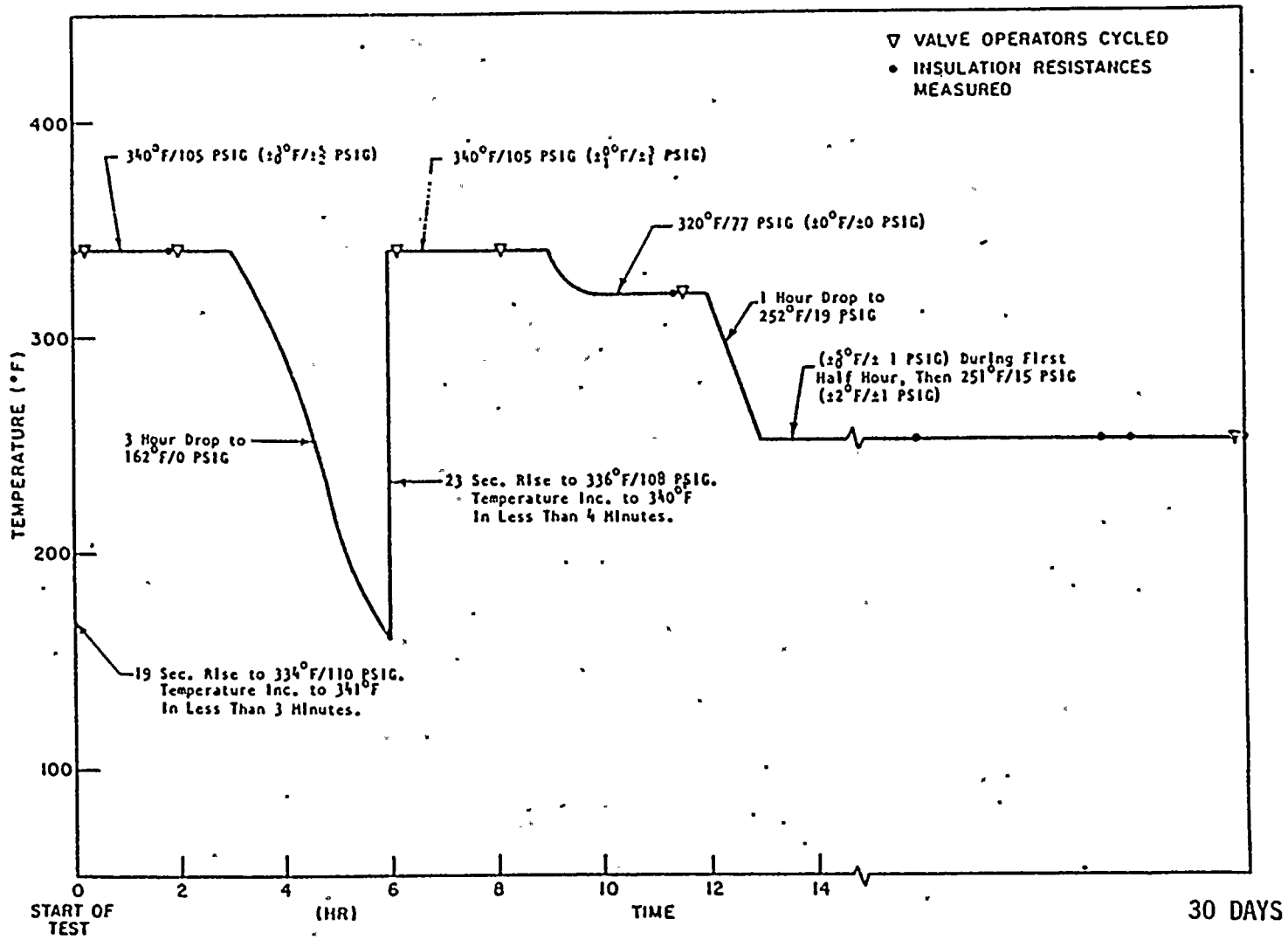


Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-MO-67A -67B -67C -67D MANUFACTURER Limitorque MODEL NUMBER SMB-000 COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate MS Valves 67A, 67B, 67C and 67D LOCATION: BLDG R ELEVATION 501 COLUMN H7/5, 6 to H7/6.4	OPERATING TIME	24 hours	30 days	1	3	Simultaneous Test	None
	TEMPERATURE (F)	125 normal 140 max. abnormal accident--profile 2	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	N/A	Simultaneous Test	None
	RELATIVE HUMITY (%)	50 normal 98 max. abonrmal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	4.2×10^6	2×10^8	2	3	Sequential Test	None
	AGING	40 years	40 years	1	3,4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

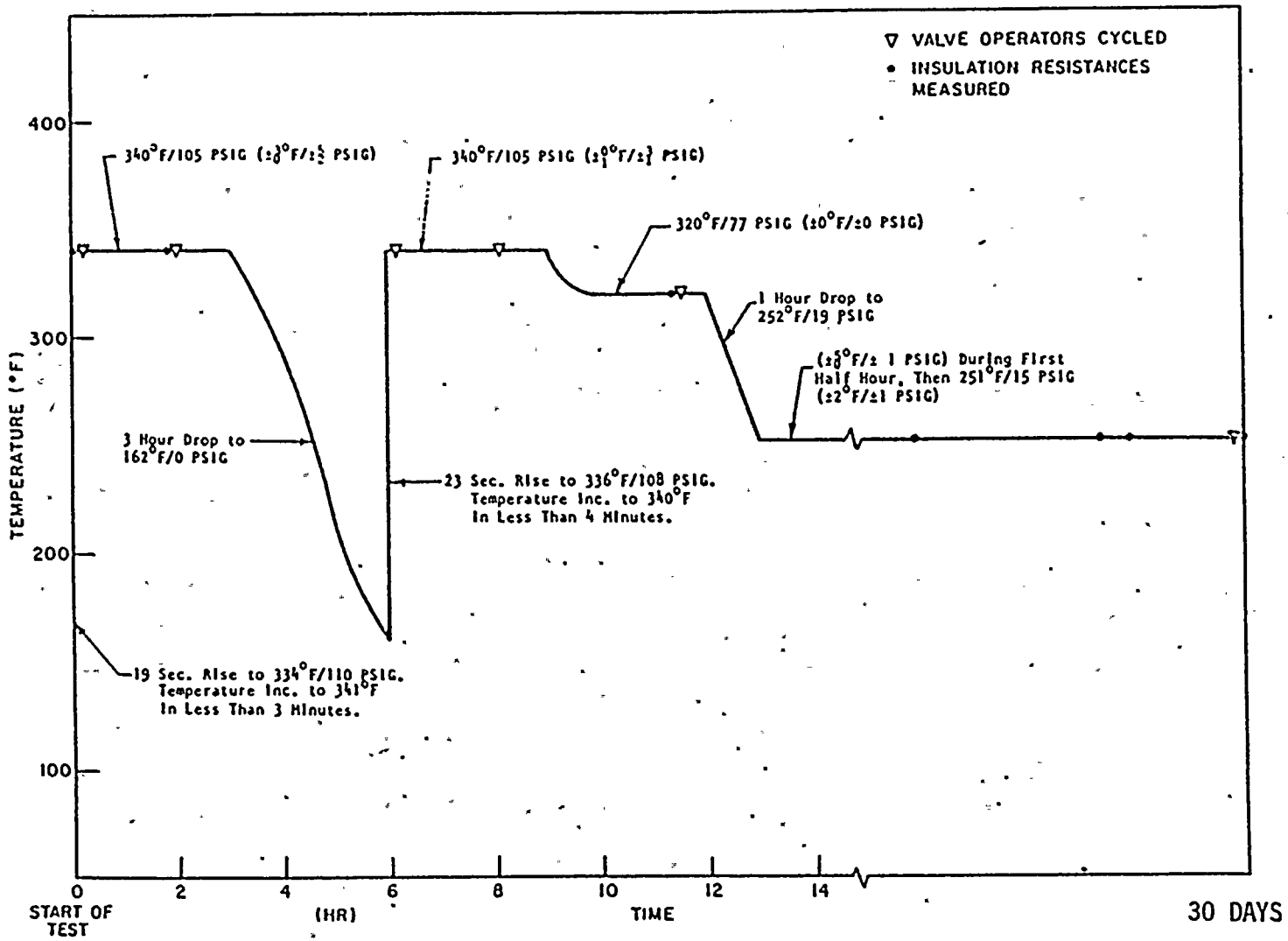
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-5010 3. Limitorque Report 600376A, 5/13/76 4. E/IC 02-80-04-0	Qualified.

WP-1081



F-C3441

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PI-4A MANUFACTURER Robert Shaw MODEL NUMBER EP COMPONENT Pressure Indicator FUNCTION/SERVICE MS Pressure Indicator LOCATION: BLDG R ELEVATION 525 COLUMN J7/4.7	OPERATING TIME	24 hours	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	5.2×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Anderson

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522P

NOTES

1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function.

   Qualified.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PS-20A-D	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barksdale	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
MODEL NUMBER B1T-M12SS COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE Main Stream Isolation Valve Scram Interlock	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.33×10^5	2×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 525 COLUMN J5/7.1 M7/6.8 N8/5.8 J9/4.5	ACCURACY		±1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR paragraph 3.11
3. EDS Report No. 0740-004-522H
4. EDS Calculation File No. 0740-006-001
5. Barksdale Environmental Test. Delaval Turbine Inc. Test Procedure 9993 Report Dated August 13, 1975.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1981

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PS-23A-D	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barksdale	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
MODEL NUMBER B1T-M12SS COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE High Vessel Pressure	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	2×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 524 COLUMN J.5/7.1 J.9/4.5 N.8/5.8 M.7/6.8	ACCURACY		±1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment list dated 12/16/81
2. FSAR paragraph 3.11
3. EDS Report No. 0740-004-522H
4. EDS Calculation File No. 0740-006-001
5. Barksdale Environmental Test Delaval Turbine Inc. Test Procedure 9993 Report Dated August 13, 1975.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PS-39A-N,P,R,S,U,V MANUFACTURER Barksdale MODEL NUMBER B1T-M12SS COMPONENT Pressure Switch FUNCTION/SERVICE Relief Valve Pressure Switch LOCATION: BLDG R ELEVATION 524 COLUMN A-N J.9/4.5 P,R,S,U,V J.5/4.5	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.2×10^4	2×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY		±1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment list, dated 12/16/81
2. FSAR paragraph 3.11
3. EDS Report No. 0740-004-522P
4. EDS Calculation file no. 0740-006-001
5. Barksdale Environmental Test Delaval Turbine Inc. Test Procedure 9993 Report Dated August 13, 1975.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PS-45A-D	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barksdale	PRESSURE (PSIA)	14.7	14.7	2	5	Simultaneous Test	None
MODEL NUMBER B1T-M12SS COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE Main Steam Pressure	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	2×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 524 COLUMN A,B J7/4.7 C,D M7/6.6	ACCURACY		±1%		5	Functional Test	

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AJ 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment list, dated 12/16/81
2. FSAR paragraph 3.11
3. EDS Report No. 0740-004-522H
4. EDS Calculation File 0740-006-001
5. Barksdale Environmental Test. Delaval Turbine Inc. Test Procedure 9993 Report Dated August 13, 1975.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PS-47A-D MS-PS-48A-D MANUFACTURER Static-O-Ring MODEL NUMBER See Note 2 COMPONENT Pressure Switch FUNCTION/SERVICE Drywell Pressure Switch LOCATION: BLDG R ELEVATION 522 COLUMN See Note 2	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	8.33×10^5	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81.
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522M
4. EDS Calculation file 0740-006-006
5. Viking Lab.Inc. Test letter Report #30203-2 dated 11/20/73. Steam testing of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Tag #	Model #	Column
MS-PS-47A,C	12N-AA5-X10TT	J.5/7.1
MS-PS-47B,D	12N-AA5-X10TT	N.8/5.8
MS-PS-48A,C	12N-AA5-X10TT	J.5/4.5
MS-PS-48B,D	12N-AA5-X10TT	M.7/6.8

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: B22-N051
PPD: 163C1292

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-PT-51A -51B MANUFACTURER Bailey MODEL NUMBER 556 COMPONENT Pressure Transmitter FUNCTION/SERVICE Transmit Reactor Pressure LOCATION: BLDG R ELEVATION 535, 522 COLUMN J8/4.6, M8/6.6	OPERATING TIME	24 hours	Note 1	4	5		
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		1		S.E.	
	PRESSURE (PSIA)	14.7		1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		1			
	ACCURACY			2			

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES Y NO

Prepared by: Raymond Chin

Reviewed by: M. S. Johnson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. PPD 163C1292 3. EDS Study 0740-004-522P, H 4. WNP-2 Class 1E Equipment List, 12/16/81 5. WPPSS Letter GE-02-JLS-81-022	1. These transmitters are being replaced with Rosemount 1153, Series D, qualified to 323-74 and 344-75.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02D17

MPL: D17-N003
PPD: 237X731

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-RE-3A, B, C, D	OPERATING TIME	24 hours	Note 1	3			
	TEMPERATURE (F)	125 normal 140 max. abnormal Accident - profile 2		1			
MANUFACTURER General Electric	PRESSURE (PSIA)	14.7	N/R				
MODEL NUMBER 237X731G001 COMPONENT Radiation Element	RELATIVE HUMITY (%)	50 max. normal 98 max. abnormal 100 max. accident		1			
FUNCTION/SERVICE Main steam lines radiation monitors	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	1.93×10^7		2			
	AGING	40 years		1			
LOCATION: BLDG R ELEVATION 508 COLUMN H7/6	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-501 0 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-1AC, 1BC, 1CC, 1DC, 2AC, 2BC, 2CC, 2DC. MANUFACTURER Avco MODEL NUMBER C5246 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Solenoids for main steam relief valves LOCATION: BLDG C ELEVATION 543 COLUMN AZ 25°, 30°, 315°, 335°, 30°, 45°, 300°, 320°	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	demineralized water	none	1			Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

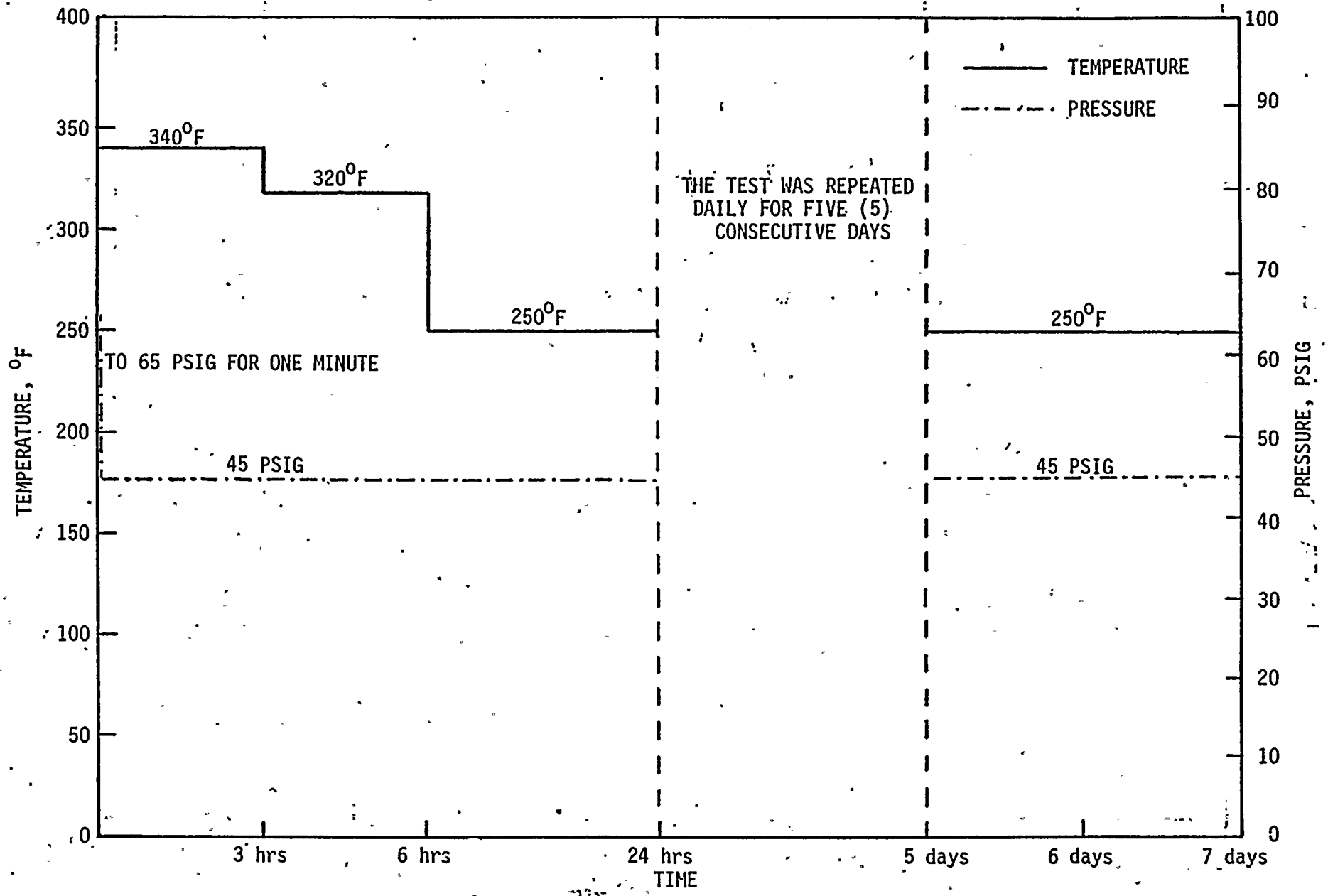
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES x NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 311 2. G.E. PED Engineer Memo No. 126-62 dated 1/15/75 3. WNP-2 Class 1E Engineer List, 12/16/81 4. QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: B22-F022
PPD: 732E150V

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV (See Note 1) MANUFACTURER Asco MODEL NUMBER HTX-8320A20 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Operate Inboard Main Steam Isolation Valves LOCATION: BLDG C ELEVATION COLUMN 5°, 15°, 345°, 355°	OPERATING TIME	24 hours		2			Note 2
	TEMPERATURE (F)	135 normal 150 max abnormal Accident - profile 1		1			
	PRESSURE (PSIA)	16.7 normal Accident - profile 1		1			
	RELATIVE HUMITY (%)	55 normal 90 max abnormal 100 accident		1			
	CHEMICAL SPRAY	Demineralized water		1			
	RADIATION (RAD)	2.74×10^{7}		1			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. P. Robinson

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List dated 12/16/81	1. MS-SPV-22A1 MS-SPV-22B1 MS-SPV-22C1 MS-SPV-22D1 -22A2 -22B2 -22C2 -22D2 -22A3 -22B3 -22C3 -22D3 2. To be replaced with NP8320A173E, see letter GE-02-JLS-81-023.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: B22-F028
PPD: 732E150V

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-(See Note 1)	OPERATING TIME	24 hours		1			Note 2
	TEMPERATURE (F)	125 normal 140 max abnormal Accident - profile 2		1			
MANUFACTURER Asco	PRESSURE (PSIA)	14.7		1			
MODEL NUMBER HTX-8320A20 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	50 max normal 100 max accident		1			
FUNCTION/SERVICE Operate Outboard Main Steam Isolation Valves	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	4.2×10^6		2			
	AGING	40 years		1			
LOCATION: BLDG R ELEVATION 501 COLUMN H7/5.9, 5.6, 6.4, 6.1	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seiben

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-501D	1. MS-SPV-28A1, -28A2, -28A3, MS-SPV-28B1, -28B2, -28B3, MS-SPV-28C1, -28C2, -28C3, MS-SPV-28D1, -28D2, -28D3 2. To be replaced with NP8320A173E, see letter GE-02-JLS-023.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-3AC, 3BC, 3CC	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MANUFACTURER Avco	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MODEL NUMBER C5246 COMPONENT	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
Solenoid Pilot Valve FUNCTION/SERVICE	CHEMICAL SPRAY	Demineralized Water	None	1			Note 1
Solenoids for Main Steam Relief Valves	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
LOCATION: BLDG C ELEVATION 543 COLUMN 45^0, 67^0, 290^0	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

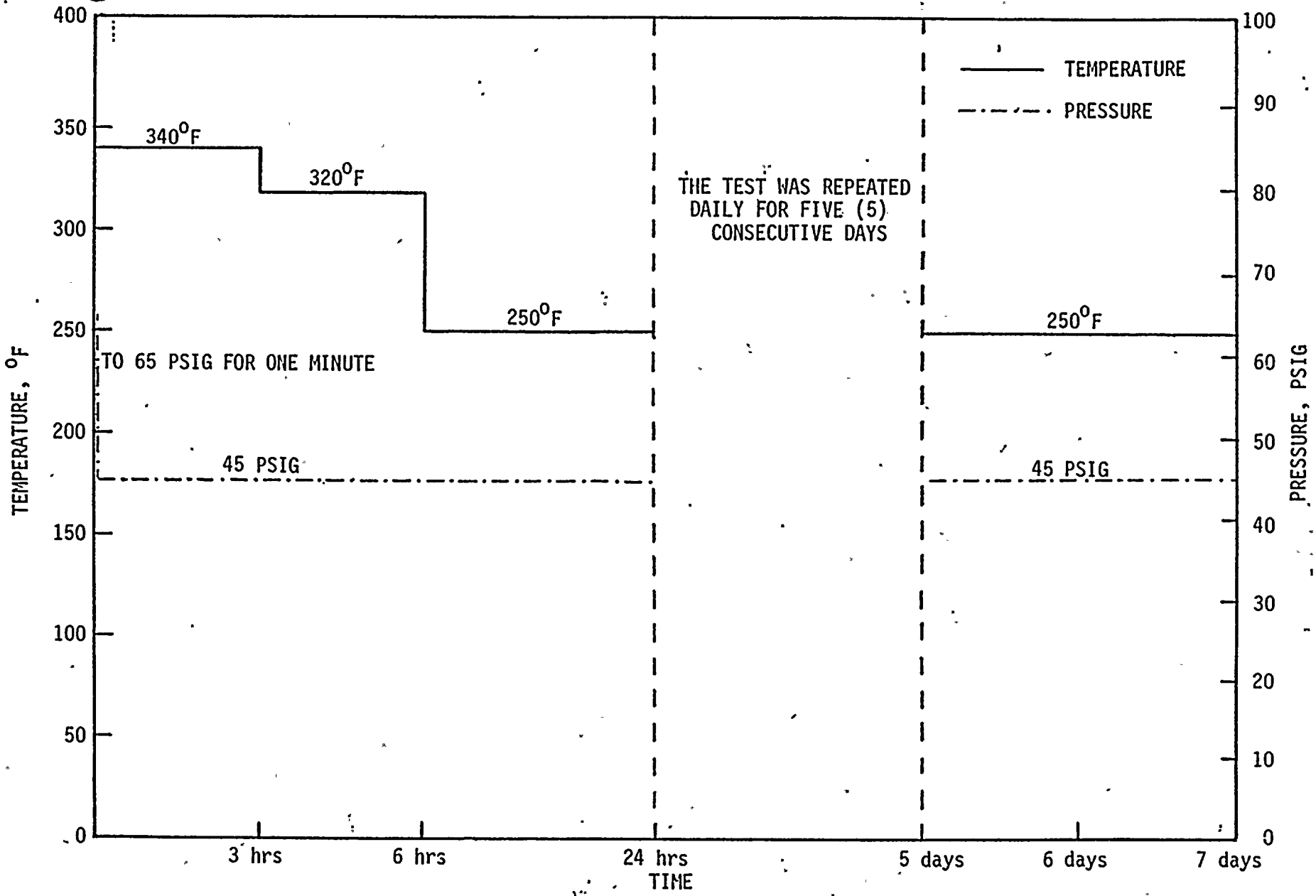
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engineer Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL: B22-F013
PPD: 22A6441

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-3DA -4BB -5BA -3DB -4CA -5BB -4AA -4CB -5CA -4AB -4DA -5CB -4BA -4DB MANUFACTURER Automatic Valve Company MODEL NUMBER C5246 COMPONENT Solenoid Pilot FUNCTION/SERVICE Solenoids for Main Steam Relief Valves LOCATION: BLDG C ELEVATION 547 COLUMN Note 3	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident--profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident--profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	demineralized water	None	1			Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2,4	Sequential Test Engineering Analysis	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

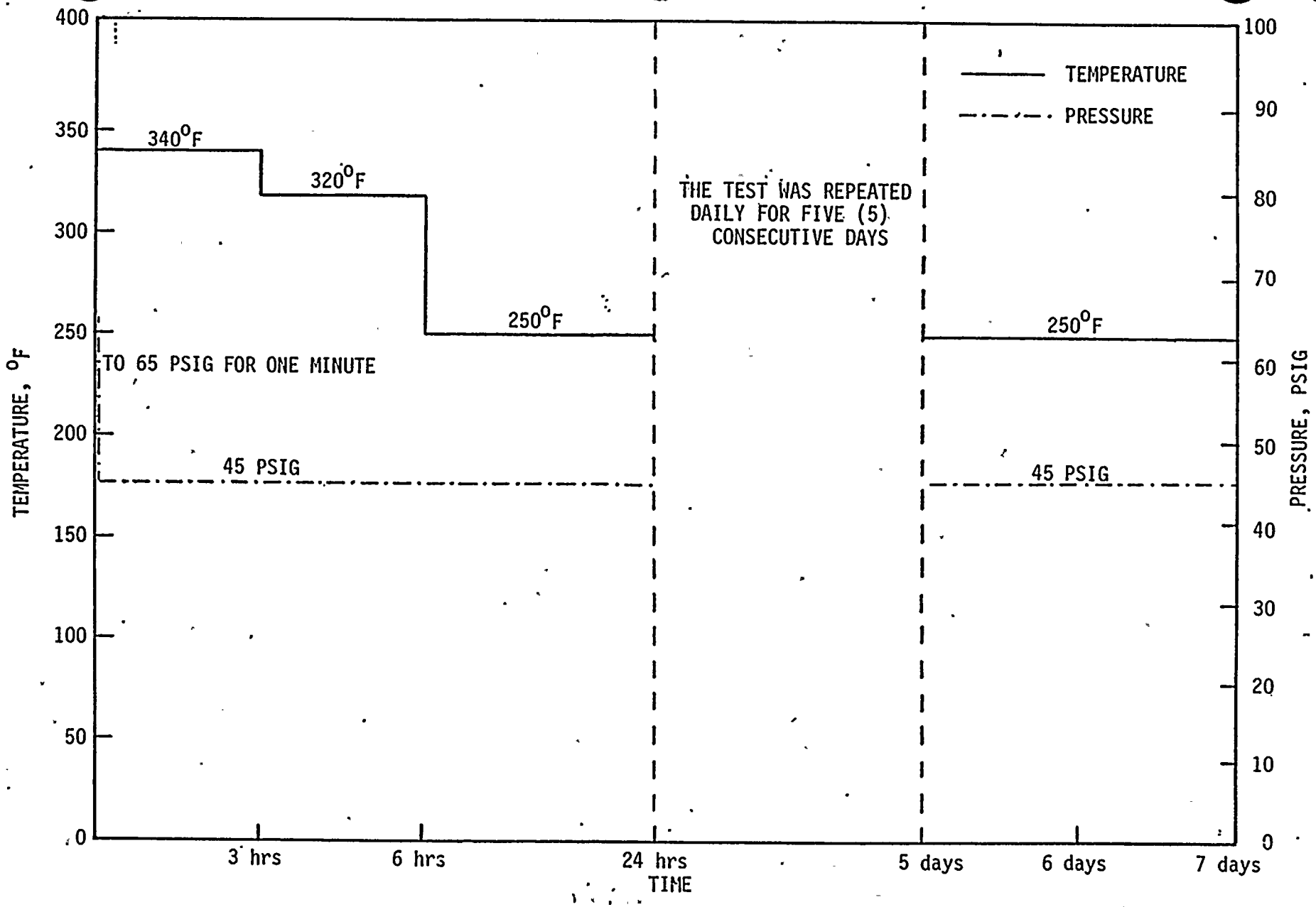
DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. GE PED Engr. Memo No. 126-62, 1/15/75, found in BWR Report 052-A-01 3. WNP-2 Class 1E Equipment List, 12/16/81 4. Calculation in QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the calculated qualified aging life and recommendations from the manufacturer.

WP-1081

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)

3.

Tag Number	Elev.	Azimuth
MS-SPV-3DA	547	310D
-3DB	547	310D
-4AA	547	62D
-4AB	547	62D
-4BA	547	75D
-4BB	547	75D
-4CA	547	285D
-4CB	547	285D
-4DA	547	300D
-4DB	547	300D
-5BA	547	80D
-5BB	547	80D
-5CA	547	275D
-5CB	547	275D



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-3DC MANUFACTURER Avco MODEL NUMBER C5246 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Solenoids for main steam relief valves LOCATION: BLDG C ELEVATION 543 COLUMN 310°	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	None	1			Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

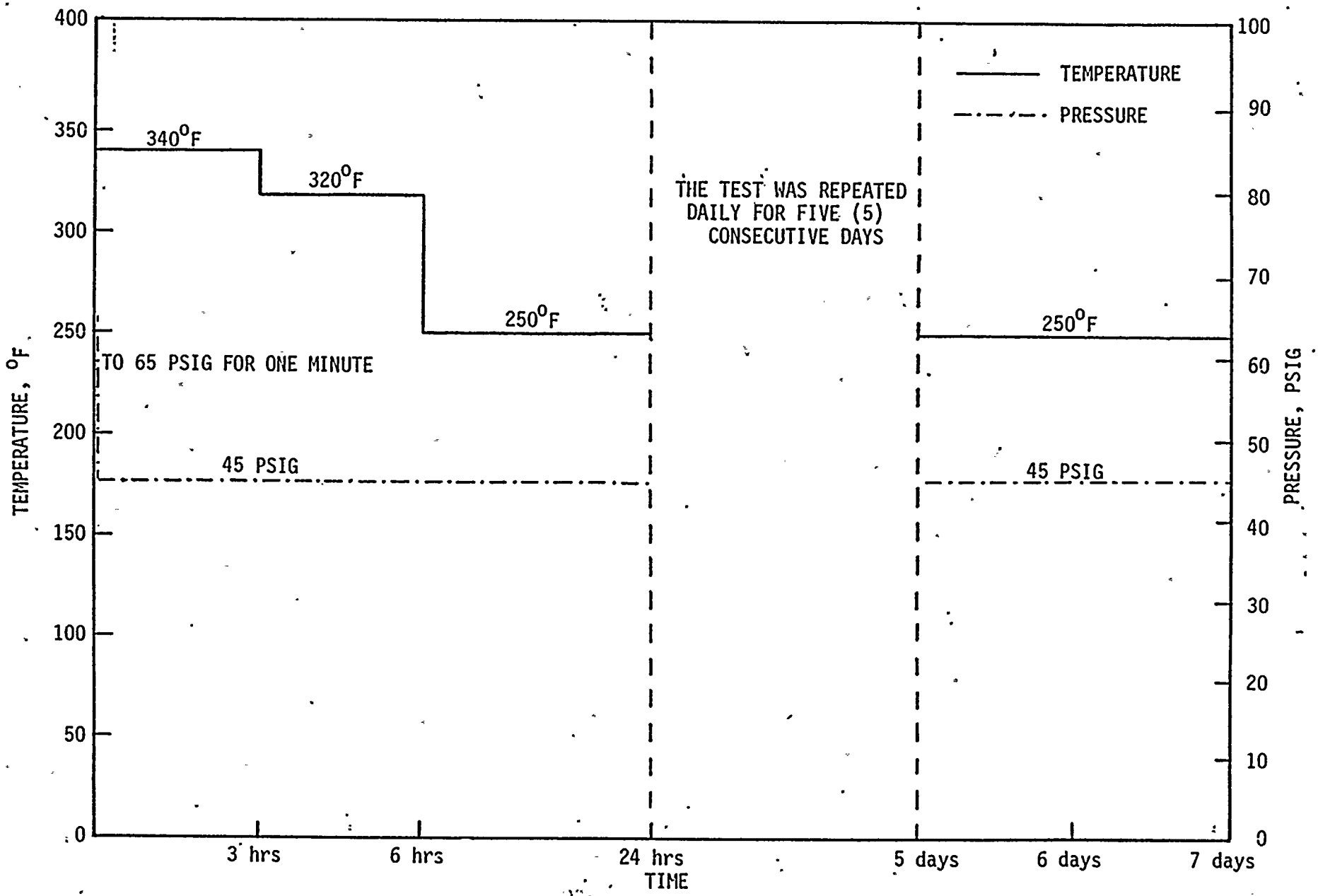
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chu

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engineer Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-4AC MANUFACTURER Avco MODEL NUMBER C5246 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Solenoids for main steam relief valves LOCATION: BLDG C ELEVATION 543 COLUMN 55°	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized Water	None	1			Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

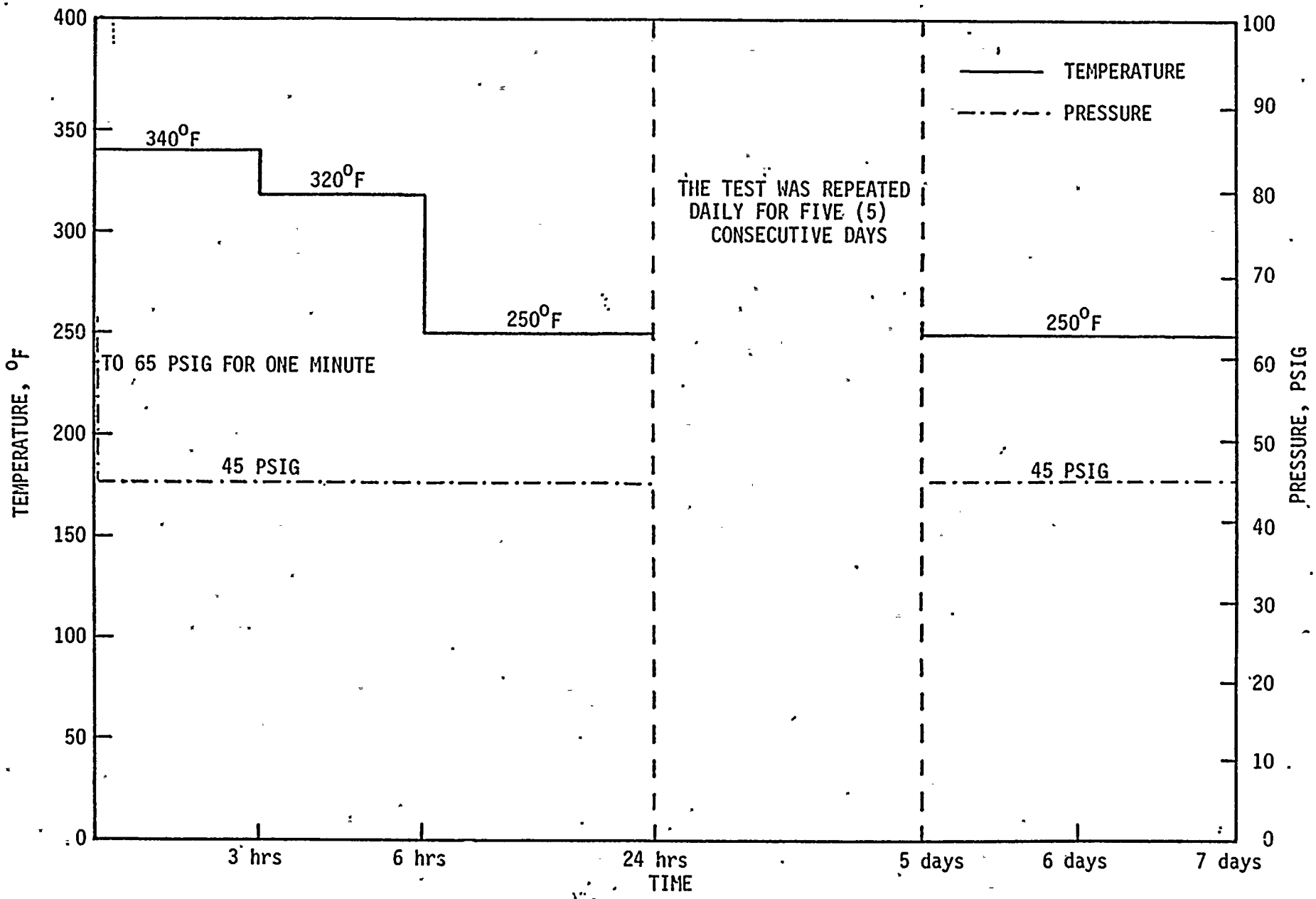
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Oi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engineer Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a scheudle based on the qualified aging life and recommendations from the manufacturer

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-4BC	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MANUFACTURER Avco	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MODEL NUMBER C5246	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
COMPONENT Solenoid Pilot Valve	CHEMICAL SPRAY	Demineralized water	None	1			Note 1
FUNCTION/SERVICE Solenoids for main steam relief valves	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
LOCATION: BLDG C ELEVATION 543 COLUMN 80	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

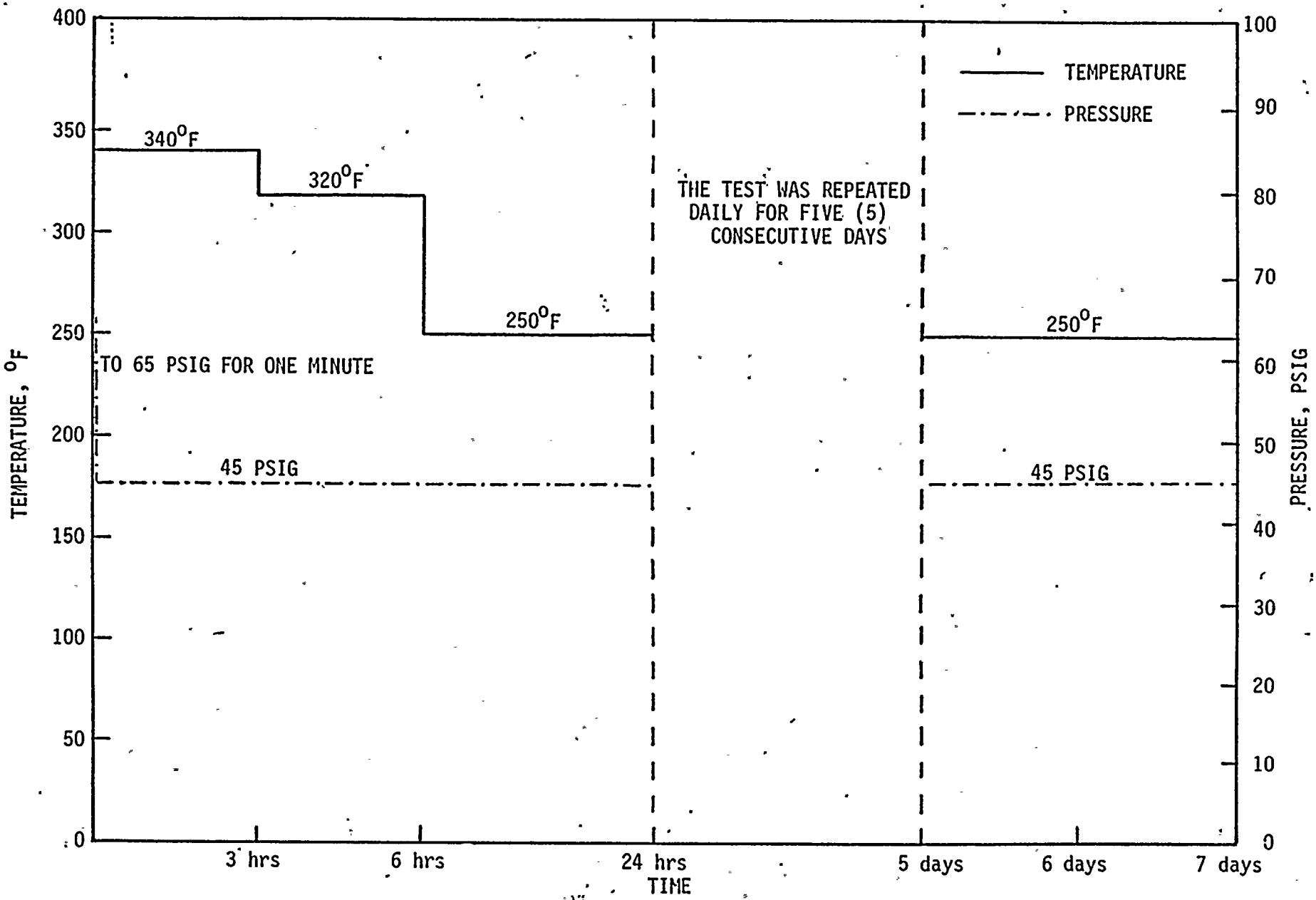
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Ehr

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engineer Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified 1. Component enclosure will be evaluated to determine the effects of demineralized water 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES.

