Central File HQ

INDIANA & MICHIGAN ELECTRIC COMPANY

P. O. BOX 18
BOWLING GREEN STATION
NEW YORK, N. Y. 10004

May 7, 1980
AEP:NRC:00356A

Donald C. Cook Nuclear Plant Units 1 and 2
Dockets No. 50-315 and 50-316
Licenses No. DPR-58 and DPR-74

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

Dear Mr. Keppler:

This letter and its Attachments provide the remaining responses to IE Bulletin 79-01B entitled "Environmental Qualification of Class IE Equipment." Our first set of responses (AEP:NRC:00356) was submitted on March 7, 1980.

Attachment 1 to our previous submittal was a "Master List" of major pieces of equipment, Attachments 2 and 3 listed the individual components which serve this major equipment for Units 1 and 2, respectively. This information was required by action item 1 of the subject bulletin. The present submittal provides the information requested by action items 2, 3, 4 and 5 of the Bulletin.

Attachments 1, 2 and 3 to this letter are similar to Attachments 1, 2 and 3 to the first submittal, except that they have been modified to show references to specific equipment qualification charts. The charts are enclosed as Attachments 5 and 6 for Units 1 and 2, respectively. Attachment 4 to this letter consists of both general notes and notes pertaining to specific classes of components. These notes are provided to explain or clarify entries on the master lists or equipment qualification charts.

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Attachments 5 and 6 to this letter are in the format required by action items 2 and 5 of the Bulletin. Copies of available test pressure and temperature vs. time profiles are generally attached to the appropriate equipment qualification charts, in response to action item 3 of the Bulletin. Exceptions include certain instruments where no single profile fully summarizes the qualification evidence, and greases and oils which are designed and rated for high temperature and pressure applications.

With one exception, calculated accident profiles are given by specific FSAR references which are readily available to your staff and thus we have not include copies in this submittal. The one exception is given in General Note 5 (see Attachment 4). At the clarification meeting held on February 7, 1980 in Glen Ellyn, Illinois, members of your staff indicated that reference to the FSAR would be an acceptable method of presenting this information.

Where information concerning aging qualification was available, it is noted on the equipment qualification charts. However, aging is a generic industry issue whose resolution is not clear at this time. As relevant information becomes available, we intend to continue to evaluate the sensitivity to aging of the materials and components part of safety related equipment located in potentially adverse environments.

Specified radiation doses listed on the environmental qualification charts are calculated doses of gamma radiation. Outside the containment, beta radiation is not significant because the equipment is well-shielded from the sources by either the containment wall or the piping wall. Using the guidelines furnished as Enclosure 4 to the subject bulletin, our evaluation indicates that the beta dose to the sensitive components inside containment, would be less than about one-third the calculated gamma dose.

To the best of our knowledge, the list of equipment is complete and proof of qualification for adverse environment, as defined by the licensing basis of the Donald C. Cook Nuclear Plant, exists in all cases with the exceptions noted on the equipment qualification charts (Attachment 5 and 6) or in Attachment 4. For those exceptions, either justification is provided for not requiring qualification and/or plans for replacement of equipment are indicated. In those few cases where equipment replacement has been the chosen option, justification for continued operation is also provided.

Very truly yours,

R. S. Hunter
Vice President

RSH:em

cc: (Attached)

STATE OF NEW YORK

COUNTY OF NEW YORK

R. S. Hunter, being duly sworn, deposes and says that he is the Vice President of licensee Indiana & Michigan Electric Company, that he has read the foregoing second response to NRC IE Bulletin 79-01B and knows the contents thereof, and that said contents are true to the best of his knowledge and belief.

Subscribed and sworn to before me this 7 day of May ,1980.

Notary Public

JOHN E. [illegible]
Notary [illegible] New York
[illegible]
[illegible] County
Commission Expires March 30, 1982

cc: w/attachments

N. C. Moseley - NRC
D. V. Shaller - Bridgman

cc: w/o attachments

R. C. Callen
G. Charnoff
J. E. Dolan
R. W. Jurgensen

ATTACHMENT 1 TO AEP:NRC:00356A

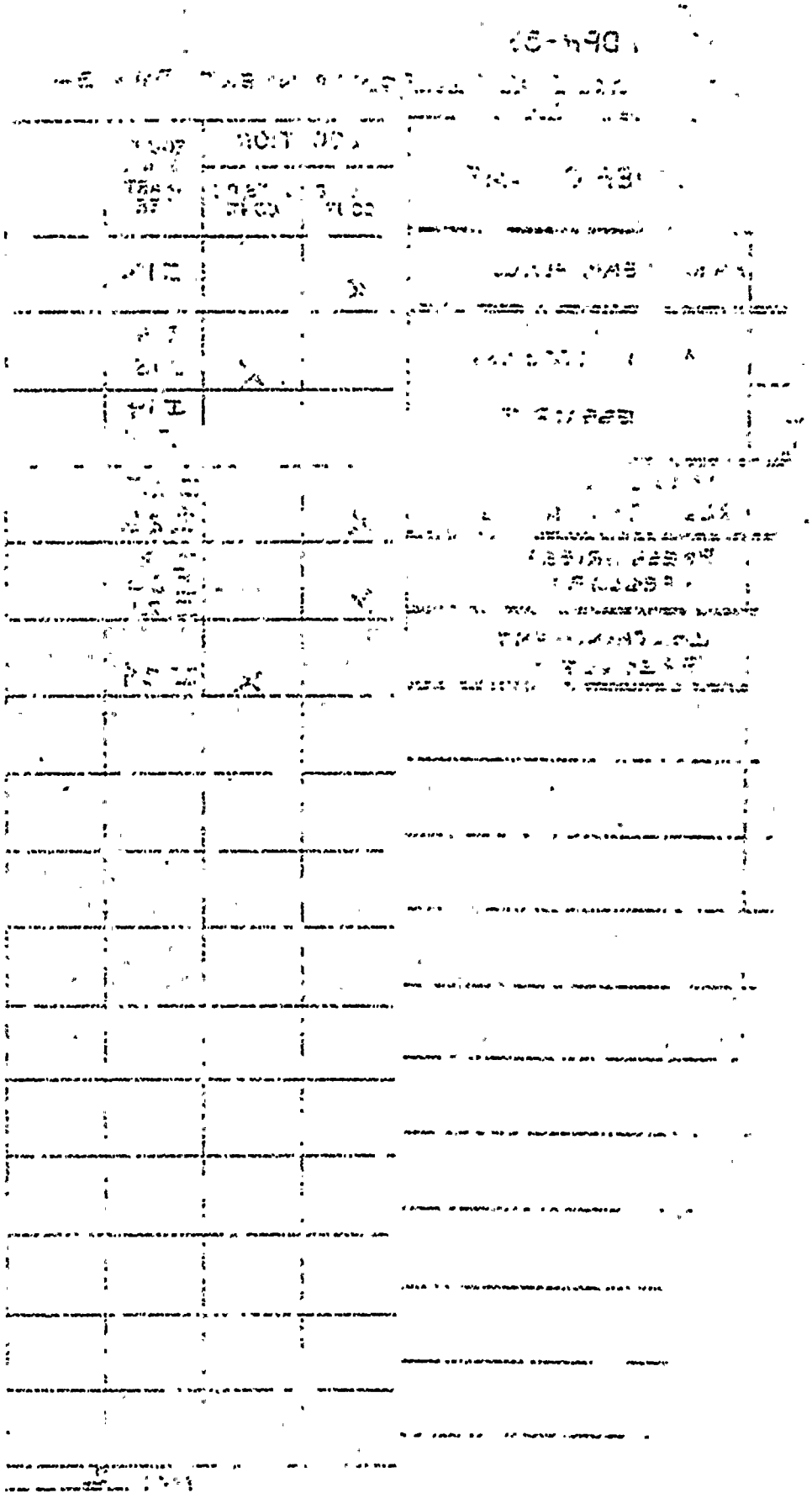
REVISED RESPONSE TO IE BULLETIN 79-01B ACTION ITEM 1

"MASTER LIST NO. 1"

DONALD C. COOK NUCLEAR PLANT

MASTER LIST 1 NOTES

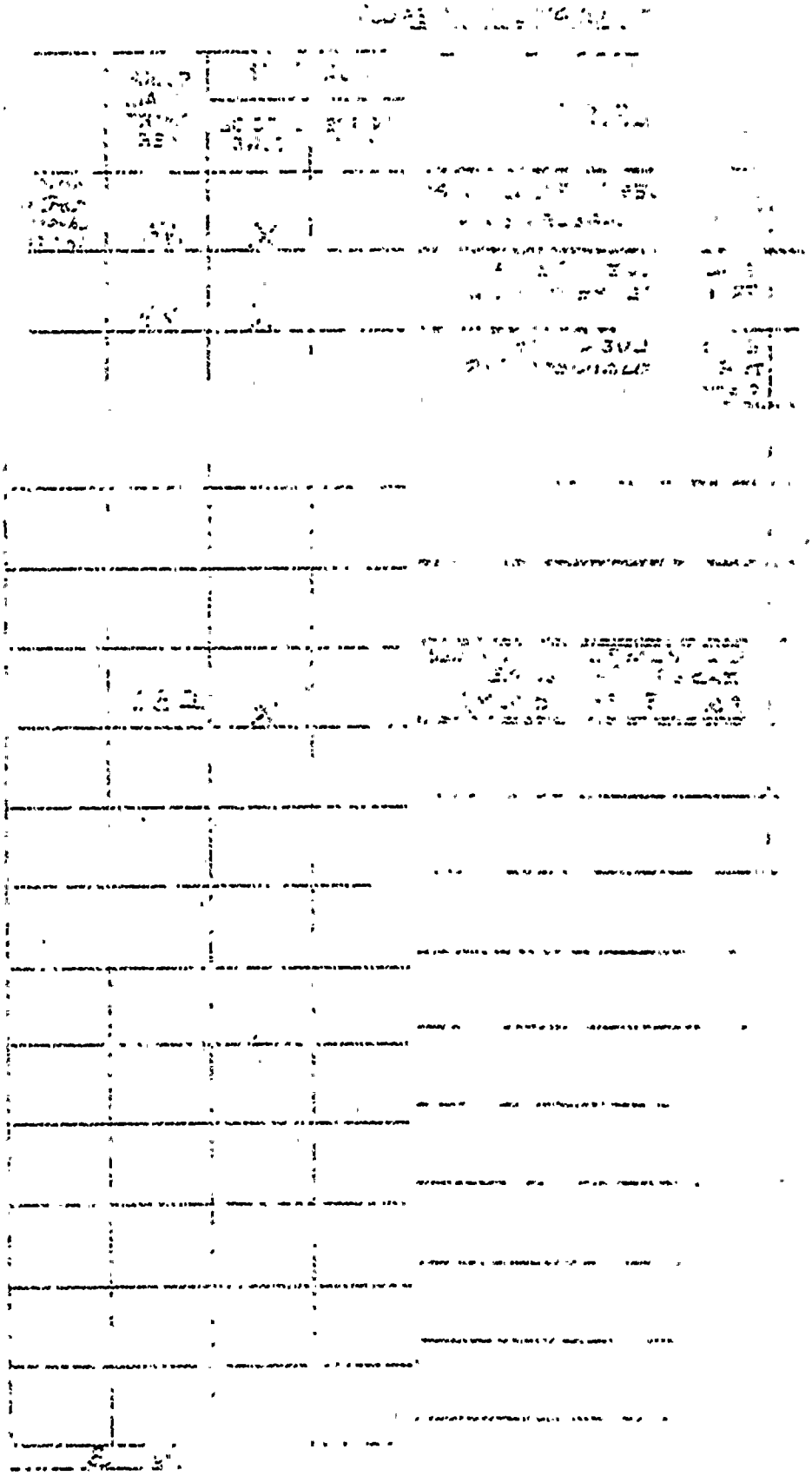
1. Same equipment or sub-set of equipment noted under ESS actuation.
2. Same equipment noted under Containment isolation Phase B actuation.
3. Abbreviated as ESS Actuation.
4. Coincident with Reactor Trip.
5. Same equipment or sub-set of equipment noted under Main Feedwater isolation actuation.
6. Generates signal equivalent to Turbine load for permissive actuation of Reactor Trip logic.
7. Abbreviated as SGSV.
8. Same equipment or sub-set of equipment noted under Reactor Trip for LOCA/HELB cases.
9. Equipment located inside containment is only items required or affected by LOCA/HELB except for SGSV, Main Feedwater Regulating Valves and Main Steam Relief Valves as noted.
10. Same equipment or sub-set of equipment noted under ECCS.
11. No credit allowed by FSAR Chapter 14 accident analysis; however NUREG 0578 required equipment to retain capability to function.
12. Same equipment or sub-set of equipment noted under Post Accident Monitoring.
13. Turbine Driven Auxiliary Feedwater pump abbreviated as TDAFP.
14. Motor Driven Auxiliary Feedwater Pump abbreviated as MDAFP.
15. The auxiliary feedwater system is currently undergoing modifications, as described in our submittals dated August 9, 1979 (AEP:NRC: 00176), December 7, 1979 (AEP:NRC: 00307), December 11, 1979 (AEP:NRC: 00300) and December 20, 1979 (AEP:NRC: 00300A). The attachments to this letter are based on the post modification design of this system.



DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

(3) SYSTEM ENGINEERED SAFEGUARDS (ESS) AND CONTAINMENT PHASE-A ISOLATION; ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MFC-110, 120, 130, 140 MFC-111, 121, 131, 141	MAIN STEAM FLOW	X		I12	
MPP-210, 211, 212 MPP-220, 221, 222	MAIN STEAM PRESSURE		X	I14 I15	
MPP-230, 231, 232 MPP-240, 241, 242			X	I14 I15	
NTP-111, 121, 131, 141 NTP-211, 221, 231, 241	NARROW RANGE RCS TEMPERATURE	X		I25 I26	
NPP-151, 152, 153	PRESSURIZER PRESSURE	X		I19 I20 I21	
PPP-300, 301, 302	CONTAINMENT PRESSURE		X	I29	



DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM ESSENTIAL SERVICE WATER (ESW)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PP-007E ; PP-007W (CONTROL & POWER ONLY)	EAST & WEST ESW PUMPS' MOTORS (CABLES ONLY)		X	NA	cable not in adverse environ.
WMO-711, 713 WMO-715, 717	ESW VALVES TO AND FROM CTS. HEAT EXCH'S.		X	V6	
WMO-721, 723 WMO-725, 727	ESW VALVES TO DIESEL ENGINES' AIR AFTER COOLERS		X	V6	
WPS-705, 701	ESW PUMPS' DISCHARGE HEADER PRESSURE (SIG. & SUPPLY ONLY)		X	I 32	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

(3) SYSTEM ENGINEERED SAFEGUARDS (ESS) AND CONTAINMENT PHASE — "A" ISOLATION: ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-210, 211, 212 MPP-220, 221, 222	MAIN STEAM		X	I 15 I 16	
MPP-230, 231, 232 MPP-240, 241, 242	PRESSURE		X	I 15 I 16	
NPR-151, 152, 153	PRESSURIZER PRESSURE	X		I 20 I 21 I 22	
PPP-300, 301, 302	CONTAINMENT PRESSURE		X	I 29	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM POST ACCIDENT MONITORING

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-300, 301 PPP-302, 303	CONTAINMENT PRESSURE		X	I 29 I 30	
NTR-110, 120, 130, 140 NTR-210, 220, 230, 240	WIDE RANGE RCS TEMPERATURE	X		I 28	
NPS-121, NPS-122	WIDE RANGE RCS PRESSURE	X		I 23 I 24	
NLP-151, 152, 153	PRESSURIZER LEVEL	X		I 17	
MPP-210, 211, 212 MPP-220, 221, 222	MAIN STEAM PRESSURE		X	I 15 I 16	
MPP-230, 231, 232 MPP-240, 241, 242			X	I 15 I 16	
BLP-110, 111, 112 BLP-120, 121, 122	NARROW RANGE STEAM GENERATOR LEVEL	X		I 1 I 2	
BLP-130, 131, 132 BLP-140, 141, 142		X		I 1 I 2	
ILS-950, 951	RWST LEVEL (SIGNAL & SUPPLY LINES ONLY)		X	C 5 C 6 C 2	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM ESSENTIAL SERVICE WATER (ESW)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PP-007E; PP-007W (CONTROL POWER ONLY)	EAST & WEST ESW PUMPS' MOTORS (CABLES ONLY)		X	NA	Cable not in adverse environ.
WMO-712, 714 WMO-716, 718	ESW VALVES TO AND FROM CTS HEAT EXCH'S		X	V6	
WMO-722, 724 WMO-726, 728	ESW VALVES TO DIESEL ENGINES' AIR AFTER-COOLERS		X	V6	
WPS-706, WPS-702	ESW PUMPS DISCHARGE HEADER PRESSURE (SIG. - SUPPLY ONLY)		X	I32	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM CONTAINMENT PHASE-"B" ISOLATION AND CONTAINMENT SPRAYS ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PPP-300, 301 PPP-302, 303	CONTAINMENT PRESSURE		X	I 29 I 30	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM CONTAINMENT VENTILATION ISOLATION: ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
SEE PAGES 2 & 4	ESS ACTUATION	SEE	PAGES	2 & 4	
VRC-302 (R-2)	CONTAINMENT AREA RADIATION		X	I 31	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM MAIN STEAM ISOLATION: ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MFC-110, 120, 130, 140 MFC-111, 121, 131, 141	MAIN STEAM FLOW (1)	X		I12 I13	
MPP-212, 222, 232, 242	MAIN STEAM PRESSURE (1)		X	I15 I16	
NTP-111, 121, 131, 141 NTP-211, 221, 231, 241	NARROW RANGE RCS TEMPERATE (1)	X		I25 I26	
PPP-300, 301 PPP-302, 303	CONTAINMENT PRESSURE (2)		X	I29 I30	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM CONTROL ROOM HABITABILITY: ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
SEE PAGES 2 & 4	ESS ACTUATION	SEE PAGES 2 & 4			

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM MAIN FEEDWATER ISOLATION: ACTUATION

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
SEE PAGES 2 & 4	ESS ACTUATION	SEE PAGES 2 & 4			
BLP-110, 111, 112 BLP-120, 121, 122	NARROW RANGE STEAM GENERATOR LEVEL ⑧	X		I1 I2	
BLP-130, 131, 132 BLP-140, 141, 142		X		I1 I2	
NTP-111, 121, 131, 141 NTP-211, 221, 231, 241	NARROW RANGE RCS TEMPERATURE ④①	X		I25 I26	
SEE PAGE 12	REACTOR TRIP	SEE PAGE 12			