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

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REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-4CC	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MANUFACTURER Avco	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MODEL NUMBER C5246 COMPONENT	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
Solenoid Pilot Valve FUNCTION/SERVICE	CHEMICAL SPRAY	Demineralized water	None	1			Note 1
Solenoids for main steam relief valves	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
LOCATION: BLDG C ELEVATION 543 COLUMN 285°	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

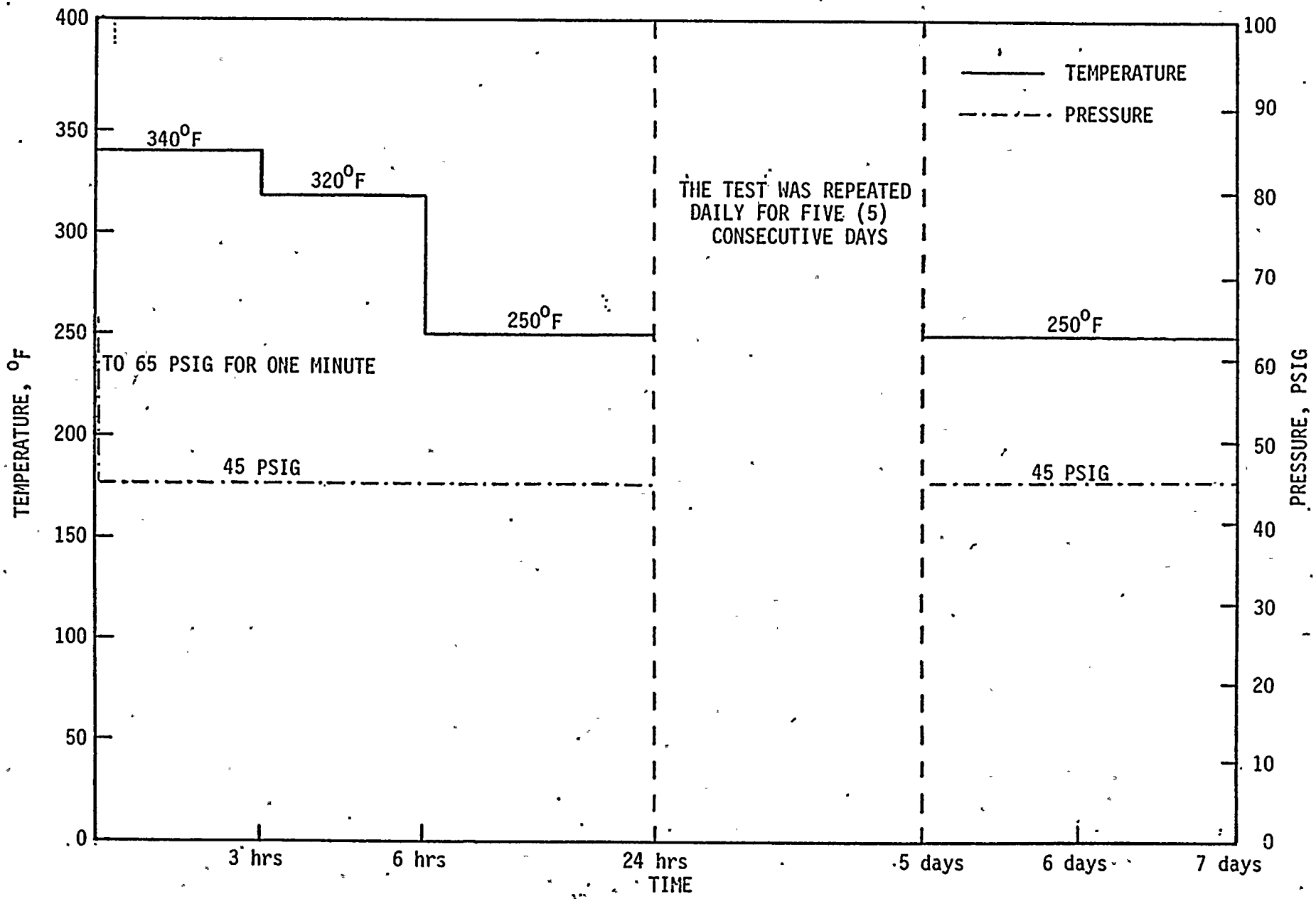
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engr. Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-4DC MANUFACTURER Avco MODEL NUMBER C5246 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Solenoids for main steam relief valves LOCATION: BLDG C ELEVATION 543 COLUMN 300	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	None	1			Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

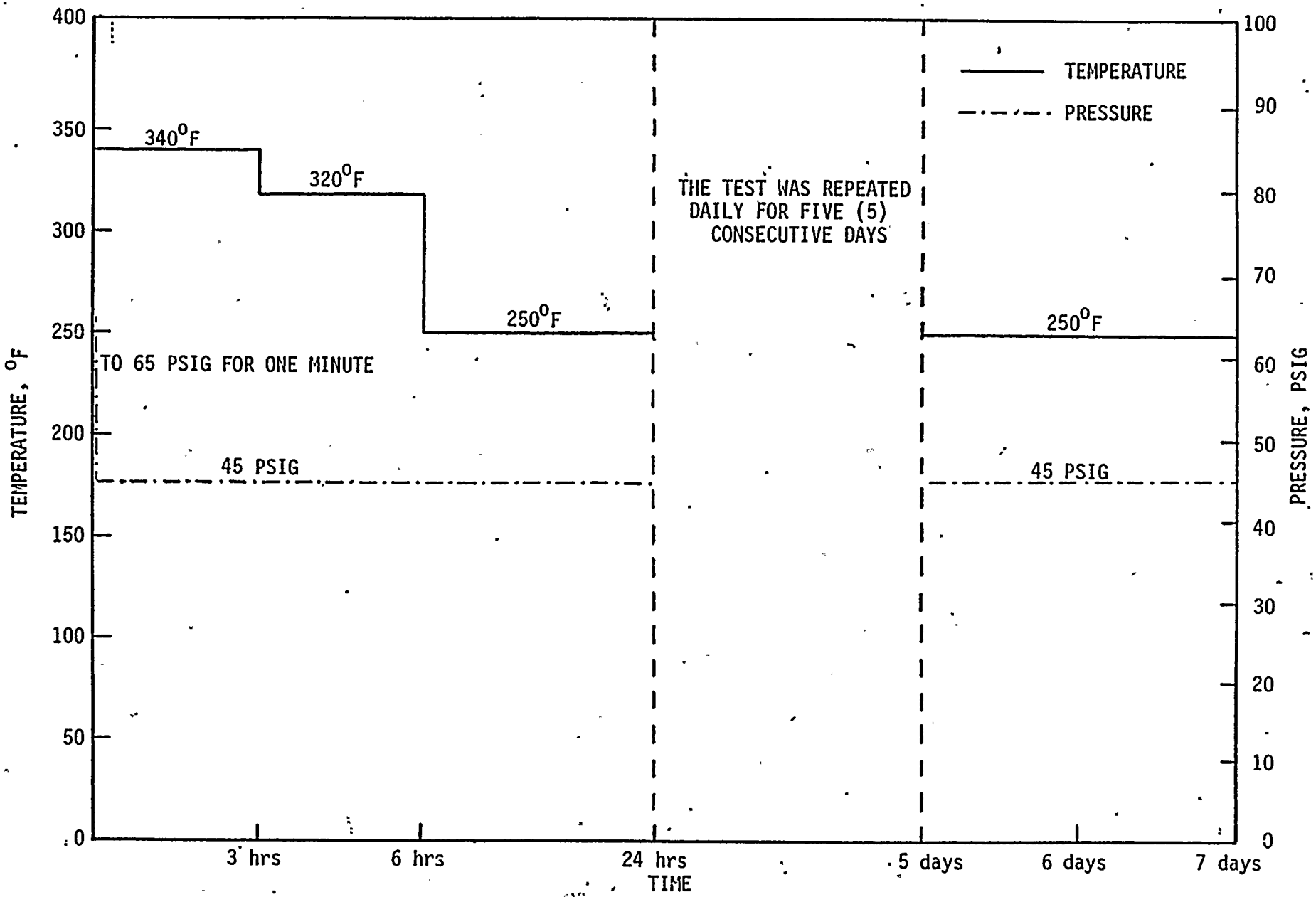
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engr. Memo No. 126-62, 1/15/71 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-5BC	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MANUFACTURER Avco	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
MODEL NUMBER C5246 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
FUNCTION/SERVICE Solenoids for main steam relief valves	CHEMICAL SPRAY	Demineralized Water	None	1	-	-	Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
LOCATION: BLDG C ELEVATION 543 COLUMN 80	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

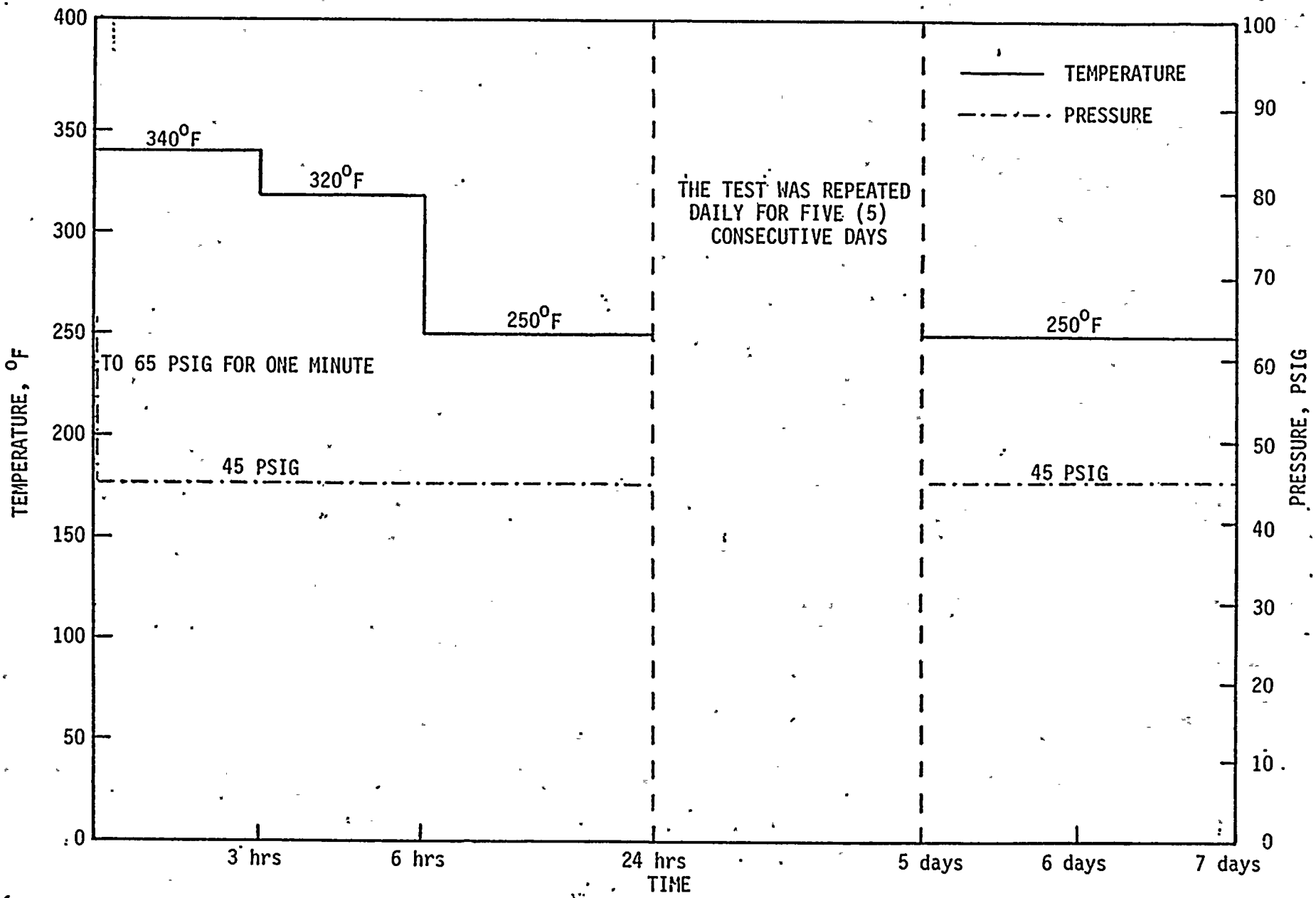
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chu

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. G.E. PED Engr. Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam TAG NUMBER MS-SPV-5CC MANUFACTURER Avco MODEL NUMBER C5246 COMPONENT Solenoid Pilot valve FUNCTION/SERVICE Solenoids for main steam relief valves LOCATION: BLDG C ELEVATION 543 COLUMN 280°	OPERATING TIME	24 hours	24 hours	3	2	Simultaneous Test	None
	TEMPERATURE (F)	135 normal 150 max. abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 max. abnormal 100 accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	None	1			Note 1
	RADIATION (RAD)	2.74×10^7	3.4×10^7	1	2	Sequential Test	None
	AGING	40 years	6 years	1	2, 4	Sequential Test Engineering Analysis	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

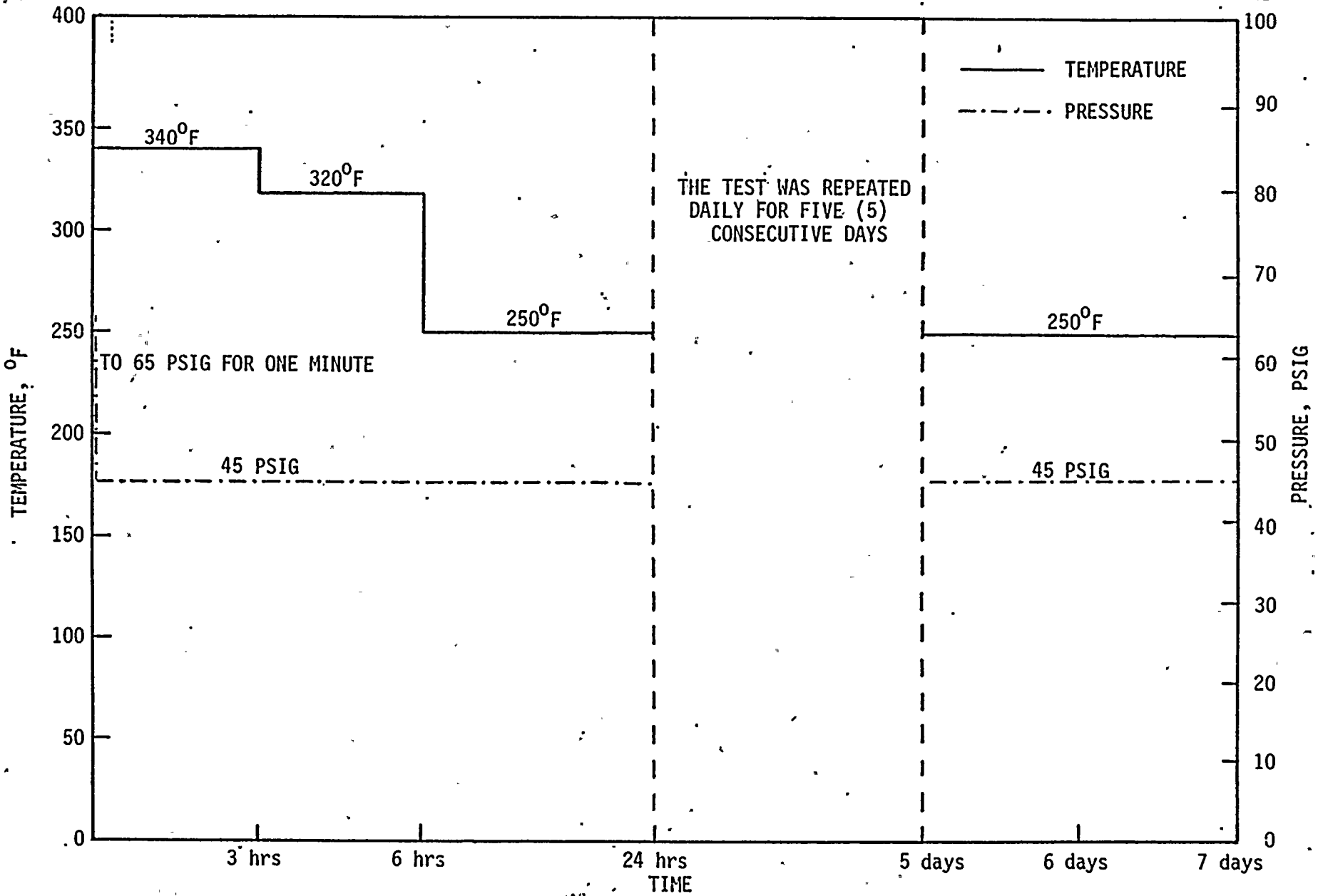
FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Orr

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2 G.E. PED Engr. Memo No. 126-62, 1/15/75 3. WNP-2 Class 1E Equipment List, 12/16/81 4. QID 315008	Qualified. 1. Component enclosure will be evaluated to determine the effects of demineralized water. 2. The component will be rebuilt on a schedule based on the qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR AVCO SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02B22

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam System TAG NUMBER MS-TE-4A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V MANUFACTURER PYCO MODEL NUMBER P.O. No. 133D9679P001 COMPONENT Temperature Element FUNCTION/SERVICE LOCATION: BLDG C ELEVATION 501 COLUMN	OPERATING TIME	24 hours	Note 1	2			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	Demineralized water spray		1			
	RADIATION (RAD)	4.4×10^7		1			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List, 12/16/81	1. These components are on order. The qualification documentation will be reviewed when it is received.

WP-1001

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-FT-3A, B, C, D MANUFACTURER Foxboro MODEL NUMBER E13DL COMPONENT Flow Transmitter FUNCTION/SERVICE Loops A, B, C, and D to manifold LOCATION: BLDG R ELEVATION 477 COLUMN H.4/5.8	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	4.4×10^7		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471J	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-H-A, B, C, D MANUFACTURER Chemelex MODEL NUMBER COMPONENT Heater FUNCTION/SERVICE Main Steam Leakage Control Heater A, B, C, & D LOCATION: BLDG R ELEVATION 480 COLUMN H.4/5.3	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	4.4×10^7		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Pfir

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471J	1. These components are on order. The qualification documentation will be reveiwed when it is received.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-28

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-M-1,2 MANUFACTURER Westinghouse MODEL NUMBER TBFC/76D56668 COMPONENT Motor FUNCTION/SERVICE 1.5 hp motor for MSLC-FN-1+,2+ LOCATION: BLDG R ELEVATION 473,501 COLUMN H.4/6.3 H.6/7.3	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4.4×10^7	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82 Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report #0740-004-471J
4. Letter from J.J. Courtin (W), dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures.
5. Letter from J.J. Courtin (W), dated 7/7/81 RE: Elec. Motor Qualification at WPPSS Plant, w/Enclosures.
6. EPRI Report #RP-1707-3.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-MO-1A -1B -1C -1D MANUFACTURER Limitorque MODEL NUMBER MSC-04 COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate MSLC Valves LOCATION: BLDG R ELEVATION 471 COLUMN H5/5.5	OPERATING TIME	24 hours	384 hours	1	3	Simultaneous Test	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	Steam for 24 hours 100% for 15 days	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.2×10^7	2×10^7	2	3	Sequential Test	None
	AGING	40 years	40 years +	1	3,4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-471J 3. Limitorque B0003 with Addendum A, dated 5/8/76 (BWR 054-C-04) 4. Calculations in QID221011 5. Justification in QID 221016	Qualified.

WP-1081

TEMPERATURE PROFILE

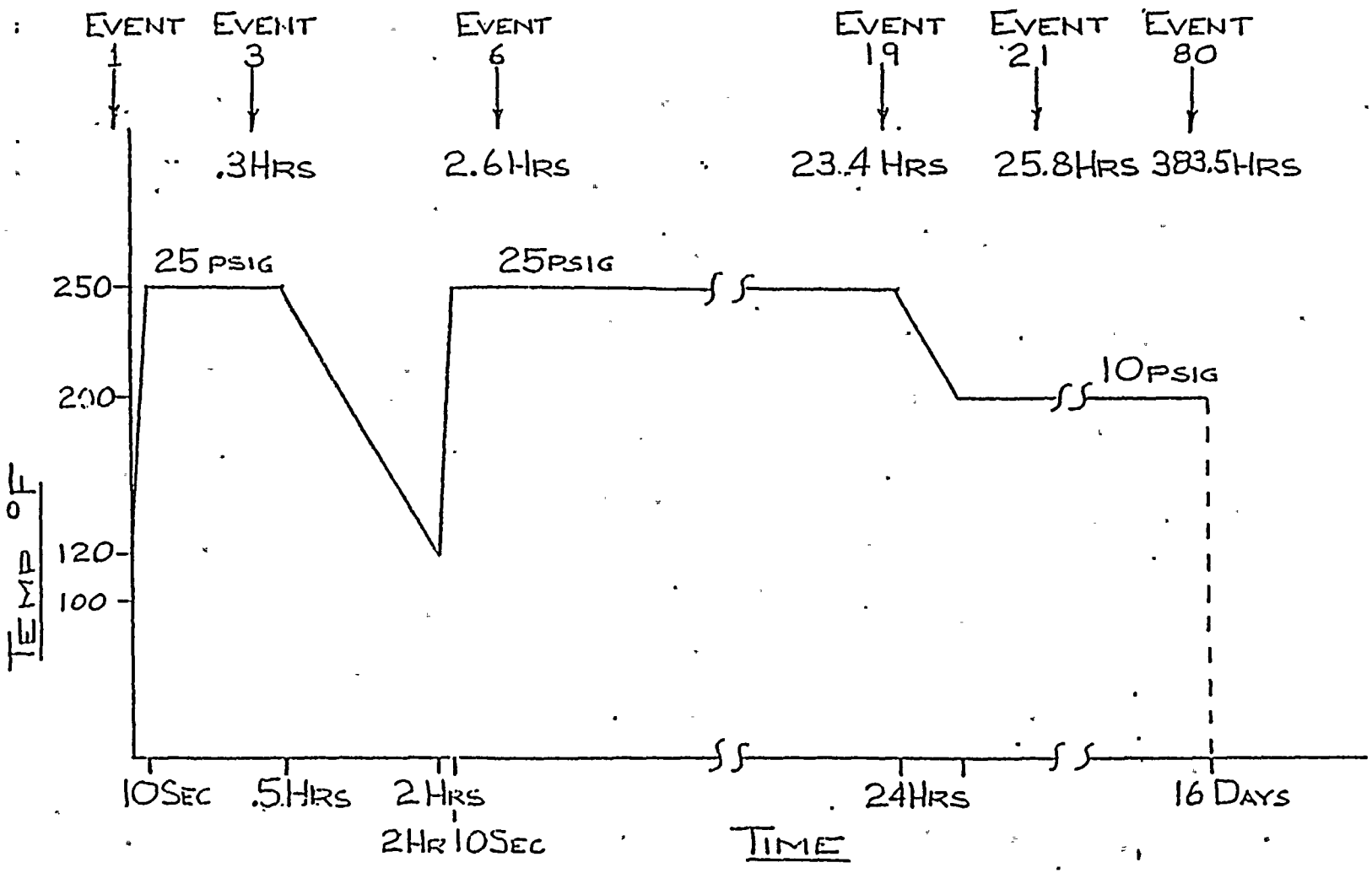

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-MO-See Note 1 MANUFACTURER Limitorque MODEL NUMBER SMB-000 COMPONENT Motor Operator FUNCTION/SERVICE Operate MSLC Valves LOCATION: BLDG R ELEVATION 501 COLUMN H.3/6.2	OPERATING TIME	24 hours	24 hours	1	3	Simultaneous Test	None
	TEMPERATURE (F)	125 normal 140 max. abnormal Accident--profile 1	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 normal Accident--profile 1	See enclosed profile	1	3	N/A	None
	RELATIVE HUMITY (%)	50 normal 98 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	4.2×10^6	2×10^8	2	3	Simultaneous Test	None
	AGING	40 years	40 years	1	3,4	Simultaneous Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ohr

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-5010 3. Limitorque Report 600376A, 5/13/76 4. E/IC 02-80-04-0	1. -10 -3B Qualified -2A -3C -2B -3D -2C -4 -2D -5 -3A -9

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TEMPERATURE PROFILE

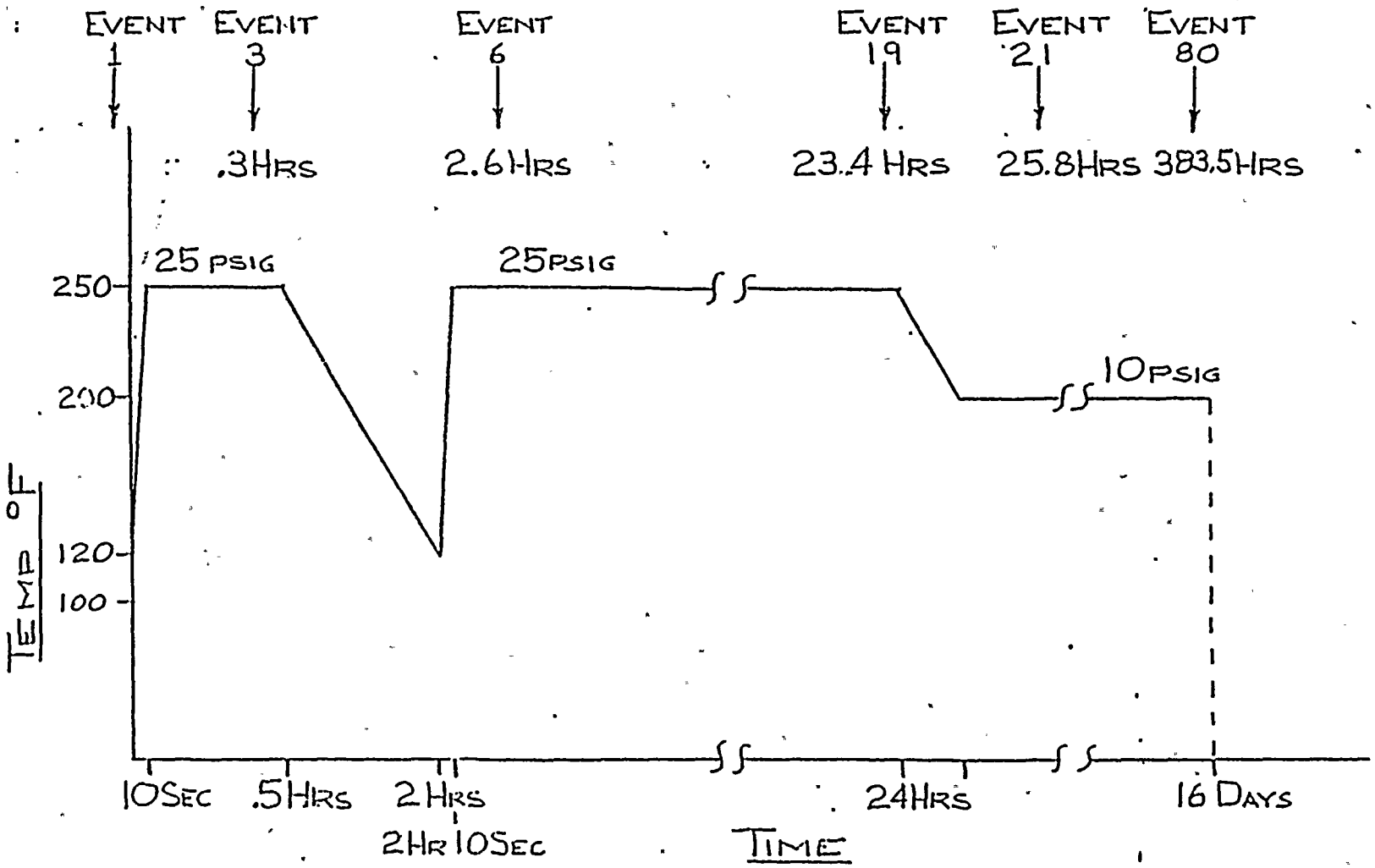

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-PS-20, 24, 25, 60, 7A, 7B, 7C, 7D, 70A, 70B 70C, 70D, 8A,B,C,D MANUFACTURER Barton MODEL NUMBER 288A, 288 COMPONENT Pressure Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 575, 528 COLUMN H.4/7.1, H.4/42	OPERATING TIME	6 months	6 months	1	4, 5	Simulation Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.3×10^6	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bak

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-PT-23 MANUFACTURER Rosemount MODEL NUMBER 1151GP9A22 COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 525 COLUMN H4/7.1	OPERATING TIME	6 months	6 months	1	4,5	Engineering Analysis Separate Effects	Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	300	2	4	Separate Effects	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	Separate Effects	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	6	Separate Effects	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	N/A	None
	RADIATION (RAD)	2.4×10^4	2×10^6	3	5	Separate Effects	None
	AGING	40 years	Note 2	2	N/A	Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522 4. Rosemount Report 97215A dated 2/9/72 5. Rosemount Report 127227 dated 12/27/72 6. Rosemount Report 117415 dated 9/19/75	Qualified 1. Test data and equipment specification data ensure the component will operate 6 months at the required temperature. 2. A preventive maintenance surveillance program is being developed to address aging of Class 1E equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-59

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-PT-6A, B, C, D MANUFACTURER Rosemount MODEL NUMBER 1151GP9A22MBGE3 COMPONENT Pressure Transmitter FUNCTION/SERVICE Monitors Main Steam Line Pressure LOCATION: BLDG R ELEVATION 522 COLUMN H4/4.2	OPERATING TIME	6 months	6 months	5	2,6	Separate Effects Engineering Analysis	None Note 1
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	300	1	2	Separate Effects	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max accident 100 max accident	100	1	7	Separate Effects	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.2×10^4	2×10^6	4	3	Separate Effects	None
	AGING	40 years	N/A	4	N/A	N/A	None
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Rosemount Report 97251A dated 2/9/72 3. Rosemount Report 127227 dated 12/27/72 4. EDS Study 0740-004-522P 5. WNP-2 Class 1E Equipment List dated 12/16/81 6. Rosemount Product Data Sheet 2256 7. Rosemount Report 117415 dated 9/19/75	Qualified 1. Test data and equipment specification data specs indicate the component will operate 6 months at the required temperatures. 2. A preventive maintenance/surveillance program is being implemented to address aging of Class 1E equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58 & 218

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PPD:

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REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-RLY- (see Note 2) MANUFACTURER ASEA MODEL NUMBER RK223067-ED COMPONENT Relay FUNCTION/SERVICE MSLC Control and Pressure Interlocks LOCATION: BLDG R ELEVATION 522 COLUMN H4/4.2, H4/7.1	OPERATING TIME	24 hours	Note 1	3			
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.2×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Seiten

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522P, 522K 3. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2. TAG NUMBERS -CR/1 -CR/1A -CR/1B -CR/1C -CR/1D -CR/12 -CR/13 -CR/3 -CR/5A1 -CR/5C1 -CR/5D1 -CR/6A1 -CR/6B1 -CR/6C1 -CR/6D1 -CR/9

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-RLY-CR/10, 11 MANUFACTURER ASEA MODEL NUMBER RXOMH2-069EP COMPONENT Relay FUNCTION/SERVICE MSIV closure interlock, MS-MSLC control interlock LOCATION: BLDG R ELEVATION 522 COLUMN H.4/4.2	OPERATING TIME	24 hours	Note 1	3			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.2×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES Y NO

Prepared by: Mark Baker

Reviewed by: Ron Seiler

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522P 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-RLY-CR/4 MANUFACTURER ASEA MODEL NUMBER RSMH2-RK223-067EP COMPONENT Relay FUNCTION/SERVICE Control Switch Interlock LOCATION: BLDG R ELEVATION 522 COLUMN H.4/7.1	OPERATING TIME	24 hours	Note 1	3			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	2.4×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Oran Seiter

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522K 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-RLY-CR/Note 2 MANUFACTURER ASEA MODEL NUMBER RK225-52-CP COMPONENT Relay FUNCTION/SERVICE MSLC Pressure Interlock LOCATION: BLDG R ELEVATION 522 COLUMN H.4/4.2	OPERATING TIME	24 hours	Note 1	3			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.2×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ron Sieler

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522P 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data. 2. TAG NUMBERS MSLC-RLY-CR/5A2, 5B1, 5B2, 5C2, 5D2, 6A2, 6B2, 6C2, 6D2

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-RLY-CR/8 MANUFACTURER ASEA MODEL NUMBER RR223067-EP COMPONENT Relay FUNCTION/SERVICE Control Switch Interlock LOCATION: BLDG R ELEVATION 528 COLUMN H.4/4.2	OPERATING TIME	24 hours	Note 1	3			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	5.2×10^4		2			
	AGING	40 years		1			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Seiben

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522P 3. WNP-2 Class 1E Equipment List dated 12/16/81.	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-RLY-TK-2A, 2B, 2C, -2D, 3A, 3B, -3C, 3D, 2, -4A, 4B, 4C, -4D, 2 MANUFACTURER Agastat Relay MODEL NUMBER 7012AE COMPONENT Time Delay Relay FUNCTION/SERVICE MS - MSLC Interlock LOCATION: BLDG R ELEVATION 522 COLUMN H4/4.2, H4/7.1	OPERATING TIME	24 hours	100 days	4	2	Simultaneous Test	None
	TEMPERATURE (F)	90 max normal 104 max abnormal	150	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 max accident	95	1	2	Sequential Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.2×10^4	1×10^7	3	2	Sequential Test	None
	AGING	40 years	Note 2	1	N/A	Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. MCC Powers Report 734-79.002, 9/3/79 3. EDS Study 0740-004-522P, 522K 4. WNP-2 Class 1E Equipment List dated 12/16/81	Qualified 1. The humidity conditions in the reactor building are currently being reevaluated. Qualification will be completed when this study is finished. 2. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Main Steam Leakage Control TAG NUMBER MSLC-TE-10A, B, C, D MANUFACTURER Hy-Cal Engineering MODEL NUMBER TC02370-C-A-250-TT COMPONENT Temperature Element FUNCTION/SERVICE Loop "A", "B", "C", "D" to manifold LOCATION: BLDG R ELEVATION 474 COLUMN H.4/5.8	OPERATING TIME	24 hours	Note 1	2			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	4.4×10^7		3			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Ann Seiler

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List, 12/16/81 3. EDS Study 0740-004-471J	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1861

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Process Instrumentation TAG NUMBER PI-SV-250, 251, 253, 256, 257, 259 MANUFACTURER Target Rock MODEL NUMBER 1021010-1-8-1-S, 1021010-3-8-1-S COMPONENT Root Value FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN 250, 251, 253-K/4.3 256, 247, 259-M7/7	OPERATING TIME	4320 hours	Equivalent to >4,320 hours at 150°F.	4	3	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max.normal 104 max. abnormal 150 max. accident	See enclosed profile.	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/	N/A	None
	RELATIVE HUMITY (%)	40 normal 29 max. abnormal 100 max. accident	92	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	2.27×10^7	2	3	Sequential Test	None
	AGING	40 years	23 years	1	3	Sequential Test Engineering Analysis	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Seiler

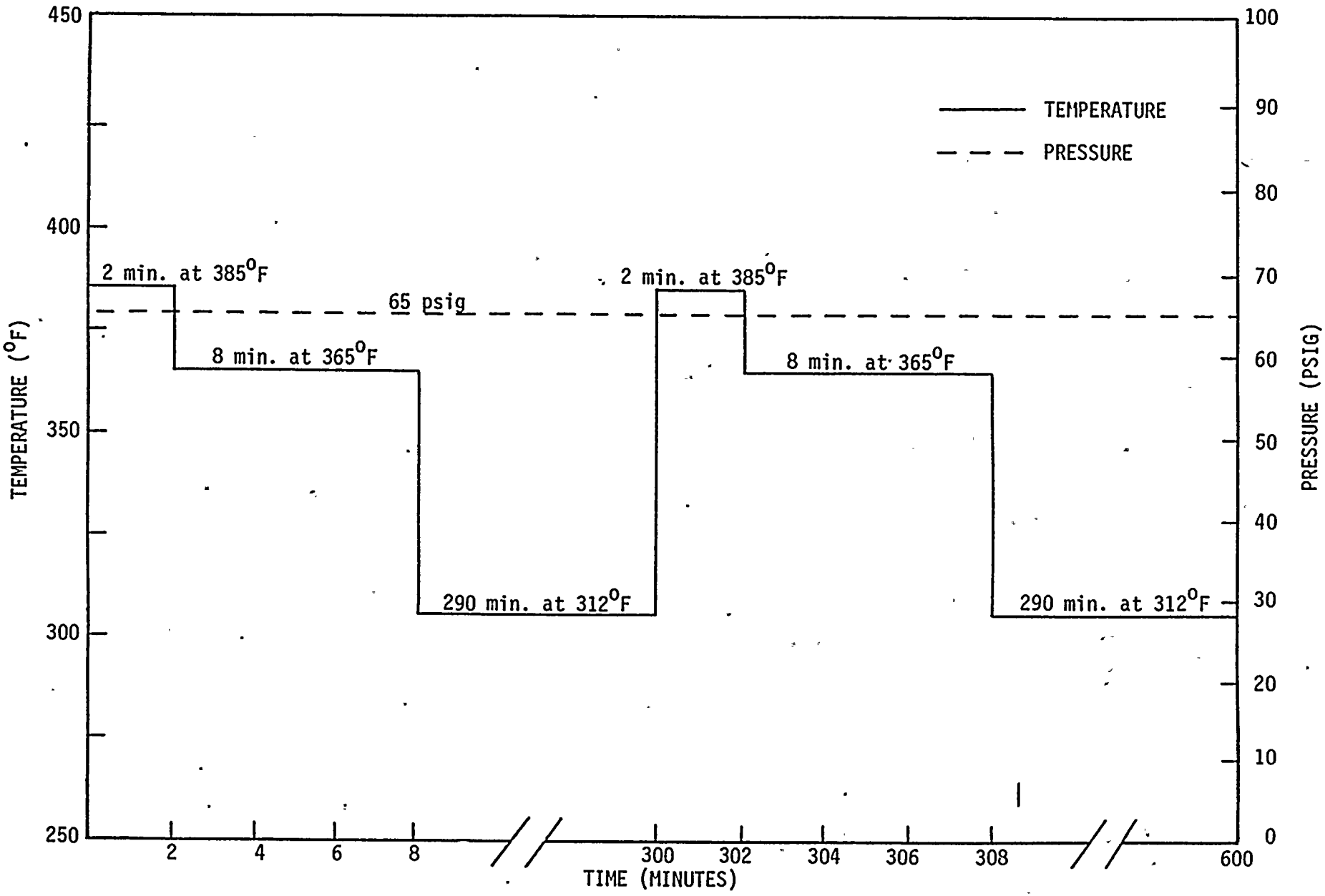
DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Report 0740-004-522B, 522H
3. TRC Report 2375A, QID 324002
4. WNP-2 Class 1E Equipment LIst, 12/16/81

NOTES

1. The accident humidity conditions in the reactor bulding are currently being reevaluated. Qualification will be completed based on this study.
2. The component will be rebuilt on a schedule based on the calculated qualified aging life and recommendations from the manufacturer.

WP-1001



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR TARGET ROCK SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-220

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Process Instrumentation TAG NUMBER PI-SV-262, 263, 264, 266, 267, 268 MANUFACTURER Target Rock MODEL NUMBER 1021010-3-8-1-S COMPONENT Root Valve FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 548 COLUMN N/5	OPERATING TIME	4320 hours	Equivalent to >4,320 hours at 150°F.	4	3	Simultantous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	93%	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	9.9×10^3	2.27×10^7	2	3	Sequential Test	None
	AGING	40 years	23 years	1	3	Sequential Test Engineering Analysis	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Aron Seiben

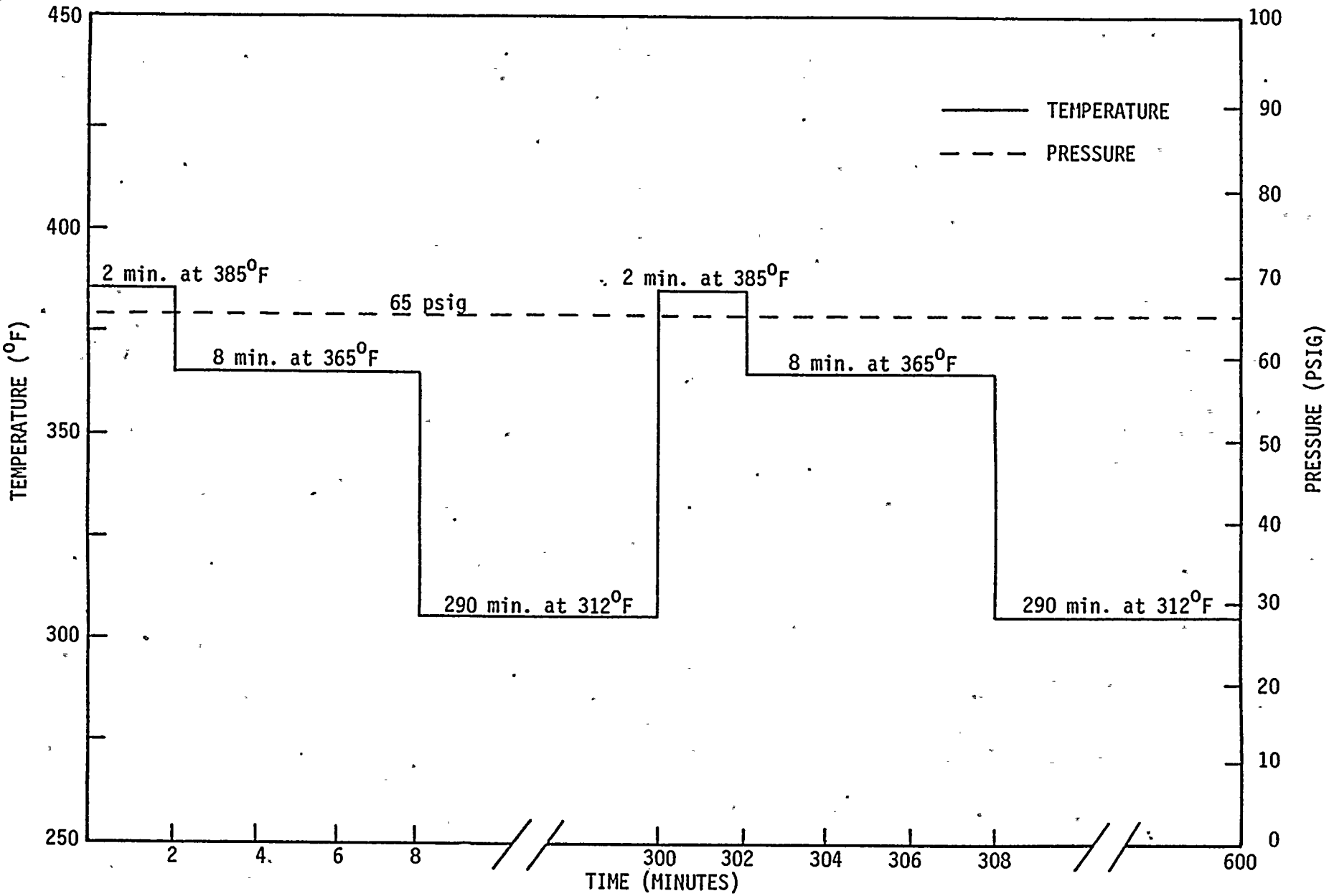
DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Report #0740-004-548C
3. TRC Report 2375A, QID 324002
4. WNP-2 Class 1E Equipment List, 12/16/81

NOTES

1. The accident humidity conditions in the reactor building are currently being reevaluated. Qualification will be completed based on this study.
2. The component will be rebuilt on a schedule based on the calculated qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR TARGET ROCK SOLENOID VALVES

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Process Instrumentation TAG NUMBER PI-SV-265, 269	OPERATING TIME	4320 hours	Equivalent to >4,320 hours at 150°F.	4	3	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 accident	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Target Rock	PRESSURE (PSIA)	14.7 PSIA	N/R	1	N/A	N/A	None
MODEL NUMBER 1021010-3-8-1-S COMPONENT Root Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	93	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	2.0×10^6	2.27×10^7	2	3	Sequential Test	None
	AGING	40 years	23 years	1	3	Sequential Test Engineering Analysis	Note 2
LOCATION: BLDG R ELEVATION 579 COLUMN See Note 2	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

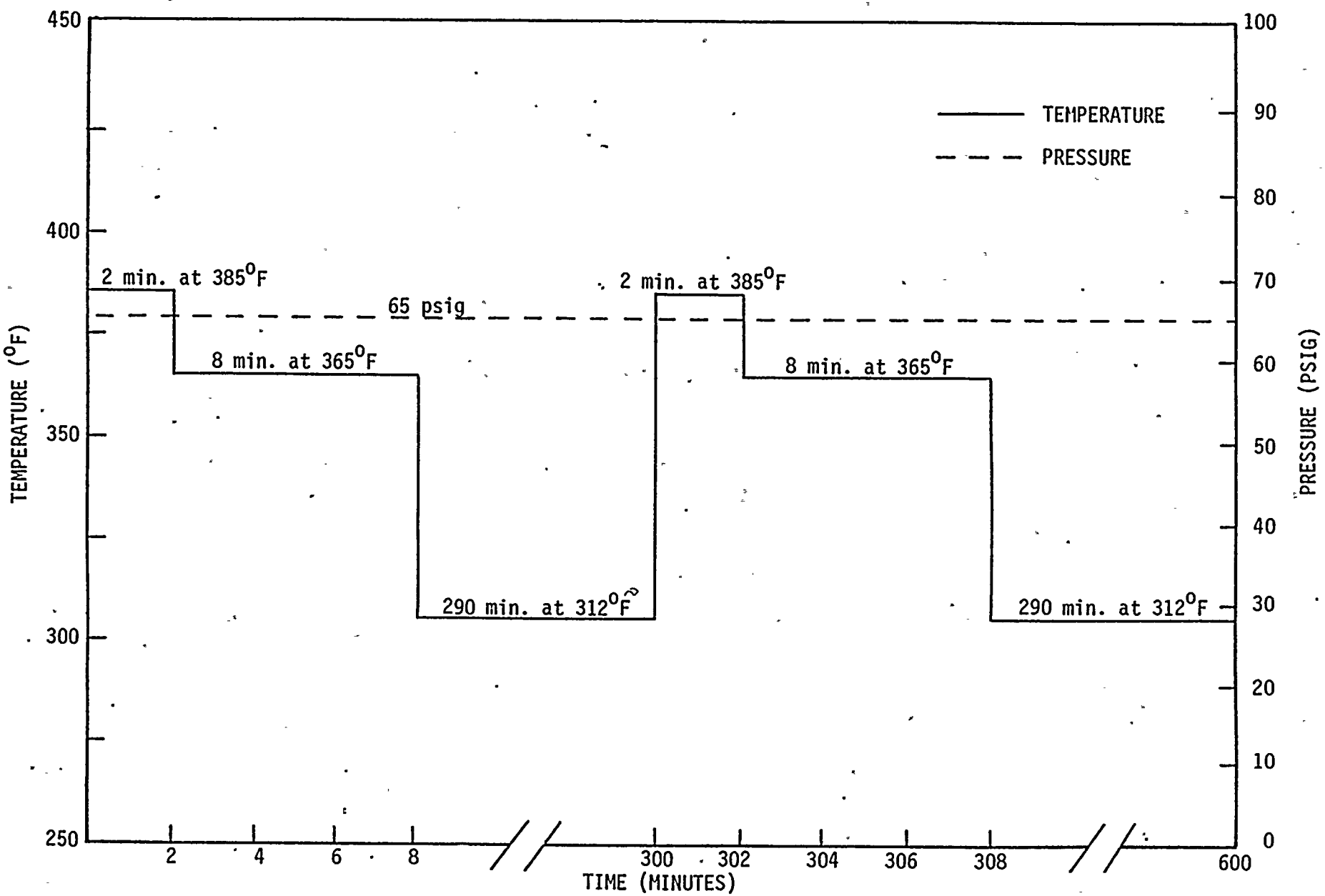
DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Report 0740-004-572N
3. TRC Report 2375A, QID 324002
4. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. The accident humidity conditions in the reactor building are currently being reevaluated. Qualification will be completed based on this study.
2. PI-VX-265 is at Containment Penetration AZ 230°
   PI-VX-269 is at Containment Penetration AZ 40°
3. The component will be rebuilt on a schedule based on the calculated qualified aging life and recommendations from the manufacturer.