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM REACTOR TRIP: ACTUATION (LOCA/HELB)

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
SEE PAGES 2 & 4	ESS ACTUATION	SEE PAGES 2 & 4			
NLP-151, 152, 153	PRESSURIZER LEVEL	X		I 18 I 19	
BLP-110, 111, 112 BLP-120, 121, 122	NARROW RANGE STEAM GENERATOR LEVEL	X		I 1 I 2	
BLP-130, 131, 132 BLP-140, 141, 142		X		I 1 I 2	
MFC-110, 120, 130, 140 MFC-111, 121, 131, 141	MAIN STEAM FLOW ①	X		I 12 I 13	
MPP-210, 220, 230, 240 MPP-211, 221, 231, 241	MAIN STEAM PRESSURE ①		X	I 14 I 15	
FFC-210, 220, 230, 240 FFC-211, 221, 231, 241	MAIN FEED WATER FLOW		X	I 3 I 4	
NTP-111, 121, 131, 141 NTP-211, 221, 231, 241	NARROW RANGE RCS TEMPERATURE ①	X		I 25 I 26	
N-41A/41B, 42A/42B N-43A/43B, 44A/44B	POWER RANGE NEUTRON FLUX	X		I 17 I 18	
N-35, N-36	INTERMEDIATE RANGE NETRON FLUX	X		I 16 I 17	
MPC-253, MPC-254	FIRST STAGE ⑥ TURBINE PRESSURE		X	I 13 I 14	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM MAIN STEAM

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MRV-210, 220 MRV-230, 240	STEAM GENERATOR STOP VALVES (5)		X	S5	
MRV-211, 221, 231, 241 MRV-212, 222, 232, 242	S.G. S.V. DUMP VALVES		X	S6 S7	
MRV-213, 223 MRV-233, 243	MAIN STEAM RELIEF VALVES		X	S8 S9	
MCM-221 MCM-231	STEAM SUPPLY TO AUX. F.W. TURBINE		X	V6	
MFC-110, 120, 130, 140 MFC-111, 121, 131, 141	MAIN STEAM FLOW (1)	X		I12 I13	
MPP-210, 211, 212 MPP-220, 221, 222	MAIN STEAM PRESSURE (1)		X	I14 I15 I16	
MPP-230, 231, 232 MPP-240, 241, 242			X	I14 I15 I16	
MPC-253, MPC-254	FIRST STAGE (5) TURBINE PRESSURE		X	I13 I14	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM MAIN FEEDWATER

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-201, 202 FMO-203, 204	MAIN FEEDWATER STOP VALVE		X	V8	
FRV-210, 220 FRV-230, 240	MAIN FEEDWATER REGULATING VALVE		X	S1 S2 S3	
BLP-110, 111, 112 BLP-120, 121, 122	NARROW RANGE STEAM GENERATOR LEVEL (8)	X		I1 I2	
BLP-130, 131, 132 BLP-140, 141, 142		X		I1 I2	
FFC-210, 220, 230, 240 FFC-211, 221, 231, 241	MAIN FEEDWATER FLOW (8)		X	I3 I4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM REMOTE SHUT-DOWN MONITORING

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NPP-151, 152, 153 ①	PRESSURIZER	X		I 14 I 20 I 21 I 22	
NPS-153 ⑧	PRESSURE	X		I 24 I 25	
NLP-151, 152, 153	PRESSURIZER LEVEL ⑧	X		I 18 I 19	
MPP-210, 211, 212 MPP-220, 221, 222	MAIN STEAM ①		X	I 14 I 15 I 16	
MPP-230, 231, 232 MPP-240, 241, 242	PRESSURE		X	I 14 I 15 I 16	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

(9) SYSTEM CONTAINMENT ISOLATION (LOCA/HELB)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
QCM-250	RCP SEAL WATER RETURN VALVE	X		V5	
ICM-111 ICM-129	RHR NORMAL COOL-DOWN VALVES	X		V1	
ICM-305 ICM-306	RECIRCULATION PHASE SUCTION VA's	(10) (AN EXT.)		V10	
VCR-011 VCR-021	ICE CONDENSER REFRIGERANT SUPPLY VA's	X		S17 S12	
VCR-101	INSTRUMENT ROOM PURGE SUPPLY VA.	X		S13 S17	
VCR-102	INSTRUMENT ROOM PURGE EXHAUST VA.	X		S13 S17	
VCR-103 VCR-105	CONTAINMENT PURGE SUPPLY VA's	X		S14 S17	
VCR-104 VCR-106	CONTAINMENT PURGE EXHAUST VA.'s	X		S15 S17	
VCR-107	CONTAINMENT PRESSURE RELIEF EXHAUST VA.	X		S16 S17	
MRV-210, 220 MRV-230, 240	STEAM GENERATOR STOP VALVES		X	S5	
MRV-213 223 MRV-233 243	MAIN STEAM RELIEF VALVES		X	S8 S9	
FRV-210, 220 FRV-230, 240	MAIN FEEDWATER REGULATING VA's		X	S1 S2 S3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM REACTOR COOLANT (RCS)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-111, 121, 131, 141 NTP-211, 221, 231, 241	NARROW RANGE (1) RCS TEMPERATURE	X		I25 I26	
NTP-110, 120, 130, 140 NTP-210, 220, 230, 240	IN-PLACE SPARES FOR NARROW RANGE RCS TEMPERATURE	X		I27	
NTR-110, 120, 130, 140 NTR-210, 220, 230, 240	WIDE RANGE (12) RCS TEMPERATURE	X		I28	
NPS-121, NPS-122	WIDE RANGE (12) RCS PRESSURE	X		I22 I23 I24	
NPP-151, 152, 153 (1)	PRESSURIZER PRESSURE	X		I19 I20 I21 I22	
NPS-153		X		I24 I25	
NLP-151, 152, 153	PRESSURIZER LEVEL (8)	X		I18 I19	
NRV-151, 152, 153	PRESSURIZER RELIEF VALVES (11)	X		S10 S11	
NMO-151, 152, 153	PRESSURIZER RELIEF VALVES' BLOCK VALVES (11)	X		V9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM CONTAINMENT SPRAY (CTS)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PP-009 EAST PP-009 WEST	CONTAINMENT SPRAY PUMPS' MOTORS		X	M2	
IMO-215 IMO-225 (VALVES)	CTS PUMP SUCTION FROM R.W.S.T.		X	V7	
IMO-210, 211 IMO-220, 221	CTS PUMP DISCHARGE VALVES		X	V7	
IMO-212 IMO-222	MOTIVE WATER SUPPLY VALVES FOR EDUCTOR		X	V7	
ILS-950 ILS-951	REFUELING WATER STORAGE TANK LEVEL (SEE ECCS)		X	CT-1 CT-2 CT-3 CT-4 CT-5 CT-6 CT-7 CT-8 CT-9 CT-10 CT-11 CT-12 CT-13 CT-14 CT-15 CT-16 CT-17 CT-18 CT-19 CT-20 CT-21 CT-22 CT-23 CT-24 CT-25 CT-26 CT-27 CT-28 CT-29 CT-30 CT-31 CT-32 CT-33 CT-34 CT-35 CT-36	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
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SYSTEM AUXILIARY FEEDWATER (AFW) (15)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FMO-211, 221 FMO-231, 241	T.D.A.F.P. DISCHARGE TO STM. GEN'S (13)		X	V6	
FMO-212, 222 FMO-232, 242	M.D.A.F.P. DISCHARGE TO STM. GEN'S. (14)		X	V6	
FFI-210, 220 FFI-230, 240	AUX FEEDWATER FLOW TO STM. GEN'S.		X	I4 I5	
CLR-110 CLR-111	CONDENSATE STORAGE TANK LEVEL. (SENSING LINE ONLY)		X	I2 I3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM COMPONENT COOLING WATER (CCW)

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
CMO- 419 CMO- 429	RHR HEAT EXCHANGERS' CCW DISCHARGE VALVES		X	V6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM EMERGENCY CORE COOLING

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-035E PP-035W	EAST & WEST R.H.R. PUMPS' MOTORS (LOW PRESS. INJ.)		X	M1	
PP-026N PP-026S	NORTH & SOUTH SAFETY INJECTION PUMPS' MOTORS (INTERMED. PRESS. INJ.)		X	M1	
PP-050E PP-050W	EAST & WEST CENTRIFUGAL CHARGING PUMPS' MOTORS (HIGH PRESS. INJECTION)		X	M1	
PART OF PP-050E & PP-050W	CENT. CHGING PUMPS' LUBE OIL PUMPS		X	See Master List No. 2	
IMO-310 IMO-320	RHR PUMPS SUCTION VALVES FROM RWST.		X	V6	
IMO-314 IMO-324	RHR PUMPS DISCHARGE CROSS-TIE VALVES		X	V6	
IMO-316 IMO-326	RHR INJECTION TO RCS COLD LEGS VALVES	X		V2	
IMO-315 IMO-325	RHR INJECTION TO RCS HOT LEGS VALVES	X		V2	
ICM-305 ICM-306	RECIRCULATION PHASE SUCTION VALVES	(10) (AN EXT.)		V10	
IMO-312 IMO-322	RHR PUMP MINI-FLOW LINE VALVES		X	V6	
ICM-311 ICM-321	RHR HEAT EXCHANGERS TO RCS HOT LEGS VALVES			V8	
IMO-261	S.I. PUMPS SUCTION FROM R.W.S.T. VALVE		X	V8	
IMO-270 IMO-275	S.I. PUMPS DISCHARGE CROSS-TIE VALVES		X	V6	
ICM-260 ICM-265	S.I. INJECTION VALVES TO RCS COLD LEGS		X	V6	
IMO-262 IMO-263	S.I. PUMP MINI-FLOW TO RWST VALVES		X	V6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM EMERGENCY CORE COOLING