WP-1081



ENVIRONMENTAL QUALIFICATION TEST PROFILE FOR TARGET ROCK SOLENOID VALVES

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Closed Cooling Water TAG NUMBER RCC-MO-104	OPERATING TIME	.017 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT Motor Operator	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE Motor Operator for RCC-V-104	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.1×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 514 COLUMN K.0/4.3	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-	1. These components are on order. The qualification documentation will be reveiwed when it is received.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Closed Cooling Water TAG NUMBER RCC-MO-5 MANUFACTURER Limitorque MODEL NUMBER SMB-0-15/M56 COMPONENT Motor Operator FUNCTION/SERVICE 1HP 2.8A Motor Operator RCC-V-5 LOCATION: BLDG R ELEVATION 515 COLUMN K8/4.1	OPERATING TIME	.017 hours	Equivalent to .017 hours at 150°F.	1	4	Engineering Analysis Sequential Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	2.6×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. P. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501 4. Limitorque Test Report B0003, 5/8/76 5. QID 221011	Qualified.

WP-1081

TEMPERATURE PROFILE

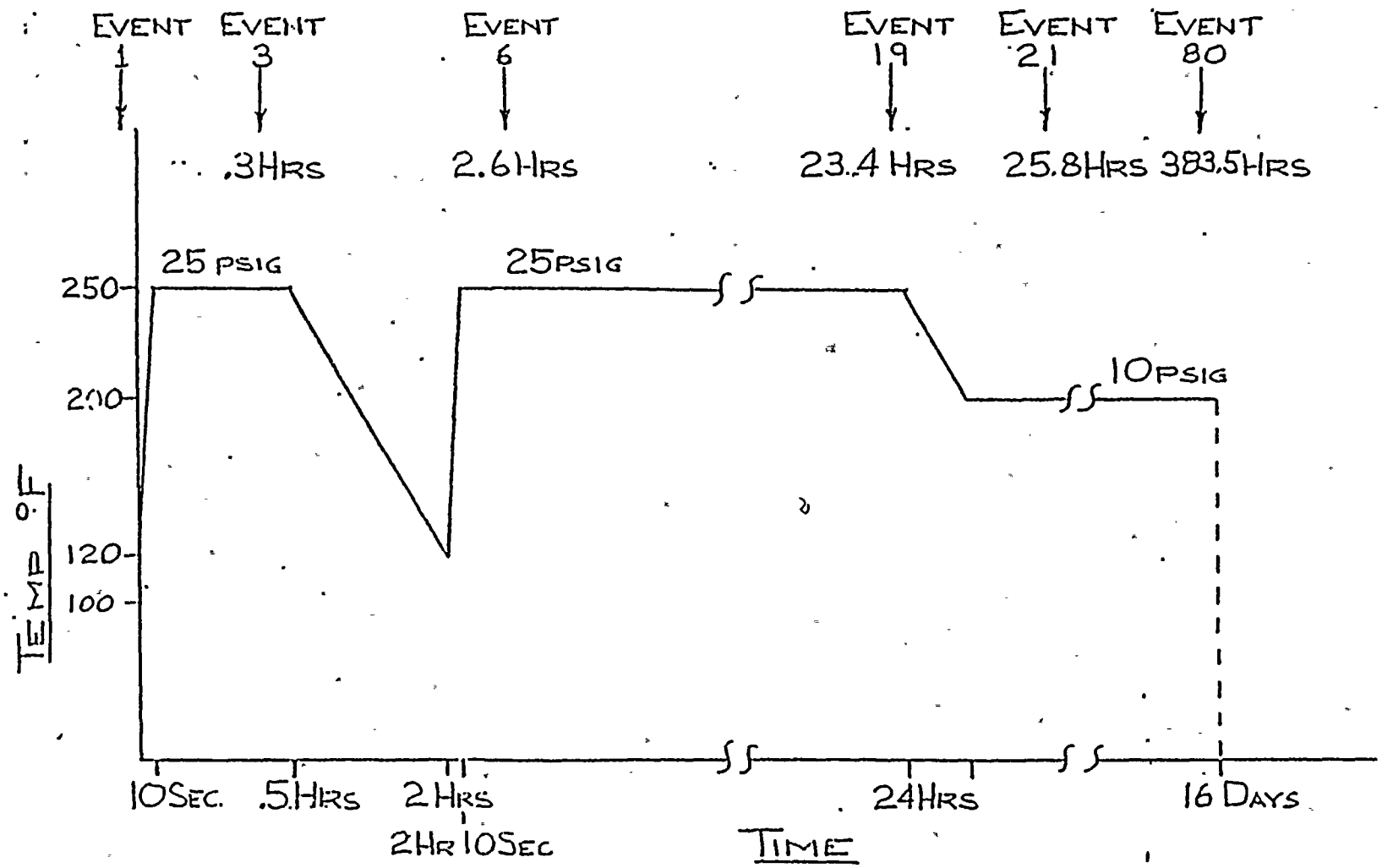


FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Closed Cooling Water TAG NUMBER RCC-MO-21 MANUFACTURER Limitorque MODEL NUMBER SMB-0-15/M56 COMPONENT - Motor Operator Motor: Reliance Insulation: Class B FUNCTION/SERVICE 1 HP 2.8A Motor Operator RCC-V-21 LOCATION: BLDG R ELEVATION 515 COLUMN K.7/4.1	OPERATING TIME	.017 hours	Equivalent to .017 hours a5 150°F.	1	4	Sequential Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	2.6×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501S 4. Limitorque Test Report B0003, 5/8/76 5. QID 221011	Qualified.

WP-1081

TEMPERATURE PROFILE

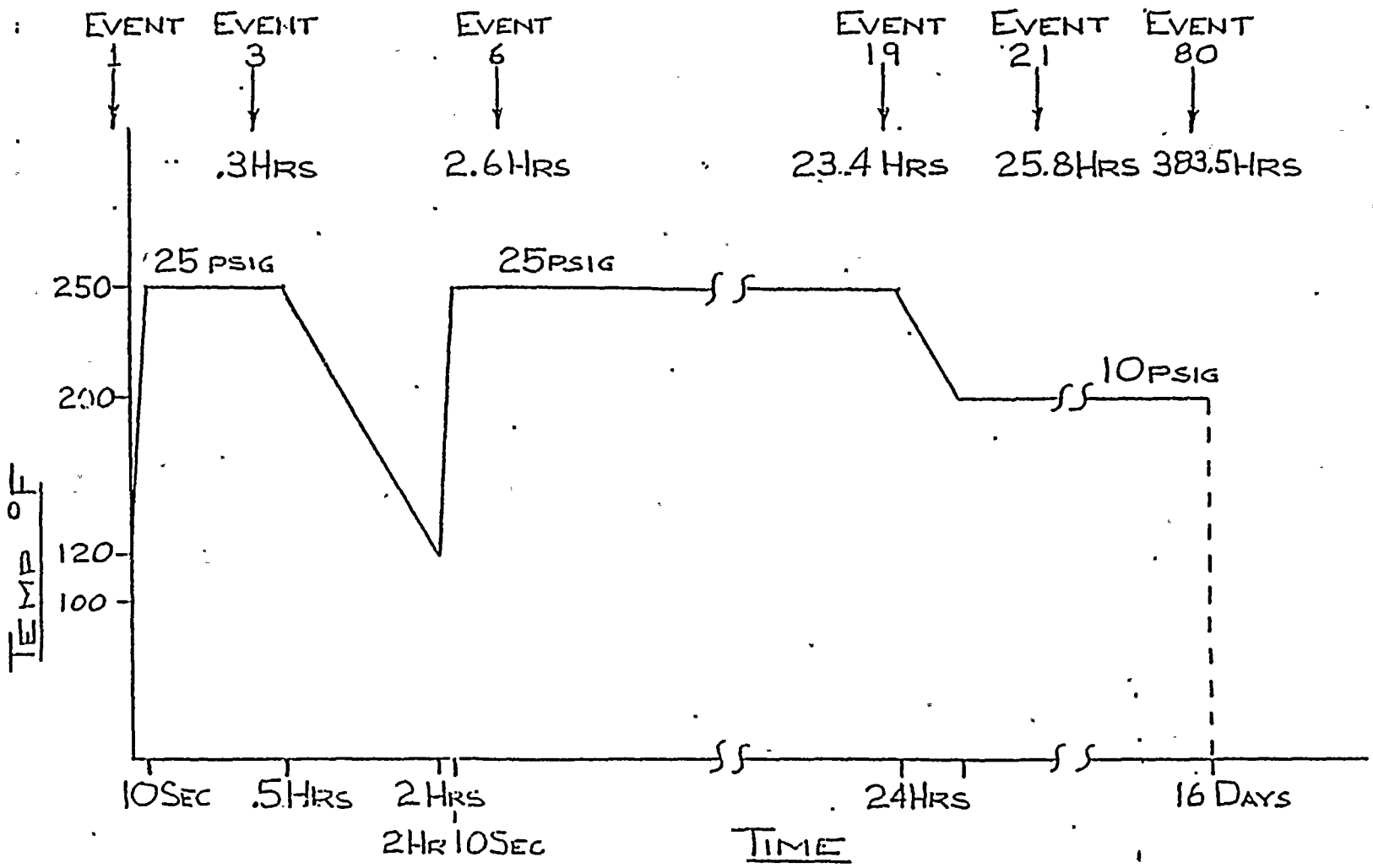


FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Closed Cooling Water TAG NUMBER RCC-MO-40 MANUFACTURER Limitorque MODEL NUMBER SMB-0-15/M56 COMPONENT Motor Operator Motor Reliance, Class B Insulation FUNCTION/SERVICE 0.7 HP 2.3A Motor Operator RCC-V-40 LOCATION: BLDG C ELEVATION 517 COLUMN 78° AZ	OPERATING TIME	.017 hours	16 days	1	3	Simultaneous Test	Note 1
	TEMPERATURE (F)	135 normal 150 abnormal Accident--profile 1	See enclosed profile	2	3	Simultaneous Test	Note 1
	PRESSURE (PSIA)	14.7 normal 16.7 abnormal Accident--profile 1	See enclosed profile	2	3	Simultaneous Test	Note 1
	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident	100	2	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	Demineralized Water	None	2			Note 1
	RADIATION (RAD)	4.4×10^7	2×10^7	2	3	Sequential Test	Note 1
	AGING	40 years	40 years	2	3,4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: M. S. Arbuckle

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. Limitorque Test Report B0003 4. QID 221011	1. The method of requalification is currently being investigated.

WP-1081

TEMPERATURE PROFILE

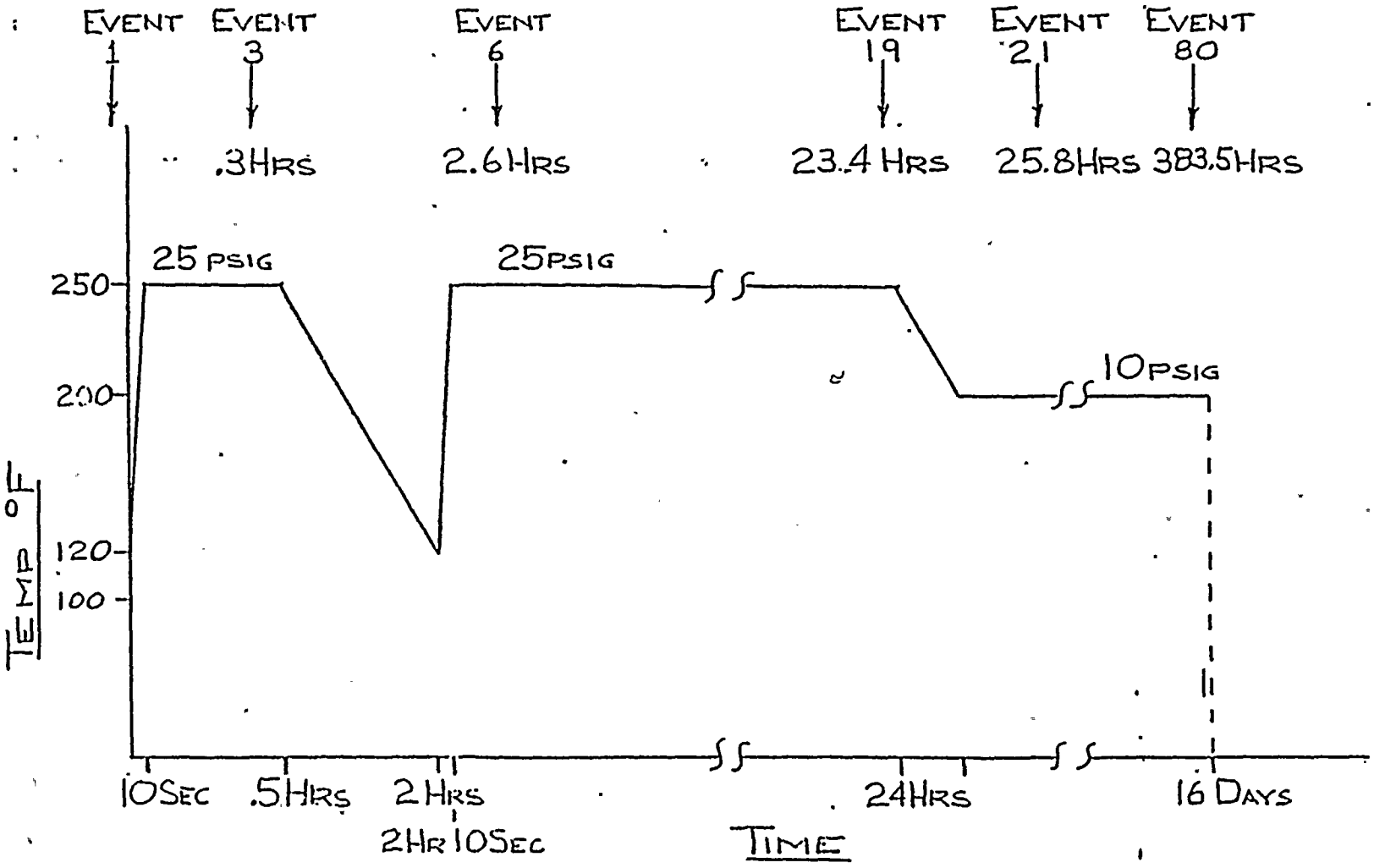


FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Closed Cooling Water TAG NUMBER RCC-MO-129 -130 -131	OPERATING TIME	0.017 hours	Equivalent to 35,700 @ 150°F	1	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER SMB	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100%	1	3	Simultaneous Test	None
COMPONENT Valve Motor Operator	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
FUNCTION/SERVICE Operate RCC Valves	RADIATION (RAD)	1.5×10^5	2×10^7	2	3	Sequential Test	None
	AGING	40 years	40 years +	1	3, 5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 548 COLUMN Note 1	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. P. Wolverton

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548L 3. Limitorque Report B0003 with Addendum A dated 5/8/76 in BWR-054-C-04 4. Calculations in QID 221011(2) 5. Calculations in QID 221011(1)	1. Located in Zone 548L from zone maps of EDS Study 0740-004.

WP-1881

TEMPERATURE PROFILE

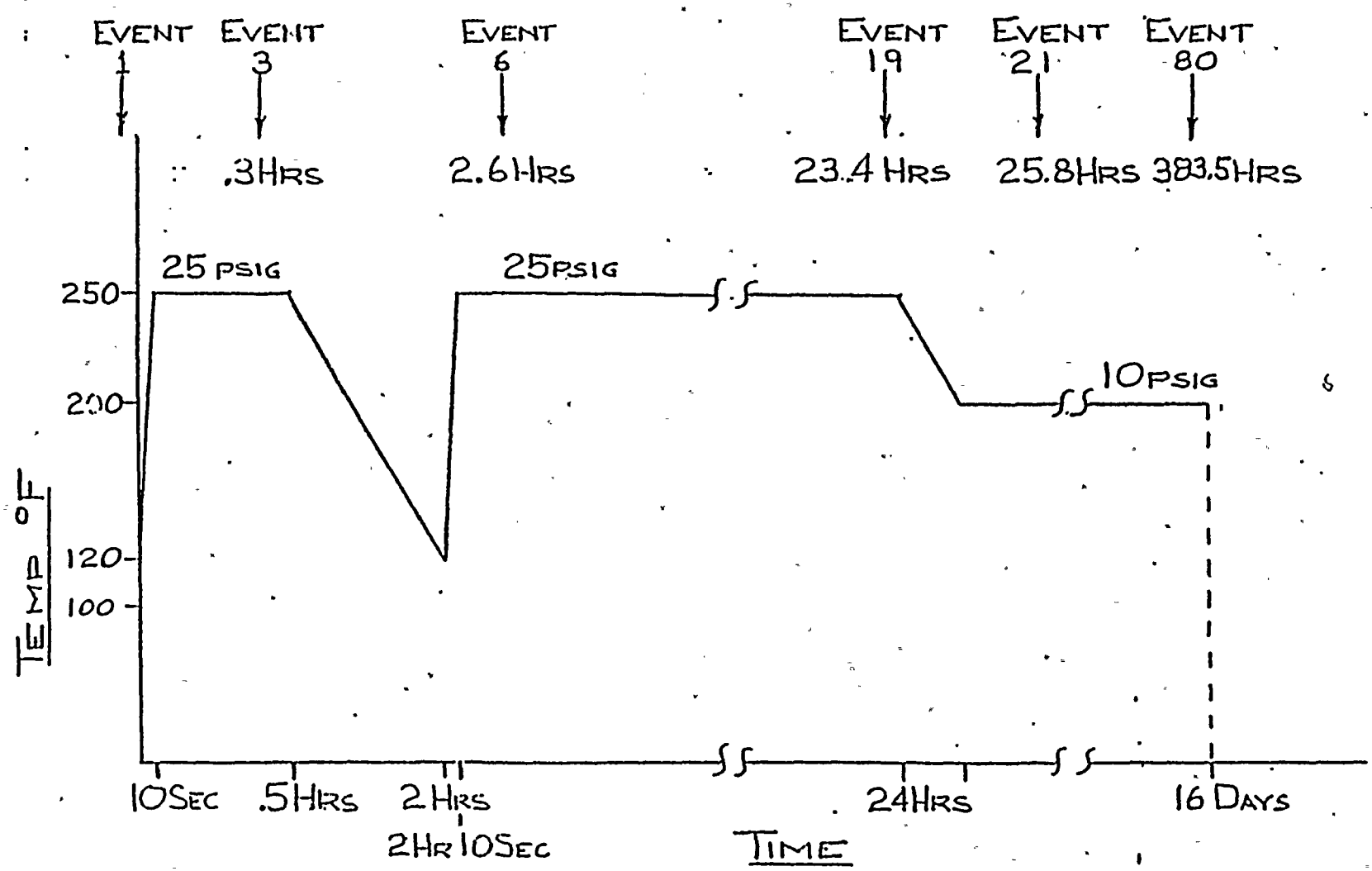


FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-69

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-LMS-65	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident		2			
MANUFACTURER NAMCO	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER SAI133 COMPONENT Limit Switch	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident		2			
FUNCTION/SERVICE Limit Switch for RCIC-V-65	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.6×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 568 COLUMN M.6/5.4	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mal Baker Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548H	1. These components are on order. The qualification documentation will be reviewed when it is received.

WP-1981

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-LMS-66	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
MANUFACTURER	PRESSURE (PSIA)	14.7		1			
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
FUNCTION/SERVICE Limit Switch RCIC-V-66	CHEMICAL SPRAY	Demineralized water		1			
	RADIATION (RAD)	4.4×10^7		2			
	AGING	40 years		1			
LOCATION: BLDG C ELEVATION 606 COLUMN 150° AZ	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List, 12/16/81	1. These components are on order. The qualification documentation will be reviewed when it is received.

WP-1841

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-13 RCIC-MO-64	OPERATING TIME	24 hours	25 hours	5	3	Simultaneous Test	None
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 284 for 30 sec & then 150 maximum accident	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER SMB-0, SMB-00	RELATIVE HUMITY (%)	40 normal 90 maximum abnormal 100 maximum accident	100%	1	3	Simultaneous Test	None
COMPONENT Valve Motor Operator	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
FUNCTION/SERVICE Operate RCIC valves	RADIATION (RAD)	3.4×10^6	1×10^7	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3, 4	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 548,501 COLUMN M6/S.5, L9/4.6, J/5	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

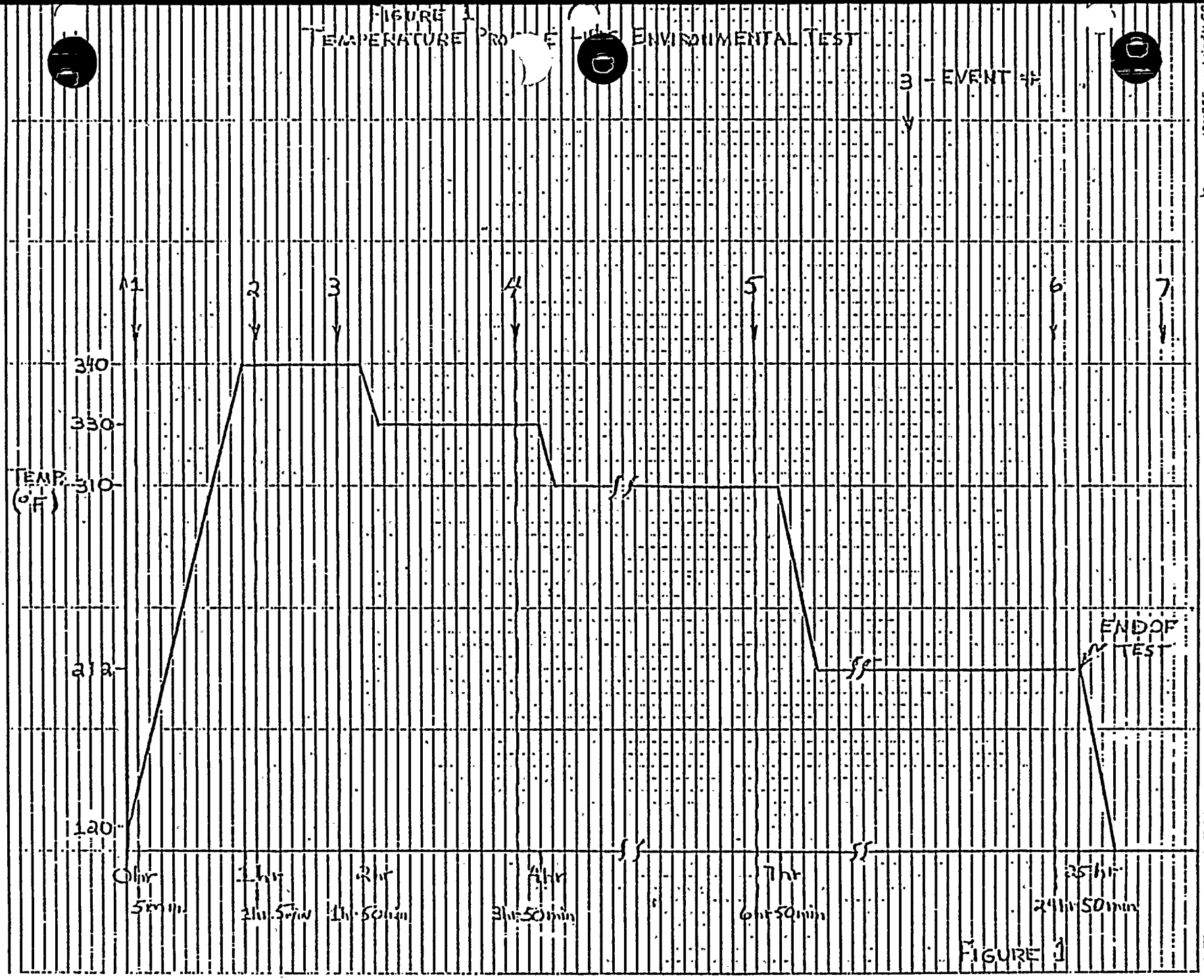
Prepared by: Raymond Pli

Reviewed by: M. F. O'Brien

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548B 3. Limitorque Report B0009, 4/30/76 4. Application calculations in QID 221011 5. WNP-2 Class 1E Equipment List, 12/16/81	Qualified.

WP-1881

FIGURE 1
TEMPERATURE PROFILE ENVIRONMENTAL TEST



WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-31 MANUFACTURER Limitorque MODEL NUMBER SMB-00-15/R56 COMPONENT - Motor Operator Motor: Reliance Insulation: Class B FUNCTION/SERVICE Operates suppression pool suction valve LOCATION: BLDG R ELEVATION 450 COLUMN H.8/7.0	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	4.0×10^6	2.0×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-441I 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

WP-1001

TEMPERATURE PROFILE

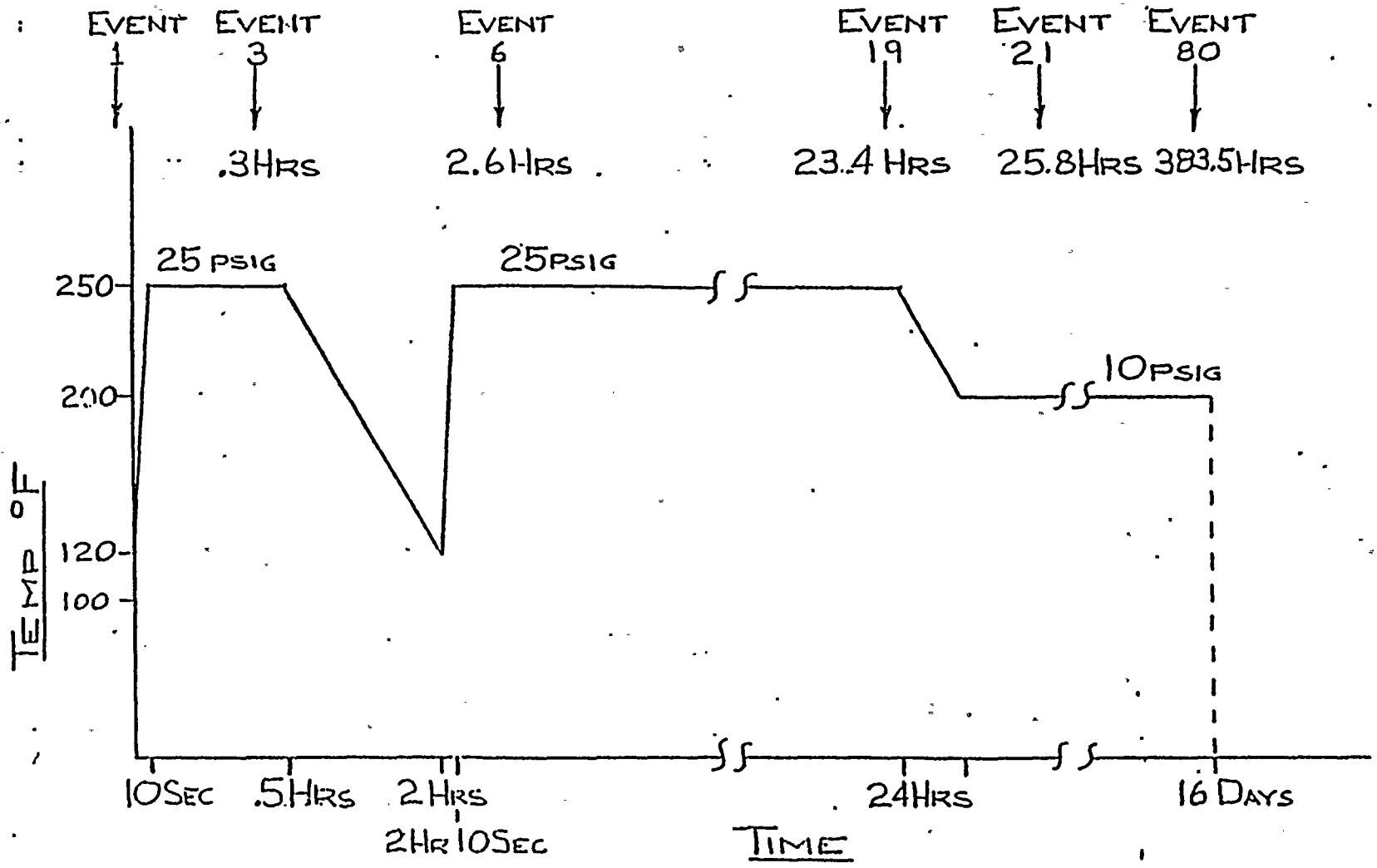


FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-59 MANUFACTURER Limitorque MODEL NUMBER SMB-0-40/0202G COMPONENT - Motor Operator Motor: Reliance Insulation: Class B FUNCTION/SERVICE Operates CST Test Return Valve LOCATION: BLDG R ELEVATION 446 COLUMN H.7/8.0	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	4.0×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-441I 4. Limitorque Test Report B0003 5. QID 221011	Qualified

WP-1001

TEMPERATURE PROFILE

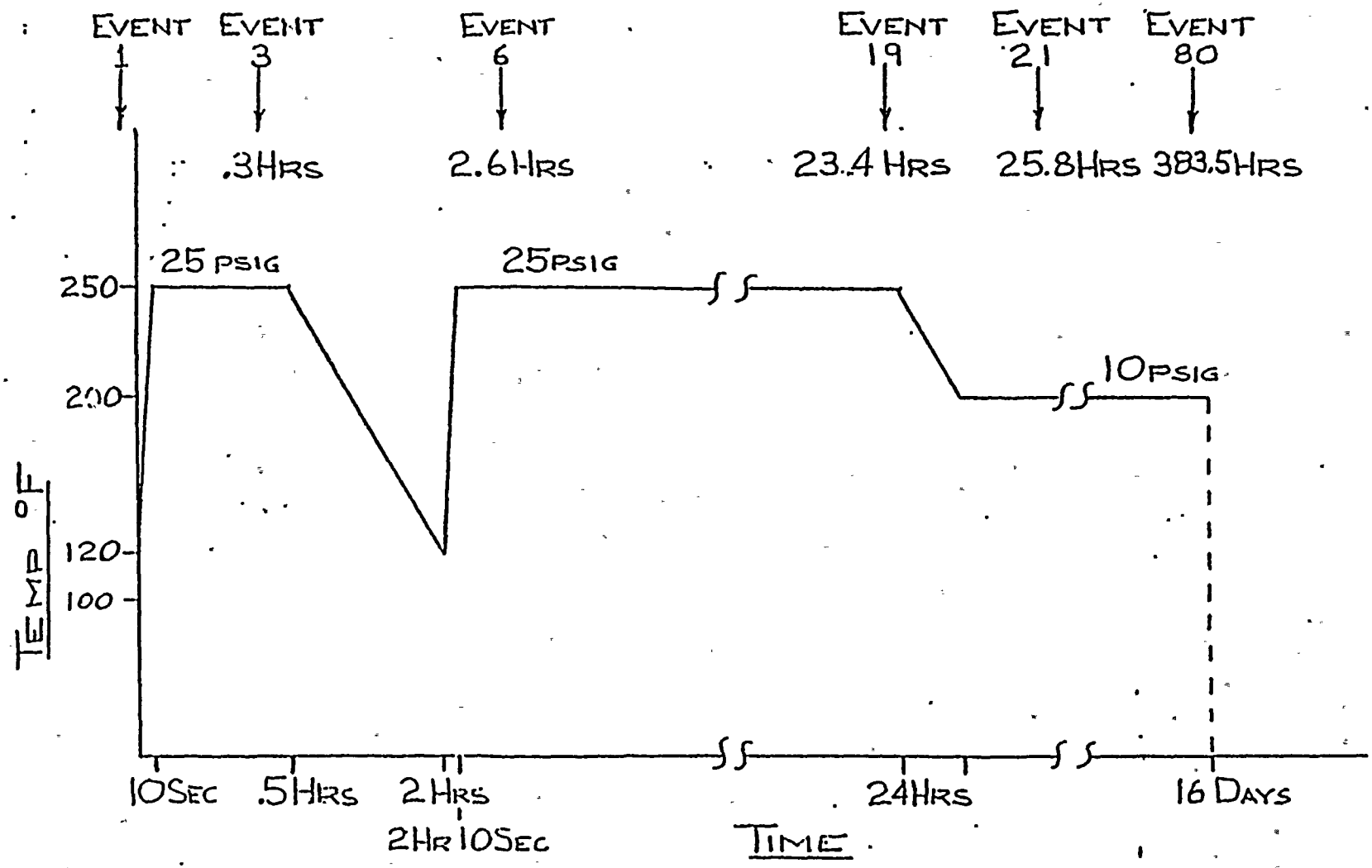


FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-63 MANUFACTURER Limitorque MODEL NUMBER SMB-2-60/D215R2 COMPONENT Motor Operator - Reliance, RH insulation FUNCTION/SERVICE Operates RCIC Steam Supply LOCATION: BLDG C ELEVATION 556' COLUMN 131 Deg.	OPERATING TIME	24 hours	30 days	4	3	Simultaneous Test	None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal Accident - see profile 1	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7 max. normal 16.7 max. normal Accident - see profile 1	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	Chemical Spray pH 10	1	3, 5	Simultaneous Test	None
	RADIATION (RAD)	4.4×10^7	2.04×10^8	1	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chu

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List 12/16/81	Qualified.

WP-1041

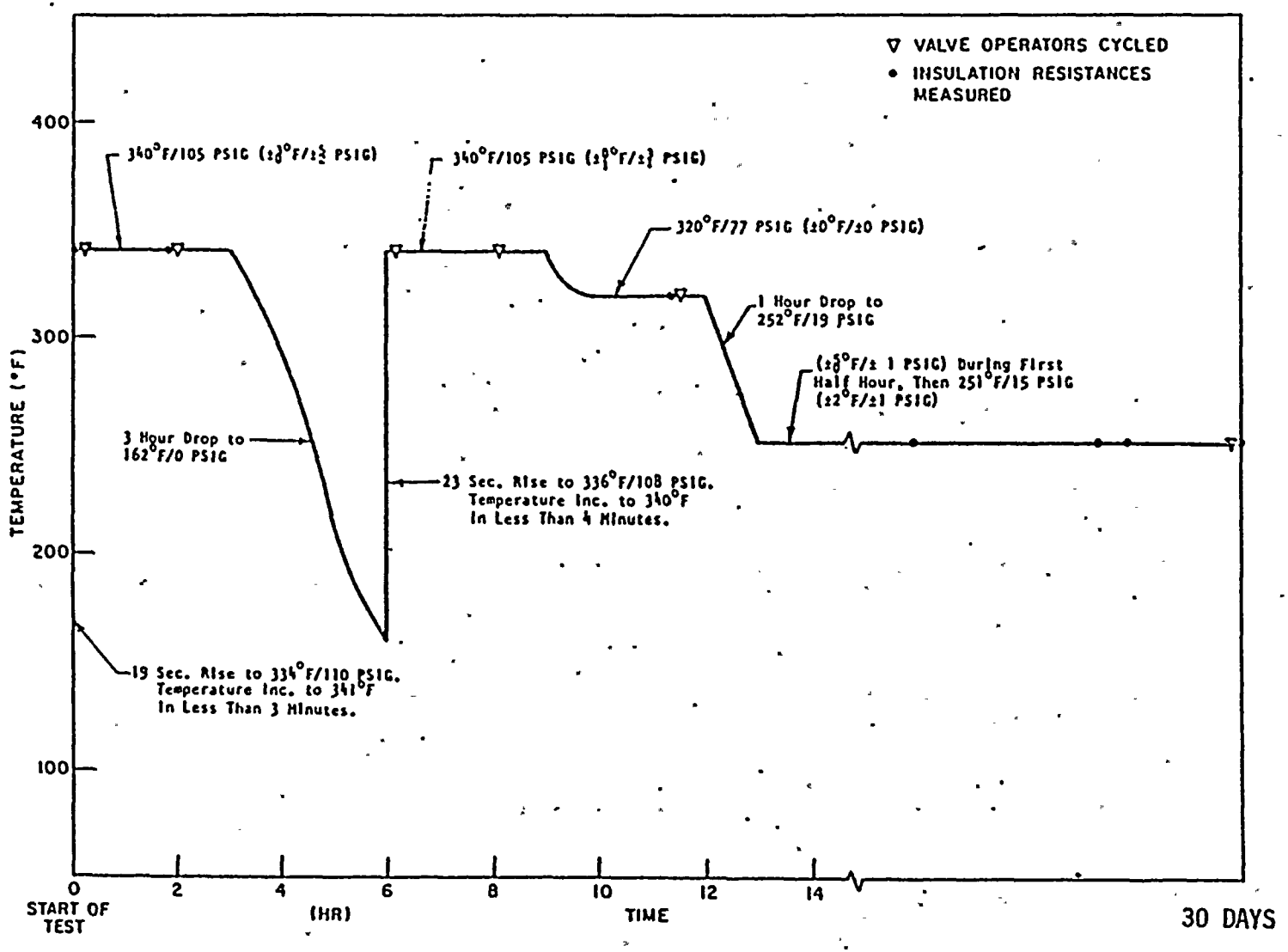


Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM - Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-68 MANUFACTURER Limitorque MODEL NUMBER SMB-015/DTS6F COMPONENT - Motor Operator Motor: Reliance Insulation: Class B FUNCTION/SERVICE Operator Turbine Exhaust Isolation Valve LOCATION: BLDG R ELEVATION 474 COLUMN J.1/7.5	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None.
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	4.8×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: M. F. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471I 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

WP-1001

TEMPERATURE PROFILE

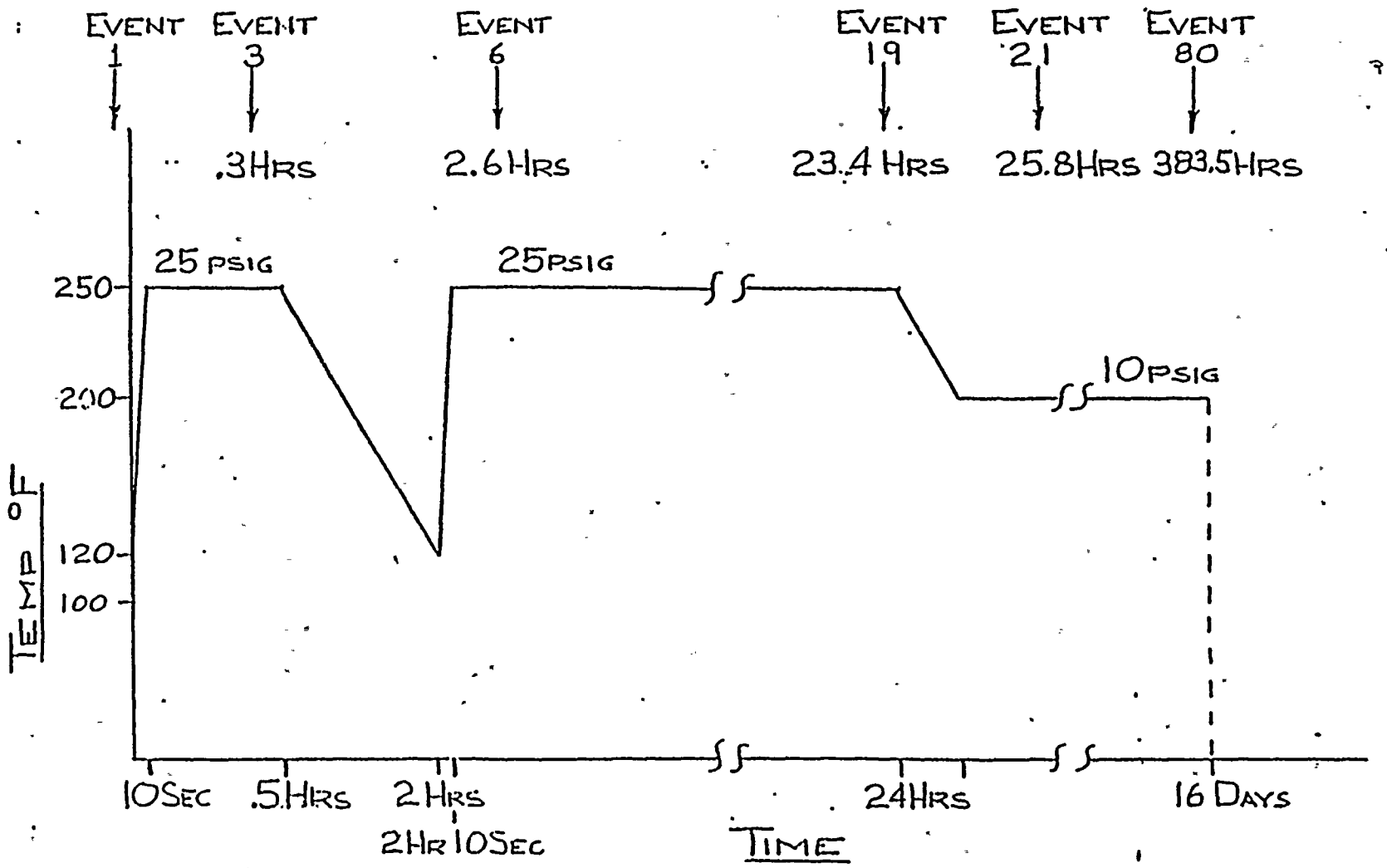


FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-69	OPERATING TIME	6 months	Equivalent to 52,284 hours at 150°F.	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	See enclosed profile	2	4	Simultaneous Test	None
MANUFACTURER Limitorque MODEL NUMBER SMB-000-5	PRESSURE (PSIA)	14.7	See enclosed profile	2	4	Simultaneous Test	None
COMPONENT Motor Operator	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4×10^6	1×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 466 COLUMN H6/6.6	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chen

Reviewed by: Alan Seiden

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-491I 4. Limitorque Report B0009, 4/30/76 5. QID 221011	Qualified.