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-910 IMO-911	CHARGING PUMP SUCTION FROM RWST		X	V8	not in HELB environ. and not req'd to function after CT recirc. starts
QMO-451 QMO-452	CHARGING PUMP SUCTION FROM VOLUME CONTROL TANK VALVES		X	NA	
QMO-225 QMO-226	CHARGING PUMP MINI-FLOW TO RWST VALVES		X	V6	
IMO-255 IMO-256	BORON INJECTION TANK (BIT) INLET VALVES		X	V6	
ICM-250 ICM-251	BIT DISCHARGE VALVES		X	V6	
IMO-051, 052 IMO-053, 054	HI PRESS. BORON INJ. TO RCS COLD LEGS VALVES	X		V1	
ILS-950, ILS-951	RWST LEVEL (SIG & SUPPLY ONLY)		X	CI3 CI4 CI5 CI6 CI7 CI8	
IFI-310, 311 IFI-320, 321	RHR PUMP FLOW (AFTER HEAT EXCH'S)		X	I10 I11 I12	
IFC-315 IFC-325	RHR PUMP MINI-FLOW: FLOW CONTROLLER		X	I5 I6	
IFI-260 IFI-266	S.I. PUMP DISCH. FLOW INDICATOR		X	I9 I10	
IFI-051, 052 IFI-053, 054	B.I.T. FLOW TO RCS COLD LEGS	X		I6 I7 I8 I9	
IMO-340	CENTRIFIGUAL CHARGING PUMP SUCTION FROM RHR VALVE		X	V8	
IMO-360, 361, 362	CROSSTIE VALVES BETWEEN CENTRIFIGUAL CHARGING & SI PUMPS SUCTION		X	V8	
IMO-350	SI PUMPS SUCTION VALVE FROM RHR		X	V8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 & 2
DOCKETS No. 50-315 & 50-316, LICENSES No. DRR-58 & DPR-74

SYSTEM HYDROGEN CONTROL

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
HV-CEQ-1 HV-CEQ-2	AIR RECIRCULATION / HYDROGEN SKIMMER FANS	X		F1	
VMO-101 VMO-102	SUCTION VALVES FOR HV-CEQ-1, -2	X		V4	
HR-1 HR-2	HYDROGEN RECOMBINERS	X		H1	

ATTACHMENT 2 TO AEP:NRC:00356A

REVISED RESPONSE TO IE BULLETIN 79-01B ACTION ITEM I

"MASTER LIST NO. 2, VOLUME 1: UNIT 1 COMPONENTS"

DONALD C. COOK NUCLEAR PLANT

ATTACHMENT 2 TO AEP:NRC:00356A

REVISED RESPONSE TO IE BULLETIN 79-01B ACTION ITEM I

"MASTER LIST NO. 2, VOLUME 1: UNIT 1 COMPONENTS"

DONALD C. COOK NUCLEAR PLANT

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Electrical Penetrations

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
1P6	4KV Containment Penetrations	X		EP-01	
1P7		X		EP-01	
2P5		X		EP-01	
2P6		X		EP-01	
3P7		X		EP-01	
3P8		X		EP-01	
4P7		X		EP-01	
4P8		X		EP-01	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM ELECTRICAL PENETRATIONS

PLANT ID No.	GENERIC NAME		LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
1P1	600 V CONTAINMENT PENETRATIONS		X		EP-02	
1P2			X		EP-02	
1P3			X		EP-02	
1P4			X		EP-02	
2P2			X		EP-02	
2P3			X		EP-02	
4P2			X		EP-02	
2P4			X		EP-02	
2P7			X		EP-02	
2P8			X		EP-02	
3P1			X		EP-02	
3P2			X		EP-02	
3P3			X		EP-02	
3P6			X		EP-02	
4P3			X		EP-02	
4P4			X		EP-02	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Electrical Penetrations

PLANT ID No.	GENERIC NAME		LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
4P5	600V Containment Penetrations		X		EP-02	
4P6			X		EP-02	
4I5			X		EP-02	
4I7			X		EP-02	
4I8			X		EP-02	
4C2			X		EP-02	
4C3			X		EP-02	
4C1			X		EP-02	
4I6			X		EP-02	
1C4			X		EP-02	
1C1			X		EP-02	
1C3			X		EP-02	
1I5			X		EP-02	
1I8			X		EP-02	
1I7			X		EP-02	
1I6			X		EP-02	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM ELECTRICAL PENETRATIONS

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
2I8	600V CONTAINMENT PENETRATIONS	X		EP-02	
2I5		X		EP-02	
2I6		X		EP-02	
2C4		X		EP-02	
2C3		X		EP-02	
2C1		X		EP-02	
2I7		X		EP-02	
3I8		X		EP-02	
3I6		X		EP-02	
3I7		X		EP-02	
3C1		X		EP-02	
3C2		X		EP-02	
3C4		X		EP-02	
3I5		X		EP-02	
EP-14		X		EP-02	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ Valve M21-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
M2V-211	SOLENOID		X	S7	
9000 G1	CONTROL CABLE		X	CC7 CC8	
9002G1	CONTROL CABLE		X	CC1	
	control cable term at solenoid		X	TC15	
	control cable term at term box		X	TC13	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No: 50-315, LICENSE No. DPR-58

SYSTEM VALVE MRV-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MRV-212	SOLENOID		X	S7	
900021	CONTROL CABLE		X	CC7 CC8	
900221	CONTROL CABLE		X	CC1	
	control cable term at Solenoid		X	TC15	
	control cable term at term box		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

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SYSTEM VALVE MRV-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MRV-221	SOLENOID		X	S7	
900G41	CONTROL CABLE		X	CC1	
	Control cable term at solenoid		X	TC15	
	control cable term at term box		X	TC13	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE MRV-222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MRV-222	SOLENOID		X	E7	
900621	CONTROL CABLE		X	CC1	
	control cable term at Solenoid		X	TC15	
	control cable term at term. box		X	TC13	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE MRV-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MRV-241	SOLENOID		X	S7	
901761	CONTROL CABLE		X	CC7 CC8	
902261	CONTROL CABLE		X	CC1	
	control cable term at solenoid		X	TC15	
	control cable term at term box		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE MRV-242

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MRV-242	SOLENOID		X	S7	
901721	CONTROL CABLE		X	CC7 CC8	
902221	CONTROL CABLE		X	CC1	
	Control cable term at solenoid		X	TC15	
	Control cable term at term box		X	TC13	

DONALD C. COOK NUCLEAR PLANT, UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFI-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-210	FLOW INDICATOR		X	I4	
5152 R-1	INSTRAMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRAMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. I
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT FFI-220

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FFI-220	FLOW INDICATOR		X	I4	
5150 R-1	INSTRAMENT CABLE		X	CI 3 CI 4 CI 5	
	CABLE TERM. AT INSTRAMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT FFI-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-230	FLOW INDICATOR		X	I4	
5151 R-1	INSTRUMENT CABLE		X	CI 3 CI 4 CI 5	
	CABLE TERM. AT INSTRUMENT		X	TI1	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT FFI-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-240	FLOW INDICATOR		X	I4	
5153 R-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, VALVE FMO-201

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-201	Valve Motor Operator		X	V8	
9753 G-2	Power Cable		X	CP1 CP2 CP3	
9754 G-2	Control Cable		X	CC9 CC10	
9755 G-2	Control Cable		X	CC9 CC10	
	Power Cable Term. at Valve Motor Operator		X	TP3	
	Control Cable Term. at Term. Box		X	TC13	
	Control Cable Term. at Valve Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-202

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-202	Valve Motor Operator		X	V8	
9753 R-1	Power Cable		X	CP1 CP2 CP3	
9754 R-1	Control Cable		X	CC9 CC10	
9755 R-1	Control Cable		X	CC9 CC10	
	Power Cable Term. at Valve Motor Operator		X	TP3	
	Control Cable Term. at Valve Motor Operator		X	TC9	
	Control Cable Term. at Term. Box		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, VALVE FMO-203

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-203	Valve Motor Operator		X	V8	
9759 R-2	Power Cable		X	CP1 CP2 CP3	
9760 R-2	Control Cable		X	CC9 CC10	
9761 R-2	Control Cable		X	CC9 CC10	
	Power Cable Term. at Valve Motor Operator		X	TP3	
	Control Cable Term. at Valve Motor Operator		X	TC9	
	Control Cable Term at Term. Box		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, VALVE FMO-204

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-204	Valve Motor Operator		X	V8	
9759 G-2	Power Cable		X	CP1 CP2 CP3	
9760 G-2	Control Cable		X	CC9 CC10	
9761 G-2	Control Cable		X	CC9 CC10	
	Power Cable Term. at Valve Motor Operator		X	TP3	
	Control Cable Term. at Valve Motor Operator		X	TC9	
	Control Cable Term. at Term. Box		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO 211	VALVE MOTOR OPERATOR		X	V6	
9091 BR-1	POWER CABLE		X	CC2 CC3 CC4	
9090 BR-1	CONTROL CABLE		X	CC7 CC8	
9280 BR-1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-212

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
EMO-212	VALVE MOTOR OPERATOR		X	V6	
909221	POWER CABLE		X	CP1 CP2 CP3	
909321	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-221	VALVE MOTOR OPERATOR		x	V6	
8303 BR-1	POWER CABLE		x	CC2 CC3 CC4	
8302 BR-1	CONTROL CABLE		x	CC7 CC8	
9281-BR-1	CONTROL CABLE		x	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		x	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		x	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		x	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, VALVE EMO-222

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
EMO-222	VALVE MOTOR OPERATOR		X	V6	
853361	POWER CABLE		X	CP1 CP2 CP3	
853261	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-231

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-231	VALVE MOTOR OPERATOR		X	V6	
8308 BR-1	POWER CABLE		X	CC2 CC3 CC4	
8307 BR-1	CONTROL CABLE		X	CC7 CC8	
9282 BR-1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE EMO-232

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EMO-232	VALVE MOTOR OPERATOR		X	V6	
853561	POWER CABLE		X	CP1 CP2 CP3	
853461	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-241	VALVE MOTOR OPERATOR		X	V6	
9086 BR-1	POWER CABLE		X	CC2 CC3 CC4	
9085 BR-1	CONTROL CABLE		X	CC7 CC8	
9283 BR-1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FMO-242

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-242	VALVE MOTOR OPERATOR		X	V6	
908621	POWER CABLE		X	CP1 CP2 CP3	
908721	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE CRV-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9330 G-1	CONTROL CABLE		X	CI 8 CI 9 CI 10	
XSO-291	SOLENOID		X	S3	
9328 G-1	CONTROL CABLE		X	CC1	
9502 R-1	CONTROL CABLE		X	CC7 CC8	
XSO-292	SOLENOID		X	S3	
9327 R-1	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM. AT TERMINAL BOXES		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE EFV-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9329 R-1	CONTROL CABLE		X	CI 8 CI 9 CI 10	
XSO-204	SOLENOID		X	S3	
9330 R-1	CONTROL CABLE		X	CC1	
9334 G-1	CONTROL CABLE		X	CC7 CC8	
XSO-293	SOLENOID		X	S3	
9335 G-1	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM. AT TERMINAL BOXES		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FRV-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9332 R-1	CONTROL CABLE		X	CI8 CI9 CI10	
XSO-296	SOLENOID		X	S3	
9333 R-1	CONTROL CABLE		X	CC1	
9341 G-1	CONTROL CABLE		X	CC7 CC8	
XSO-295	SOLENOID		X	S3	
9342 G-1	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM. AT TERMINAL BOXES		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE FRV-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9401G-1	CONTROL CABLE		X	CI 8 CI 9 CI 10	
XSO-297	SOLENOID		X	S3	
9506R-1	CONTROL CABLE		X	CC7 CC8	
9349G-1	CONTROL CABLE		X	CC1	
XSO-298	SOLENOID		X	S3	
9336R-1	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM. AT TERMINAL BOXES		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

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SYSTEM INSTRUMENT WPS-701

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WPS-701	Pressure Switch		X	I32	
8447 G-2	Control Cable		X	CC2 CC3 CC4	
	Cable termination at pressure switch		X	TI6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-711

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-711	VALVE MOTOR OPERATOR		X	V6	
829461	POWER CABLE		X	CP1 CP2 CP3	
829561	CONTROL CABLE		X	CC7 CC8	
829661	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
—	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-713

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-713	VALVE MOTOR OPERATOR		X	V6	
819761	POWER CABLE		X	CP1 CP2 CP3	
819861	CONTROL CABLE		X	CC7 CC8	
819961	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-723

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-723	VALVE MOTOR OPERATOR		X	V6	
80576-1	POWER CABLE		X	CP1 CP2 CP3	
80596-1	CONTROL CABLE		X	CC7 CC8	
80SP 6-2	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-725

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-725	VALVE MOTOR OPERATOR		X	V6	
80606-1	POWER CABLE		X	CP1 CPR CP3	
80626-1	CONTROL CABLE		X	CC7 CC8	
8061 G-2	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT WPS-705

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WPS-705	Pressure Switch		X	I32	
2447 R-1	Control Cable		X	CC2 CC3 CC4	
	Cable termination at pressure switch		X	TI6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-715

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-715	VALVE MOTOR OPERATOR		X	V6	
829421	POWER CABLE		X	CP1 CP2 CP3	
829521	CONTROL CABLE		X	CC7 CC8	
829621	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-717

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-717	VALVE MOTOR OPERATOR		x	V6	
8255R1	POWER CABLE		x	CP1 CP2 CP3	
8256R1	CONTROL CABLE		x	CC7 CC8	
8257R1	CONTROL CABLE		x	CC7 CC8	
8968R1	CONTROL CABLE		x	CC7 CC8	
	PWR CABLE TERM. AT VLV. MTR. OPERATOR		x	TP3	
	CONTROL CABLE TERM.S AT TERMINAL BOX		x	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		x	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-721

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-721	VALVE Motor Operator		X	V6	
8057 R-1	POWER CABLE		X	CP1 CP2 CP3	
8058 R-1	CONTROL CABLE		X	CC7 CC8	
8059 R-1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE WMO-727

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-727	Valve Motor Operator		X	V6	
8060 R-1	Power Cable		X	cp1 cp2 cp3	
8062 R-1	Control Cable		X	cc7 cc8	
8061 R-1	Control Cable		X	cc7 cc8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NPS-121

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPS-121	INSTRUMENT	X		I23 I22	
9765 CB-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM _____, INSTRUMENT NPS-122

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPS-122	INSTRUMENT	X		I23 I22	
9766 CY-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-910

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-910	VALVE MOTOR OPERATOR		X	U8	
802661	POWER CABLE		X	CP1 CP2 CP3	
803161	CONTROL CABLE		X	CC9 CC10	
803261	CONTROL CABLE		X	CC9 CC10	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-911

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-911	VALVE MOTOR OPERATOR		x	V8	
8026R1	POWER CABLE		x	CP1 CP2 CP3	
8031R1	CONTROL CABLE		x	CC9 CC10	
8032R1	CONTROL CABLE		x	CC9 CC10	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		x	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		x	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		x	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE QMO-225

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
QMO-225	VALVE MOTOR OPERATOR		X	V6	
803961	POWER CABLE		X	CP1 CP2 CP3	
803761	CONTROL CABLE		X	CC7 CC8	
803861	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM ..... VALVE QMO-226

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
QMO-226	VALVE MOTOR OPERATOR		X	V6	
803921	POWER CABLE		X	CP1 CP2 CP3	
803821	CONTROL CABLE		X	CC7 CC8	
803721	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM EAST CENTRIFUGAL CHARGING PUMP

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PP-050E	EAST CENTRIFUGAL CHARGING PUMP MOTOR		X	M1	
8007G1	POWER CABLE		X	CP11	
	POWER CABLE TERM. AT MOTOR		X	TP4	
	Motor Oil		X	G10	
	Coupling Grease		X	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM WEST CENTRIFUGAL CHARGING PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-050W	WEST CENTRIFUGAL CHARGING PUMP MOTOR		X	M1	
8007R1	POWER CABLE		X	CP11	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G10	
	Coupling Grease		X	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM CVCS EAST CHARG & L.O. PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
Part of PP-050E	EAST CHARG. & L.O. PUMP MOTOR		x	m1	
827641	POWER CABLE		x	CP1 CP2 CO3	
	POWER CABLE TERM. AT PUMP MOTOR		x	TP4	
	Motor Oil		x	G10	
	Coupling Grease		x	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM CVCS WEST CHARG. + L.D. PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
Part of PP-050W	CVCS WEST CHARG. + L.D. PUMP MOTOR		X	M1	
8276R1	POWER CABLE		X	CP1 CP2 CP3	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G10	
	Coupling Grease		X	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE CMO-419

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
CMO-419	VALVE MOTOR OPERATOR		X	V6	
8250G1	POWER CABLE		X	CP1 CP2 CP3	
8251G1	CONTROL CABLE		X	CC7 CC8	
8252G1	CONTROL CABLE		X	CC5 CC6	
8253G1	CONTROL CABLE		X	CC7 CC8	
8254G1	CONTROL CABLE		X	CC2 CC3 CC4	
8909G1	CONTROL CABLE		X	CC2 CC3 CC4	
8908G1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM.S AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM.S AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE CMO-429

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
CMO-429	VALVE MOTOR OPERATOR		X	V6	
890221	POWER CABLE		X	CP1 CP2 CP3	
890321	CONTROL CABLE		X	CC7 CC8	
890421	CONTROL CABLE		X	CC7 CC8	
890521	CONTROL CABLE		X	CC5 CC6	
890621	CONTROL CABLE		X	CC2 CC3 CC4	
890721	CONTROL CABLE		X	CC7 CC8	
890821	CONTROL CABLE		X	CC2 CC3 CC4	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM.S AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-51