WP-1861

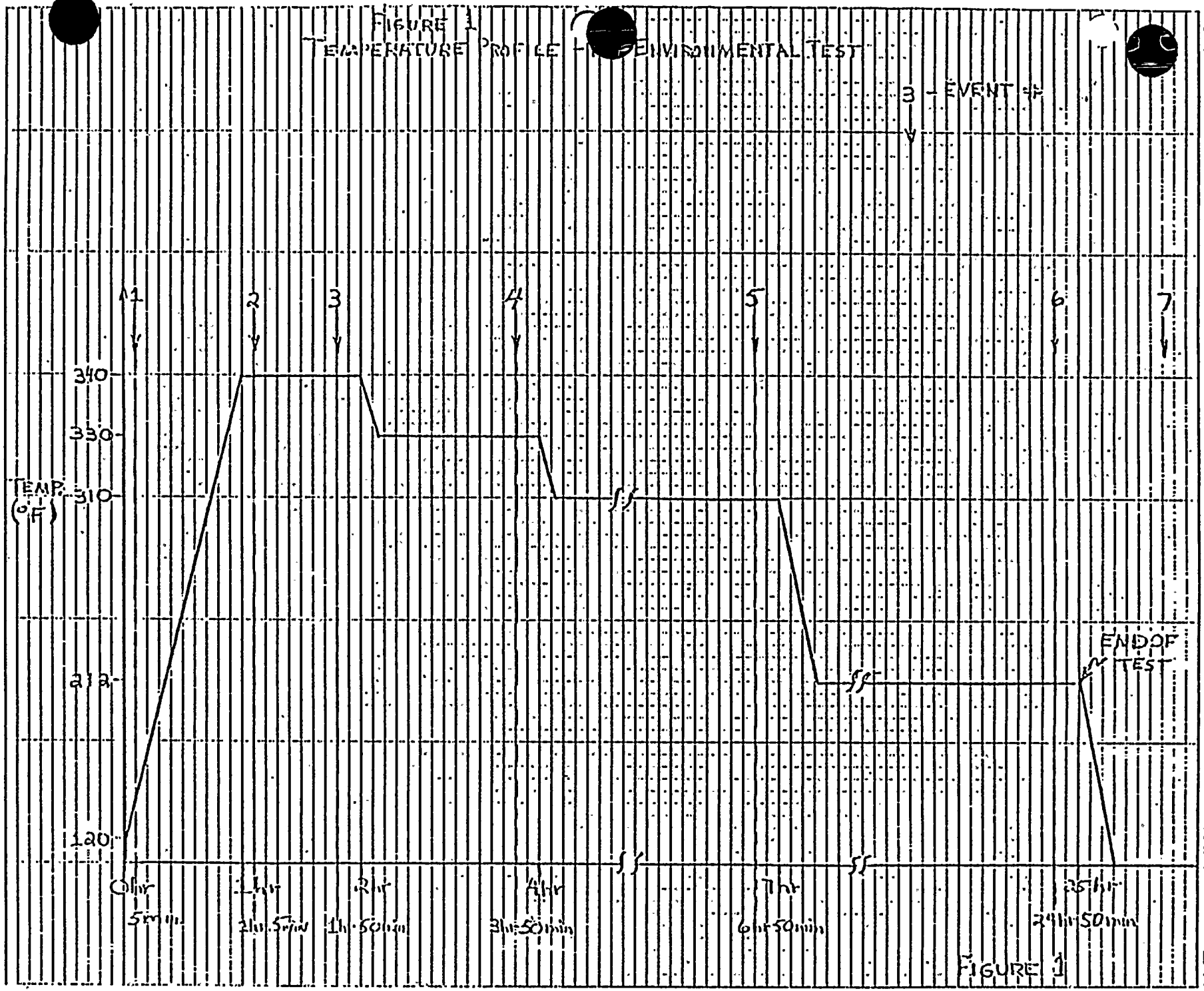


FIGURE 1
TEMPERATURE PROFILE - ENVIRONMENTAL TEST
3 - EVENT #
1
2
3
4
5
6
7
340
330
310
212
120
TEMP. (°F)
SS
SS
SS
SS
END OF TEST
0hr
1hr
2hr
4hr
7hr
25hr
5min
2hr 5min
1hr 50min
3hr 50min
6hr 50min
24hr 50min
FIGURE 1
KEUFFEL & ESSER CO.
10 X 10 TO THE INCH
12 3705

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-76 MANUFACTURER Limitorque MODEL NUMBER SMB-000-5 COMPONENT Motor Operator .33 HP MO for RCIC-V-76 FUNCTION/SERVICE LOCATION: BLDG C ELEVATION 556 COLUMN 120° AZ	OPERATING TIME	24 hours	Note 1	2			
	TEMPERATURE (F)	135 normal 150 abnormal accident--profile 1		1			
	PRESSURE (PSIA)	16.7 normal accident--profile 1		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	Demineralized water		1			
	RADIATION (RAD)	4.4×10^7		1			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP- 2 Class 13 Equipment List, 12/16/81	1. Man and model on Class 1E List but no evaluation. The qualification status of these components has not yet been determined. Requalification activities will be implemented, if required.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-8	OPERATING TIME	24 hours	25 hours	1	3	Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal Accident: See profile 13	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7 normal Accident--profile 13	See enclosed profile	1	N/A	N/A	None
MODEL NUMBER SMB-0 COMPONENT Valve motor operator	RELATIVE HUMITY (%)	40 normal 90 abnormal Accident: See profile 13	100	1	3	Simultaneous Test	None
FUNCTION/SERVICE Operate RCIC Valves	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	11×10^6	1×10^7	2	3	Sequential Test	None
	AGING	40 years	40 years	1	3, 4	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 515 COLUMN J/15	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Alan Seiber

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-501P 3. Limitorque Report B0009, 4/30/76 4. QID 221011	Qualified.

WP-1061

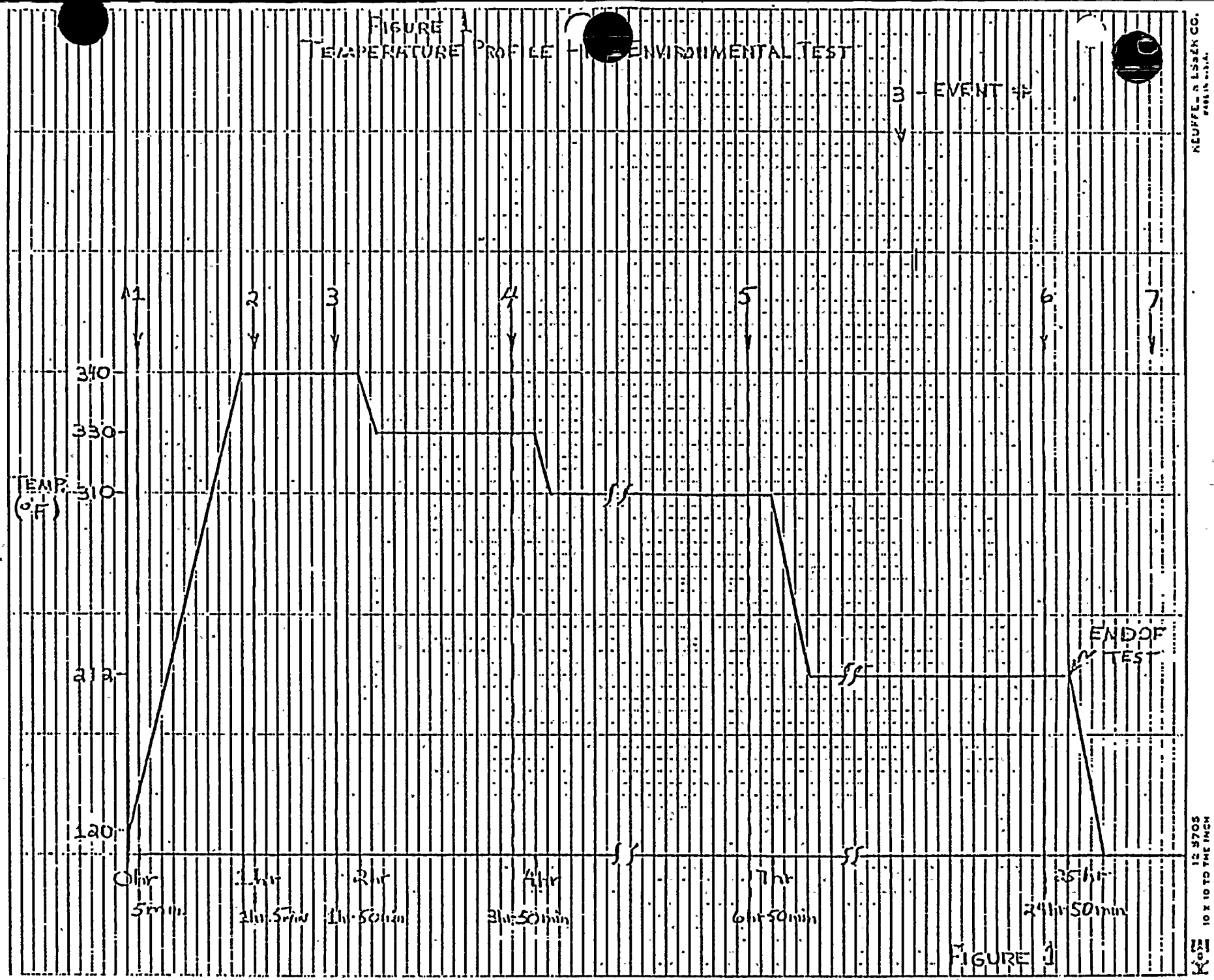
FIGURE 1
TEMPERATURE PROFILE - ENVIRONMENTAL TEST
3 - EVENT 4
1
2
3
4
5
6
7
340
330
310
212
120
TEMP. (°F)
0hr
5min
1hr
2hr 50min
2hr
1hr 50min
4hr
3hr 50min
7hr
6hr 50min
25hr
24hr 50min
END OF TEST
FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-MO-80, 86	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	See enclosed profile	2	4	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	See enclosed profile	2	N/A	N/A	None
MODEL NUMBER SMB-00-7-5	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
COMPONENT Motor Operator	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
FUNCTION/SERVICE Operators for Valves RCIC-V-110 and 113	RADIATION (RAD)	4.8×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4,5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 474 COLUMN J.3/7.2	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471I 4. Limitorque Test Report B0003 5. QID 221011	Qualified

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TEMPERATURE PROFILE

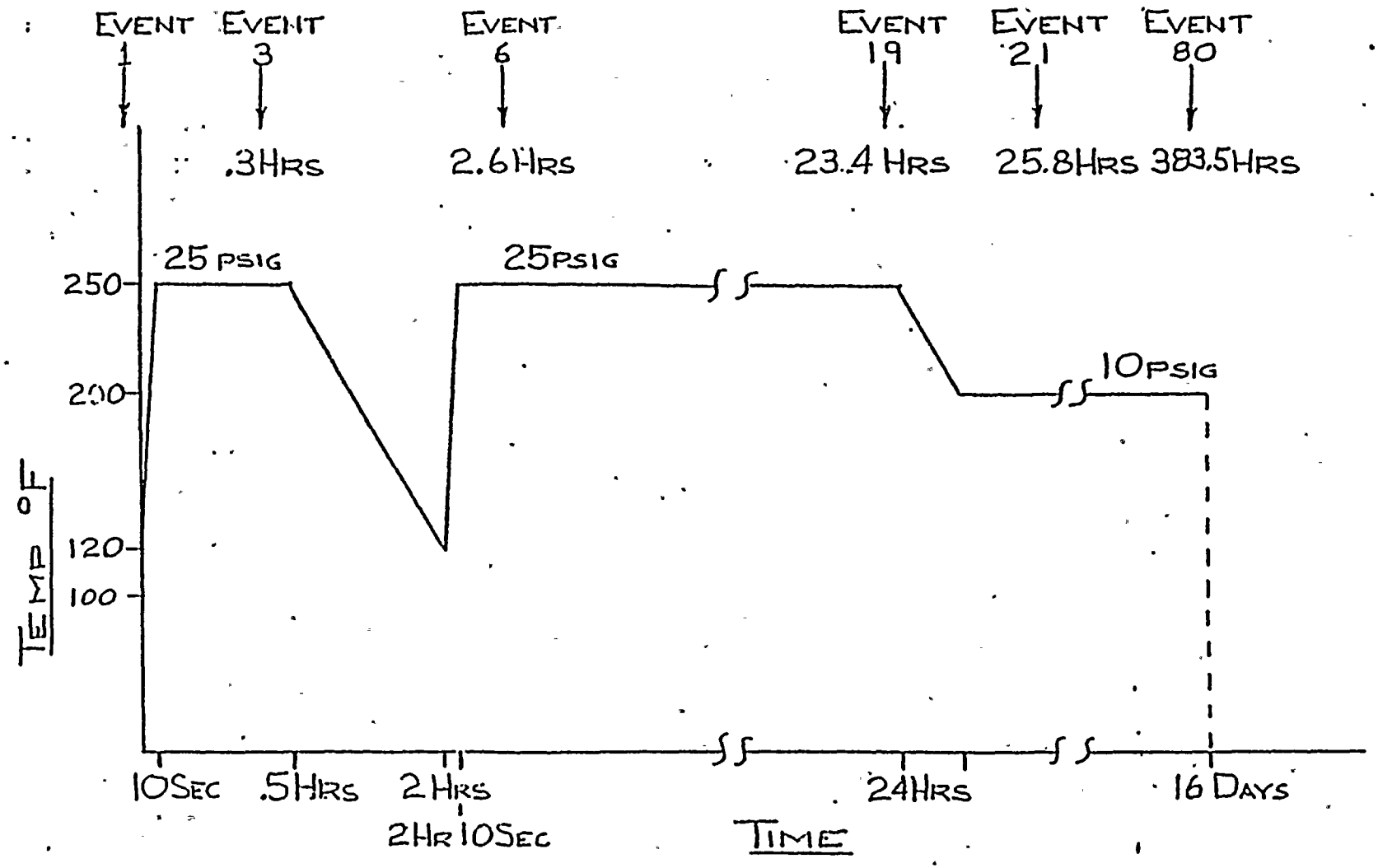

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling TAG NUMBER RCIC-SPV-65	OPERATING TIME	24 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER WJHT831654 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE Reactor Head Spray	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.6×10^3	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
LOCATION: BLDG R ELEVATION 556 COLUMN M8/5.8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. S. Robinson

Reviewed by: W. E. Farrar 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-548G
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Core Isolation Cooling System TAG NUMBER RCIC-SPV-66 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE RCIC to Reactor Isolation Valve LOCATION: BLDG R ELEVATION 528 COLUMN J0/6.9	OPERATING TIME	24 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	2.4×10^4	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: W. S. Robinson

Reviewed by: W.E. Faucone 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522K 3. Calculations in QID 315004 4. E/I-02-81-04-0 (IE Bulletin 78-14) 5. REIC Report No. 21 (Battelle) 6. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity. 2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-68

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Exhaust Air TAG NUMBER REA-LMS-1, 2	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	340	2	4,5	Simultaneous Test	None
MANUFACTURER Namco	PRESSURE (PSIA)	14.7	N/A	2	N/A	N/A	None
MODEL NUMBER 74080100 COMPONENT Limit Switches	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE Limit Switch on REA-V-1	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
	RADIATION (RAD)	1.9×10^8	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4,5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 593 COLUMN H.5/6.0	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Alan Seiler Reviewed by: M. F. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572H 4. Qualification of NAMCO Controls Limit Switch Model EA-740 to IEEE Stds. 344 (1975), 323 (1974) and 382 (1972), Rev. 1, dated 2/22/79; Rev. 0, dtd. 2/20/78 5. EDS Problem File #0740-004-AAD20, NAMCO LS	Qualified.

WP-1001

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-92B

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Exhaust Air TAG NUMBER REA-RE-19 MANUFACTURER MODEL NUMBER COMPONENT Radiation Detection FUNCTION/SERVICE Detector for elevated dis-discharge beta radiation LOCATION: BLDG R ELEVATION 572 COLUMN	OPERATING TIME		Note 1				None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	N/R	1			None
	PRESSURE (PSIA)	14.7	N/R	1			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	N/R	1			None
	CHEMICAL SPRAY	N/A	N/R	1			None
	RADIATION (RAD)	4.4×10^3	N/R				None
	AGING	40 years	Note 2	1			None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11	1. This component is only required for operation under normal environmental conditions and is, therefore, considered a mild environment component. Specific Qualification of components in mild environments is not required at this time. 2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-59

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Exhasut Air TAG NUMBER REA-RLY-CR1 MANUFACTURER ASEA MODEL NUMBER RK225052-CP COMPONENT Relay FUNCTION/SERVICE Control relay for isolation valves LOCATION: BLDG R ELEVATION 527 COLUMN J/6.9	OPERATING TIME	4,320 hours	Note 1	3			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. normal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	2.4×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ann Seiken

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522K 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-59

MPL:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Exhaust Air TAG NUMBER REA-RLY-CR2 MANUFACTURER ASEA MODEL NUMBER RK225-052-CP COMPONENT Relay FUNCTION/SERVICE Control relay for isolation valves LOCATION: BLDG R ELEVATION 554 COLUMN H7/8.2	OPERATING TIME	4,320 hours	Note 1	3	N/A		
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	8.5×10^4		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Oran Seiler

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 2.11 2. EDS Study 0740-004-48P 3. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Environmental qualification test data is currently being obtained. The component qualification will be evaluated upon receipt of this data.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Exhaust Air TAG NUMBER REA-SPV-1	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER WJHT 831654 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
Reactor Building Normal Exhaust Isolation	RADIATION (RAD)	2.4×10^4	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	Note 2
LOCATION: BLDG R ELEVATION 530 COLUMN J/6.9	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared By: [illegible] Reviewed By: W.E. Farasow 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-522K
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-58

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Exhaust Air TAG NUMBER REA-SPV-2 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Reactor Building Normal Exhaust Isolation LOCATION: BLDG R ELEVATION 552 COLUMN H7/8.6	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. normal 100 accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.5×10^4	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4,	Operating Experience Maintenance	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared By: M. S. Robinson

Reviewed By: W. E. Faraone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-548P
3. Calculation in QID 315004
4. E/I-02-91-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Feedwater TAG NUMBER RFW-MO-65A RFW-MO-65B MANUFACTURER Limitorque MODEL NUMBER SMB-4-250/326UR4 COMPONENT Motor Operator FUNCTION/SERVICE Motor Operator for RFW-V-65A RFW-V-65B LOCATION: BLDG R ELEVATION 505 COLUMN H.4/5.7 H.4/6.3	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.2×10^6		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Phi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-5010	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Feedwater TAG NUMBER RFW-SPV-32A1 -32A2 -32B1 -32B2 MANUFACTURER Automatic Switch MODEL NUMBER WJHT831654 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE RFW-V-32A -32B LOCATION: BLDG R ELEVATION 475 COLUMN H4/6.8	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.7×10^5	4.4×10^6	2	3, 5	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: W. S. Robinson

Reviewed by: W. E. Farmer 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-471J
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final Qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-CE-1A RHR-CE-1B MANUFACTURER MODEL NUMBER COMPONENT Conductivity Element FUNCTION/SERVICE LOCATION: BLDG ELEVATION COLUMN	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)						None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-DPIS-12A RHR-DPIS-12B RHR-DPIS-29A RHR-DPIS-29B MANUFACTURER Barton MODEL NUMBER 288 COMPONENT Differential Pressure Indicating Switch FUNCTION/SERVICE Measure Differential Pressure for Suction Flow LOCATION: BLDG R ELEVATION 501 COLUMN J.6/3.6 H.8/9.3 H.8/7.3	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.6×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-501B and 501K	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-DPIS-9A, B, C	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288A	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 Accident	100	2	5	Simultaneous Test	None
COMPONENT Differential Pressure Indicating Switch	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
FUNCTION/SERVICE	RADIATION (RAD)	1.7×10^6	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 522 COLUMN H8/6.2	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-5220 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Swithc, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-FIS-10A, B, C MANUFACTURER ITT Barton MODEL NUMBER 289 COMPONENT Flow Indicating Switch FUNCTION/SERVICE Shutdown Cooling Loop "A", "B" flow; Loop "C" flow to vessel LOCATION: BLDG R ELEVATION 501 COLUMN J.7/3.6 M.5/7.9	OPERATING TIME	6 months	Equivalent to >6 months at 150°F.	1	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	150	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.3×10^6	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment 2. FSAR Par. 3.11 3. EDS Study 0740-004-501B,I 4. EDS Calculation File 0740-004-002 5. Qualification Test Report for Barton 289 Switch, Report 027A-01, 10/9/80	Qualified 1 A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-FT-13 MANUFACTURER G.E. MODEL NUMBER 1118MAAAWLF COMPONENT Flow Transmitter FUNCTION/SERVICE Flow Transmitter to Reactor HD Spray LOCATION: BLDG R ELEVATION 553 COLUMN M.7/5.4	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	1.6×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. F. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-548G	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-FT-15A MANUFACTURER Rosemount MODEL NUMBER 1151BF5E22PB COMPONENT Flow Transmitter FUNCTION/SERVICE Flow Transmitter to Cooling Loop A LOCATION: BLDG R ELEVATION 501 COLUMN J6/3.6	OPERATING TIME	6 months	6 months	1	4,5	Separate Effects Engineering Analysis	None Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	300 max	2	5	Separate Effects	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	7	Separate Effects	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	N/A	None
	RADIATION (RAD)	4.6×10^5	2×10^6	3	6	Separate Effects	None
	AGING	40 years	Note 2	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ch

Reviewed by: Ann Seiler

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List dated 12/16/81
2. FSAR Par. 3.11
3. EDS Study 0740-004-501B
4. Rosemount Product Data Sheet 2256
5. Rosemount Report 97215A dated 2/9/72
6. Rosemount Report 127227 dated 12/27/72
7. Rosemount Report 117415 dated 9/19/75

NOTES

Qualified

1. Test data and equipment specification data ensure the component will operate 6 months at the required temperatures.
2. A preventive maintenance surveillance program is being developed to address aging of Class 1E equipment.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-FT-15B, 15C MANUFACTURER Bailey MODEL NUMBER 555111BMAA4WBM COMPONENT Flow Transmitter FUNCTION/SERVICE Flow Transmitter for cooling loops B, C LOCATION: BLDG R ELEVATION 501 COLUMN H.8/9.3	OPERATING TIME	6 months	Note 1	1	N/A	N/A	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	Note 1	2	N/A	N/A	None
	PRESSURE (PSIA)	14.7	Note 1	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	Note 1	2	N/A	N/A	None
	CHEMICAL SPRAY	N/A	Note 1	2	N/A	N/A	None
	RADIATION (RAD)	7.8×10^4	Note 1	3	N/A	N/A	None
	AGING	40 years	Note 1	2	N/A	N/A	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501K	1. These components are being replaced by transmitters qualified to IEEE 323-74 and IEEE 344-75.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER See Notes Below MANUFACTURER Namco MODEL NUMBER 1703100 COMPONENT Limit Switch FUNCTION/SERVICE	OPERATING TIME	6 months	Note 1	1	3		
	TEMPERATURE (F)	135 normal 150 abnormal Accident - profile 1		2			
	PRESSURE (PSIA)	14.7 normal 16.7 abnormal Accident - profile 1		2			
	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	3.48×10^7		2			
	AGING	40 years		2			
LOCATION: BLDG C ELEVATION 512, 563 COLUMN 20, 58, 79, 100, 158 165, 265, 325, 360 degrees	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: M. L. Johnson

DOCUMENTATION REFERENCES

1. WNP-2 CIE Equipment List
2. FSAR Paragraph 3.11
3. WPPSS Letter GE-02-JLS-81-04

NOTES

1. These limit switches are being replaced by Namco Limit Switch EA-180, which is qualified to IEEE-323-74 and IEEE-344-75. (Ref. 3)

TAG NUMBERS

RHR-LMS-111A	RHR-LMS-113	RHR-LMS-50B
RHR-LMS-111B	RHR-LMS-41A	
RHR-LMS-111C	RHR-LMS-41B	
RHR-LMS-112A	RHR-LMS-41C	
RHR-LMS-112B	RHR-LMS-50A	

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-LMS-89	OPERATING TIME	6 months	6 months	2	4,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	200	1	4	Simultaneous Test	None
MANUFACTURER NAMCO	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER 1703100 COMPONENT Limit Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	1	4	Simultaneous Test	None
FUNCTION/SERVICE Limit Switch for RHR-V-89	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6	2.5×10^6	3	5	Engineering Analysis	Note 2
	AGING	40 years	Note 1	1		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 553 COLUMN N.2/8.9	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Oran Sibley

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. WNP-2 Class 1E Equipment List dated 12/16/81
3. EDS Report 0740-004-548J
4. ACME-Cleveland Report, "Qualification of Namco Control Limit Switch Model EA-170", dated 3/17/78
5. QID No. 200005
6. NAMCO Controls, Limit Switches General Catalog, copyright 1979

NOTES

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2. The susceptible materials of construction will be reevaluated for radiation degradation.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-LS-10A RHR-LS-11C RHR-LS-10B RHR-LS-11D RHR-LS-10C RHR-LS-10D RHR-LS-11A RHR-LS-11B MANUFACTURER Magnetrol MODEL NUMBER 751-SPX-M14 COMPONENT Level Switch FUNCTION/SERVICE	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	2.2×10^6		3			None
	AGING	40 years		2			None
LOCATION: BLDG R ELEVATION 474 COLUMN M.0/7.8, M.0/7.9 K.0/8.0	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-471E and 471F	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-LT-8A,B	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
MANUFACTURER Barton	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 352/358 COMPONENT Level Transmitter	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
FUNCTION/SERVICE Level Transmitter to Heat Exchanger A,B	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 548 COLUMN J5/8,6 M5/8.6	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YESX NO

Prepared by: AN 1/8/82

Reviewed by: JDM 1/8/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-548J	1. Qualification Documentation is being obtained.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: E12-C002
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-M-2A -2B -2C	OPERATING TIME	4320 hours	Equivalent of 4320 hours at 150°F	5	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	1	3,4	Simultaneous Test	None
MANUFACTURER General Electric	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER 5K6339XC122A COMPONENT Motor	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100%	1	3,4	Simultaneous Test	None
FUNCTION/SERVICE Drive Pumps	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	2.5×10^6		2			Note 1
	AGING	40 years	180 starts = 10 year + 10 33 years (worst fit)	1	3,4	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 422 COLUMN K/8.6, M/8.6, H7/4.6	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seiler

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-422I (worst case) 3. GE #491HA911, 3/25/80 (BWR 111-A-04) 4. GE #NEDM-10672, 8/27 (BWR 111-A-05) 5. WNP-2 Class 1E Equipment List	1. Radiation test data on representative motorettes are being obtained from the manufacturer.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-35A

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-M-3	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
MANUFACTURER Westinghouse	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
MODEL NUMBER 75D40786 COMPONENT Motor	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
FUNCTION/SERVICE 15hp motor for RHR-P-3+	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.9×10^6	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 429 COLUMN H 4/4.8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82

Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report #0740-004-422M
4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Plant, w/Enclosures
5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Electric Motor Qualification at WPPSS Plant, w/Enclosures
6. EPRI Report #RP-1707-3

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-11A -MO-11B MANUFACTURER Limitorque . MODEL NUMBER SMB-000-5/K48 COMPONENT - Motor Operator Motor: Reliance, B insulation FUNCTION/SERVICE Operate HX to suppression pool valve LOCATION: BLDG R ELEVATION 475 COLUMN K.2/8/1 L.8/8.1	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Engineering Analysis Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	2.2×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by:

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471F, E 4. Limitorque Test Report B0003 5. QID 221011	Qualified

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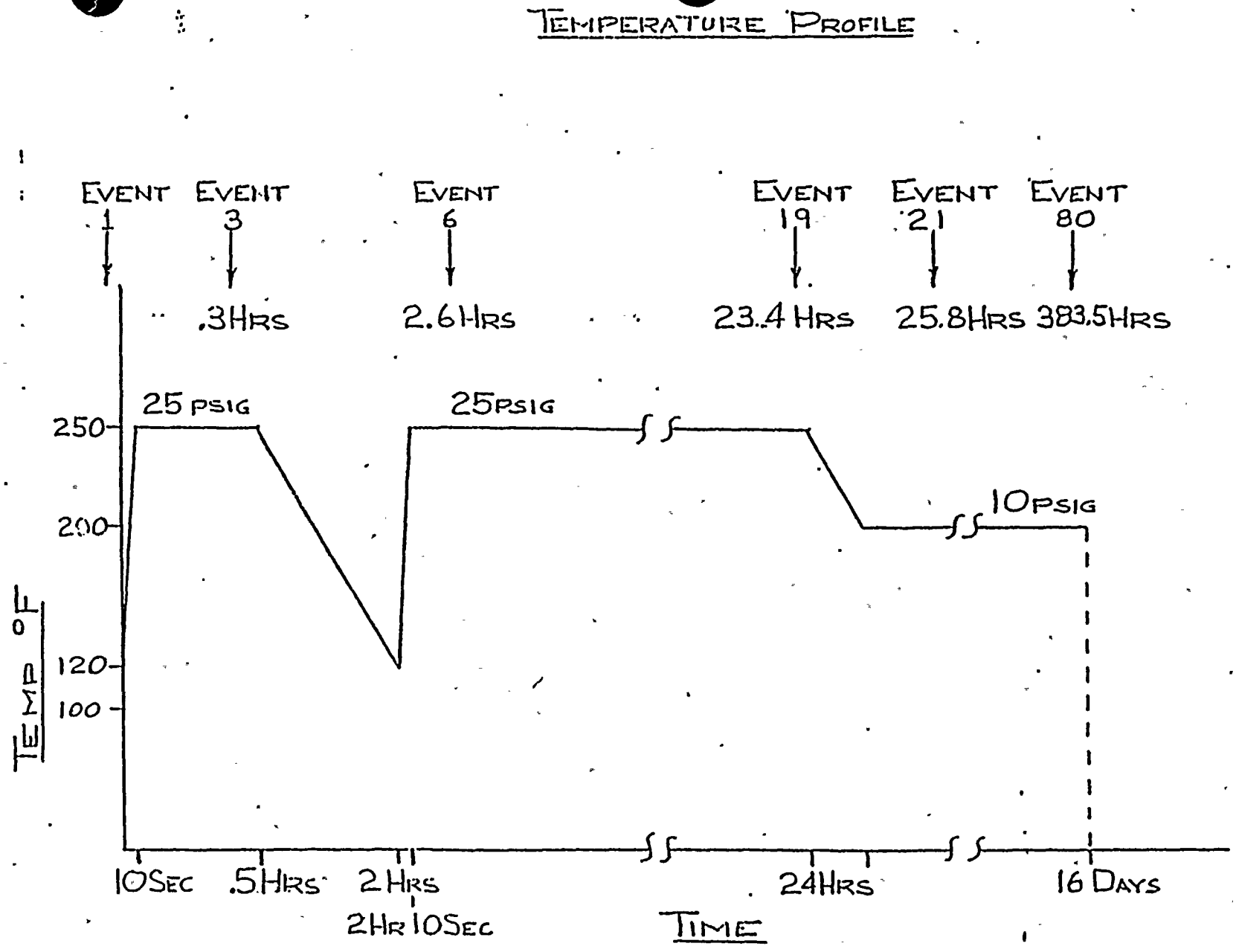
TEMPERATURE PROFILE
EVENT 1
EVENT 3
EVENT 6
EVENT 19
EVENT 21
EVENT 80
.3HRS
2.6HRS
23.4 HRS
25.8HRS
383.5HRS
25 PSIG
25PSIG
10PSIG
250
200
120
100
TEMP °F
10SEC
.5HRS
2 HRS
2HR 10SEC
24HRS
16 DAYS
TIME

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-124A -124B -125A -125B MANUFACTURER Limitorque MODEL NUMBER SMC-04 COMPONENT Motor Operator FUNCTION/SERVICE Operate RHR Valves LOCATION: BLDG R ELEVATION 471 COLUMN K3/8.1, K9/8.1, L5/8, L4/8	OPERATING TIME	4320 hours	Equivalent to 35,700 @ 150°F	3	4,5,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	4,6	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	Steam for 24 hours 100% for 15 days	1	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	2.19×10^6	2×10^7	2	4,6	Sequential Test	None
	AGING	40 years	40 years +	1	4,5,6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: M. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-471F (worst case) 3. WNP-2 CIE Equipment List 4. Limitorque Reports B0003, 5/76; B0058, 1/11/80 5. Calculations in QID 221011(1) and (2) 6. Limitorque letter QID 221010	Qualified.

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TEMPERATURE PROFILE

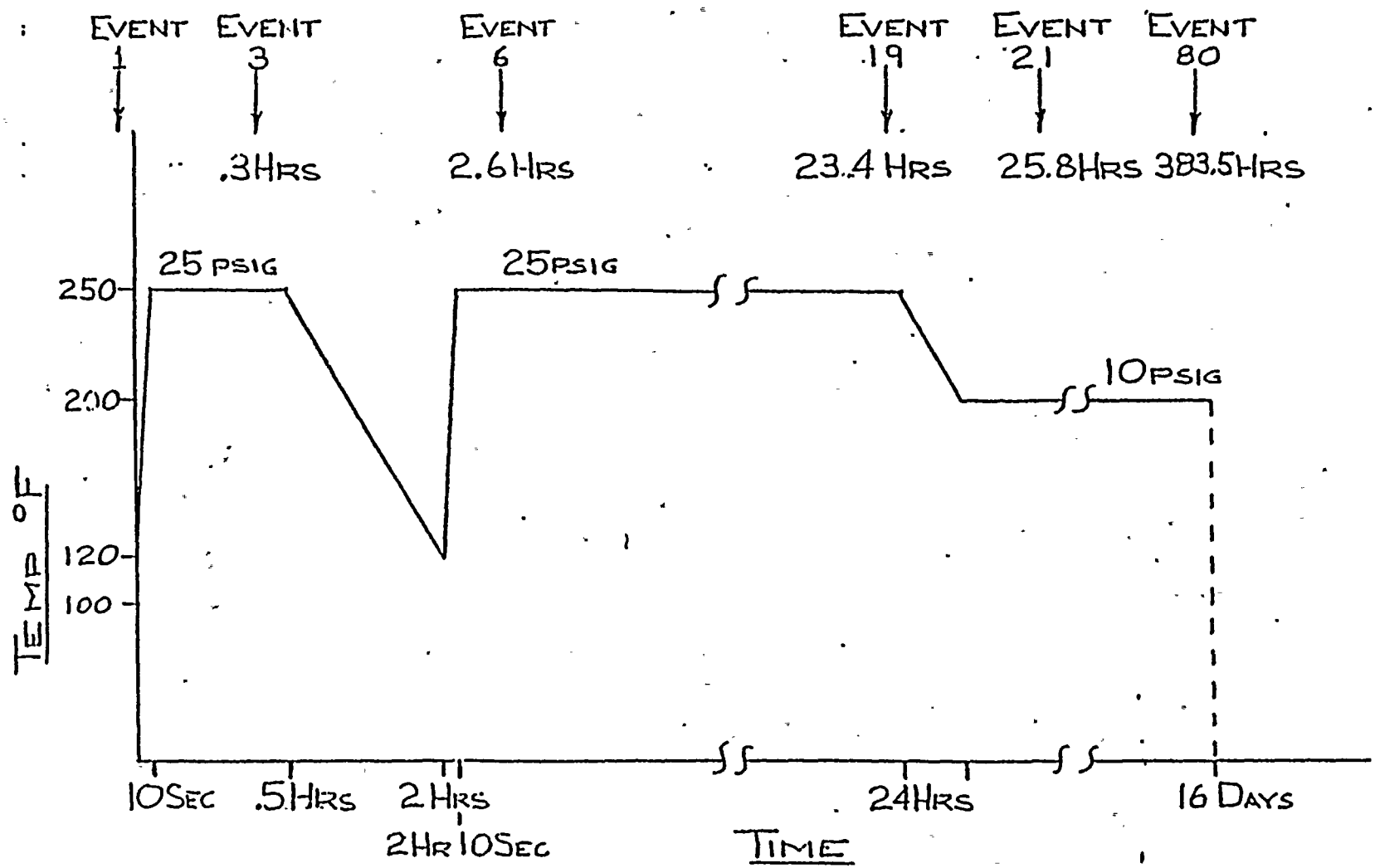

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41B

MPL:
PPD:

PAGE NO:
REVISION:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-134A, 134B MANUFACTURER Limitorque MODEL NUMBER SMB- COMPONENT Motor Operator Motor: Reliance, B insulation FUNCTION/SERVICE RHR-V-139A, 139B LOCATION: BLDG R ELEVATION 548 COLUMN K.1/9.0 L.5/9.2	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	1.5×10^5	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Simultaneous Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548L, M 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

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TEMPERATURE PROFILE

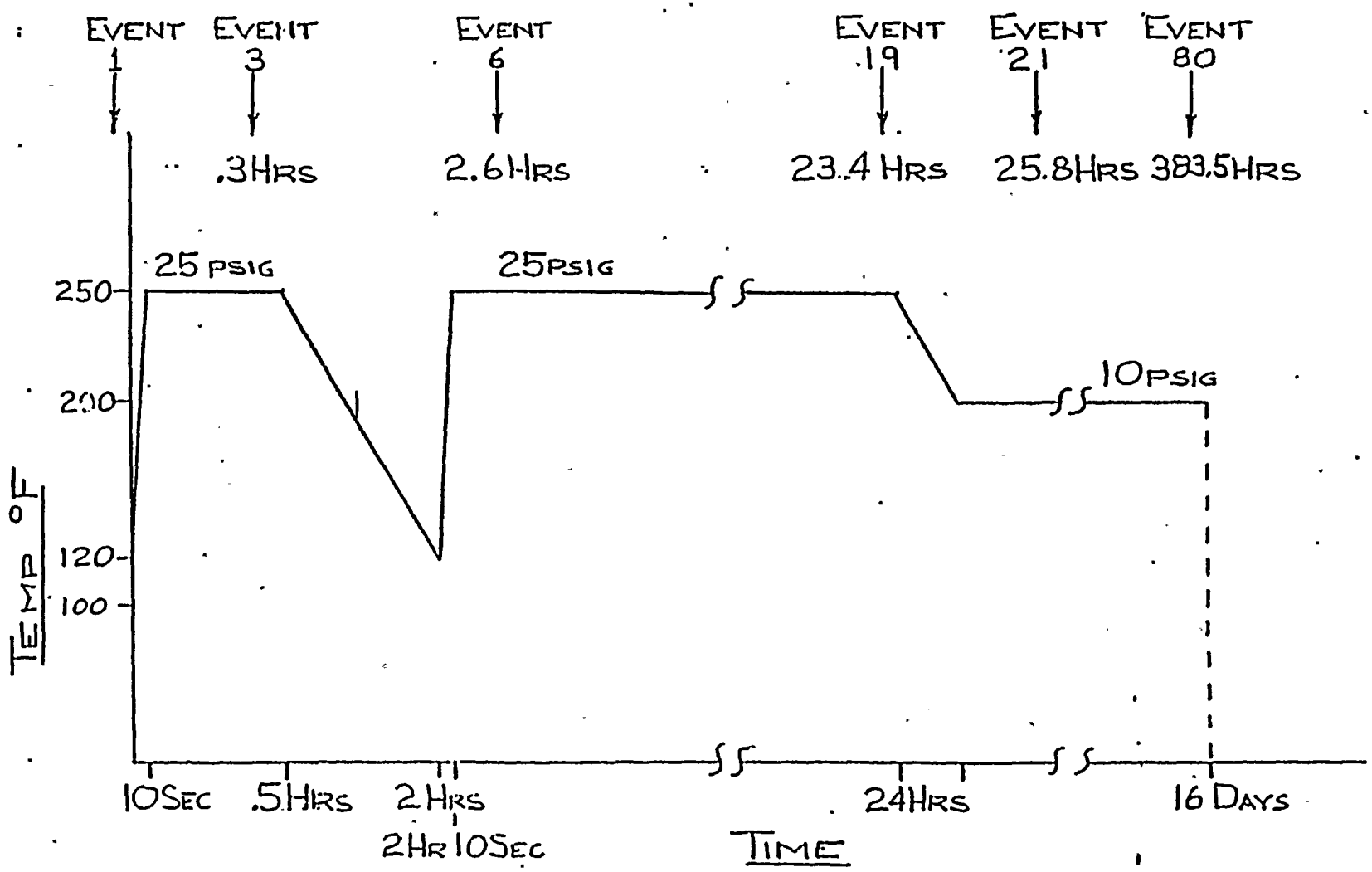

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-16A -17A MANUFACTURER Limitorque MODEL NUMBER SMB-2-80/C215Y COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate RHR Valve LOCATION: BLDG R ELEVATION 556 COLUMN 4.4/L.0	OPERATING TIME	4320 hours	Equivalent to 6 months at 150°F	6	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.4×10^6	2×10^7	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3,5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES · NO

Prpeared by: W. S. Johnson

Reviewed by: Raymond Ai

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548B 3. Limitorque Report B0003 with Addendum A (BWR-054-C-04) 4. Calculation in QID 221011(2) 5. Calculation in QID 221011(1) 6. WNP-2 Class 1E Equipment List dated 12/16/81	Qualified

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TEMPERATURE PROFILE

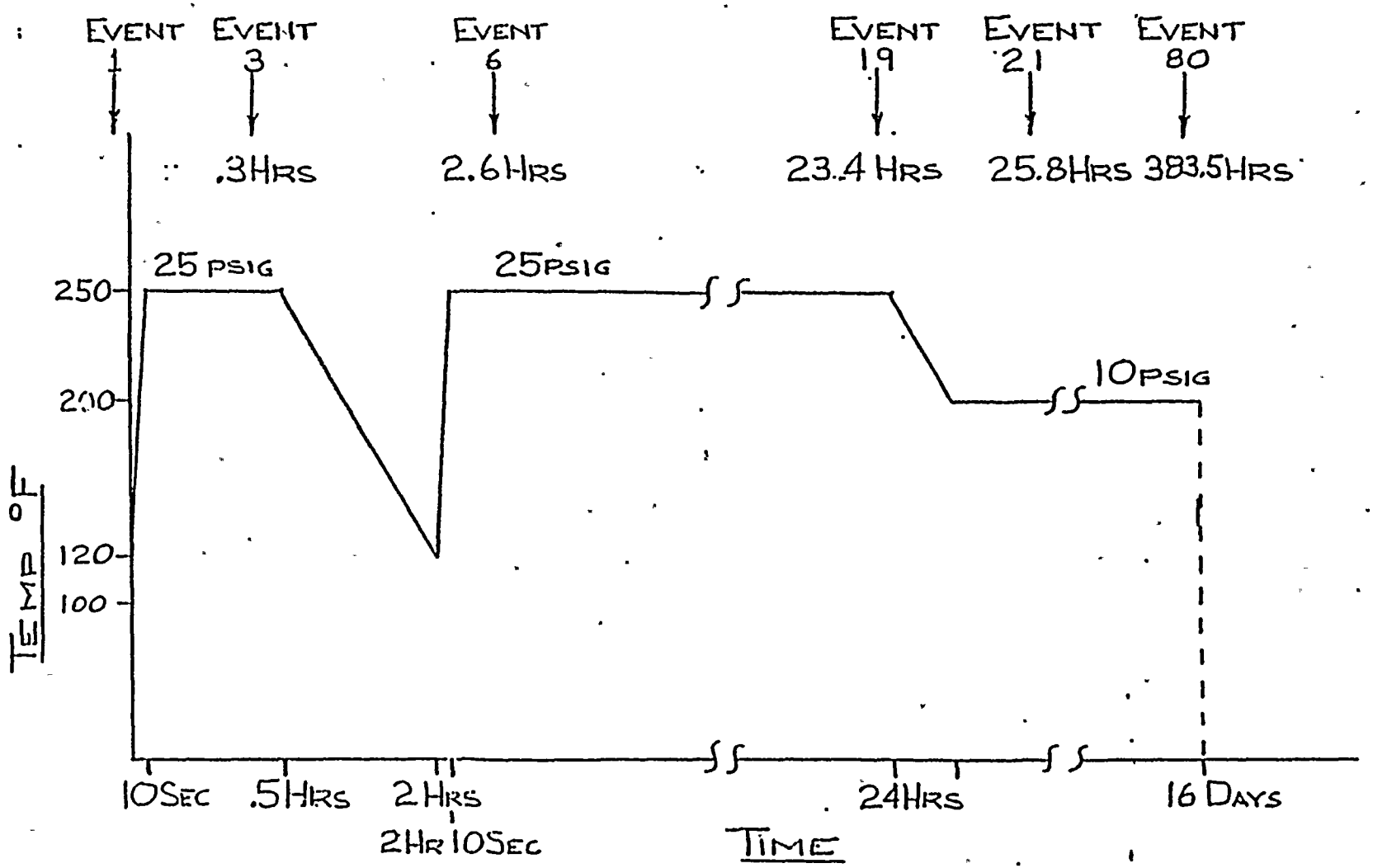

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-16B -17B MANUFACTURER Limitorque MODEL NUMBER SMB-2-80/C215Y COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate RHR Valve LOCATION: BLDG R ELEVATION 516 COLUMN K.7/8.1, K.5/8.0	OPERATING TIME	4320 hours	Equivalent to 6 months at 150°F	6	3,4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	3	Simultaneous	None None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.06×10^6	2×10^7	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3,5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: W. S. Johnson

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-501M 3. Limitorque Report B0003 with Addendum A (BWR-054-C-04) 4. Calculation in QID 221011(2) 5. Calculation in QID 221011(1) 6. WNP-2 Class 1E Equipment List dated 12/16/81	Qualified