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-51	FLOW INDICATOR	X		I7 I6 I8	
4410 C01	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-52

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-52	FLOW INDICATOR	X		I7 I8 I6	
6211 CB-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-53

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP. QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-53	FLOW INDICATOR	X		I2 I8 I6	
6210 CY-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-54

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-54	FLOW INDICATOR	X		I2 I6	
6212 CW-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT IFI-260

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-260	FLOW INDICATOR		X	I9	
4610 e-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-51

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-51	VALVE MOTOR OPERATOR	X		V1	
8315CG1	POWER CABLE	X		CP7 CP8 CP9	
8316CG1	CONTROL CABLE	X		CC7 CC8	
8317G1	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	POWER CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT TERMINAL BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT IFI-266

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-266	FLOW INDICATOR		X	I9	
1889861	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-52

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-52	VALVE MOTOR OPERATOR	X		V1	
8080C21	POWER CABLE	X		CP7 CP8 CP9	
8081C21	CONTROL CABLE	X		CC7 CC8	
8082C21	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	POWER CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT TERMINAL BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IHO-53

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IHO-53	VALVE MOTOR OPERATOR	X		VI	
8444CG1	POWER CABLE	X		CP7 CP8 CP9	
8445CG1	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	PWR. CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	PWR. CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-54

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-54	VALVE MOTOR OPERATOR	X		VI	
8472CR1	POWER CABLE	X		CP 7 CP8 CP9	
8473CR1	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	PWR. CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	PWR. CABLE TERM. INSIDE FLOODUP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-255

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-255	VALVE MOTOR OPERATOR		X	V6	
817761	POWER CABLE		X	CP1 CP2 CP3	
817661	CONTROL CABLE		X	CC7 CC8	
817861	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
—	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-256

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-256	VALVE MOTOR OPERATOR		X	V6	
8177R1	POWER CABLE		X	CP1 CP2 CP3	
8176R1	CONTROL CABLE		X	CC7 CC8	
8178R1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-241	VALVE MOTOR OPERATOR		X	V8	
803021	POWER CABLE		X	CP1 CP2 CP3	
825021	CONTROL CABLE		X	CC7 CC8	
825121	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-262

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-262	VALVE MOTOR OPERATOR		X	V6	
825861	POWER CABLE		X	CP1 CP2 CP3	
825961	CONTROL CABLE		X	CC7 CC8	
826061	CONTROL CABLE		X	CC9 CC10	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-263

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-263	VALVE MOTOR OPERATOR		X	V6.	
825221	POWER CABLE		X	CP1 CP2 CP3	
825321	CONTROL CABLE		X	CC7 CC8	
825421	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-270

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-270	VALVE MOTOR OPERATOR		X	V6	
9651G1	POWER CABLE		X	CP1 CP2 CP3	
9652G1	CONTROL CABLE		X	CC7 CC8	
9653G1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	—	X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-275

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-275	VALVE MOTOR OPERATOR		X	V6	
965121	POWER CABLE		X	CP1 CP2 CP3	
965221	CONTROL CABLE		X	CC7 CC8	
965321	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-360

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-360	VALVE MOTOR OPERATOR		X	V8	
825561	POWER CABLE		X	CP1 CP2 CP3	
825661	CONTROL CABLE		X	CC7 CC8	
825761	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE. TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-361

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-361	VALVE MOTOR OPERATOR		X	U8	
826161	POWER CABLE		X	CP1 CP2 CP3	
826261	CONTROL CABLE		X	CC7 CC8	
826561	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-362

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-362	VALVE MOTOR OPERATOR		X	V8	
826121	POWER CABLE		X	CP1 CP2 CP3	
826221	CONTROL CABLE		X	CC7 CC8	
826321	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM SAFETY INJECTION PUMP "IN"

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-026N	SAFETY INJECTION PUMP "IN" MOTOR		X	M1	
800061	POWER CABLE		X	CP10 CP6	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Pump Oil		X	G7	
	Motor Oil		X	G8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM SAFETY INJECTION PUMP "1S"

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-026S	SAFETY INJECTION PUMP "1S" MOTOR		X	m1	
8000R1	POWER CABLE		X	cp6 cp10	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Pump Oil		X	G7	
	Motor Oil		X	G8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFC-315

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFC-315	INSTRUMENT		X	I5	
887261	INSTR. CABLE		X	CI8 CI9 CI10	
	CABLE TERM. AT TERMINAL BOX		X	TC13	
	CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFC-325

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFC-325	INSTRUMENT		X	I5	
886721	INSTR. CABLE		X	CI8 CI9 CI10	
	CABLE TERM. AT TERMINAL BOX		X	TC13	
	CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-310

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-310	FLOW INDICATOR		X	I10	
6296 R-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-311

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-311	FLOW INDICATOR		X	I 11	
5104 R-1	INSTRUMENT CABLE		X	CI 3 CI 4 CI 5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-320

PLANT ID. No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-320	FLOW INDICATOR		X	I10	
6297 R-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT IFI-321

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-321	FLOW INDICATOR		X	I 11	
5103 R-2	INSTRUMENT CABLE		X	CI3 CIH CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315; LICENSE No. DPR-58

SYSTEM VALVE IMO-310

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-310	VALVE MOTOR OPERATOR		X	V6	
807661	POWER CABLE		X	CP1 CP2 CP3	
807761	CONTROL CABLE		X	CC7 CC8	
807861	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-312

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-312	VALVE MOTOR OPERATOR		X	V6	
819161	POWER CABLE		X	CP1 CP2 CP3	
819261	CONTROL CABLE		X	CC7 CC8	
819361	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-314

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-314	VALVE MOTOR OPERATOR		X	V6	
9645G1	POWER CABLE		X	CP1 CP2 CP3	
9647G1	CONTROL CABLE		X	CC7 CC8	
9648G1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-315

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-315	VALVE MOTOR OPERATOR	X		V2	
9628C61	POWER CABLE	X		CP7 CP8 CP9	
9627C61	CONTROL CABLE	X		CC7 CC8	
9643C1	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	POWER CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERMINAL BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-316

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-316	VALVE MOTOR OPERATOR	X		V2	
9631 CG1	POWER CABLE	X		CP7 CP8 CP9	
9630 CG1	CONTROL CABLE	X		CC7 CC8	
9644 G1	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	POWER CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERMINAL BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-320

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-320	VALVE MOTOR OPERATOR		X	V6	
807621	POWER CABLE		X	CP1 CP2 CP3	
807721	CONTROL CABLE		X	CC7 CC8	
807821	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-322

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-322	VALVE MOTOR OPERATOR		X	V6	
819121	POWER CABLE		X	CP1 CP2 CP3	
819221	CONTROL CABLE		X	CC7 CC8	
819321	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-324

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-324	VALVE MOTOR OPERATOR		X	V6	
964521	POWER CABLE		X	CP1 CP2 CP3	
964721	CONTROL CABLE		X	CC7 CC8	
964821	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-325

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-325	VALVE MOTOR OPERATOR	X		V2	
9628 CR1	POWER CABLE	X		CP2	
9627 CR1	CONTROL CABLE	X		CC7 CC8	
964321	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	POWER CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERMINAL BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-326

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-326	VALVE MOTOR OPERATOR	X		V2	
9631CR1	POWER CABLE	X		CP2	
9630CR1	CONTROL CABLE	X		CC7 CC8	
964421	CONTROL CABLE	X		CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TP2	
	POWER CABLE TERM. INSIDE FLOOD UP TUBES AT PEN.	X		TP1	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERMINAL BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERMINAL BOX	X		TC7	
	CONTROL CABLE TERM. INSIDE FLOOD UP TUBE AT PENETRATION	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-330

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-330	VALVE MOTOR OPERATOR		X	V7	
818561	POWER CABLE		X	CP1 CP2 CP3	
818661	CONTROL CABLE		X	CC7 CC8	
818861	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC1D	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-331

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-331	VALVE MOTOR OPERATOR		X	V7	
818521	POWER CABLE		X	CP1 CP2 CP3	
818621	CONTROL CABLE		X	CC7 CC8	
818821	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-340

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-340	VALVE MOTOR OPERATOR		X	V8	
819461	POWER CABLE		X	CP1 CP2 CP3	
819561	CONTROL CABLE		X	CC7 CC8	
819661	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-350

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-350	VALVE MOTOR OPERATOR		X	V8	
8182R1	POWER CABLE		X	CP1 CP2 CP3	
8183R1	CONTROL CABLE		X	CC7 CC8	
8184R1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-128

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IMO-128	VALVE Motor Operator	X		V1	
8086 CR-1	Power Cable	X		CP7 CP8 CP9	
8094 R-1	Control Cable	X		CC7 CC8	
8087 CR-1	Control Cable	X		CC7 CC8	
	Power Cable Term at Valve Motor Operator	X		TP3	
	Power Cable Term at Floodup Term Box	X		TP2	
	Power Cable Term at Pen inside Floodup Tubes	X		TP1	
	Control Cable Term at Valve Motor Operator	X		TC3	
	Control Cable Term at Floodup Term Box	X		TC7	
	Control Cable Term at Pen inside Floodup Tubes	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM EAST RHR PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-035E	EAST RHR PUMP MOTOR		X	M1	
800361	POWER CABLE		X	CP6 CP10	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Pump and Motor Grease		X	G9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM WEST RHR PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP035W	WEST RHR PUMP MOTOR		X	M1	
800321	POWER CABLE		X	CP6 CP12	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Pump and Motor Grease		X	G9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT TLS-950

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
9738 G-1	Instrument Cable		X	CI3 CI4 CI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT ILS-95

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
9738 R-1	Instrument Cable		X	CI3 CI4 CI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT PPP-301

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-301	CONTAINMENT PRESSURE INSTRUMENT		X	I29	
9304 Y-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT PPP-300

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-300	CONTAINMENT PRESSURE INSTRUMENT		X	I29	
9305 W-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT PPP-302

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PPP-302	CONTAINMENT PRESSURE INSTRUMENT		X	F29	
9305 B-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT PPP-303

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-303	CONTAINMENT PRESSURE INSTRUMENT		X	I30	
9304 0-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE IMO-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-210	VALVE MOTOR OPERATOR		X	V7	
806461	POWER CABLE		X	CP1 CP2 CP3	
806561	CONTROL CABLE		X	CC7 CC8	
806661	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-211	VALVE MOTOR OPERATOR		X	V7	
806761	POWER CABLE		X	CP1 GP2 CP3	
806861	CONTROL CABLE		X	CC7 CC8	
806961	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-220	VALVE MOTOR OPERATOR		X	V7	
806421	POWER CABLE		X	CP1 CP2 CP3	
806521	CONTROL CABLE		X	CC7 CC8	
806621	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM VALVE IMO-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-221	VALVE MOTOR OPERATOR		X	V7	
806721	POWER CABLE		X	CP1 & CP2 CP3	
806821	CONTROL CABLE		X	CC7 CC8	
806921	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-212	VALVE MOTOR OPERATOR		X	V7	
807061	POWER CABLE		X	CP1 CP2 CP3	
807161	CONTROL CABLE		X	CC7 CC8	
807261	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-222	VALVE MOTOR OPERATOR		X	V7	
807021	POWER CABLE		X	CP1 CP2 CP3	
807121	CONTROL CABLE		X	CC7 CC8	
807221	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-215

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-215	VALVE MOTOR OPERATOR		x	V7	
807361	POWER CABLE		x	cp1 cp2 cp3	
807461	CONTROL CABLE		x	cc7 cc8	
807561	CONTROL CABLE		x	cc7 cc8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		x	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		x	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		x	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE IMO-225

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-225	VALVE MOTOR OPERATOR		X	V7	
807321	POWER CABLE		X	CP1 CP2 CP3	
807421	CONTROL CABLE		X	CC7 CC8	
807521	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM EAST CONT. SPRAY PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-009 EAST	EAST CONT. SPRAY PUMP MOTOR		X	M2	
800261	POWER CABLE		X	CP11	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G3	
	Motor GREASE		X	G4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM WEST CONT. SPRAY PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-009 WEST	WEST CONT. SPRAY PUMP MOTOR		X	M2	
8002R1	POWER CABLE		X	CP11	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G3	
	Motor Grease		X	G4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Control Air Recirc. Sys. VALVE VMO-101

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
VMO-101	Valve Motor Operator	X		V4	
9539 CR-1	Power Cable	X		CP7 CP8 CP9	
9541 R-1	Control Cable	X		CC7 CC8	
9540 CR-1	Control Cable	X		CC7 CC8	
	Power Cable Termination at Valve Motor Operator	X		TP3	
	Power Cable Termination at Flood up Term. Box	X		TP2	
	Power Cable Termination at Penetration	X		TP1	
	Control Cable Term. at Valve Motor Operator	X		TC2	
	Control Cable Term. at Term. Box	X		TC8	
	Control Cable Term. at Floodup Term Box	X		TC7	
	Control Cable Term. inside Floodup Tube at Penetration.	X		TC6	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Control Air Recirc. Sys VALVE VMO-102

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
VMO-102	Valve Motor Operator	X		V4	
9608 CG-1	Power Cable	X		CP7 CP8 CP9	
9610 G-1	Control Cable	X		CC7 CC8	
9609 CG-1	Control Cable	X		CC7 CC8	
	Power cable termination at valve motor operator	X		TP3	
	Power cable termination at flood up term. box	X		TP2	
	Power cable termination at penetration	X		TP1	
	Control cable term. at Valve Motor Operator	X		TC2	
	Control cable term. at term. box	X		TC8	
	Control cable term. at Floodup Term. Box	X		TC7	
	Control cable term. inside flexible tube at penetration	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Control Air Recirc Sys FAN 1-HV-CEQ1

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
0532 CR-1	Power Cable	X		CC12	
HV-CEQ1	Fan Motor	X		F1	
	Power Cable Term. At Fan Motor	X		TP3	
	Power Cable Term. At Floodup Term Box	X		TP2	
	Power Cable Term. Inside Floodup Tube At Penetration.	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Control Air Recirc System FAN 1-HV-CEQ2

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9604 CG-1	Power Cable	X		CC12	
HV-CEQ2	Fan Motor	X		F1	
	Power Cable Term. At Fan Motor	X		TP3	
	Power Cable Term. At Floodup Term Box	X		TP2	
	Power Cable Term. Inside Floodup Tube At Penetration	✓		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Hydrogen Recombiner #1

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
8978 CR-1	Power Cable	X		CP4	
HR-1	Hydrogen Recombiner	X		H1	
	Power Cable Team At Recombiner	X		TP3	
	Power Cable Team At Floodup Team Box	X		TP2	
	Power Cable Team Inside Floodup Tube At Penetration	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Hydrogen Recombiner #2

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
8978 CG-1	Power Cable	X		CP4	
HR-2	Hydrogen Recombiner Heater Assembly	X		H1	
	Power Cable Term at Recombiner	X		TP3	
	Power Cable Term at Floodup Term. Box	X		TP2	
	Power Cable Term inside Floodup Tubes at Penetration	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT N35

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N35 CV	INSTRUMENT	X		I16	
N35 SIG	INSTRUMENT	X		I16	
N35 HV	INSTRUMENT	X		I16	
9258 CO-2	INSTR. CABLE	X		I16	
9259 CO-2	INSTR. CABLE	X		I16	
9260 CO2	INSTR. CABLE	X		I16	
	Cable TERM. AT JUNC. BOX	X		I16	
	Cable TERM. AT INSTR. N35	X		I16	
	cable term AT Penetration	X		I16	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT N36

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N36CV	INSTRUMENT	X		I16	
N36 SIG	INSTRUMENT	X		I16	
N36 HV	INSTRUMENT	X		I16	
9258 CB-1	INSTR. CABLE	X		I16	
9259 CB-1	INSTR. CABLE	X		I16	
9260 CB-1	INSTR. CABLE	X		I16	
	CABLE TERM. AT JUNCTION BOX	X		I16	
	CABLE TERM AT INSTR.	X		I16	
	Cable Term AT PENETRATION	X		I16	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT N41A

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N 41A	INSTRUMENT	X		I17	
9264 CO-2	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT PENETRATION	X		I17	
	Cable TERM AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM _____ INSTRUMENT N 41B

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N41B	INSTRUMENT	X		I17	
9266 CO-2	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT Penetration	X		I17	
	Cable TERM AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT N42A

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N 42A	INSTRUMENT	X		I17	
9264 CB-2	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT. PENETRATION	X		I17	
	Cable TERM AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM _____ INSTRUMENT N 42B

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N 42B	INSTRUMENT	X		I17	
9266 CB-2	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT Penetration	X		I17	
	Cable Term AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT N43A

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N43A	INSTRUMENT	X		I17	
P468 CY-1	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM. AT PENETRATION	X		I17	
	CABLE TERM. AT INSTRUMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM _____ INSTRUMENT N 43B

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N 43B	INSTRUMENT	X		I17	
8470 CY-2	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT Penetration	X		I17	
	Cable TERM AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM _____ INSTRUMENT N44A.