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TEMPERATURE PROFILE

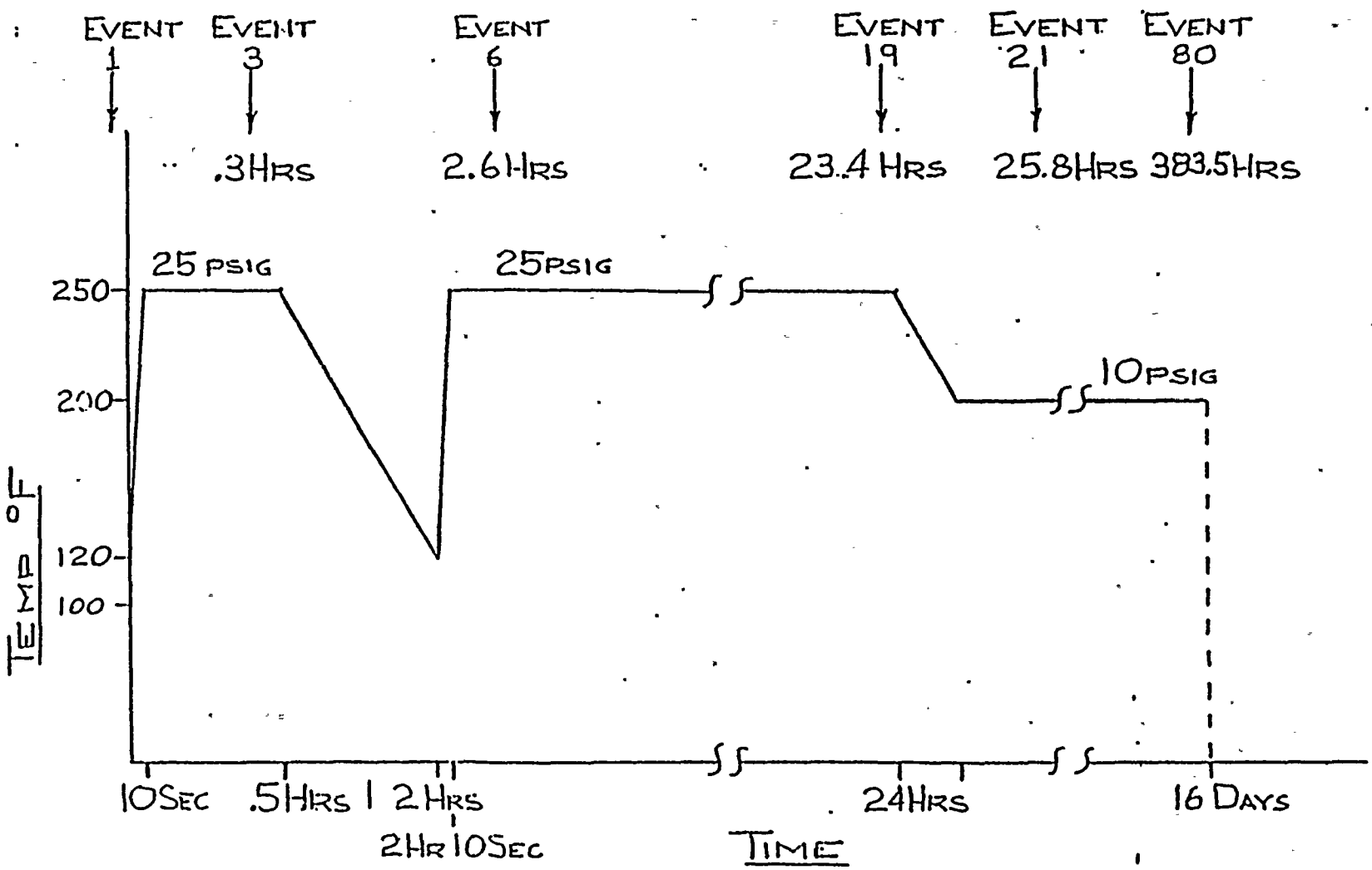

FIGURE 1

WPPSS

WASHINGTON PUB[illegible]ER SUPPLY SYSTEM

EQUIPMENT QU[illegible]ICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41B

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-21 MANUFACTURER Limitorque MODEL NUMBER SMB-3-80/213R3 COMPONENT Motor Operator Motor: Reliance B Insulation FUNCTION/SERVICE Operates Loop Test Return Valve LOCATION: BLDG R ELEVATION 455 COLUMN H.4/5.2	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Engineering Analysis Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 140 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclose profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	3.1×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-441J 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

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TEMPER CURE PROFILE

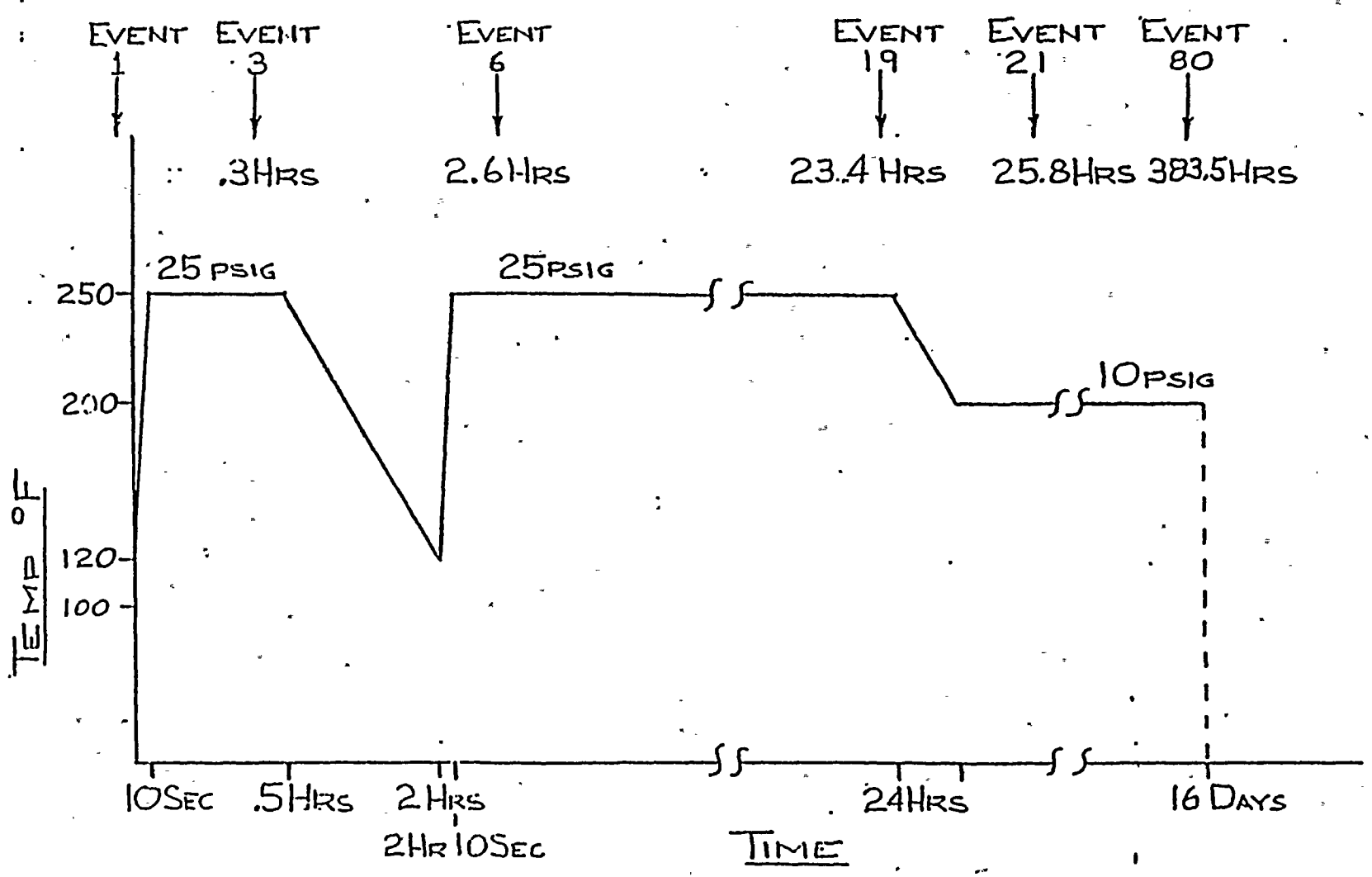

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41B

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-23 -40	OPERATING TIME	4320 hours	Equivalent of 52284 hours at 150°F	5	3,4	Simultaneous Testing Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Testing	None
MANUFACTURER Limitorque MODEL NUMBER SMB-0-	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	100%	1	3	Simultaneous Testing	None
COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate RHR Valve	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6	1×10^7	2	3	Sequential Testing	None
	AGING	40 years	40 years+	1	3,4	Sequential Testing Engineering Analysis	None
LOCATION: BLDG R ELEVATION 548 COLUMN M.6/5.4 & 8.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548J (worst case) 3. Limitorque Report B0009, 4/30/76 4. Applicability calculations in QID221011 5. WNP-2 Class 1E Equpment List, 12/16/81	Qualified.

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FIGURE 1
TEMPERATURE PROFILE DC ENVIRONMENTAL TEST

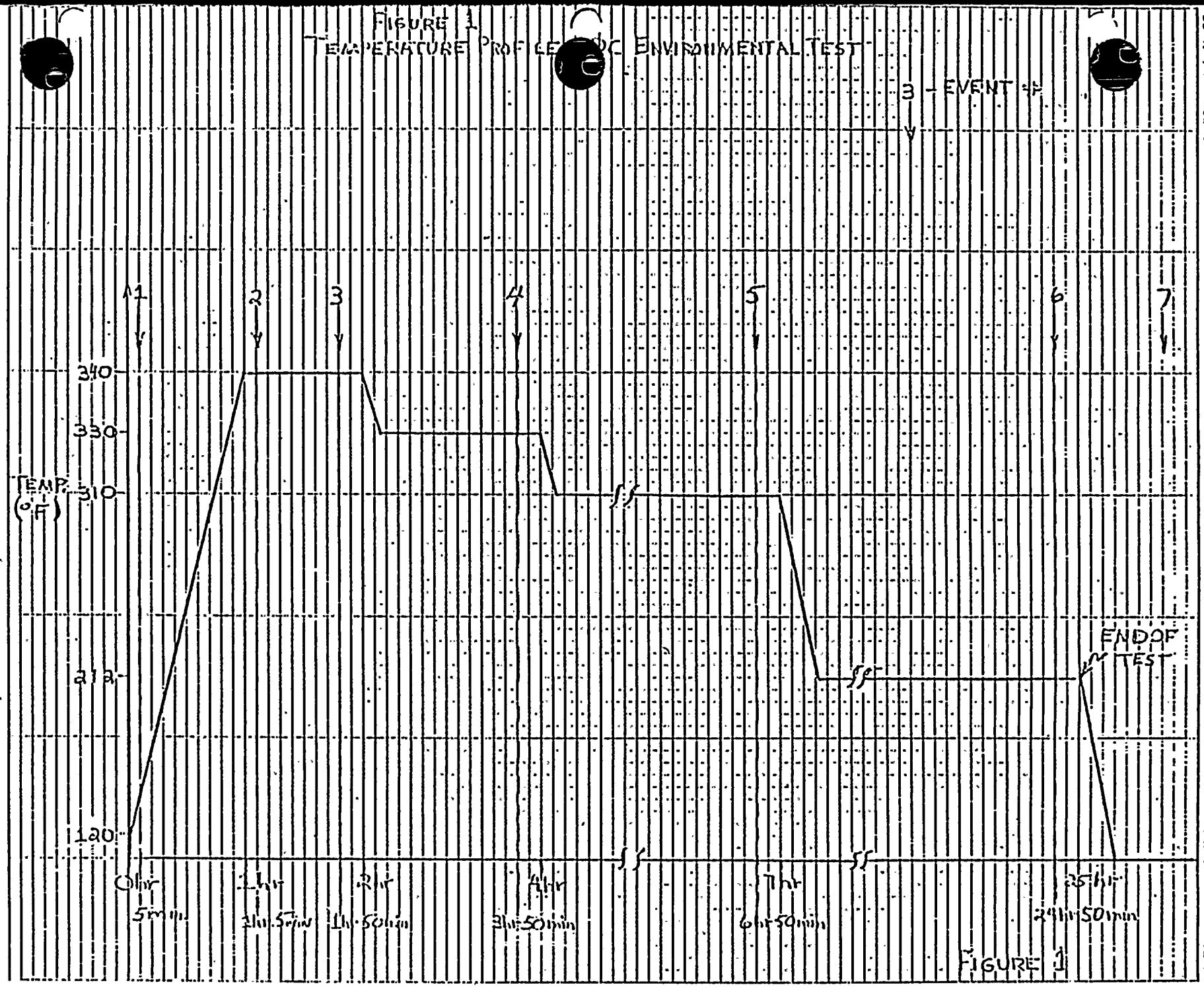

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-24A -MO-24B MANUFACTURER Limitorque MODEL NUMBER SMB-3-80-213R3 COMPONENT Motor Operator Motor: Reliance, B insulation FUNCTION/SERVICE Operates Loop Test Return Valve LOCATION: BLDG R ELEVATION 476 COLUMN K.0/8.1 M.2/8.1	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Engineering Analysis Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	2.2×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471F, E 4. Limitorque Test Report B0003 5. QID 221011	Qualified

WP-1081

TEMPERATURE PROFILE

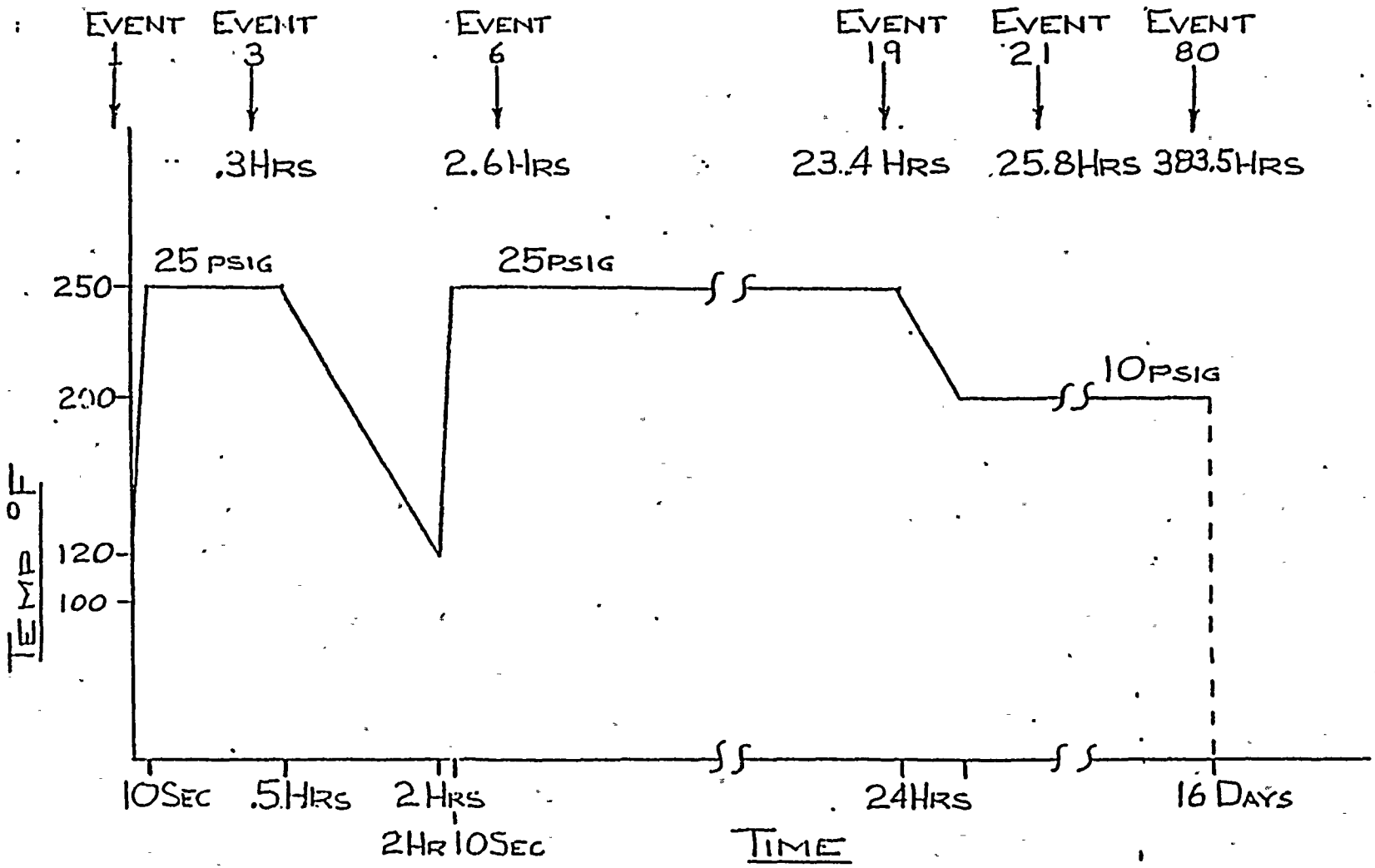

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-27A -MO-27B MANUFACTURER Limitorque MODEL NUMBER SMB-00-7.5/L56 COMPONENT - Motor Operator Motor: Reliance, B insulation FUNCTION/SERVICE Operates wetwell spray valve LOCATION: BLDG R ELEVATION 495 COLUMN K.2/4.1 M.1/7.7	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Engineering Analysis Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	1.7×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-471A, E 4. Limitorque Test Report B0003 5. QID 221011	Qualified

WP-1001

TEMPERATURE PROFILE

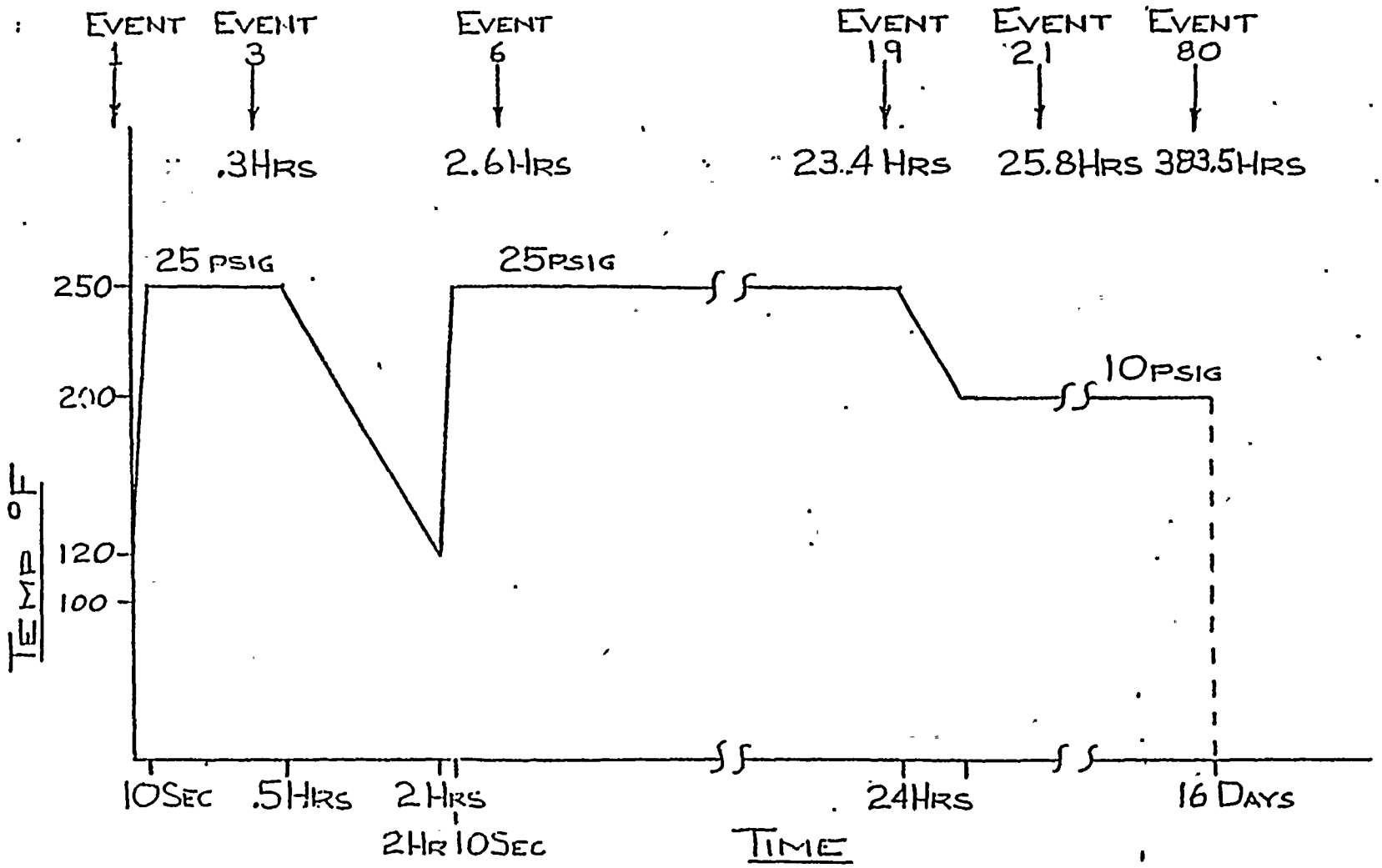

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-3A -MO-3B	OPERATING TIME	6 months	Equivalent to 6 months at 150°F	4	3, 6	Simultaneous Test Engineering Analysi	None
	TEMPERATURE (F)	40 max. normal 90 max. abnormal 100 max. accident	See enclosed profile	1	3	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
MODEL NUMBER SMB-1-40/T-56 COMPONENT	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
Motor Operator - Reliance, RH insulation FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
Operates RHR heat exchanger outlet isolation valve	RADIATION (RAD)	3.1×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3 6	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 562 COLUMN J.9/8.5 M.2/8.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M.S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List, 12/16/81 5. EDS Study 0740-004-548J, N 6. E/IC-02-80-04-0	Qualified

WP-1061

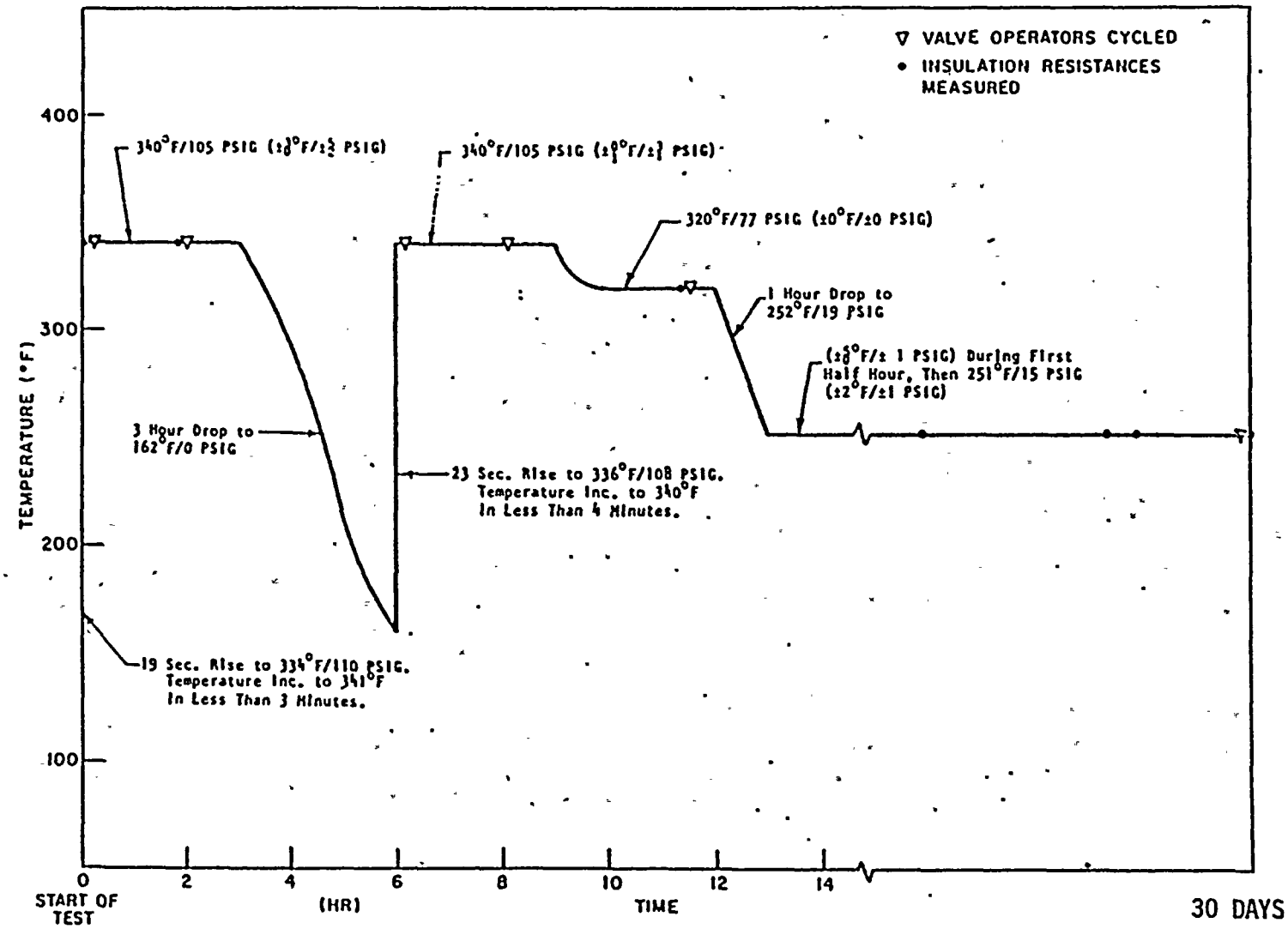

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual heat removal TAG NUMBER RHR-MO-4A -MO-4B -MO-4C MANUFACTURER Limitorque MODEL NUMBER SMB-040/T56 COMPONENT Motor Operator - Reliance, RH insulation FUNCTION/SERVICE Operates loop suppression pool suction valve LOCATION: BLDG R ELEVATION 444 COLUMN K.0/8.3 L.2/8.3 J.7/4.3	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	4	3, 6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3, 6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List, 12/16/81 5. EDS Study 0740-004-441F, G, J 6. E/IC 02-80-04-0	Qualified.

WP-1061

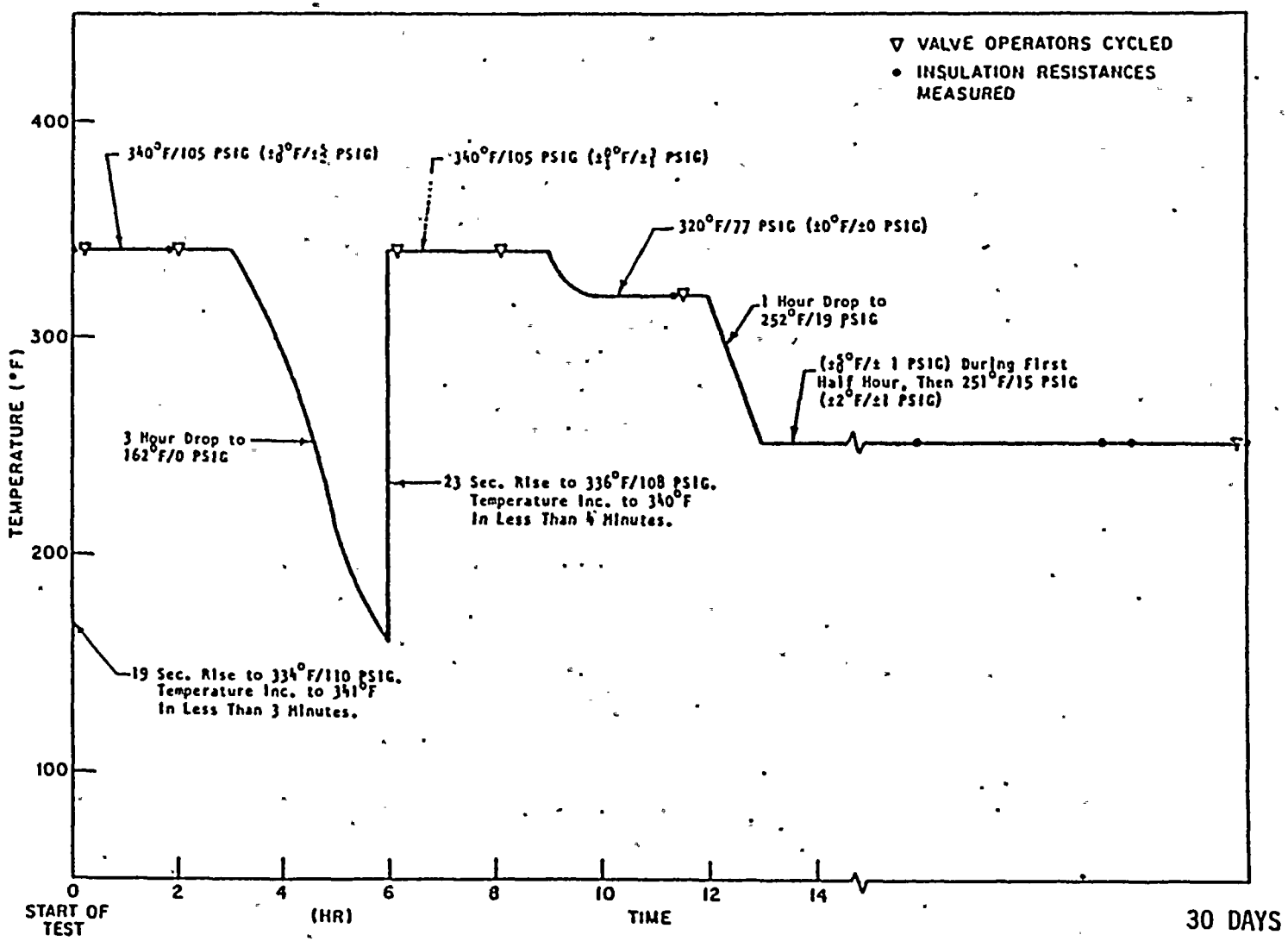

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual heat removal TAG NUMBER RHR-MO-42A -MO-42B -MO-42C MANUFACTURER Limitorque MODEL NUMBER SMB-3-15-/256UR3 COMPONENT Motor Operator - Reliance, RH insulation FUNCTION/SERVICE Operates LPCI injection valve LOCATION: BLDG R ELEVATION 522 COLUMN J.0/6.0 N/5.8 J.0/6.0	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	4	3	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1	N/R	N/R	None
	RADIATION (RAD)	1.7×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3 6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List, 12/16/81 5. EDS Study 0740-004-5220 6. E/IC 02-80-04-0	Qualified.

WP-1041

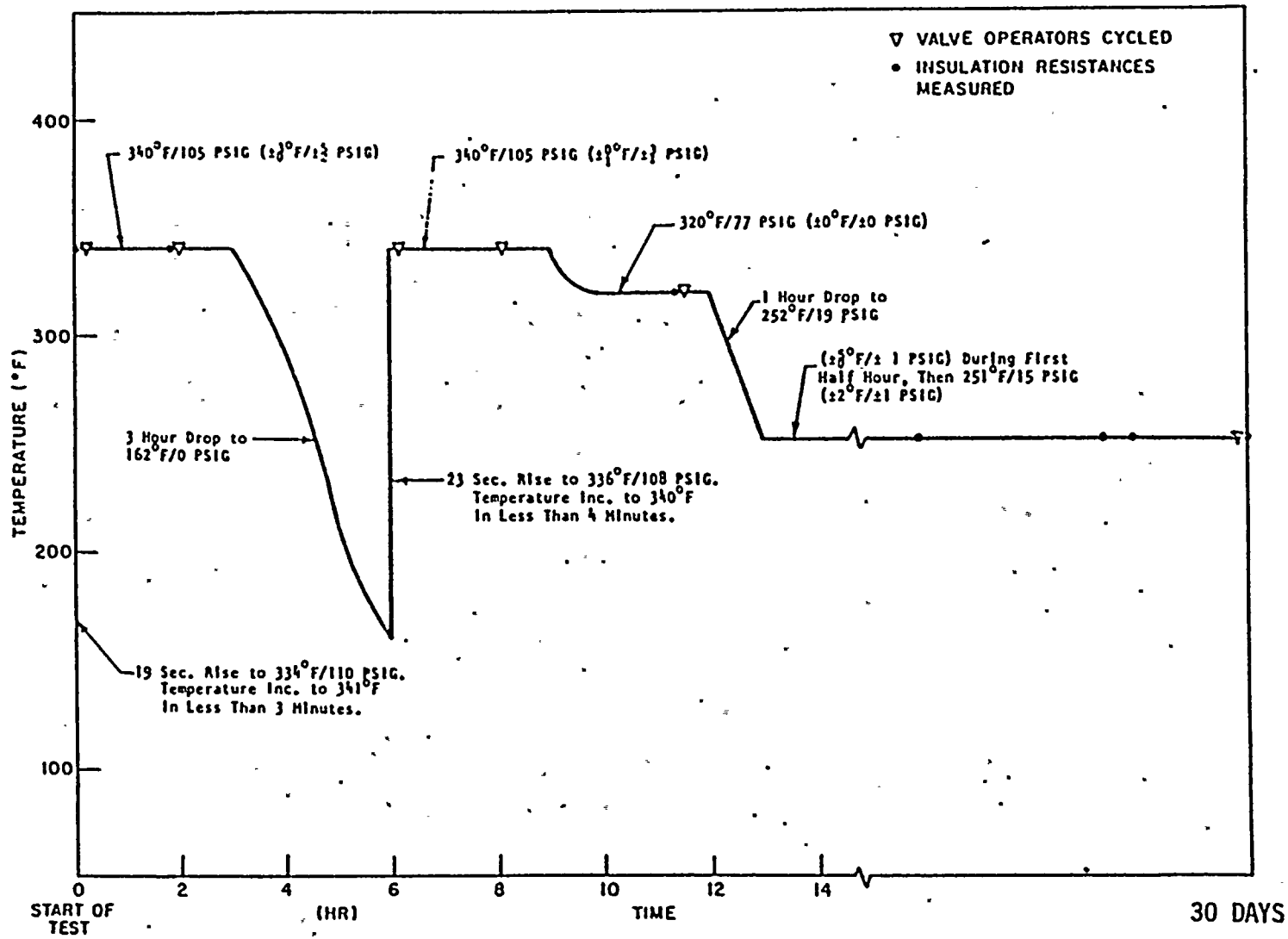

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-47A 47B MANUFACTURER Limitorque MODEL NUMBER SMB-1-40/T56 COMPONENT Motor Operator - Reliance, RH insulation FUNCTION/SERVICE Operates RHR inlet heat exchanges inlet isolation valve LOCATION: BLDG R ELEVATION 582 COLUMN J.2/8.6 M3/8.6	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	4	3, 6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.8	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	1.2×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3, 6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. P. Dolpinia

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B--58 3. Limitorque Report B600376A 4. WNP-3 Class 1E Equipment List, 12/16/81 5. EDS Study 0740-004-572I, L 6. E/IC-02-80-04-0	Qualified.

WP-1061

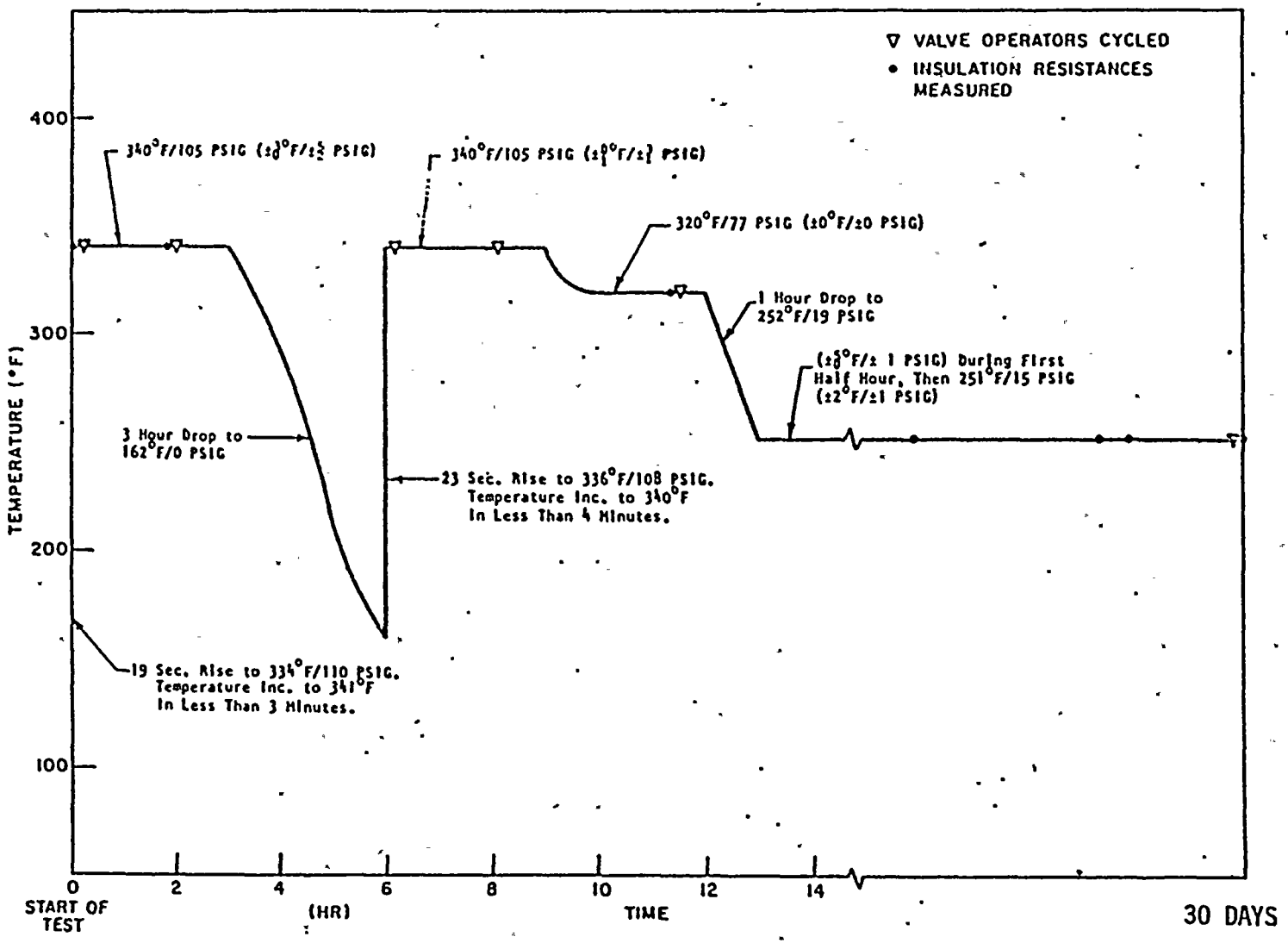

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41B

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-48A -MO-48B MANUFACTURER Limitorque MODEL NUMBER SMB-3-80/213R3 COMPONENT - Motor Operator Motor: Reliance, B insulation FUNCTION/SERVICE Operates RHR HX Bypass Valves LOCATION: BLDG R ELEVATION 555 COLUMN J.2/8.6 N.0/8.4	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Engineering Analysis Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	N/A
	RADIATION (RAD)	3.1×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548N, J 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

WP-1981

TEMPERATURE PROFILE

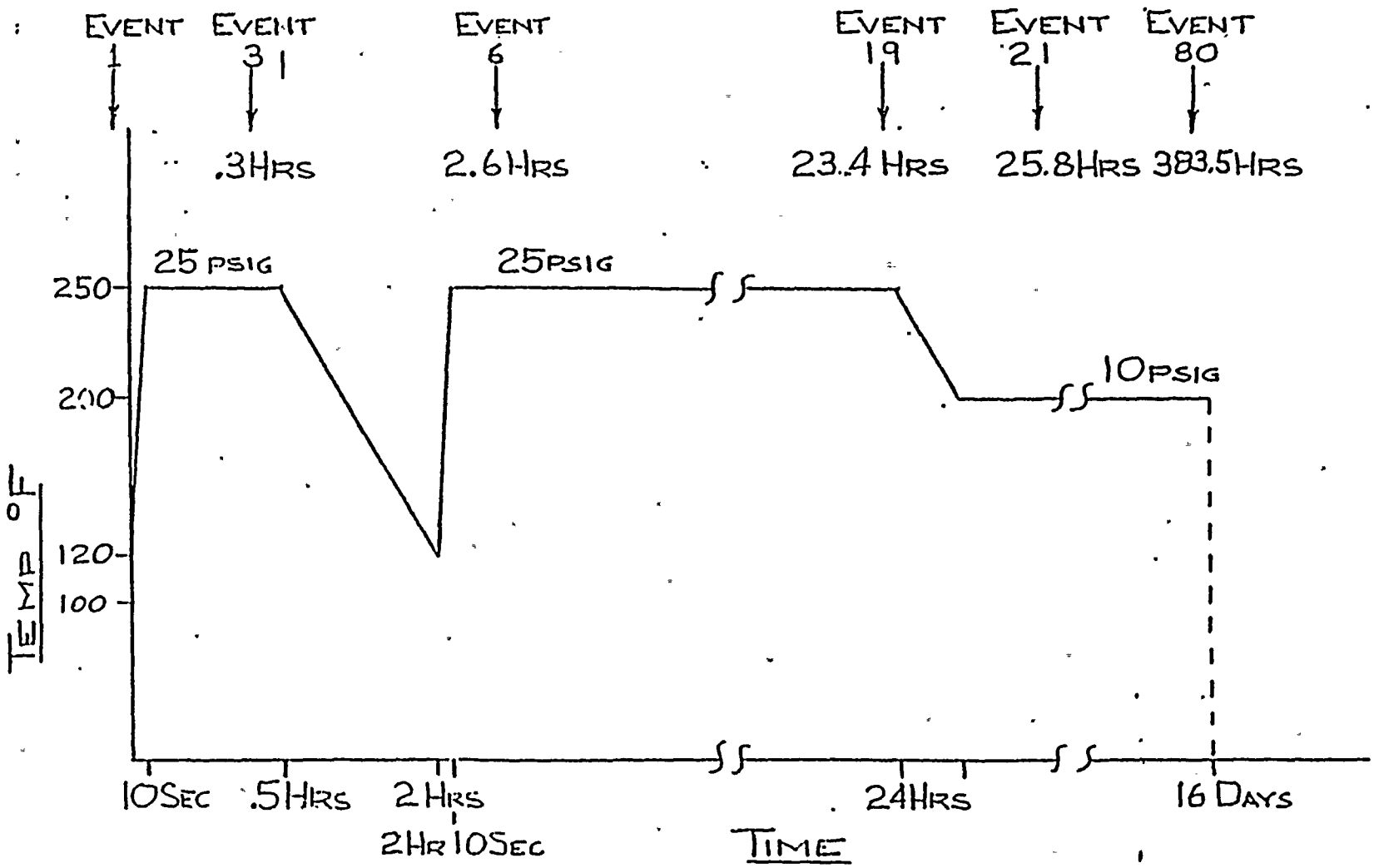

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-49	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Simultaneous Test Engineering Analysi	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 140 max. accident	see enclosed profile	2	4	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
MODEL NUMBER SMB-000-5/K48 COMPONENT - Motor Operator Motor: Reliance, B insulation	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE Operates RHR discharge to Radwaste	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	3.1×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 553 COLUMN M.8/8.4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS study 0740-004-548J 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

WP-1961

TEMPERATURE PROFILE

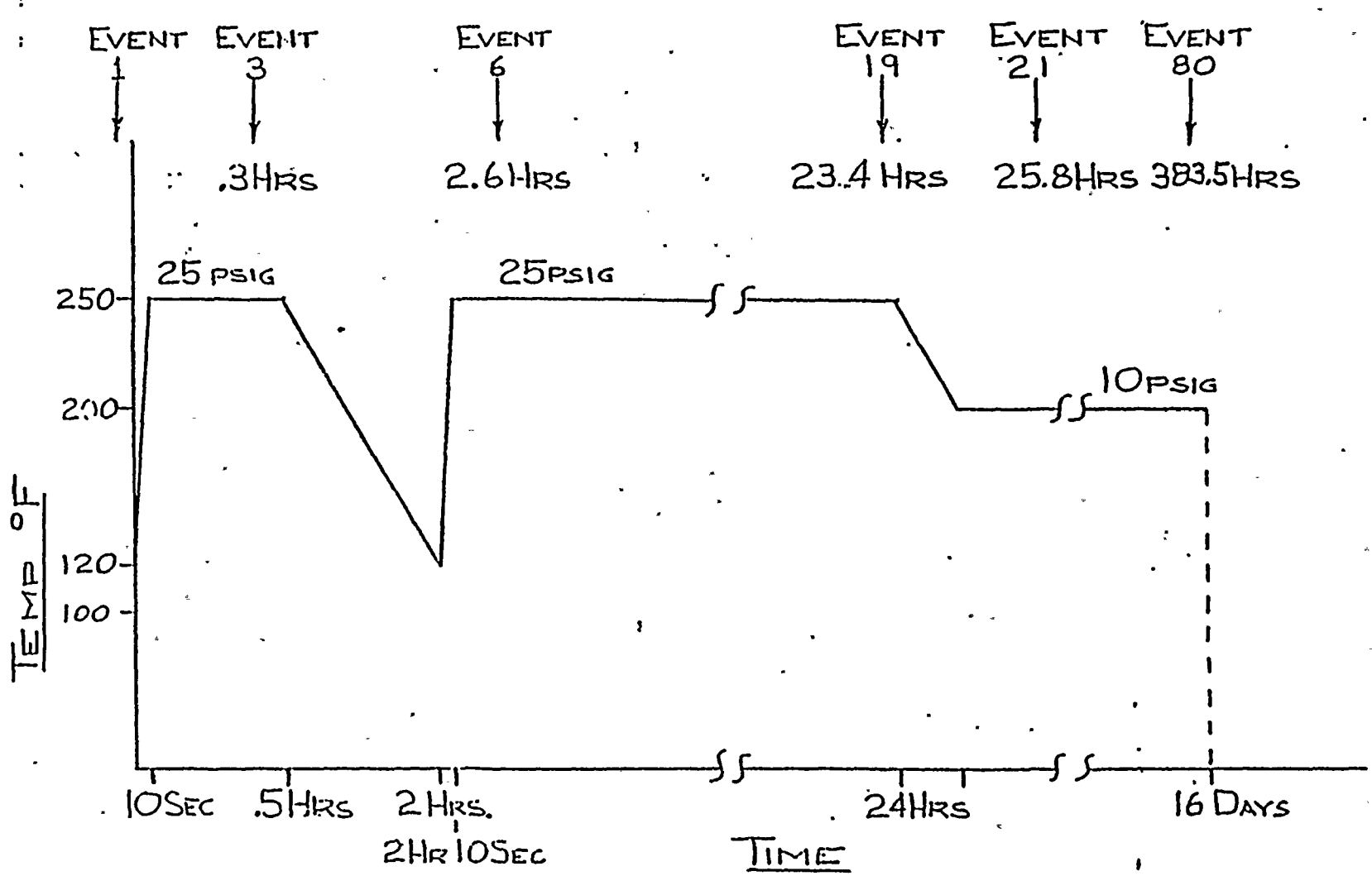

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-52A MANUFACTURER Limitorque MODEL NUMBER SMB-00-10/L56 COMPONENT - Motor Operator Motor: Reliance, B insulation FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 578 COLUMN H.6/9.2	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Engineering Analysis Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	1.2×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. P. Dolphin

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-572L 4. Limitorque Test Report B0003 5. QID 221011.	Qualified.

WP-1881

TEMPERATURE PROFILE

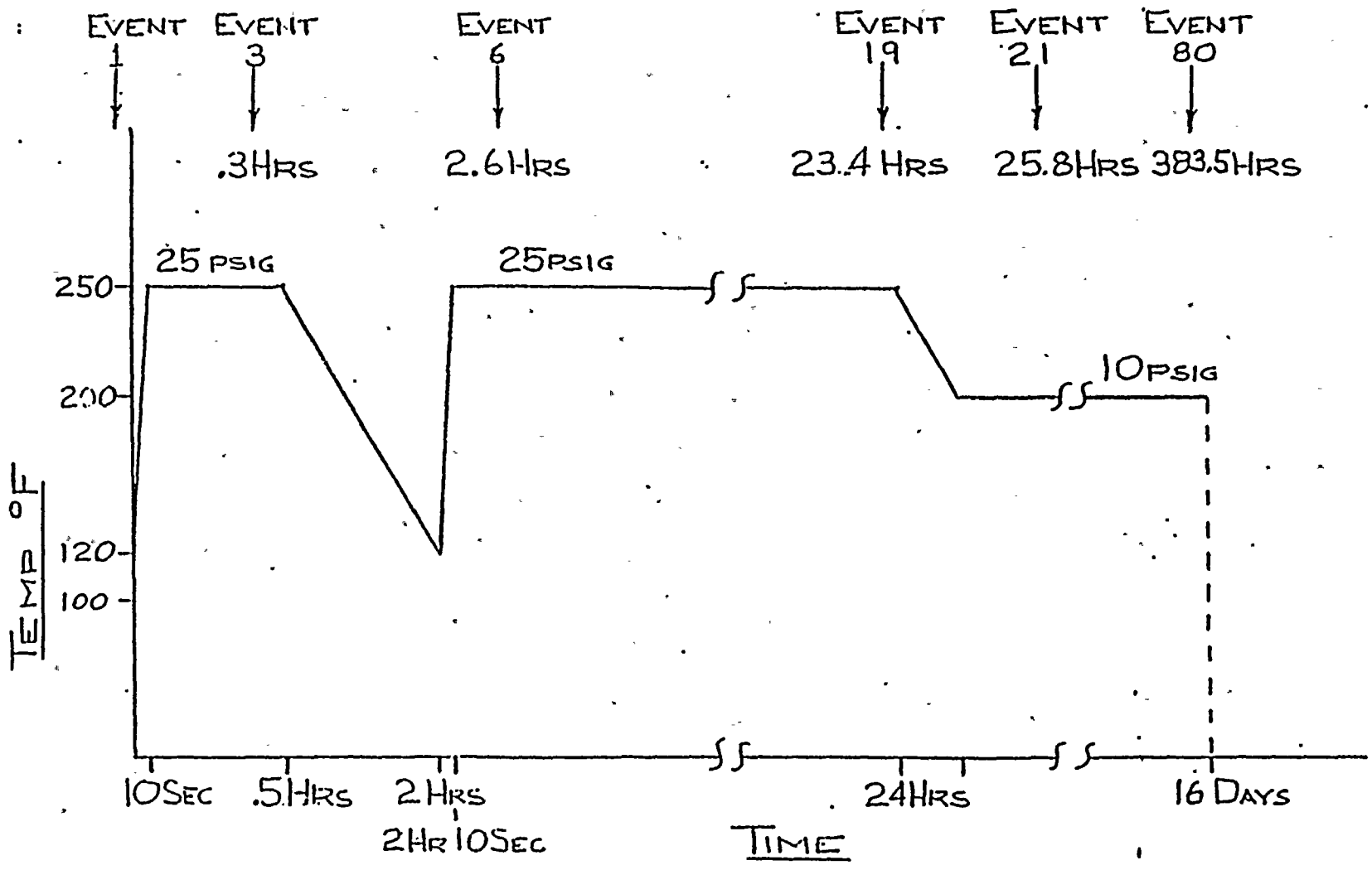

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-42A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-52B	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	3	4	Engineering Analysis Sequential Test	Note 1
	TEMPERATURE (F)	90°F normal 104°F abnormal 150°F accident	see enclosed profile	1	4	Simultaneous Test	Note 1
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7 PSIA	N/A	1	N/A	N/A	Note 1
MODEL NUMBER SMB-00-10/L56 COMPONENT Motor Operator Motor→Paramount, B	RELATIVE HUMITY (%)	40% RH normal 90% RH abnormal 100% accident	100	1	4	Simultaneous Test	Note 1
FUNCTION/SERVICE 5.2 HP Motor Operator RHR-V-52B	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	Note 1
	RADIATION (RAD)	9.97×10^5	2×10^7	2	4	Sequential Test	Note 1
	AGING	40 years	40 years	1	4, 5	Sequential Test	Note 1
LOCATION: BLDG R ELEVATION 578 COLUMN N.1/8.6	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Johnson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Report 0740-004-572I 3. WNP-2 Class 1E Equipment List 4. Limitorque Report B0003, with addendum A, 5/8/76 5. QID 221011	1. The vendor is being contacted to confirm applicability of test report.

WP-1961

TEMPERATURE PROFILE

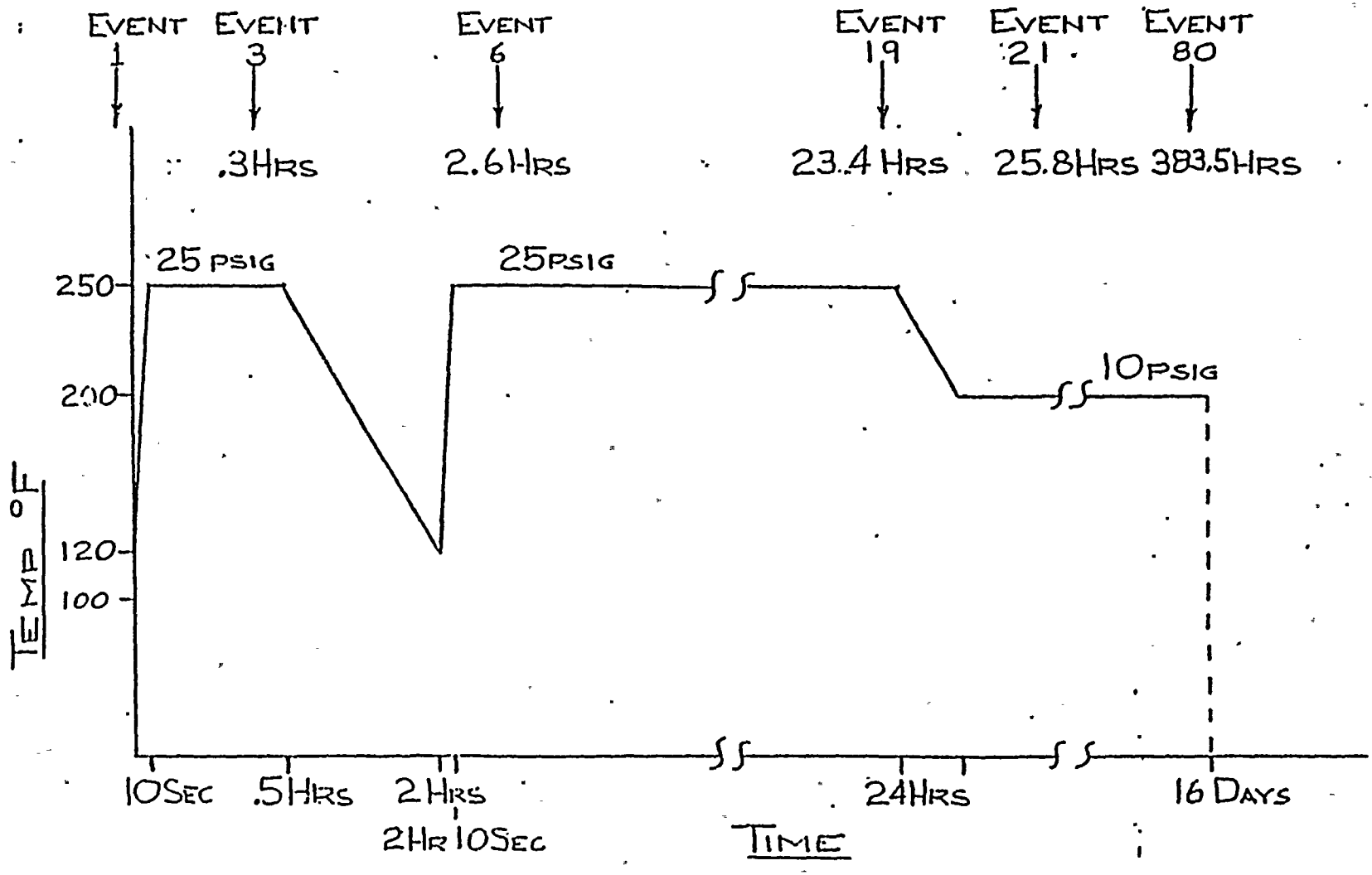

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-53A -MO-53B MANUFACTURER Limitorque MODEL NUMBER COMPONENT Motor Operator - Reliance, RH insulation FUNCTION/SERVICE Operates SD cooling injection valve LOCATION: BLDG R ELEVATION 516 COLUMN K.9/4.1 L.2/8.0	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	4	3, 6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	50 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	2.6×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3 6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600367A 4. WNP-2 Class 1E Equipment List, 12/16/81 5. EDS Study 0740-004-501M, M01S 6. E/IC 02-80-04-0	Qualified.

WP-1041

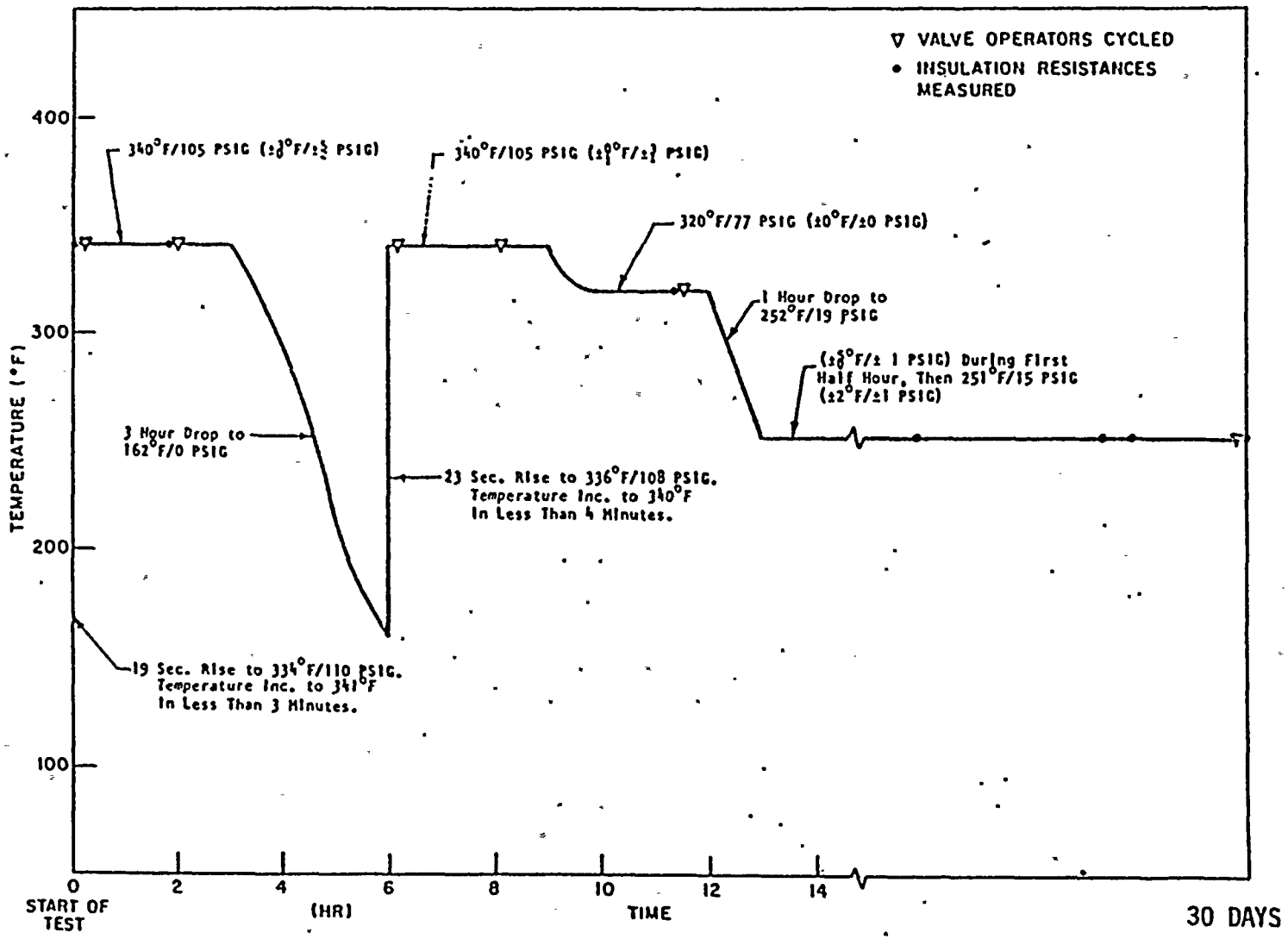

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual heat removal TAG NUMBER RHR-MO-6A -MO-6B MANUFACTURER Limitorque MODEL NUMBER SMB-0-25/R56 COMPONENT Motor Operator - Reliance, RH insulation FUNCTION/SERVICE Operates SD cooling suppression pool isolation valve LOCATION: BLDG R ELEVATION 430 COLUMN K.8/8.3 L.8/8.5	OPERATING TIME	6 months	Equivalent to 6 months at 150°F	4	3, 6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	N/A	None
	RADIATION (RAD)	2.5×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3, 6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES : NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List, 12/16/81 5. EDS Study 0740-004-422I, J 6. E/IC 02-80-04-0	Qualified.

WP-1061

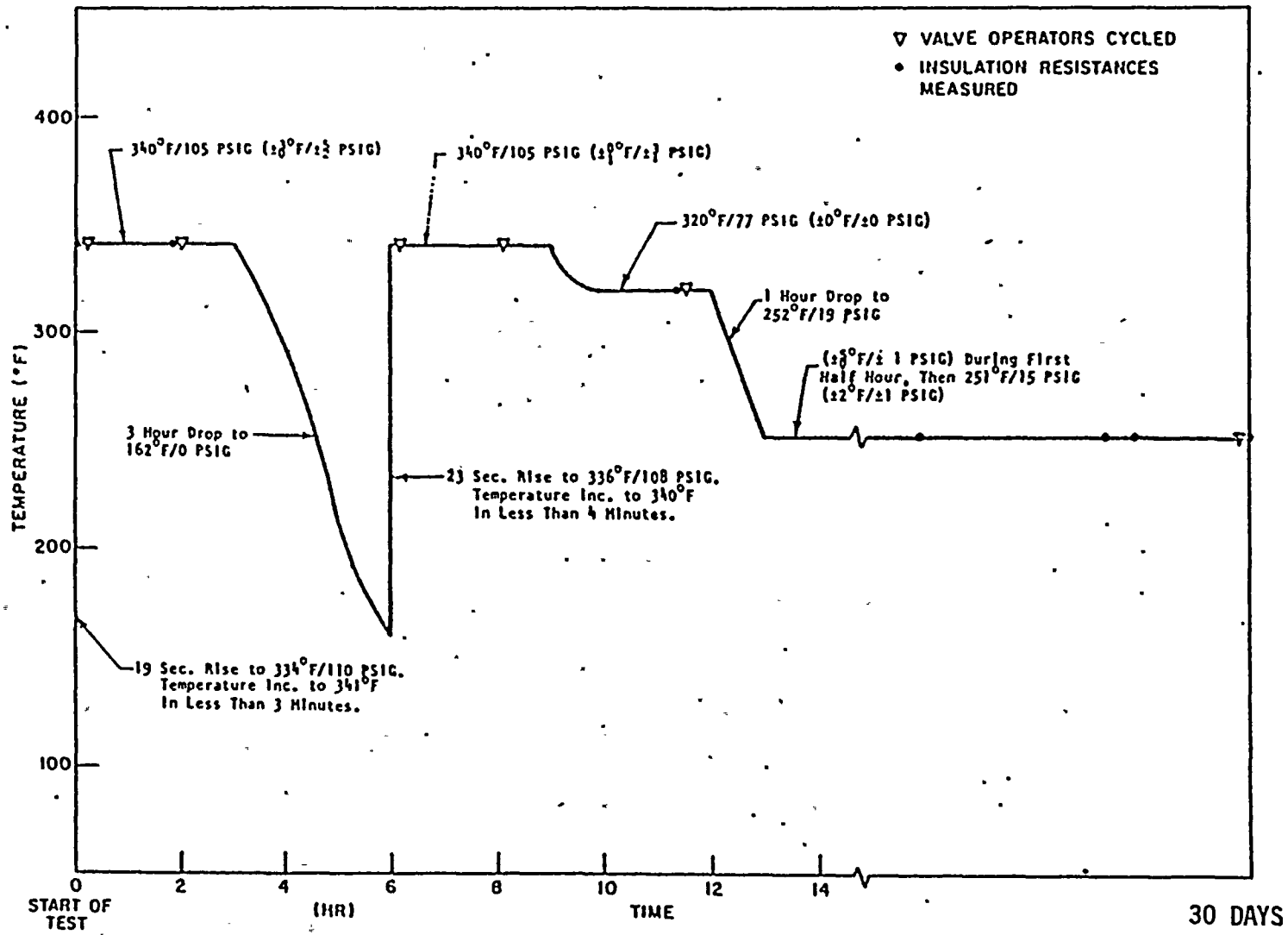

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-64A -64B -64C	OPERATING TIME	4320 hours	Equivalent of 35700 @ 150°F	1	3,4	Simultaneous Testing Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Testing	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	N/A	1	N/A	Simultaneous Testing	None
MODEL NUMBER SMB-000	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	Steam from 24 hrs 100% from 15 days	1	3	Simultaneous Testing	None
COMPONENT Motor Operator	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
FUNCTION/SERVICE Operate RHR Valves	RADIATION (RAD)	$3x10^6$	$2x10^7$	2	3	Sequential Testing	None
	AGING	40 Years	40 Years+	1	3,5	Sequential Testing Engineering Analysis	None
LOCATION: BLDG R ELEVATION 441 COLUMN K/9.3, J/5	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EUS Study 0740-004-441J (worst case) 3. Limitorque Report B0003 with addendum A, 5/8/76 in BWR054-C-04 4. Calculations in QID 221011 (2) 5. Calculations in QID 221011 (1)	Qualified.

WP-1081

TEMPERATURE PROFILE

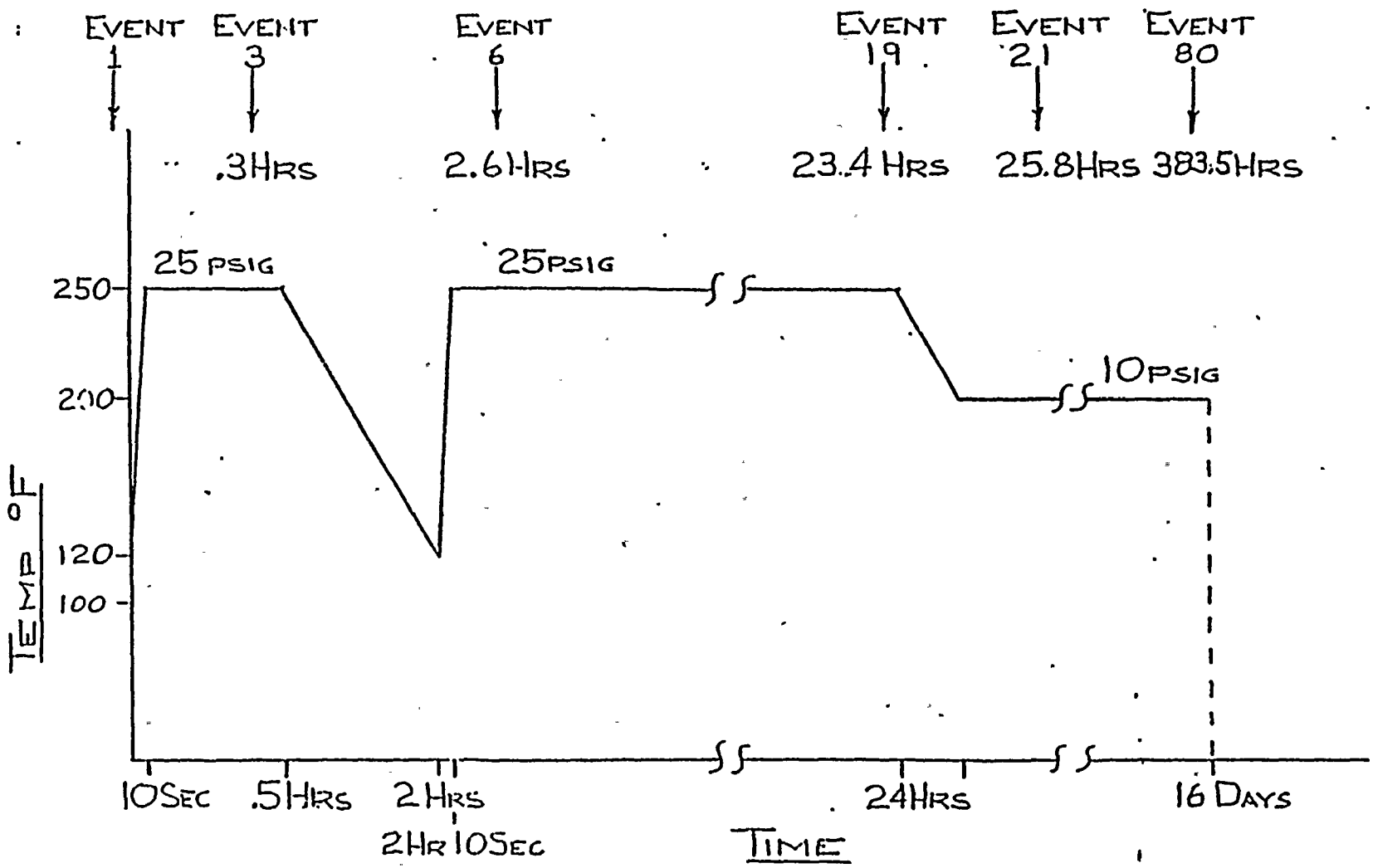

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual heat removal TAG NUMBER RHR-MO-68A RHR-MO-68B MANUFACTURER Limitorque MODEL NUMBER SMB-0-40/T56 COMPONENT Motor Operator- Reliance, RH insulation FUNCTION/SERVICE Operates RHR heat exchanger inlet valve LOCATION: BLDG R ELEVATION 558 COLUMN J.1/9.3 M.8/9.3	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	4	6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1		N/A	None
	RADIATION (RAD)	3.1×10^6	2.04×10^8	5	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3, 6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. L. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Clas 1E Equipment List, 12/16/81 5. EDS Study 0740-004-548J, N 6. E/IC 02-80-04-0	Qualified.

WP-1081

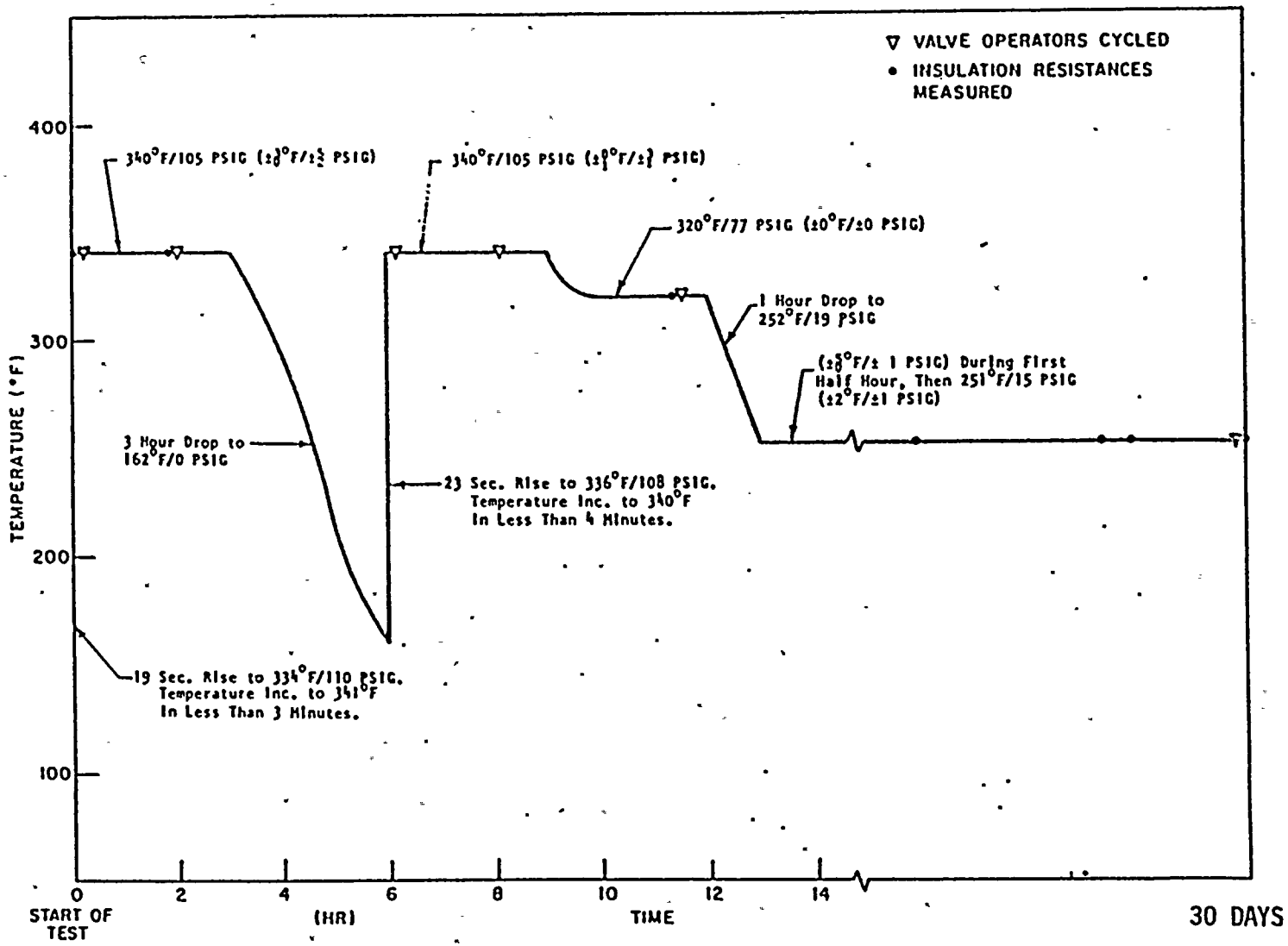

Figure 3. Actual Steam Exposure Profile.

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-73A, B 74A, B	OPERATING TIME	6 months	Equivalent to 6 months at 150°F.	1	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	See enclosed profile	2	4	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	See enclosed profile	2	4	Simultaneous Test	None
MODEL NUMBER SMB COMPONENT Motor Operator Reliance, Class B Insulation	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	1.2×10^6	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Simultaneous Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 572 COLUMN J8/9	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Alan Seiden

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-572L, I 4. Limitorque Test Report B0003 5. QID 221011	Qualified.

WP-1841

TEMPERATURE PROFILE

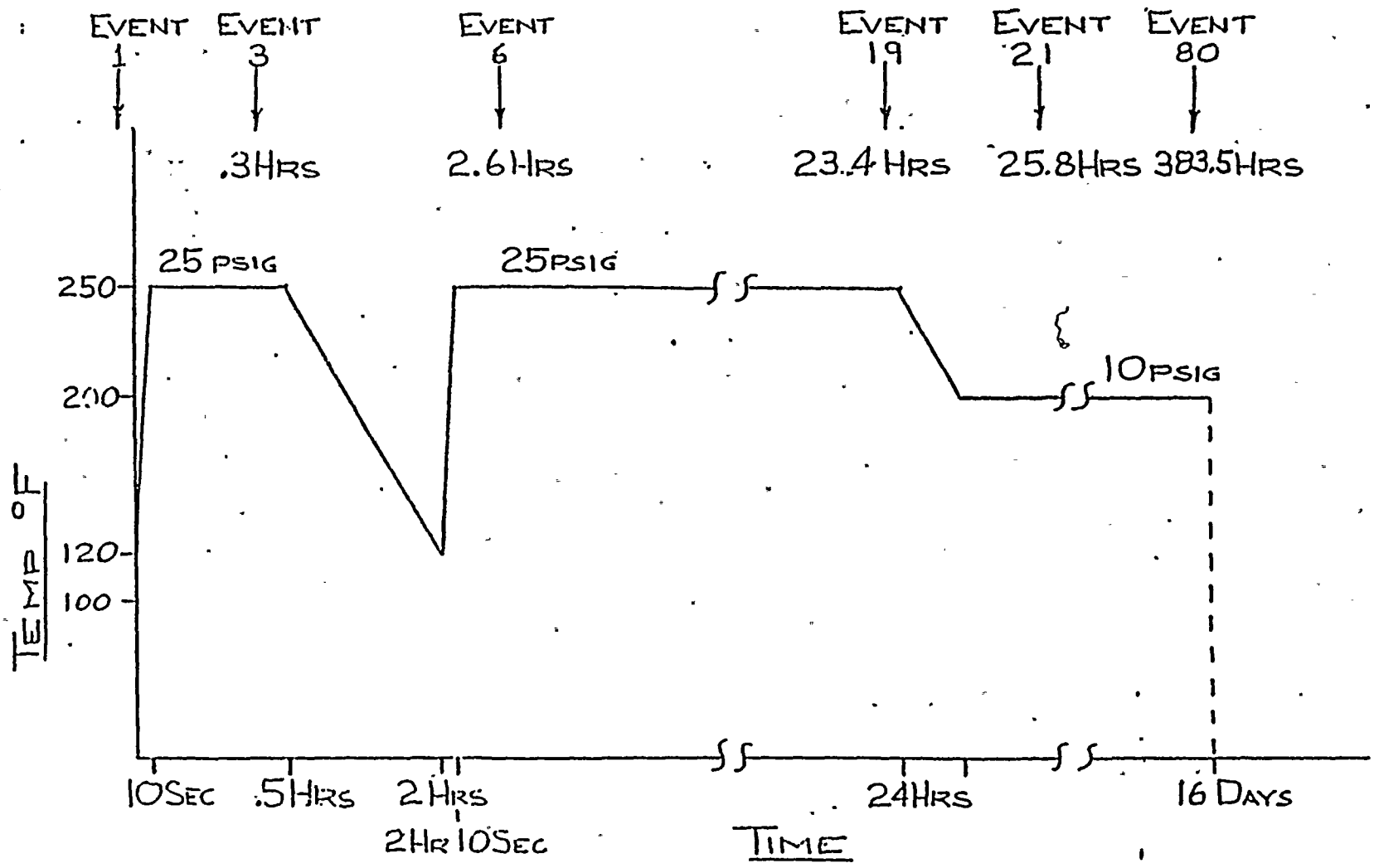

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-42A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-8 MANUFACTURER Limitorque MODEL NUMBER SMB-2 COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate RHR Valves LOCATION: BLDG R ELEVATION 501 COLUMN M9/7.3	OPERATING TIME	4320 hours	Equivalent to 52,284 hours at 150°F	5	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 maximum accident	See enclosed profile	1	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 maximum abnormal 100 accident	100%	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	1.3×10^6	1×10^7	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3, 4	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. F. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-501I 3. Limitorque Report B0009, 4/30/76 Section E 4. Applicability calculations in QID221011, Section E. 5. WNP- 2 Class 1E Equipment List, 12/16/81	1. Qualified

WP-1061

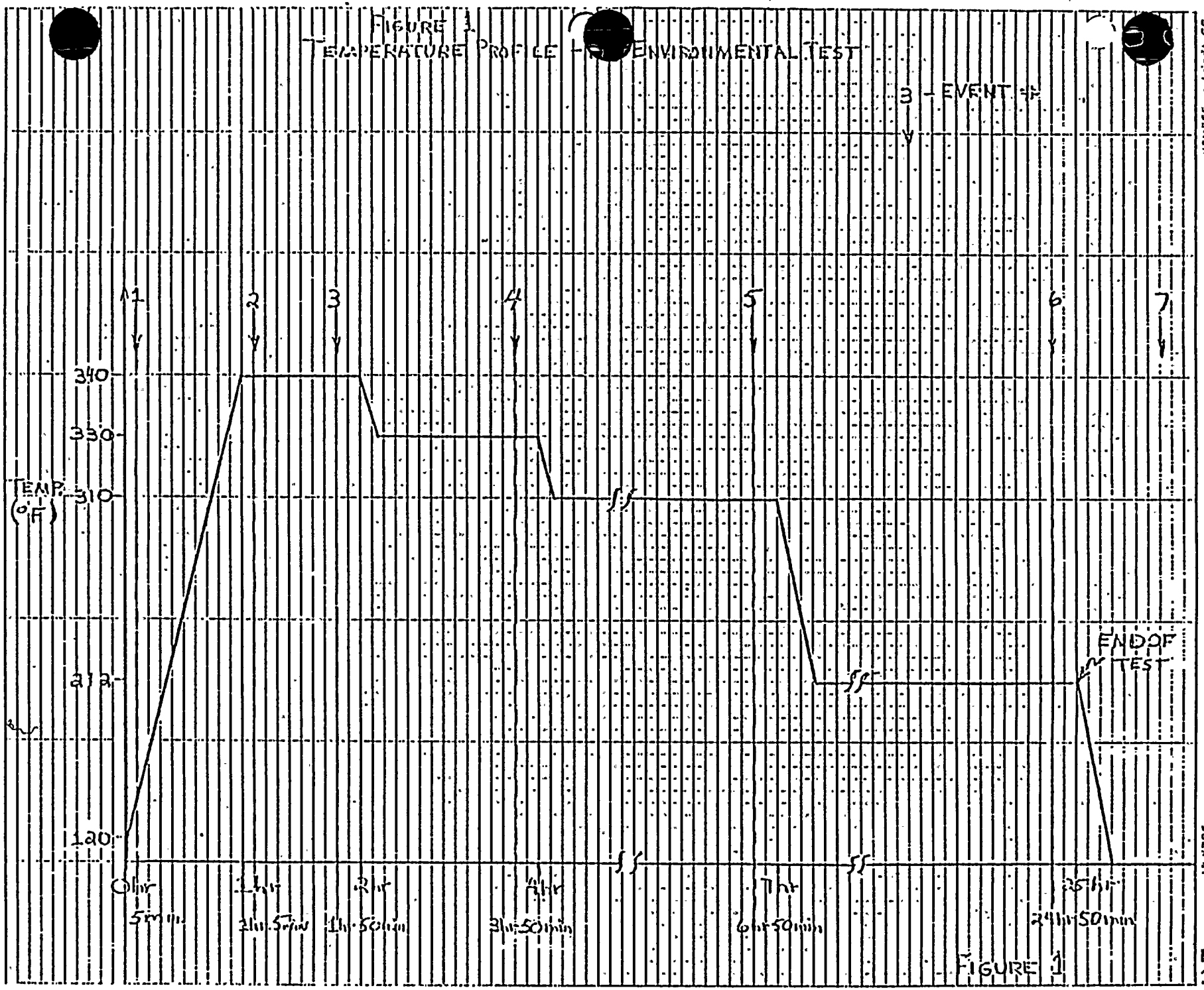
FIGURE 1
TEMPERATURE PROFILE - ENVIRONMENTAL TEST
3 - EVENT #
1
2
3
4
5
6
7
340
330
TEMP. (°F)
310
212
120
END OF TEST
0hr
5min
1hr
2hr.5min
2hr
1hr.50min
4hr
3hr.50min
7hr
6hr.50min
25hr
24hr.50min
FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-42A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-87A, B	OPERATING TIME	4320 hours	Equivalent to 6 months at 150°F	7	3,4,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	3	Simultaneous Test	None.
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	See enclosed profile	1	3	Simultaneous Test	None
MODEL NUMBER SMB-00-10/L56	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	1	3	Simultaneous Test	None
COMPONENT Valve Motor Operator	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
FUNCTION/SERVICE Operate RHR Valve	RADIATION (RAD)	1.1×10^6	2×10^7	2	3	Sequential Test	None
	AGING	40 years	40+ years	1	3,5,6	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 578 COLUMN N.1/8.6 J/9.3 M.8/8.6	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible] Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-572I 3. Limitorque Report B0003 with Addendum A (BWR-054-C-04) 4. Calculation in QID 221011(2) 5. Calculation in QID 221011(1) 6. Letter, QID 221010 7. WNP-2 Class 1E Equipment List dated 12/16/81	Qualified

WP-1681

TEMPERATURE PROFILE

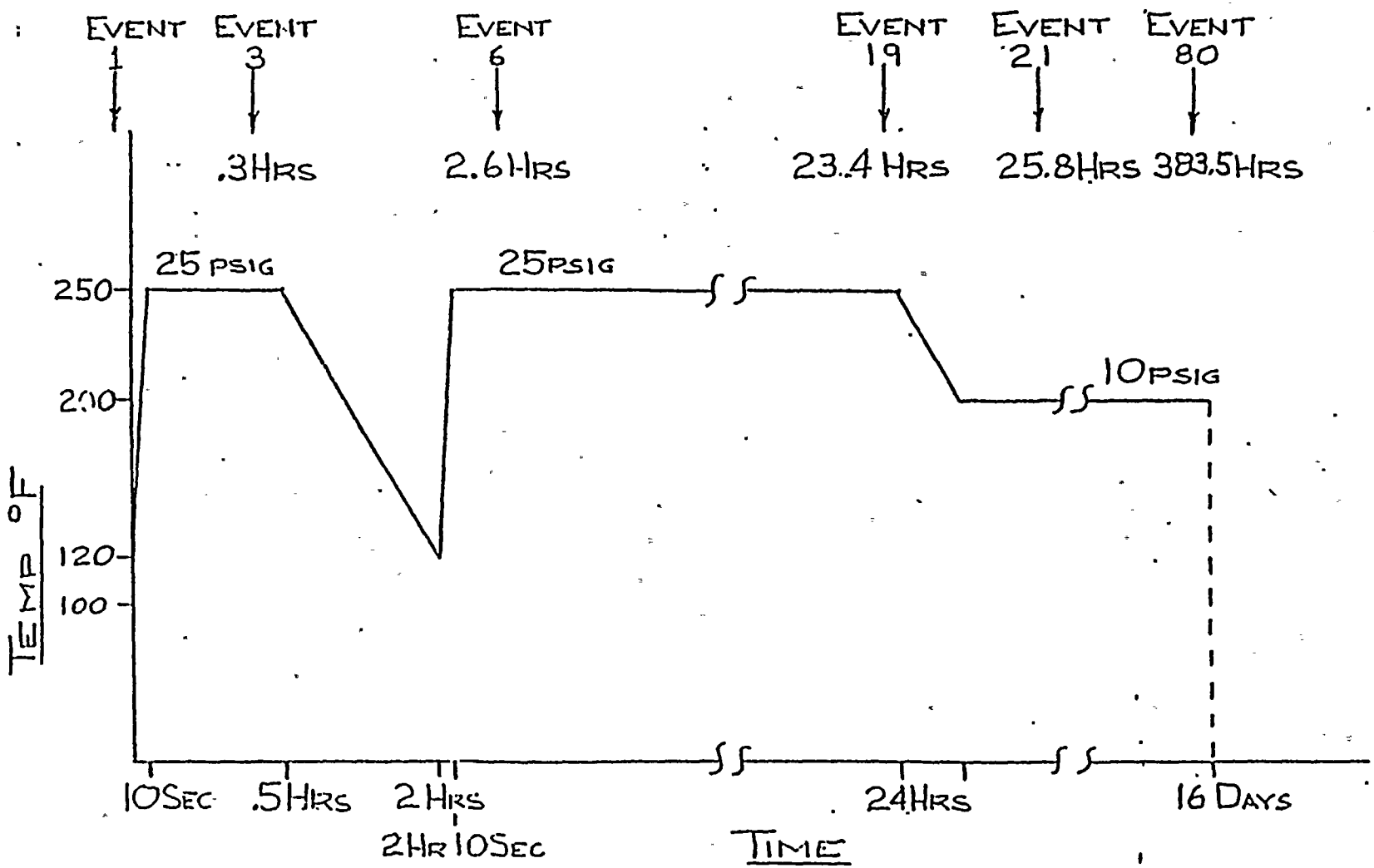

FIGURE 1

WASHINGTON PUBLIC SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-9 MANUFACTURER Limitorque MODEL NUMBER SMB-2601215R2 COMPONENT Motor Operator FUNCTION/SERVICE LOCATION: BLDG C ELEVATION 509 COLUMN 150°D	OPERATING TIME	6 months	Note 1	2			
	TEMPERATURE (F)	135 Normal 150 abnormal Accident - Profile 1		1			
	PRESSURE (PSIA)	16.7 normal Accident - Profile 1		1			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	Demineralized water		1			
	RADIATION (RAD)	4.4×10^7		1			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List 12/16/81	1. Man and model on Class 1E List but no evaluation. The qualification status of these components has not yet been determined. Requalification activities will be implemented, if required.

WP-1081

WASHINGTON PUBLIC SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL: G11-F093 and G11-F094
PPD: 21A1883

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-93 -94	OPERATING TIME	6 months	Equivalent of 50 months at 150°F	4	2,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	2	Simultaneous Test	None
MANUFACTURER Limitorque	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER SMB-0 COMPONENT	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	Steam for 24 hours 100% for 15 days	1	2	Simultaneous Test	None
Valve Motor Operator (Reliance Class B) FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
Operate RHR/SSW Crosstie Valve	RADIATION (RAD)	3.1×10^6	2×10^7	3	2	Sequential Test	None
	AGING	40 years	40 years	1	2,5	Sequential Test Engineering Analysis	None
LOCATION: BLDG R ELEVATION 552 COLUMN N/8.6, N/9	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: N. S. Wolfe

DOCUMENTATION REFERENCES	NOTES
1. Par. 3.11 2. Limitorque Test Report B0003, with Addendum A, prepared 5/8/76 3. EDS Study 0740-004-548J 4. WNP-2 Class 1E Equipment List, dated 12/16/81 5. Calculations in QID 221011(2) 6. Calculations in QID 221011(1)	Qualified

WP-1681

TEMPERATURE PROFILE

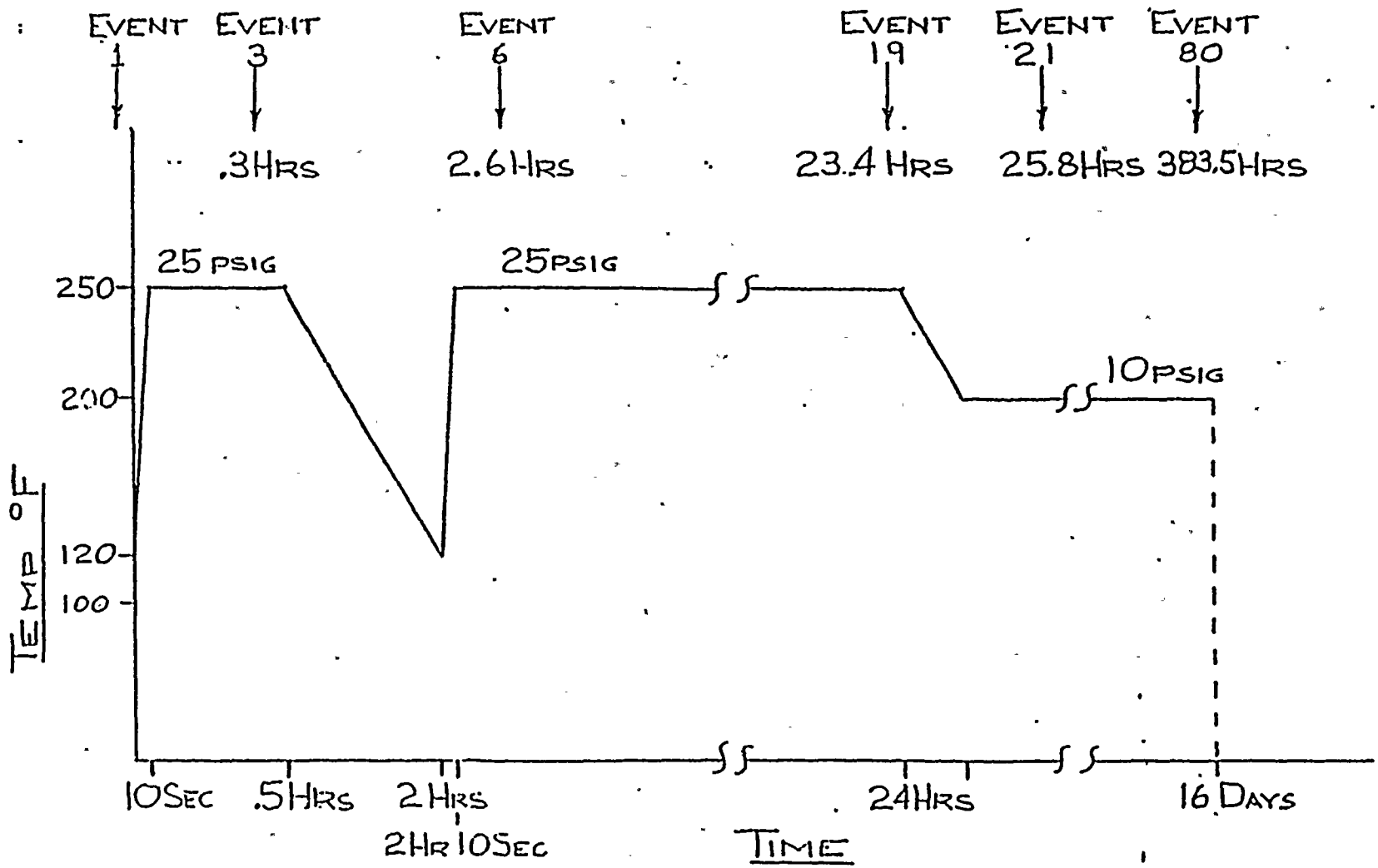

FIGURE 1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-MO-99A RHR-MO-99B MANUFACTURER Limitorque MODEL NUMBER SMB-000 COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate RHR Valves LOCATION: BLDG C ELEVATION 510 COLUMN 95° + 270°	OPERATING TIME	4320 hours	Equivalent to 4320 hours	5	2, 3	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	135 normal 150 maximum abnormal Accident - profile 1	See enclosed profile	1	2	Simultaneous Test	None
	PRESSURE (PSIA)	16.7 normal Accident - Profile 1	See enclosed profile	1	2	Simultaneous Test	None
	RELATIVE HUMITY (%)	50 normal 90 maximum abnormal 100 Accident	100	1	2	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	Chemical spray with pH 10	1	4	Simultaneous Test	None
	RADIATION (RAD)	2.74×10^7	2.04×10^8	1	2	Sequential Test	None
	AGING	40 years	40+ years	1	2, 3	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report 600376A, 5-13-76 3. E/IC 02-80-04-0 4. Limitorque Report 600456, 12-9-75, Section C Appendix c. 5. WNP-2 Class 1E Equipment List, 12/16/81	1. Qualified

WP-1681

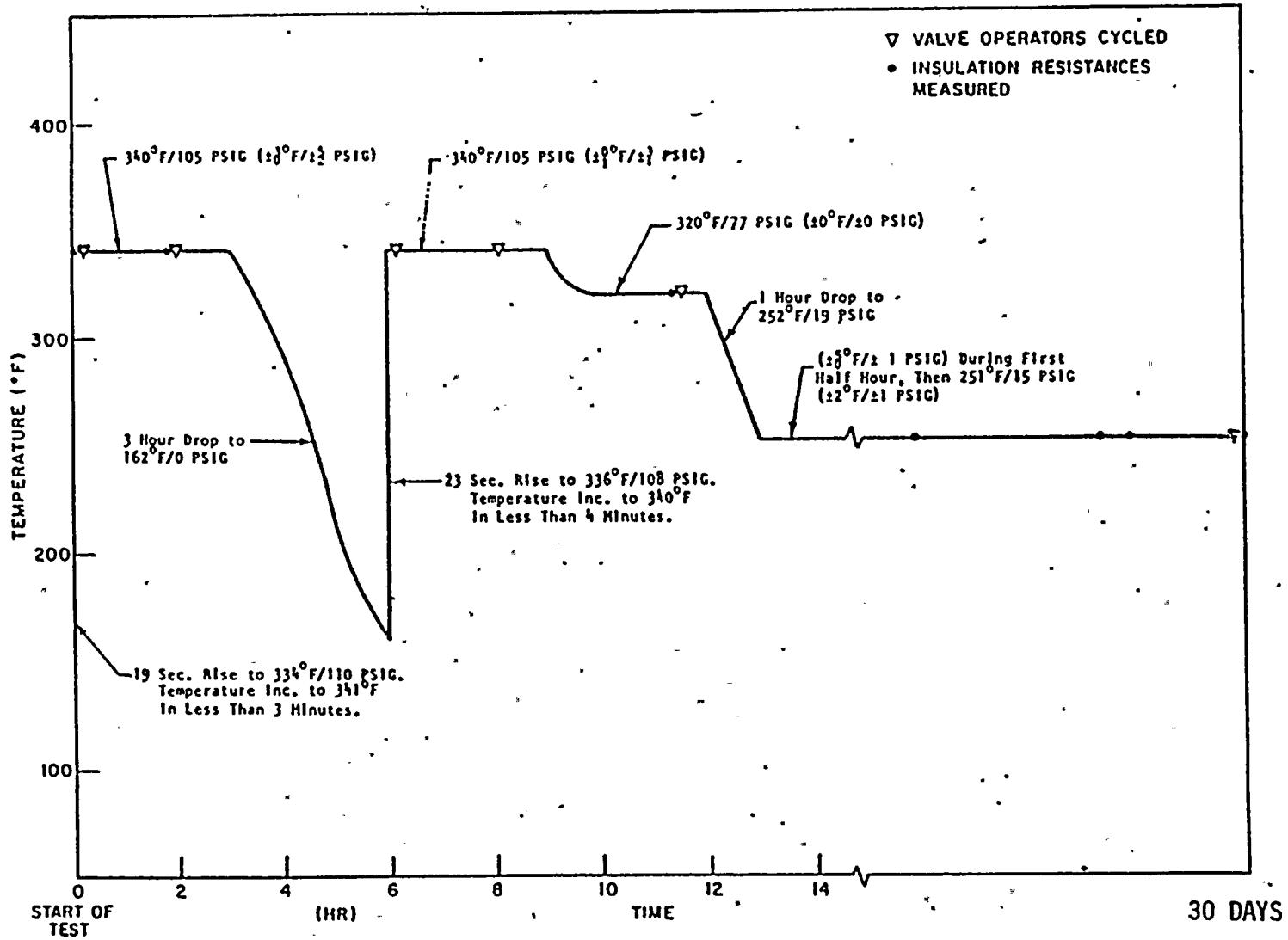

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-PIS-22A RHR-PIS-22C MANUFACTURER Robert Shaw MODEL NUMBER COMPONENT Pressure Indicating Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 503 501 COLUMN J0/9.4 H8/9.3	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.6×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Pike

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-501B, K	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1981

WASHINGTON PUBLIC SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-PIS-22B MANUFACTURER Static-O-Ring MODEL NUMBER 5N-AA3-X10511 COMPONENT Pressure Indicating Switch FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 503 COLUMN J.0/9.4	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	7.8×10^4		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Pk

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES

1. WNP Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-501K

NOTES

1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function.

Qualified.

WP-1881

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02E12

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-PS-16 A-C	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Static-O-Ring	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
MODEL NUMBER 5N-AA3-X105TT COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
FUNCTION/SERVICE LPCI Permissive Pump Pressure Switch	RADIATION (RAD)	4.63×10^5	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 501 COLUMN See Note 2	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-501B
4. EDS Calculation file 0740-006-006
5. Viking Lab.Inc. Test letter Report #30203-2 dated 11/20/73. Steam testing of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Tag#	Column
RHR-MS-16A	J 3/3.6
RHR-MS-16B-C	H8/9.3

WP-1961

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-PS-18 MANUFACTURER Static-O-Ring MODEL NUMBER COMPONENT Pressure Switch FUNCTION/SERVICE Pressure Switch Shutdown Cooling LOCATION: BLDG R ELEVATION 501 COLUMN M.8/7.9	OPERATING TIME	6 months	6 months	1	4, 5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.3×10^6	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2	N/A	Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Oscar Seiler

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 2. FSAR Par. 3.11 3. EDS Study 0740-004-501M 4. EDS Calculation File 0740-006-006 5. Viking Lab., Inc. Test Letter Report 30203-2, 11/20/73	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-PS-19 A-C MANUFACTURER Static-O-Ring MODEL NUMBER 5N-AA3-X105TT COMPONENT Pressure Switch FUNCTION/SERVICE LPCI Permissive Pump Pressure Switch LOCATION: BLDG R ELEVATION 501 COLUMN See Note 2	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4.63×10^5	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-501B
4. EDS Calculation file 0740-006-006
5. Viking Lab. Inc. Test letter Report #30203-2 dated 11/20/73. Steam testing of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A proventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Tag #	Column
RHR-MS-19A	J5/3.6
RHR-MS-19 B-C	H8/9.4

WP-1041

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-PT-26A,B RHR-PT-28 MANUFACTURER Robertshaw MODEL NUMBER 613B COMPONENT Pressure Transmitter FUNCTION/SERVICE Pressure Transmitter RCIC Loop A,B,A LOCATION: BLDG R ELEVATION 501 COLUMN J5/3.7 J/9.3 J/9.3	OPERATING TIME	6 months		1			Note 1
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident		2			
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4.6×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/6/82

Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-501B	1. Qualification documentation is being obtained from the vendor.

WP-1861

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-SV-182 -60A -60B MANUFACTURER Marotta MODEL NUMBER MV36RP-H3 COMPONENT Solenoid Valve FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 548 COLUMN L/9, N/8.3, K/8.3	OPERATING TIME	4320 hours		3			Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40-70 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	3.1×10^6		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seber

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548J 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. Currently being qualified by Contract 0607, Work Release 004 with Wyle Lab.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-TE-27A,-B MANUFACTURER California Alloy MODEL NUMBER COMPONENT Temperature Element FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 565, 548 COLUMN K/8	OPERATING TIME	6 months	Note 1	1	N/A	N/A	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	Note 1	2	N/A	N/A	None
	PRESSURE (PSIA)	14.7	Note 1	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	Note 1	2	N/A	N/A	None
	CHEMICAL SPRAY	N/A	Note 1	2	N/A	N/A	None
	RADIATION (RAD)	3.4×10^6	Note 1	3	N/A	N/A	None
	AGING	40 years	Note 1	2	N/A	N/A	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Neil Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548 (worse case)	1. No test data is available from vendor. Alternate qualification methods are being developed.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Residual Heat Removal TAG NUMBER RHR-TE-4A RHR-TE-4B RHR-TE-5A RHR-TE-5B MANUFACTURER G.E. MODEL NUMBER COMPONENT Temperature Element FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 572, 560 COLUMN L.0/8.3	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	1.2×10^6		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Pehi

Reviewed by: M. S. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-548L and 572J	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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SPEC: 2808-216

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Outside Air TAG NUMBER ROA-LMS-10, 11	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 accident		2			
MANUFACTURER Namco	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 70050100 COMPONENT Limit Switch	RELATIVE HUMITY (%)	45 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE Limit Switch for Air Dampers	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.7×10^4		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 542 COLUMN H.7/8.1	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Allen

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-522D, K 4. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch EA-740 which is qualified to IEEE 323-74 and IEEE-75. (Ref. 4).

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Reactor Outside Air TAG NUMBER: ROA-LMS-12 MANUFACTURER: Namco MODEL NUMBER: 70050100 COMPONENT: Limit Switch FUNCTION/SERVICE: Limit Switch for Air Dampers LOCATION: BLDG R ELEVATION 480 COLUMN J0/83	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	45 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	3.2×10^3		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ohlin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-471H 4. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch EA-740 which is qualified to IEEE 323-74 and IEEE-75. (Ref. 4).

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Outside Air TAG NUMBER ROA-LMS-13, 14 MANUFACTURER Namco MODEL NUMBER 70050100 COMPONENT Limit Switch FUNCTION/SERVICE Limit Switch for Air Dampers LOCATION: BLDG R ELEVATION 591 COLUMN M.5/6.0 M.9/7.4	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	45 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-572D, H 4. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch 740 which is qualified to IEEE 323-74 and IEEE 344-75. (Ref. 4).

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Outside Air TAG NUMBER ROA-LMS-15, 17 MANUFACTURER Namco MODEL NUMBER 70050100 COMPONENT Limit Switch FUNCTION/SERVICE Limit Switch for Air Dampers LOCATION: BLDG R ELEVATION 563 COLUMN M.8/4.6 M 8/4.2	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	45 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	9.9×10^3		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: M. L. Johnson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-548C 4. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch 740 which is qualified to IEEE 323-74 and IEEE-75. (Ref. 4).

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Outside Air TAG NUMBER ROA-LMS-19 MANUFACTURER Namco MODEL NUMBER 70050100 COMPONENT Limit Switch FUNCTION/SERVICE Limit Switch for Air Dampers LOCATION: BLDG R ELEVATION 548 COLUMN L.0/4.0	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 maximum normal 104 maximum abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	45 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.0×10^5		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-548K 4. WPPSS Letter GE-02-JLS-81-021	1. These limit switches are being replaced by Namco Limit Switch EA-740 which is qualified to IEEE 323-74 and IEEE-75. (Ref. 4).

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Outside Air TAG NUMBER ROA-RLY-CR1A -CR200	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 548, 522 COLUMN M.8/6.0, N.0/8.3	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chu

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522H, 548G	1. These components are on order. The qualification documentation will be reviewed when it is received.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-10	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER HBX 8320A1 COMPONENT	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
Solenoid Pilot Valve FUNCTION/SERVICE DIV 11 MCC Room Damper ROA-AD-10	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.66×10^4	4.4×10^6	2	3, 5	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
LOCATION: BLDG R ELEVATION 522 COLUMN M6/4	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: [illegible]

Reviewed by: W.E. Farsone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 1740-004-522D
3. Calculations in QID 315004
4. E/I-02-91-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-100 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 8316 E35F COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE ROA-V-1 Solenoid Pilot Valve LOCATION: BLDG R ELEVATION 548 COLUMN M8/5.7	OPERATING TIME	4320 Hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.6×10^3	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [illegible] S. Robinson

Reviewed by: W.E. Farrar 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-548 G
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-11	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal. 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
MODEL NUMBER HBX 8320A1 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE Div 1 MCC Room Damper ROA-AD-11	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	2.4×10^4	4.4×10^6	2	3, 5	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 522 COLUMN H4/8.3	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. J. Robinson

Reviewed by: W.E. Farasse 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-422K
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final Qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-12	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER HBX 8320 A1 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE DC MCC Room Damper ROA-AD-12	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.24×10^3	4.4×10^6	2	3, 5	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
LOCATION: BLDG R ELEVATION 471 COLUMN H4/8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: [illegible]

Reviewed by: W.E. Faraone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-471H
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-13 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HBX8321A1 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE H_2 Recomb. MCC Rm (Div 1) Damper ROA-AD-13 LOCATION: BLDG · R ELEVATION 575' COLUMN M4/5.7	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 150 max. accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4	4.4×10^6	2	3, 5	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: A. L. Robinson

Reviewed by: W. E. Farabee 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-572D
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duraction at 100% relative humidity.
2. The solenoid valves will be rebuilt on a scheduled based on the 7-year qualified life.

WP-1041

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-14	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO)	PRESSURE (PSIA)	14.7	N/R	1	N/A	Simultaneous Test	None
MODEL NUMBER HBX 8320 A1 COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE H_2 Recomb. MCC Room (Div II) Damper ROA-AD-14	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.8×10^4	4.4×10^6	2	5, 3	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 572 COLUMN M8/7.8	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. P. Wilson

Reviewed by: W.E. Farone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 740-004-572H
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1661

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-15 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HBX 8320A1 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Solenoid Pilot Valve for Air Damper ROA-AD-15 LOCATION: BLDG R ELEVATION 548 COLUMN M4/4.3	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F.	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.9×10^3	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: W. L. Robinson

Reviewed by: W.E. Farasoie 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-548C
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-17 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER HBX 8320A-1 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE Analyzer Room 1B Damper Solenoid Pilot Valve RDA-AD-17 LOCATION: BLDG R ELEVATION 548 COLUMN M4/4.4	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident	Steam	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.9×10^3	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. L. Robinson

Reviewed by: W.E. Farone 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-548C 3. Calculations in QID 315004 4. E/I-02-81-04-0 (IE Bulletin 78-14) 5. REIC Report No. 21 (Battelle) 6. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity. 2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1083

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Outside Air TAG NUMBER ROA-SPV-200	OPERATING TIME	4320 Hours	Equivalent to >10,000 hours at 150°F	6	3, 4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	3, 4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER WJHT 8316 E35F	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
COMPONENT Solenoid Pilot Valve	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1	3	Simultaneous Test	Note 1
FUNCTION/SERVICE ROA-V-2, Pilot Valve	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.3×10^5	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	Note 2
LOCATION: BLDG R ELEVATION 528 COLUMN N/8.2	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. S. Robinson

Reviewed by: W.E. Fausone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-522H
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1041

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C72

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Protection System TAG NUMBER RPS-PS-2A-D	OPERATING TIME	1 Min.	1 Min.	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	212	2	5	Simultaneous Test	None
MANUFACTURER Static-O-Ring	PRESSURE (PSIA)	14.7	14.95	2	5	Simultaneous Test	None
MODEL NUMBER 12N-AA5-X10TT COMPONENT	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	5	Simultaneous Test	None
Pressure Switch FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
Drywell High Pressure	RADIATION (RAD)	8.33×10^5	8.33×10^5	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 522 COLUMN See Note 2	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: AN 1/5/82 Reviewed by: JDM 1/6/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522H
4. EDS Calculation file 0740-006-006
5. Viking Lab. Inc. Test letter Report #30203-2 dated 11/20/73. Steam test of Static-O-Ring Pressure Switch, P/N 12N-AA4-TTX10.

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Component	Column
RPS-PS-2A	J5/7.1
RPS-PS-2B	M.8/6.6
RPS-PS-2C	N8/5.8
RPS-PS-2D	J8/4.8

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C72

MPL:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Protection System TAG NUMBER RPS-PS-4	OPERATING TIME	.017 hours	6 hours	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	212	2	5	Simultaneous Test	None
MANUFACTURER Barton	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER 288A COMPONENT Pressure Switch	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	5	Simultaneous Test	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
Primary containment high pressure	RADIATION (RAD)	2.4×10^4	3×10^6	3	4	Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 522 COLUMN J.5/7.2	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-522K 4. EDS Calculation File 0740-006-002 5. Qualification Test Report for Barton 288 Switch, Report #QSR-027-01, dated 10/2/80	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1861

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-67

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-M-1,10 MANUFACTURER Westinghouse MODEL NUMBER SBFC, FBFC COMPONENT Motors FUNCTION/SERVICE 3hp motors for RRA-FC-1+,10+ LOCATION: BLDG R ELEVATION 445,522 COLUMN H 7/4.3 N3/3.8	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-441J 4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures 5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Elec. Motor Qualification at WPPSS Plant, w/Enclosures 6. EPRI Report #RP-1707-3	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1801

WASHINGTON PUBLIC SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-67,216

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-M-11,12	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 108 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
MANUFACTURER Westinghouse	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
MODEL NUMBER FBFC,TBAN COMPONENT Motor	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
FUNCTION/SERVICE (Note 2)	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.5×10^3	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION (Note 2) COLUMN (Note 2)	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDN 1/7/82 Reviewed by: AJ 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report #0740-004-522N
4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures
5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Electric Motor Qualification at WPPSS Plant, w/Enclosures
6. EPRI Report #RP-1707-3

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Tag Numbers	Function/Service	Elev.	Column
RRA-M-11	3hp motor for RRA-FC-11+	522	H5/8
RRA-M-12	5hp motor for RRA-FC-12+	490	H 6/7.8

3. These components are located in a mild environment; however, they are qualified to the harsh environment conditions listed here.

WP-1061

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808- 216

MPL:
PPD:

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-M-13, 14 MANUFACTURER Westinghouse MODEL NUMBER TBAN/7905-01-003 COMPONENT Motor FUNCTION/SERVICE 3hp motors for RRA-FC-13+,14+ LOCATION: BLDG R ELEVATION 585 COLUMN M 3/6.1 M 7/8.0	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	5.4×10^4	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AJ 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report 0740-004-572D 4. Letter from J.J. Courtin(W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures 5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Elec. Motor Qualification at WPPSS Plant, w/Enclosures 6. EPRI Report #RP-1707-3	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1861

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-216

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-M-15,17 MANUFACTURER Westinghouse MODEL NUMBER TBAN COMPONENT Motor FUNCTION/SERVICE 3hp motor for RRA-FC-15+,-17+ LOCATION: BLDG R ELEVATION 548 COLUMN M5/4.5 M5/4.7	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 107 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.7×10^4	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11 3. EDS Report #0740-004-548F 4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures 5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Electric Motor Qualification at WPPSS Plant, w/Enclosures 6. EPRI Report #RP-1707-3	Qualified 1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment. 2. These components are located in a mild environment; however, they are qualified to the harsh environment conditions listed here.

WP-1061

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-67

MPL:
PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-M-4,5,6	OPERATING TIME	24 hours	24 hours	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
MANUFACTURER Westinghouse	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
MODEL NUMBER TBFC COMPONENT Motor	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
FUNCTION/SERVICE (Note 2)	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	4.0×10^6	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 445 COLUMN (Note 2)	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AN 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-441I
4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Unit #2, w/Enclosures
5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Electric Motor Qualification at WPPSS Plant, w/Enclosures
6. EPRI Report #RP-1707-3

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Tag Number	Function/Service	Column
RRA-M-4	10hp motor for RRA-FC-4+	M 5/4.1
RRA-M-5	5hp motor for RRA-FC-5+	K7/3.7
RRA-M-6	2hp motor for RRA-FC-6+	H 7/7.7

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215,67

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-M-19, RRA-M- 2, RRA-M-20, RRA-M- 3 MANUFACTURER Westinghouse MODEL NUMBER (Note 2) COMPONENT Motor FUNCTION/SERVICE (Note 2) LOCATION: BLDG R ELEVATION (Note 2) COLUMN (Note 2)	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test and Engineering Analysis	None
	TEMPERATURE (F)	90 Max Normal 104 Max Abnormal 150 Max Accident	484	2	4,5	Simultaneous Test and Engineering Analysis	None
	PRESSURE (PSIA)	14.7	14.7	2	4,5	Simultaneous Test and Engineering Analysis	None
	RELATIVE HUMITY (%)	40 Normal 90 Abnormal 100 Accident	100	2	4,5	Simultaneous Test and Engineering Analysis	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	1.7×10^6	1×10^8	3	4,5,6	Separate Effects and Engineering Analysis	None
	AGING	40 years	Note 1	2		Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: JDM 1/7/82 Reviewed by: AJ 1/7/82

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-441P
4. Letter from J.J. Courtin (W) dated 4/3/81 RE: Qualification, W Medium AC Motors in WPPSS Units #2, w/Enclosures
5. Letter from J.J. Courtin (W) dated 7/7/81 RE: Elec. Motor Qualification at WPPSS Plant, w/Enclosures
6. EPRI Report #RP-1707-3

NOTES

Qualified

1. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.
2.

Tag Number	Model Number	Function/Service	Elev.	Column
RRA-M-19			585	L10/8.4
- 2	SBFC	3hp motor for RRA-FC-2+	445	L.0/8.3
-20			585	L8/8.4
- 3	TBFC	3hp motor for RRA-FC-3+	445	M/8.3

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-218

MPL:
PPD:

PAGE NO:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Building Return Air TAG NUMBER RRA-RMS-S1, S2, S3, -S4, S5, S6	OPERATING TIME	6 months	Equivalent to 6 months at 150°F	3	4,5	Sequential Testing Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	267	1	4	Sequential Testing	None
MANUFACTURER General Electric	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER CR2940 COMPONENT	RELATIVE HUMITY (%)	40 max normal 90 max abnormal 100 max accident		1			Note 1
Remote Manual Switch FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
Local Control Switches	RADIATION (RAD)	4.0×10^6	1×10^6	2	4	Sequential Testing	Note 1
	AGING	40 years	Note 2	1	N/A	Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 444 COLUMN H8/4.3 M4/4.7 K2/8.2 K7/3.8 L8/8.2 H6/8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Report 0740-004-441C, 444G, 444F, 444J
3. WNP-2 Class 1E Equipment List dated 12/16/81
4. General Electric Qualification Report for CR2940YC212B2 Indicating Light, CR2940YA202B1 Pushbutton, and CR2940YB202B1 Selector Switch to IEEE Standard 323-1974, January 29, 1974
5. QID No. 285002

NOTES

1. These components are Use Code 2 and are, therefore, not required to perform an active safety function following an accident. However, failure modes must be evaluated to determine whether failure would be detrimental to plant safety. The evaluation is currently being performed.
2. A preventive maintenance/surveillance program is currently being developed to address aging of Class 1 equipment.

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
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PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Circulation TAG NUMBER RRC-MO-16A, 16B MANUFACTURER Limitorque MODEL NUMBER SMC-04 COMPONENT Motor Operator FUNCTION/SERVICE 2 HP m.o. for valves RRC-V-16A, 16B LOCATION: BLDG R ELEVATION 504 COLUMN J.3/7.4	OPERATING TIME	.017	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	7.8×10^4		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Elis

Reviewed by: [illegible]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501K	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Recirculation System TAG NUMBER RRC-MO-23A, B MANUFACTURER Limitorque MODEL NUMBER SMB-2-25 COMPONENT Motor Operator FUNCTION/SERVICE LOCATION: BLDG C ELEVATION 510 COLUMN 160 D AZ R17	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal accident--see profile 1		2			None
	PRESSURE (PSIA)	14.7 normal 16.7 max. abnormal accident--see profile 1		2			None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.4×10^7		2			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Raymond Chin

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundy under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Recirculation TAG NUMBER RRC-MO-67A MANUFACTURER Limitorque MODEL NUMBER SMB-3-60 COMPONENT Motor Operator FUNCTION/SERVICE LOCATION: BLDG C ELEVATION 514 COLUMN 102 D AZ R20	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal accident--see profile 1		2			None
	PRESSURE (PSIA)	14.7 normal 16.7 max. abnormal accident--see profile 1		2			None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.4×10^7		2			None
	AGING	40 years		2			None
	ACCURACY	N/A					None.

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Raymond Chin

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-2

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PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Recirculation TAG NUMBER RRC-MO-67B MANUFACTURER Limitorque MODEL NUMBER SMB-3-60 COMPONENT Motor Operator FUNCTION/SERVICE	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal accident--see profile 1		2			None
	PRESSURE (PSIA)	14.7 normal 16.7 max. abnormal accident--see profile 1		2			None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.4×10^7		2			
	AGING	40 years		2			None
LOCATION: BLDG C ELEVATION 514 COLUMN 275 D AZ R20	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Raymond Chin

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Recirculation TAG NUMBER RRC-POS-19, 20	OPERATING TIME	.017 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT Position Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE	CHEMICAL SPRAY	Demineralized water spray		2			
	RADIATION (RAD)	4.4×10^7		3, 2			
	AGING	40 years		2			
LOCATION: BLDG C, R ELEVATION 506, 522 COLUMN AZ 319°, J/6.7	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-5220	1. These components are on order. The qualification documentation will be reveiwed when it is received.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Recirculation Cooling TAG NUMBER RRC-SV-19, 20	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT Solenoid Valve FUNCTION/SERVICE	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.7×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION R COLUMN J/6.7	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-5220	1. These components are on order. The qualification documentation will be reviewed when it is received.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Water Cleanup TAG NUMBER RWCU-FT-36 RWCU-FT-37 RWCU-FT-41 MANUFACTURER G.E. MODEL NUMBER 555111BMAA4NBP COMPONENT Flow Transmitter FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 526, 471 COLUMN J/7.6 N8/50	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)	4.5×10^5		3			None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Pragraph 3.11 3. EDS Report 0740-004-522K and 471B	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor water clean-up TAG NUMBER RWCU-MO-1 MANUFACTURER Limitorque MODEL NUMBER SMB-0-25-R56 COMPONENT Motor Operator - Relaince, RH insulation FUNCTION/SERVICE Operates Containment Isolation valve LOCATION: BLDG C ELEVATION 540 COLUMN 150 Degrees	OPERATING TIME	24 hours	30 days	4	3	Simultaneous Test	None
	TEMPERATURE (F)	135 max. normal 150 max. abnormal accident: see profile 1	See enclosed profile			Simultaneous Test	
	PRESSURE (PSIA)	14.7 normal 16.7 abnormal accident: see profile 1	See enclosed profile	1	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident	100	1	3	Simultaneous Test	None
	CHEMICAL SPRAY	Demineralized water	Chemical spray pH 10	1	3	Simultaneous Test	None
	RADIATION (RAD)	2.74×10^7	2.04×10^8	1	3	Sequential Test	None
	AGING	40 years	40 years	1	2, 3	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chi

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600367A 4. WNP-2 Class 1E Equipment List, 12/16/81	Qualified

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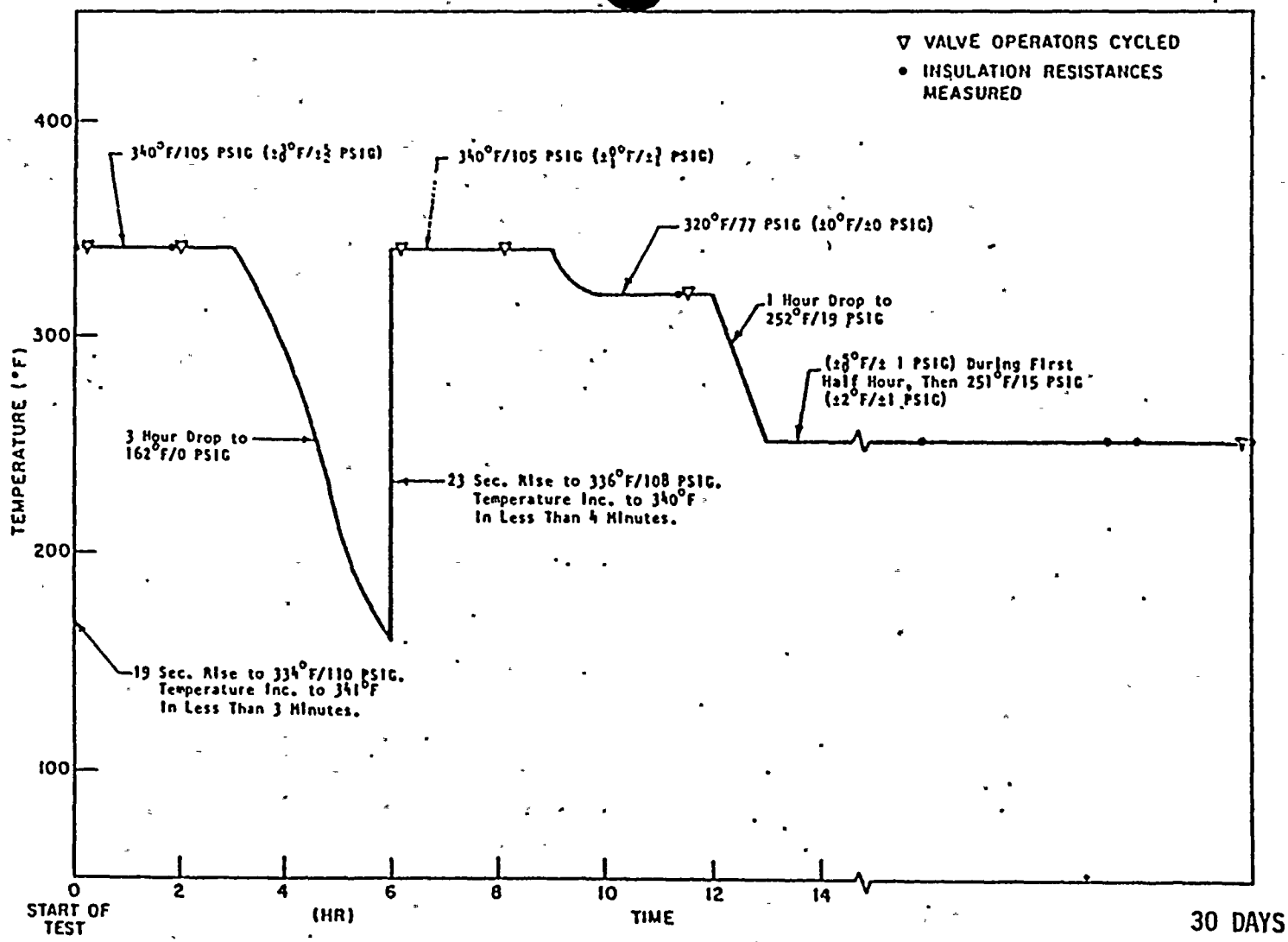

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Water Clean Up TAG NUMBER RWCU-MO-4 MANUFACTURER Limitorque MODEL NUMBER SMB-0-25/DK56H COMPONENT Valve Motor Operator FUNCTION/SERVICE Operate RWCU Valve 4 LOCATION: BLDG R ELEVATION 522 COLUMN M7/5	OPERATING TIME	24 hours	Equivalent of 52284 hours at 150°F	5	3,4	Simultaneous Testing Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal Accident: See profile 15	See enclosed profile	1	3	Simultaneous Testing	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal Accident: See profile 15	100%	1	3	Simultaneous Testing	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	8.4×10^5	1×10^7	2	3	Sequential Testing	None
	AGING	40 years	40 years	1	3,4	Sequential Testing Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ch

Reviewed by: M. F. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 074-004-522F 3. Limitorque Report B0009, 4/30/76 4. Applicability calculations in QID221011 5. WNP-2 Class 1E Equipment List, 12/16/81	Qualified.

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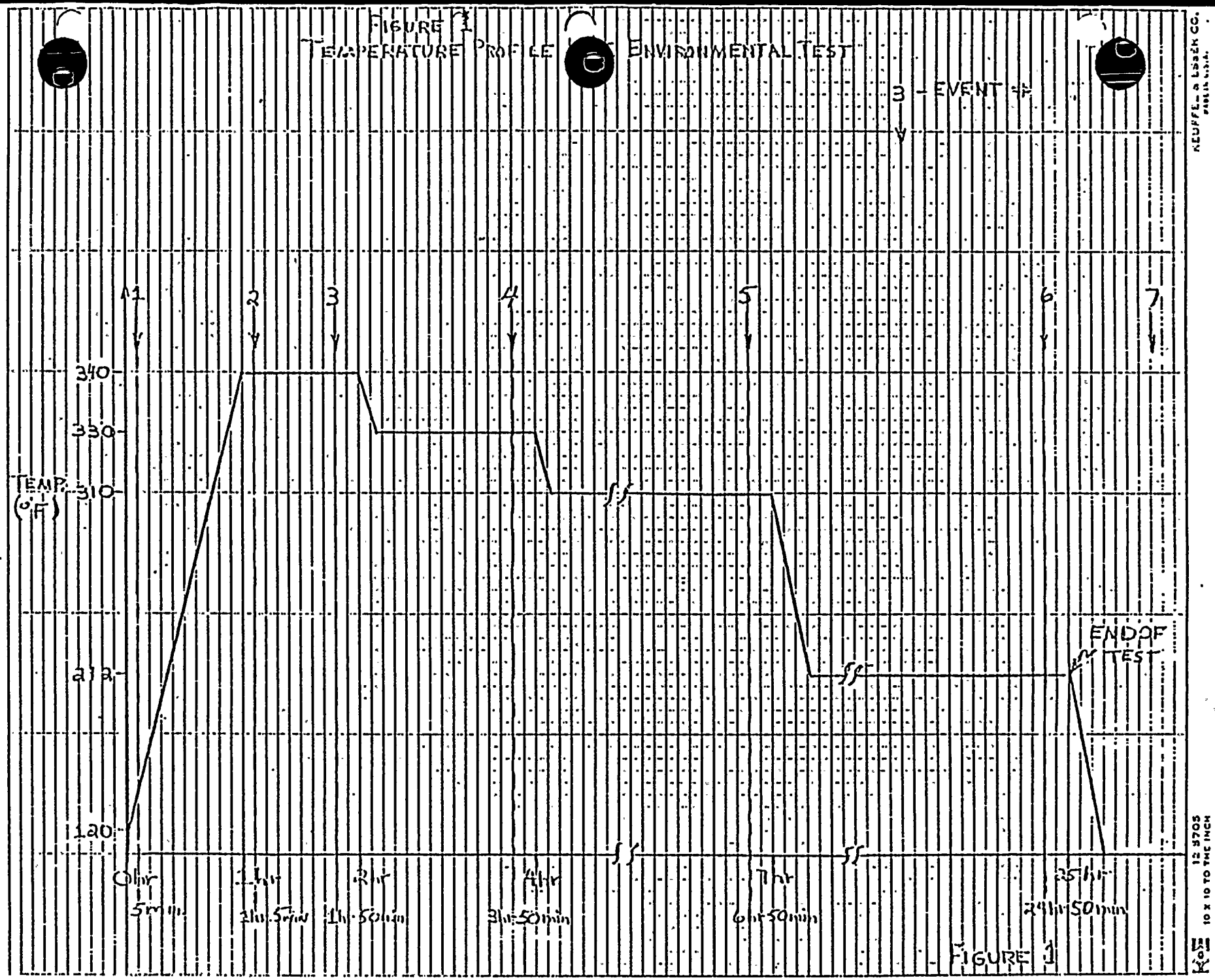
FIGURE 1
TEMPERATURE PROFILE OF ENVIRONMENTAL TEST
3 - EVENT #
1
2
3
4
5
6
7
TEMP. (°F)
340
330
310
212
120
0hr
5min
1hr
2hr 5min
2hr
1hr 50min
4hr
3hr 50min
7hr
6hr 50min
25hr
24hr 50min
END OF TEST
FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Reactor Water Clean Up TAG NUMBER RWCU-MO-40 MANUFACTURER Limitorque MODEL NUMBER SMB COMPONENT Motor Operator Reliance, RH Insulation FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 515 COLUMN H6/5.1	OPERATING TIME	6 months	Equivalent to 6 months at 150°F	4	2,3	Sequential Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal Accident--profile 13	See enclosed profile	1	2,3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	1	2,3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 max normal 90 max abnormal Accident--profile 13	100	1	2,3	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/R	1		N/A	None
	RADIATION (RAD)	2.6×10^6	2.04×10^8	5	2,3	Sequential Test	None
	AGING	40 years	40 years	1	2,3	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	1	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ai

Reviewed by: M. P. Robinson

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Limitorque Report B0058 3. Limitorque Report B600376A 4. WNP-2 Class 1E Equipment List dated 12/16/81 5. EDS Study 0740-004-510S	Qualified

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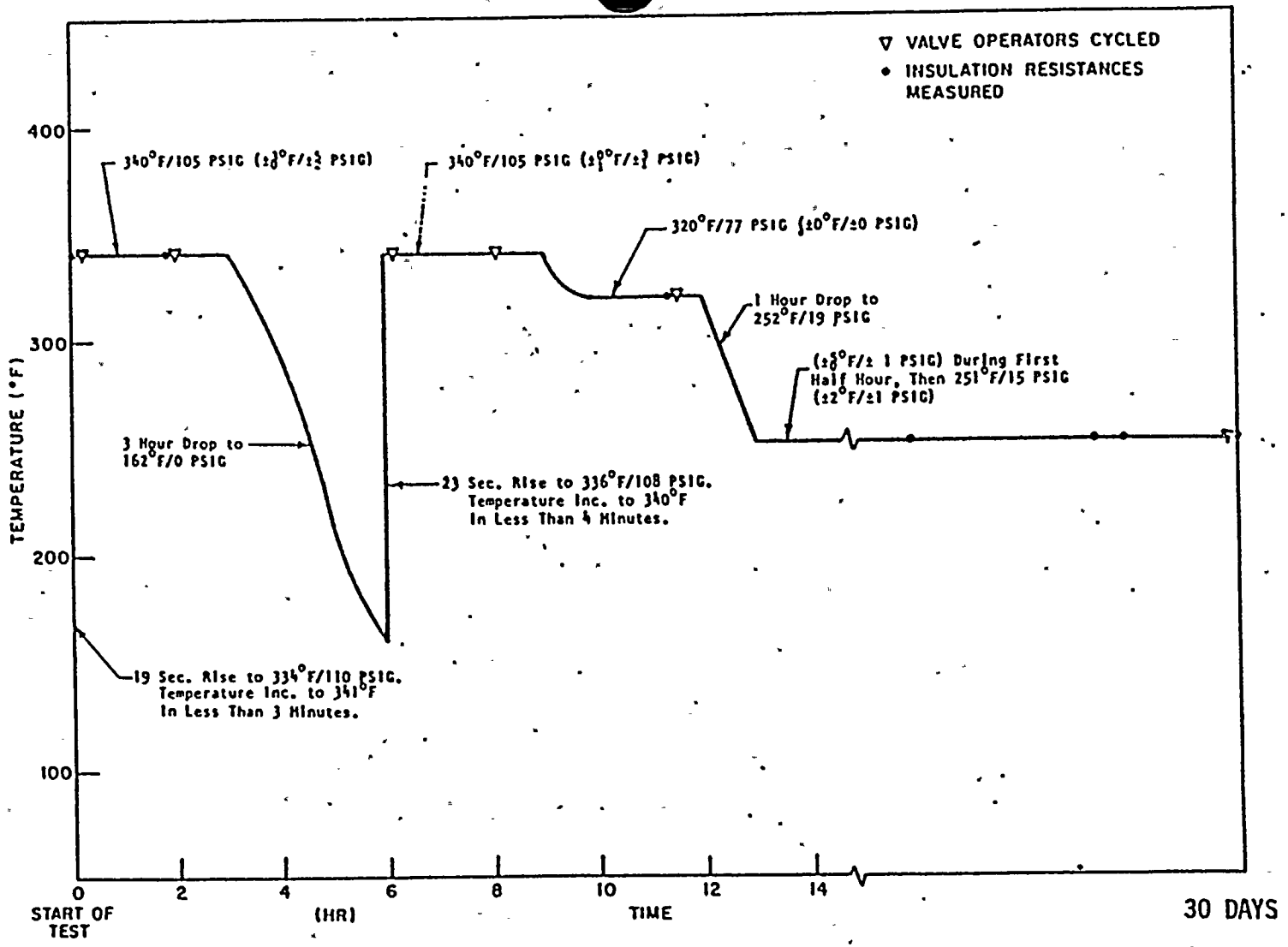

Figure 3. Actual Steam Exposure Profile

LIMITORQUE TEST REPORT 600376A

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-01

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Sampling TAG NUMBER S-SR-13, 14 MANUFACTURER MODEL NUMBER COMPONENT Sample rack FUNCTION/SERVICE Support sampling components LOCATION: BLDG R ELEVATION 548 COLUMN M.6/4.6	OPERATING TIME	6 months	Note 1	1	N/A	N/A	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	Note 1	2	N/A	N/A	None
	PRESSURE (PSIA)	14.7	Note 1	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	Note 1	2	N/A	N/A	None
	CHEMICAL SPRAY	N/A	Note 1	2	N/A	N/A	None
	RADIATION (RAD)	1.7×10^4	Note 1	3	N/A	N/A	None
	AGING	40 years	Note 1	2	N/A	N/A	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ohi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548F	Qualified. 1. The racks are metallic and are not subject to environmental degradation.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Sampling TAG NUMBER S-SR-42, 43 MANUFACTURER MODEL NUMBER COMPONENT Sample Rack FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN K.6/9.5 N.1/9.5	OPERATING TIME	6 months	N/R	1	N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	2	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	N/R	2	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	2	N/A	Note 1	None
	RADIATION (RAD)	8.3×10^5	N/R	3	N/A	Note 1	None
	AGING	40 years	N/R	2	N/A	Note 1	None
	ACCURACY	N/A	N/R		N/A	Note 1	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522H, K	Qualified 1. The racks are metallic, and are not subject to environmental degradation.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-EHC-1A1, 1A2 -1B1, 1B2 MANUFACTURER Chromalox MODEL NUMBER 27-47499 COMPONENT Heater FUNCTION/SERVICE Limit Relative Humidity LOCATION: BLDG R ELEVATION 572 COLUMN H7/5.6, J.3/5.6	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	2	4,5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 80 max abnormal 100 max accident	100%	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
	RADIATION (RAD)	1.9×10^8	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	5	Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: W. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. Westinghouse Test Report WCAP 7709-L, Supplements 1-7 5. EDS Problem File #0740-004-AAD4	Qualified.

WP-1861

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-28

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-EHO-1A1 -1A2 -1B1 -1B2 MANUFACTURER ITT-General Controls MODEL NUMBER NH91 COMPONENT Electro-Hydraulic Operator FUNCTION/SERVICE Operate inlet vanes LOCATION: BLDG R ELEVATION 572 COLUMN J4/7.8 H6/7.8	OPERATING TIME	4320 hours	2400 hours	5	3	Simultaneous Test	Note 1
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	150	1	3	Simultaneous Test	Note 1
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal max.. accident	100	1	3	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.41×10^6	3.9×10^7	2	3	Sequential Test	Note 1
	AGING	40 years	10.6 years	1	3,4	Sequential Test Engineering Analysis	Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared By: Chas Seiken

Reviewed By: M. S. Thomas

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study #0740-004-572N 3. MCC Powers #377-80.010 with Appendices A through D 4. Calculation QID 110001 5. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Applicability of the test data and discrepancies in the testing procedures are being resolved with the vendor (letter G02-81-0531). 2. The component will be requalified on a schedule based on the calculated qualified life and manufacturers' recommendations.

WP-1041

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-220

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-FS-2A2 -2B1 MANUFACTURER MODEL NUMBER COMPONENT Flow Switch FUNCTION/SERVICE SGT-FN-1A-1, 1B-2, discharge LOCATION: BLDG R ELEVATION 572 COLUMN H.9/7.8	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	9.4×10^6		3			
	AGING	40 years					
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-572N	1. These components are on order. The qualification documentation will be reveiwed when it is received.

WP-1661

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-FT-1A1, 1A2, 1B1, 1B2	OPERATING TIME	6 months	6 months	4	2,6	Engineering Analysis Separate Effects	None Note 1
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	300 max	1	2	Separate Effects	None
MANUFACTURER Rosemount	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
MODEL NUMBER 1151DP3022MBGE01 COMPONENT	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	1	7	Separate Effects	None
Flow Transmitter FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
Transmit Fan Flow Signal for Associated SGT Fans	RADIATION (RAD)	9.4×10^6	2×10^6	5	3	Separate Effects	None
	AGING	40 years	Note 2	1	N/A	N/A	None
LOCATION: BLDG R ELEVATION 585 COLUMN H8/7.1	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Rosemount Report 97251A dated 2/9/72 3. Rosemount Report 127227 dated 12/27/72 4. WNP-2 Class 1E Equipment List dated 12/16/81 5. EDS Study 0740-004-572N 6. Rosemount Product Data Sheet 2256 7. Rosemount Report 117415 dated 9/19/75	Qualified 1. Test data and product specs data ensure the component will operate 6 months at the required temperatures. 2. A preventive maintenance/surveillance program is being developed to address aging in Class 1E equipment.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-68

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-LMS-2A, B MANUFACTURER Namco MODEL NUMBER 74080100 COMPONENT Limit Switches FUNCTION/SERVICE V-2A,B Position Indicator LOCATION: BLDG R ELEVATION 572 COLUMN J.3/5.5, J.4/5.2	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	340	2	4,5	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	2	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
	RADIATION (RAD)	1.9×10^8	2×10^8	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4,5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. Qualification of NAMCO Controls Limit Switch Model EA-740 to IEEE Stds. 344 (1975), 323 (1974) and 382 (1972), Rev. 1, dtd 2/22/79; Rev. 0, dtd 2/20/78 5. EDS Problem File #0740-004-AAD20, NAMCO LS	Qualified.

WP-1981

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OW: WPPSS
FACILITY: WNP-2
SPEC: 2808-28

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-M-1A1, 2 -1B1, 2	OPERATING TIME	6 months	6 months	1	4,5	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	150	2	4	Simultaneous Test Engineering Analysis	None
MANUFACTURER Westinghouse	PRESSURE (PSIA)	14.7	N/R	2	N/A	N/A	None
MODEL NUMBER Style No. 74D25012 COMPONENT Fan Motor	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100	2	4	Simultaneous Test Engineering Analysis	None
FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	N/A
	RADIATION (RAD)	9.4×10^6	9.4×10^6	3	5	Engineering Analysis	None
	AGING	40 years	40 years	2	5	Engineering Analysis	None
LOCATION: BLDG R ELEVATION 572 COLUMN H.8/7.6, J.5/7.6	ACCURACY	N/A	N/A	N/A	N/A	N/A	N/A

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: M. L. Morrison

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. Letter from J. Courtin (Westinghouse) dated April 3, 1981, with attachments 5. EDS Problem File #0740-004-AAD10	Qualified.

WP-1001

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

MPL:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-MC-6A, B; -7A, B ME-6A, B; -7A, B MANUFACTURER Hygrometrix MODEL NUMBER XMA/C-103 COMPONENT Xeristat Moisture Control System FUNCTION/SERVICE Heater control to limit relative hum. LOCATION: BLDG R ELEVATION 572' COLUMN H.7-J.3/5.5, N.7/5.5	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.9E08		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature] Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Par. 3.11
3. EDS Report 0740-004-572N
4. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers

NOTES

1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER See Notes Below MANUFACTURER Limitorque MODEL NUMBER SMB-00-10/P56 COMPONENT Motor Operator FUNCTION/SERVICE Various Valve Operators Reliance, Class B Insulation LOCATION: BLDG R ELEVATION 572 COLUMN See Notes Below	OPERATING TIME	6 months	Equivalent to 6 months at 150°F	1	3	Sequential Test Engineering Analysis	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	See enclosed profile	2	3	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	See enclosed profile	2	3	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	3	Simultaneous	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	9.4×10^6	2×10^7	6	3	Sequential Test	None
	AGING	40 years	40 years	2	3,5	Sequential Test	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Clin

Reviewed by: [illegible]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List dated 12/16/81
2. FSAR Par. 3.11
3. Limitorque Test Report B003
4. Limitorque Test Report B0058
5. EDS P.F. 0740-004-AAD5
6. EDS Report 0740-004-572N

NOTES

Qualified

Tag Number	Location	Tag Number	Location	Tab Number	Location
SGT-MO-1A	J.3/5.5	SGT-MO-4A1	H.4/7.0	SGT-MO-5A1	H.4/7.0
-1B	J.4/5.2	-4A2	J.1/7.0	-5A2	H.9/7.0
-3A1	H.4/7.6	-4B1	H.8/7.0	-5B1	J.6/7.0
-3A2	H.6/7.6	-4B2	J.8/7.0	-5B2	H.0/6.0
-3B1	J.4/7.6				
-3B2	J.6/7.6				

WP-1061

TEMPERATURE PROFILE

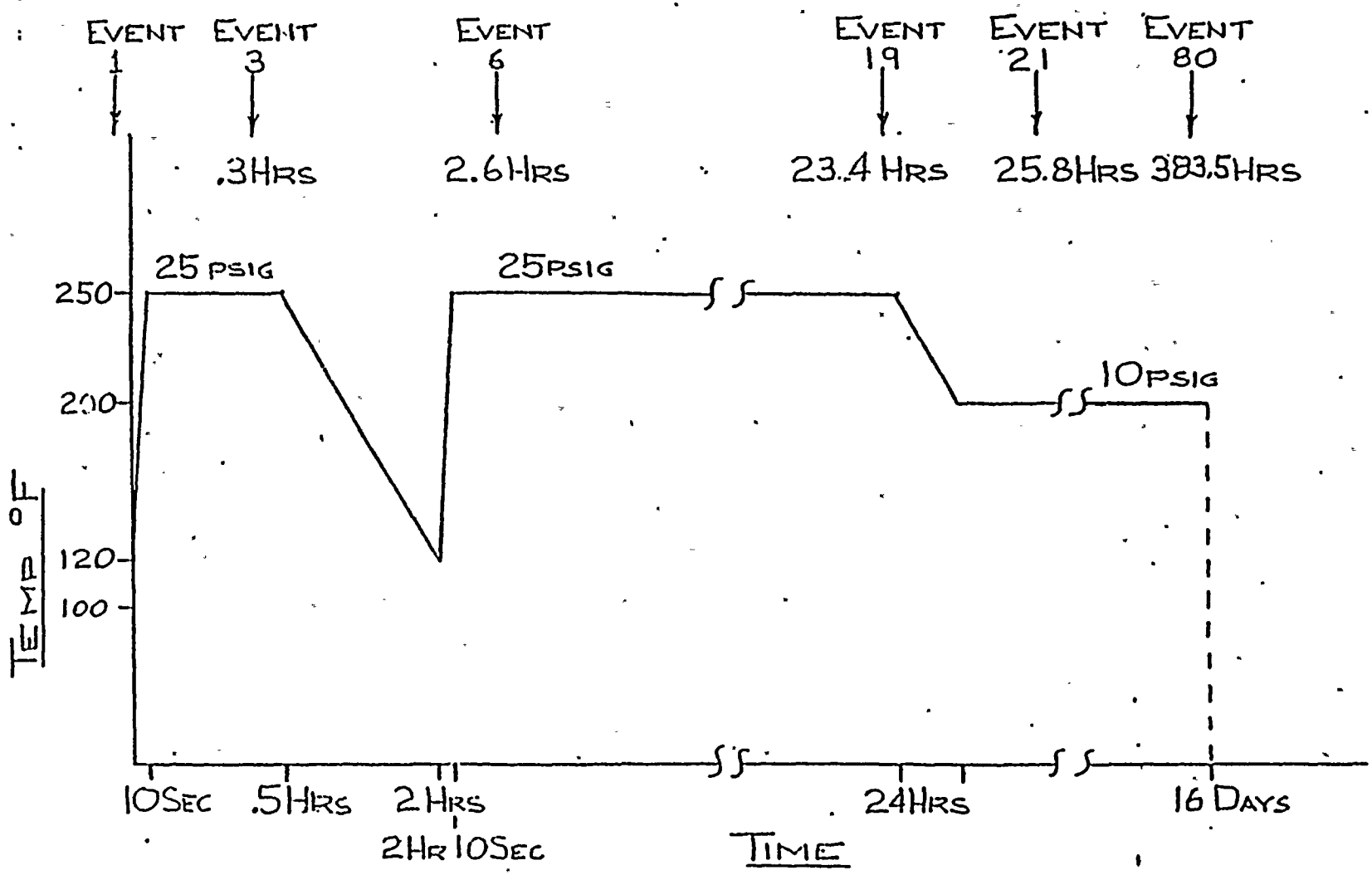

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-PP-EHC/1A1 -EHC/1A2 -EHC/1B1 -EHC/1B2 MANUFACTURER MODEL NUMBER COMPONENT Power Panel FUNCTION/SERVICE Heater Control Box LOCATION: BLDG R ELEVATION 572 COLUMN M.0/6.0 M.0/8.3	OPERATING TIME	6 months	N/R	3	N/A	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	N/R	1	N/A	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	N/R	1	N/A	Note 1	None
	CHEMICAL SPRAY	N/A	N/R	1	N/A	Note 1	None
	RADIATION (RAD)	5.4×10^4	N/R	2	N/A	Note 1	None
	AGING	40 years	N/R	1	N/A	Note 1	None
	ACCURACY	N/A	N/R		N/A	Note 1	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Bach

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-572D, H 3. WNP-2 Class 1E Equipment List dated 12/16/81	Qualified 1. The component is metallic and not subject to environmental degradation.

WP-1941

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment System TAG NUMBER SGT-PS-EH1A11, EH1A21, EH1B11, EH1B21 MANUFACTURER Beckman Instruments, Inc. MODEL NUMBER A900-20C0EAA-20 COMPONENT Pressure Switch FUNCTION/SERVICE Controls for SGT-EHC-1A1, 1A2, 1B1, 1B2 LOCATION: BLDG R ELEVATION 572 COLUMN H.6/5.9 J.5/16.0 J.2/6.0	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.9×10^8		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class IE Equipment List, dated 12/16/81. 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers.	1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WP-1041

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-RLY-EH1A15, 16, 17, 21, 22, 23, 24, 25, 26, 27; SGT-RLY-EH1B11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, MANUFACTURER Allen Bradley Company MODEL NUMBER 700N400A1, 700N600A1, 7004N800A1 COMPONENT Relay FUNCTION/SERVICE Control of heater SGT-EHC-1A1, 1A2, 1B1, 1B2 LOCATION: BLDG R ELEVATION 572 COLUMN M.0/6.0 M.0/8.2 M.0/5.8 M.0/8.0	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	5.4×10^4		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers	1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WP-1001

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

MPL:
PPD:

PAGE NO:
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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-SPV-F1, F2, F3, F4, F5, F6 MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER 8211 D2MO COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE ½" S. O. Deluge Valve Assy SGT-DV-1B LOCATION: BLDG R ELEVATION 578 COLUMN H6/3.6	OPERATING TIME	4320 hours	Equivalent to >10,000 at 150°F.	6	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. normal 100 accident	Steam	1		Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.9×10^5	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. S. Robinson

Reviewed by: W. E. Faraone 1-11-82

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-572N (Target SGT-DV-1B2) 3. Calculations in QID 315004 4. E/I-02-81-04-0 (IE Bulletin 78-14) 5. REIC Report No. 21 (Battelle) 6. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity. 2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1861

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2802-220

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-SPV-2A, 2B MANUFACTURER Automatic Switch (ASCO) MODEL NUMBER 8210 D2H0 COMPONENT Solenoid Pilot Valve FUNCTION/SERVICE SGT-V-2B LOCATION: BLDG R ELEVATION 578 COLUMN H6/3.6	OPERATING TIME	4320 hours	Equivalent to >10,000 hours at 150°.	6	4	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	310	1	4	Simultaneous Test Engineering Analysis	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 accident	Steam	1		Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.9×10^5	4.4×10^6	2	5, 3	Engineering Analysis	None
	AGING	40 years	7 years	1	4	Operating Experience Maintenance	None Note 2
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: M. P. Robinson

Reviewed by: W. E. Faraone 1-11-82

DOCUMENTATION REFERENCES

1. FSAR Par. 3.11
2. EDS Study 0740-004-572N
3. Calculations in QID 315004
4. E/I-02-81-04-0 (IE Bulletin 78-14)
5. REIC Report No. 21 (Battelle)
6. WNP-2 Class 1E Equipment List, dated 12/16/81

NOTES

1. Final qualification or further testing will be determined by verification of the actual time duration at 100% relative humidity.
2. The solenoid valves will be rebuilt on a schedule based on the 7-year qualified life.

WP-1661

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment	OPERATING TIME	6 months	Note 1	1	4		
TAG NUMBER SGT-TE-6A1, 6B1 7A1, 7B1 8A1, 8B1	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		2			
MANUFACTURER Fenwal	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 21110-0	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			
COMPONENT Temperature Element	CHEMICAL SPRAY	N/A		2			
FUNCTION/SERVICE Temperature Controllers	RADIATION (RAD)	1.9×10^8		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572' COLUMN H8/5.5, J5/6	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Par. 3.11
3. EDS Report 0740-004-572N
4. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers

NOTES

1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WPA-1001

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-TIS-1A1 -1A2 -1B1 -1B2 MANUFACTURER Fenwall MODEL NUMBER 21110-0 COMPONENT Temperature Switch FUNCTION/SERVICE Temperature Controls LOCATION: BLDG R ELEVATION 572 COLUMN H.8/5.5, I5/6	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.9×10^8		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-572N	1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WP-1041

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER See Note 2.	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		2			
MANUFACTURER Fenwal	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER 18000-0 COMPONENT Temperature switch	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		2			
FUNCTION/SERVICE Control of heater	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.9×10^8		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 572' COLUMN H4/5.9	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-572N 4. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers	1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WP-1061

DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2. TAG NUMBERS SGT-TS-EH1A10 -EH1A11 -EH1A111 -EH1A112 -EH1A113 -EH1A114 -EH1A115 -EH1A116 -EH1A117 -EH1A118 -EH1A12 -EH1A13 -EH1A14 -EH1A15 -EH1A16 -EH1A17 -EH1A18 -EH1A19 -EH1A21 -EH1A210 -EH1A211 -EH1A212 -EH1A213 -EH1A214 -EH1A215 -EH1A216 -EH1A217 -EH1A218 -EH1A22 -EH1A23 -EH1A24 -EH1A25 -EH1A26 -EH1A27 -EH1A28 -EH1A29 -EH1B10 -EH1B11 -EH1B111 -EH1B112 SGT-TS-EH1B113 -EH1B114 -EH1B115 -EH1B116 -EH1B117 -EH1B118 -EH1B12 -EH1B13 -EH1B14 -EH1B15 -EH1B16 -EH1B17 -EH1B18 -EH1B19 -EH1B21 -EH1B210 -EH1B211 -EH1B212 -EH1B213 -EH1B214 -EH1B215 -EH1B217 -EH1B218 -EH1B22 -EH1B23 -EH1B24 -EH1B25 -EH1B26 -EH1B27 -EH1B28 -EH1B29

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-18

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Gas Treatment TAG NUMBER SGT-TS-6A1 6B1 7A1 7B1 8A1 8B1 MANUFACTURER Kidde, Walter & Company MODEL NUMBER CSD-3 (A) COMPONENT Temperature Switch FUNCTION/SERVICE Carbon bed air high temperature alarm for associated SGT carbon filters LOCATION: BLDG R ELEVATION 572' COLUMN H8/5.5 J4/5.5 H8/6.8	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 max. normal 90 max. abnormal 100 max. accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	1.9×10^8		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES / NO

Prepared by: [signature]

Reviewed by: Raymond Ch[illegible]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Par. 3.11
3. EDS Report 0740-004-572N
4. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers

NOTES

1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02C41

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-EHC 2, 3 MANUFACTURER General Electric MODEL NUMBER 2D433G3 COMPONENT Electric Heating Coil FUNCTION/SERVICE Heaters for SLC-TK-2 LOCATION: BLDG R ELEVATION 548 COLUMN M.5/3.8	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	9.9×10^3		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548C	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1061

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-M1A, B	OPERATING TIME	24 hours		3			Note 1
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	150	1			Note 1
MANUFACTURER G.E.	PRESSURE (PSIA)	14.7	R/R	1	N/A	N/A	None
MODEL NUMBER 5K324AK2120/324T COMPONENT	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident	100	1			Note 1
Electric Motor FUNCTION/SERVICE	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
Drive SLC Pumps	RADIATION (RAD)	9.9×10^3	Note 2	2			None
	AGING	40 years	Note 3	N/A		Preventive Maintenance	None
LOCATION: BLDG R ELEVATION 548 COLUMN M2/3.7,M2/3.8	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Report 0740-0040548C 3. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Similar motors have been tested to more severe conditions. A detailed comparison is being made to confirm applicability of the test date. 2. Post accident Rad levels are below 1×10^4; therefore, the motors are located in a mild environment for this service condition. No further qualification for radiation is necessary. 3. A preventive maintenance/surveillance program is being developed to address aging of Class 1 equipment.

WP-1081

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41B

MPL:
PPD:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-MO-1A, 1B MANUFACTURER Limitorque MODEL NUMBER SMB-000-5/K48 COMPONENT - Motor Operator Motor: Reliance Insulation: Class B FUNCTION/SERVICE .33 HP .95A Motor Operator SLC-V-1A, B LOCATION: BLDG R ELEVATION 552 COLUMN M.7/3.6	OPERATING TIME	24 hours	16 days	1	4	Simultaneous Test	None
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident	see enclosed profile	2	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	see enclosed profile	2	4	Simultaneous Test	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	100	2	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	2	4	N/A	None
	RADIATION (RAD)	9.9×10^3	2×10^7	3	4	Sequential Test	None
	AGING	40 years	40 years	2	4, 5	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548C 4. Limitorque Test Report B0003 5. QID 221011	Qualified

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TEMPERATURE PROFILE

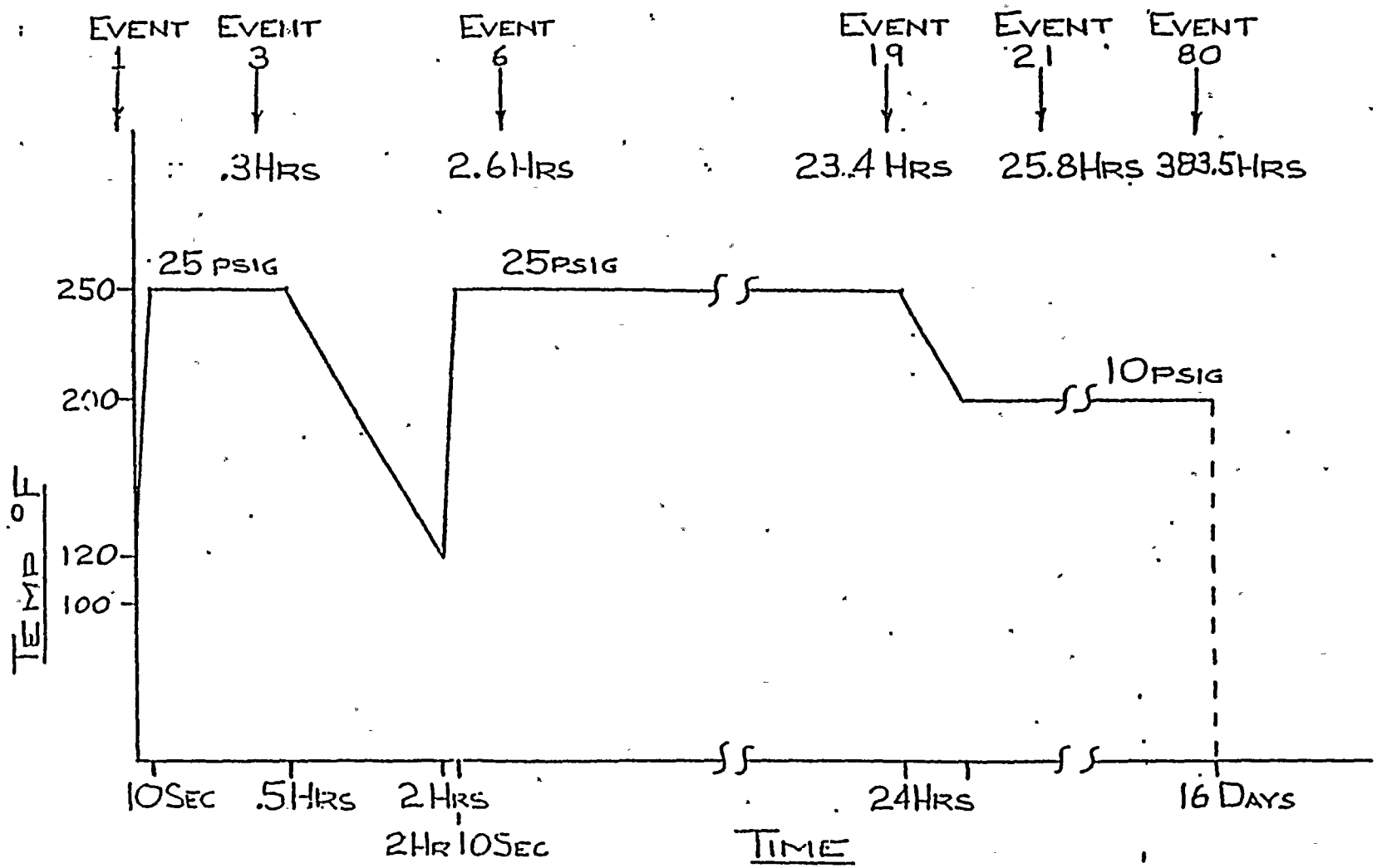

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-PT-4 MANUFACTURER GE MODEL NUMBER 556110EAAA1WEN COMPONENT Pressure Transmitter FUNCTION/SERVICE SCC Pump Discharge Pressure Transmitter LOCATION: BLDG R ELEVATION 553 COLUMN N.0/3.5	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	9.9×10^3		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: M. S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 CIE Equipment List, dated 12/16/81 2. FSAR Par. 3.11 3. EDS Report 0740-004-548C 4. WPPSS Letter GE-02-JLS-81-022	1. This component will be replaced with Rosemount 1153, Series D, qualified to IEEE 323-1974 and 344-1975.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-RMS-S2	OPERATING TIME	24 hours	N/R	3	5	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal	N/R	1	5	Note 1	None
MANUFACTURER General Electric	PRESSURE (PSIA)	14.7	N/R	1	4	Note 1	None
MODEL NUMBER CR2940 COMPONENT Remote Manual Switch	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	1	4	Note 1	None
FUNCTION/SERVICE Local SLC Heater Switch	CHEMICAL SPRAY	N/A	N/A	1	N/A	Note 1	None
	RADIATION (RAD)	8.8×10^2	N/R	2	5	Note 1	None
	AGING	40 years	40 years	1	4	Note 2	None
LOCATION: BLDG R ELEVATION 548 COLUMN H.8/3.7	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Ron Sieben

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, 12/16/81
2. FSAR Par. 3.11
3. EDS Study 0740-004-
4. EDI-4.8, Paragraph 5.1, I
5. General Electric Qualification Report for, CR2940YC212B2 Indicating Light; CR294-YA202B1, Pushbutton; and CR2940YB202B1, Selector Switch to IEEE Standard 323-1974, January 29, 1979.
6. QID No. 285002

NOTES

1. This component is only required for operation under normal environmental conditions and is, therefore, considered a mild environment component. Specific qualification of components in mild environments is not required at this time. However, the component has been tested to the following conditions and satisfactorily maintained its operability (Ref. 5):

   - Radiation exposure to 1×10^7 Rad

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	1. (Cont'd) - Thermal Aging for 14 days at 267°F. - 95% Humidity Exposure - Qualified to operating time of >6 months at 150°F (Ref. 6). 2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-TE-6 MANUFACTURER Fenwal MODEL NUMBER 40-104044-103 COMPONENT Temperature Element FUNCTION/SERVICE SLC storage Tank temperature indication LOCATION: BLDG R ELEVATION 548 COLUMN M.7/3.6	OPERATING TIME	6 months	Note 1	1	4		
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	9.9×10^3		3			
	AGING	40 years		2			
	ACCURACY	N/A					

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List, dated 12/16/81 3. EDS Report #0740-004-548C 4. Work Release Order No. 002, Contract No. C-0608 from WPPSS to ANCO Engineers	1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-TIC-2 MANUFACTURER Fenwal MODEL NUMBER 40-104044-103 COMPONENT Temperature Controller FUNCTION/SERVICE SLC Temperature Controller LOCATION: BLDG R ELEVATION COLUMN	OPERATING TIME	24 hours	Note 1	3	2		
	TEMPERATURE (F)	90 max. normal 104 max. abnormal 150 max. accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40 normal 90 max. abnormal 100 max. accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)						
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature]

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Work Release Order No. 002, Contract No. C-0608, from WPPSS to ANCO Engineers 3. WNP-2 Class 1E Equipment List, dated 12/16/81	1. Environmental qualification testing has been performed. The test documentation is currently being obtained.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-TS-3	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
COMPONENT Temperature Switch FUNCTION/SERVICE	CHEMICAL SPRAY	N/A		2			
SLC Temperature Switch	RADIATION (RAD)	9.9×10^3		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 548 COLUMN M.8/3.5	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Olin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 2. FSAR Par. 3.11 3. EDS Study 0740-004-548C	1. These components are on order. The qualification documentation will be reviewed when it is received.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL: C41-F004
PPD: 21A9370

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Liquid Control TAG NUMBER SLC-V-4A -4B MANUFACTURER Conax MODEL NUMBER 1832159 COMPONENT Valve and Trigger Assembly FUNCTION/SERVICE SLC Inlet Valve LOCATION: BLDG R ELEVATION 548 COLUMN M.2/3.7	OPERATING TIME	6 months	7 months	4	2,5	Sequential Testing Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	185 maximum	1	2	Simultaneous Testing	None
	PRESSURE (PSIA)	14.7	N/R	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	100%	1	2	Simultaneous Testing	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9.9×10^3	2.2×10^4		2	Sequential Testing	None
	AGING	40 years	Note 1	1	N/A	Preventive Maintenance	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: [signature] Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. Conax TR-39, 12/22/76 3. EDS Study 0740-004-548C 4. WNP-2 Class 1E Equipment List, dated 12/16/81 5. Calculations in QID No. 361003	Qualified. 1. A maintenance and surveillance program is being developed to address aging of Class 1 equipment.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-218

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Suppression Pool Temperature Monitoring TAG NUMBER See Note 2	OPERATING TIME	24 hours	Note 1	1			
	TEMPERATURE (F)	135 normal 150 abnormal Accident - profile 1		2			
MANUFACTURER Hy-Cal Engineering	PRESSURE (PSIA)	14.7 normal 16.7 abnormal Accident - profile 1		2			
MODEL NUMBER TC-113X-T-A-24-3 COMPONENT Thermocouple	RELATIVE HUMITY (%)	55 normal 90 abnormal 100 accident		2			
FUNCTION/SERVICE Suppression Pool Temp., Operator info.	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	2.6×10^7		2			
	AGING	N/A		2			
LOCATION: BLDG C ELEVATION 446 COLUMN Suppression Pool.	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Mark Baker

Reviewed by: Ann Seiler

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

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DOCUMENTATION REFERENCES (Cont'd)	NOTES (Cont'd)
	2. TAG NUMBERS SPTM-TE-1A -1B -10 -11 -12 -13 -14 -15 -16 -2A -2B -3A -3B -4A -4B -5A -5B -6A -6B -7A -7B -8A -8B -9

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Source Range Monitor TAG NUMBER SRM-DET-1A, B, C, D MANUFACTURER General Electric MODEL NUMBER 807E162TC COMPONENT Radiation Monitor FUNCTION/SERVICE LOCATION: BLDG C ELEVATION COLUMN In RPV	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	135 max. normal 150 abnormal Accident - see profile 1		2			
	PRESSURE (PSIA)	16.7 PSIA Accident - see profile 1		2			
	RELATIVE HUMITY (%)	40-50 normal 90 abnormal 100 Accident		2			
	CHEMICAL SPRAY	Demineralized water		2			
	RADIATION (RAD)	4.4×10^7		2			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: [signature]

Reviewed by: [signature]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List, 12/16/81	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water System TAG NUMBER SW-FT-7A MANUFACTURER MODEL NUMBER COMPONENT Flow Transmitter FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 501 COLUMN J.6/3.6	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	4.6×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501B	1. These components are on order. The qualification documentation will be reveiwed when it is received.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water System TAG NUMBER SW-FT-7B MANUFACTURER General Electric MODEL NUMBER 50-555111BHAA4WCF COMPONENT Flow Transmitter FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 501 COLUMN H.8/7.3	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	7.8×10^4		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Mark Baker

Reviewed by: Raymond Chi

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-501K	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1861

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-41A

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER SW-MO-187A SW-MO-187B SW-MO-188A SW-MO-188B MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R548 ELEVATION COLUMN	OPERATING TIME	6 months	Note 1	1	1		None
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			None
	PRESSURE (PSIA)	14.7		2			None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			None
	CHEMICAL SPRAY	N/A		2			None
	RADIATION (RAD)						None
	AGING	40 years		2			None
	ACCURACY	N/A					None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Ohi

Reviewed by: Mary S. Robinson

DOCUMENTATION REFERENCES	NOTES
1. WNP Class 1E Equipment List, dated 12/16/81 2. FSAR Paragraph 3.11	1. These components are designated as use code 2, equipment classification G. Therefore, they have no active safety function. They are only required to maintain a pressure boundary under seismic conditions. No environmental failure mechanism will cause the component to not perform its safety function. Qualified.

WP-1041

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER SW-MO-24A -24B -24C -44 -54 MANUFACTURER Limitorque MODEL NUMBER SMC-04 COMPONENT Motor Operator FUNCTION/SERVICE Operate SW Valves LOCATION: BLDG R ELEVATION 441 COLUMN H7/4.4; K6/8, K9/3.9, L8/8.3, M9/4	OPERATING TIME	4320 hours	Equivalent to 35,700 @ 150°F	3	4,5,6	Simultaneous Test Engineering Analysis	None
	TEMPERATURE (F)	90 max normal 104 max abnormal 150 max accident	See enclosed profile	1	4,6	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 max abnormal 100 max accident	Steam for 24 hours 100% for 15 days	1	4	Simultaneous Test	None
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	3.1×10^6	2×10^7	2	4,6	Sequential Test	None
	AGING	40 year	40 year +	1	4,5,6	Sequential Test Engineering Analysis	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: M. P. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-441C (worst case) 3. WNP-2 CIE Equipment List 4. Limitorque Reports B0003, 5/76; B0058, 1/11/80 5. Calculations in QID 221011(1) and (2) 6. Limitorque letter QID 221010	Qualified.

WP-1061

TEMPERATURE PROFILE

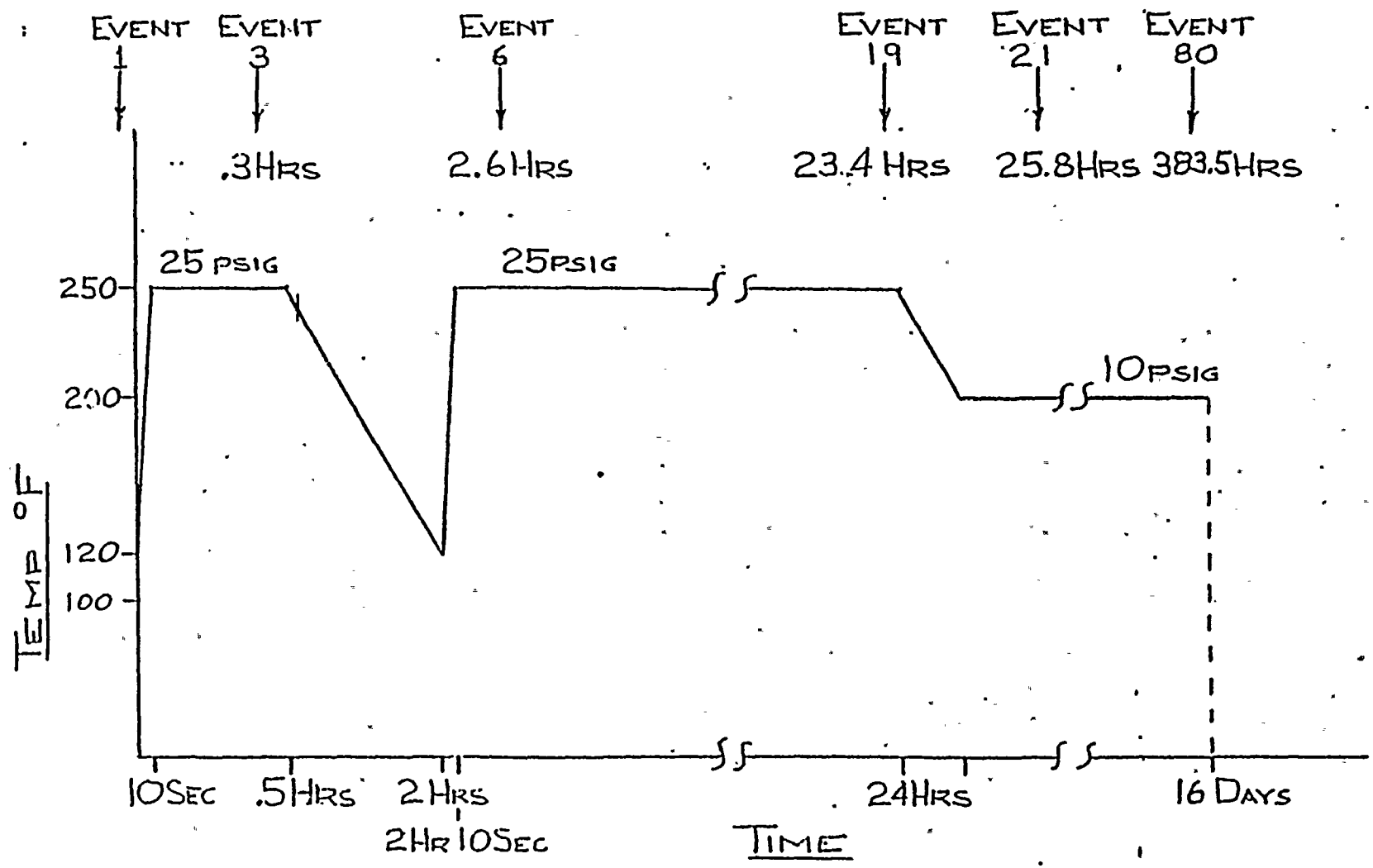

FIGURE 1

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Standby Service Water TAG NUMBER SW-MO-75A -75B MANUFACTURER Limitorque MODEL NUMBER COMPONENT Motor Operator FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 522 COLUMN J/9.4, M6/9.4	OPERATING TIME	4320 hours		3			Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		1			
	PRESSURE (PSIA)	14.7		1			
	RELATIVE HUMITY (%)	40-70 normal 90 abnormal 100 accident		1			
	CHEMICAL SPRAY	N/A		1			
	RADIATION (RAD)	8.33×10^5		2			
	AGING	40 years		1			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: W. F. [illegible]

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. EDS Study 0740-004-522H 3. WNP-2 Class 1E Equipment List dated 12/16/81	1. These are being purchased on Contract 2808-215, by WBG, qualified to NUREG 0588, Category I.

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WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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PPD:

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DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER SW-PS-1014 -1015 MANUFACTURER Asco MODEL NUMBER SC11AR/GT10A44R COMPONENT Switch FUNCTION/SERVICE Supply to H_2 - O_2 analyzer LOCATION: BLDG R ELEVATION 548 COLUMN M.7/5	OPERATING TIME	4320 hours	63 days	2	4	Sequential Test	Note 1
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident	175	1	4	Simultaneous Test	None
	PRESSURE (PSIA)	14.7	N/A	1	N/A	N/A	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident	95	1	4	Simultaneous Test	Note 1
	CHEMICAL SPRAY	N/A	N/A	1	N/A	N/A	None
	RADIATION (RAD)	9×10^3	5×10^7	3	4	Sequential Test	Note 1
	AGING	40 years	See note 2		4	Sequential Test	Note 1
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES X NO

Prepared by: Raymond Chin

Reviewed by: Mal Baker

DOCUMENTATION REFERENCES	NOTES
1. FSAR Par. 3.11 2. WNP-2 Class 1E Equipment List 3. EDS Study 0740-004-548E 4. Asco Valve Report 169A, QID 256001	1. Further testing is currently being conducted by the manufacturer, and is expected to be complete by Summer 1982. Test data will be obtained when it becomes available.

WP-1981

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-02D17

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER SW-RE-4, 5 MANUFACTURER General Electric MODEL NUMBER 117B1681G001 COMPONENT Radiation Monitor FUNCTION/SERVICE Service water discharge from RHR-HX-1B, 1A LOCATION: BLDG R ELEVATION 522 COLUMN K.6/9.5 N.1/9.5	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	8.3×10^5		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-522K, H	1. The qualification status of these components has not yet been determined. Requalification activities will be implemented if required.

WP-1881

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER SW-RT-1, 2	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
MANUFACTURER	PRESSURE (PSIA)	14.7		2			
MODEL NUMBER COMPONENT Radiation Transmitter FUNCTION/SERVICE	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	3.4×10^6		3			
	AGING	40 years		2			
LOCATION: BLDG R ELEVATION 522 COLUMN	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Clair

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 2. FSAR Par. 3.11 3. EDS Study 0740-004-548B (worst case)	1. These components are on order. The qualification documentation will be reviewed when it is received.

WP-1661

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM: Service Water TAG NUMBER: SW-RLY-CRV44 MANUFACTURER: Struthers Dunn, Inc. MODEL NUMBER: 219BBXP COMPONENT: Relay FUNCTION/SERVICE: SW-V-44 LOCATION: BLDG R ELEVATION 522 COLUMN H.4/8.1	OPERATING TIME	6 months max	N/R	1	4	Note 1	None
	TEMPERATURE (F)	90 normal 104 abnormal 108 accident	N/R	2	4	Note 1	None
	PRESSURE (PSIA)	14.7	N/R	2	4	Note 1	None
	RELATIVE HUMITY (%)	40 normal 90 abnormal	N/R	2	4	Note 1	None
	CHEMICAL SPRAY	N/A	N/A	2	N/A	N/A	None
	RADIATION (RAD)	3.5×10^3	N/R	3	4	Note 1	None
	AGING	40 years	40 years	2	4	Note 2	None
	ACCURACY	N/A	N/A	N/A	N/A	N/A	None

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Ann Seiler

Reviewed by: [illegible]

DOCUMENTATION REFERENCES

1. WNP-2 Class 1E Equipment List, dated 12/16/81
2. FSAR Paragraph 3.11
3. EDS Report 0740-004-522N
4. EDI-4.8, Paragraph 5.1, I

NOTES

1. These components are located in isolated rooms serviced by Class 1 HVAC systems and the total radiation dose is less than 10^4 rad. Therefore, the area is a mild environment.
2. Aging of equipment in mild environments is adequately addressed by current maintenance and surveillance procedures.

Qualified.

WP-1081

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC: 2808-215

MPL:
PPD:

PAGE NO:
REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER See Note 2 MANUFACTURER Marotta MODEL NUMBER MV229MQ-L2 COMPONENT Solenoid Valve FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 548 COLUMN	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	3.4×10^6		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chi

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List, 12/16/81 2. FSAR Par. 3.11 3. EDS Study 0740-004-548B (worse case)	1. Environmental Qualifications testing for these components are currently being performed at Wyle Labs. 2. Tag Numbers - SW-SV-201 -204 -211 -209 -206 -213 -212 -210

WP-1061

WPPSS

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

EQUIPMENT QUALIFICATION REPORT

OWNER: WPPSS
FACILITY: WNP-2
SPEC:

MPL:
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REVISION:
DATE:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENT REF.		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	FSAR	QUALIFICATION	FSAR	QUAL.		
SYSTEM Service Water TAG NUMBER SW-V-34 MANUFACTURER MODEL NUMBER COMPONENT FUNCTION/SERVICE LOCATION: BLDG R ELEVATION 460 COLUMN N.3/8.3	OPERATING TIME	6 months	Note 1	1			
	TEMPERATURE (F)	90 normal 104 abnormal 150 accident		2			
	PRESSURE (PSIA)	14.7		2			
	RELATIVE HUMITY (%)	40 normal 90 abnormal 100 accident		2			
	CHEMICAL SPRAY	N/A		2			
	RADIATION (RAD)	8.2×10^3		3			
	AGING	40 years		2			
	ACCURACY						

FLOOD LEVEL ELEV:
ABOVE FLOOD LEVEL?
YES NO

Prepared by: Raymond Chin

Reviewed by: Mark Baker

DOCUMENTATION REFERENCES	NOTES
1. WNP-2 Class 1E Equipment List 2. FSAR Par. 3.11 3. EDS Study 0740-004-441D	1. These components are on order. The qualification documentation will be reviewed when it is received.

WP-1861