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N44A	INSTRUMENT	X		I17	
8466 CW-1	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT PENETRATION	X		I17	
	CABLE TERM AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM _____ INSTRUMENT N 44B

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N 44B	INSTRUMENT	X		I17	
8470 CW-1	INSTRUMENT CABLE	X		I17	
	CABLE TERM. AT JUNCTION BOX	X		I17	
	CABLE TERM AT PENETRATION	X		I17	
	CABLE TERM AT INSTRAMENT	X		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT NTP-110

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-110	Nuclear Reactor Coolant Temperature Protection	X		I27	
8708 CO-2	Instrument Cable	X		CI8 CI4	
	Cable Term at Instrument	X		TI2	
	Cable Term at Terminal Box	X		TC8	
	Cable Term at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT NTP-111

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-111	NUCLEAR REACTOR COOLANT TEMPERATURE PROTECTION	X		I26 I25	
8710 CO-2	INSTRUMENT CABLE	X		CI 8 CI 9	
	CABLE TERM AT INSTRUMENT	X		TI2	
	CABLE TERM AT TERM. BOX	X		TC8	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NTP-120

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-210	Nuclear Reactor Coolant Temperature Protection	X		I27	
8720 CB-1	Instrument Cable	X		CI8 CI9	
	Cable Term at Penetration	X		TI4	
	Cable Term. at Term. Box	X		TC8	
	Cable Term at Instrument	X		TI2	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-121

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-121	Nuclear Reactor Coolant Temp Protection	X		I26 I25	
8722 CB-1	Instrument Cable	X		CI8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable Term at Term Box	X		TC8	
	Cable Term. at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-130

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-130	Nuclear Reactor Coolant Temp Protection	X		I27	
8721 CY-1	Instrument Cable	X		CI8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable Term. at Term Box	X		TC8	
	Cable Term. at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-131

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-131	Nuclear Reactor Coolant Temp. Protection	X		I26 I25	
8723 C4-1	Instrument Cable	X		CI8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable Term. at Term. Box	X		TC8	
	Cable Term. at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-140

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-140	Nuclear Reactor Coolant Temp. Protection	X		I27	
8732 CW-1	Instrument Cable	X		CI5 CI3	
	Cable Term. at Instrument	X		TI2	
	Cable Term at Term. Box	X		TC8	
	Cable Term at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM: INSTRUMENT NTP-141

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-141	Nuclear Reactor Coolant Temp. Prot.	X		I26 I25	
8734 CW-1	Instrument Cable	X		CI8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable term. at Term Box	X		TC8	
	Cable term at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT: NTP-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-210	NUCLEAR REACTOR COOLANT TEMPERATURE PROTECTION	X		I27	
2709 CO-2	INSTRUMENT CABLE	X		CI8 CI9	
	CABLE TERM AT INSTRUMENT	X		TI2	
	CABLE TERM. AT TERM. BOX	X		TC8	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT, UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NTP-211

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-211	Nuclear Reactor Coolant Temperature Protection	X		I25 I26	
8711-CO-1	Instrument Cable	X		CI8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable Term. at Term. Box.	X		TC8	
	Cable Term at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NTP-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-220	NUCLEAR REACTOR COOLANT TEMPERATURE PROTECTION	X		I27	
8721 CB-1	INSTRUMENT CABLE	X		CI8 CI9	
	CABLE TERM. AT INSTRUMENT	X		TI2	
	CABLE TERM AT TERM BOX	X		TCB	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-221	Nuclear Reactor Coolant Temp. Protection	X		I25 I26	
8723 CB-1	Instrument Cable	X		CI8 CI9	
	Cable Term at Instrument	X		TI2	
	Cable Term at Term Box	X		TC8	
	Cable Term at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-230	Nuclear Reactor Coolant Temp. Protection	X		I27	
8722 CY-1	Instrument Cable	X		LI 8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable Term. at Term Box	X		TL8	
	Cable Term. at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-231

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-231	Nuclear Reactor Coolant Temp. Protection	X		I25 I26	
8724-CY-1	Instrument Cable	X		CI8 CI9	
	Cable Term at Instrument	X		TI2	
	Cable Term. at Term. Box.	X		TC8	
	Cable Term. at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Instrument NTP-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-240	Nuclear Reactor Coolant Temp. Prot.	X		I27	
2733 CW-1	Instrument Cable	X		CI8 CI9	
	Cable term. at Penetration	X		TI4	
	Cable term. at Term. Box	X		TC8	
	Cable term at Instrument	X		TI2	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM Instrument NTP-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-241	Nuclear Reactor Coolant Temp. Prot.	X		I25 I26	
8735 CW-1	Instrument Cable	X		CI8 CI9	
	Cable Term. at Instrument	X		TI2	
	Cable Term. at Term. Box	X		TC8	
	Cable Term at Penetration	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ RECORDER NTR-110

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-110	TEMP. RECORDER	X		I28	
8725 CO-1	INSTRUMENT CABLE	X		CI5 CI3	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, RECORDER NTR-120

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-120	TEMP. RECORDER	X		I28	
8726 CO-1	INSTRUMENT CABLE	X		CI5 CI3	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		T48	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, RECORDER NTR-130

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-130	TEMP. RECORDER	X		I28	
8727 CO-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX.	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ RECORDER NTR-140

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-140	TEMP. RECORDER	X		I28	
8728 CO-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, RECORDER NTR-210

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-210	TEMP. RECORDER	X		I28	
8729 C8-1	INSTRUMENT CABLE	X		AI 3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, RECORDER NTR-220

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-220	TEMP. RECORDER	X		I28	
8730CB-1	INSTRUMENT CABLE	X		CI 3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM RECORDER NTR-230

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-230	TEMP. RECORDER	X		I28	
8731 C8-1	INSTRUMENT CABLE	X		4I3 C15	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM RECORDER NTR-240

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-240	TEMP. RECORDER	X		I28	
8732 CB-1	INSTRUMENT CABLE	X		CI 8 CI9	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NPP-151

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPP-151	INSTRUMENT	X		I19 I20 I21	
8733 CO-1	INSTRUMENT CABLE	X		CI 1 CI 2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NPP-152

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPP-152	INSTRUMENT	X		I19 I21 I20	
8736 C8-1	INSTRUMENT CABLE	X		CI-3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, INSTRUMENT NPP-153

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPP-153	INSTRUMENT	X		I19 I21 I20	
9600 CY-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NPS-153

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NPS-153	Nuclear Reactor Coolant Pressure Control Switch	X		I24	
9600 CW-2	Control Cable	X		CI3 CI5	
---	Cable term at Instr	X		TI1	
-	Cable term. at Pene	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT NLP-151

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NLP-151	INSTRUMENT	X		I18	
873460-1	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT NLP-152

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NLP-152	INSTRUMENT	X		I 18	
8737 C8-1	INSTRUMENT CABLE	X		CI 3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT NLP-153

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NLP-153	INSTRUMENT	X		I18	
9601 CY-1	INSTRUMENT CABLE	X		CI 3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-110

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-110	INSTRUMENT	X		I1	
8584CW-1	INSTRUMENT CABLE	X		CI3 CI5.	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X.		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-111

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-111	INSTRUMENT	X		I1	
8558 CB-1	INSTRUMENT CABLE	X		CI3, CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-112

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-112	INSTRUMENT	X		I 1	
8584 CY-1	INSTRUMENT CABLE	X		CI 3 CI 5	
	CABLE TERMINATION AT INSTRUMENT	X		TI 1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI 3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI 4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-120

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-120	INSTRUMENT	X		I1	
8585 CW-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-121

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-121	INSTRUMENT	X		I1	
8558 CO-1	INSTRUMENT CABLE	X		CI3. CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-122

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-122	INSTRUMENT	X		I1	
8585CY-1	INSTRUMENT CABLE	X		CI 3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT BLP-130

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-130	INSTRUMENT	X		I1	
8586 CW-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-131

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-131	INSTRUMENT	X		I1	
8559 CO-1	INSTRUMENT CABLE	X		CI 3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT BLP-132

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-132	INSTRUMENT	X		I1	
8586 CY-1	INSTRUMENT CABLE	X		CI3 CI5.	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, INSTRUMENT BLP-140

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-140	INSTRUMENT	X		I1	
8587 CIN-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ INSTRUMENT BLP-141

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-141	INSTRUMENT	X		I1	
8559 CB-1	INSTRUMENT CABLE	X		CI3, CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____, INSTRUMENT BLP-142

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-142	INSTRUMENT	X		I1	
8587 Y-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT . FFC-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-210	Feedwater Flow Controller		X	I3	
9070 O-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-211	Feedwater Flow Controller		X	I3	
9064 B.1	Instrument Cable		X	CI3 CI4 CI5	
	Cable Term. at Instrument		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-220	Feedwater Flow Controller		X	I3	
9071 0-1	Instrument Cable		X	CI3 CI4 CI5	
	Cable Term at Instrument		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-221	Feedwater Flow Controller		X	I3	
9070 B-1	Instrument Cable		X	CI3 CI4 CI5	
	Cable Term. At Instrument		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-230	Feedwater Flow Controller		X	I3	
9064 0-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-231

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-231	Feedwater Flow Controller		X	I3	
9065 B-1	Instrument Cable		X	CI3 CI4 CI5	
	Cable Term. at Instrument		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-240

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FFC-240	Feedwater Flow Controller		X	I3	
9065-0-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT FFC-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-241	Feedwater Flow Controller		X	I3	
9071 B-2	Instrument Cable		X	CI3 CI4 CI5	
	Cable Term. at Instrument		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-110

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-110	MAIN STEAM FLOW CONTROLLER	X		I12	
9072 CO-2	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERM AT PENETRATION	X		TI4	
	CABLE TERM. AT INSTRUMENT	X		TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-111

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-111	MAIN STEAM FLOW CONTROLLER	X		I12	
9066 CB-1	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-120

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-120	MAIN STEAM FLOW CONTROLLER	X		I12	
9072 CB-2	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM. AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-121

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-121	MAIN STEAM FLOW CONTROLLER	x		I12	
9073 CO-2	INSTRUMENT CABLE	x		CI3 CI5	
	CABLE TERM AT INSTRUMENT	x		TI1	
	CABLE TERM. AT PENETRATION	x		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Instrument MFC-130

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-130	Main Steam Flow Controller	x		I12	
9067 CB-1	Instrument Cable	x		CI3 CI5	
	Cable Term. at Instrument	x		TI1	
	Cable Term. at Penetration	x		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-131

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MFC-131	MAIN STEAM FLOW CONTROLLER	X		I12	
9066 CO-2	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-140

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-140	MAIN STEAM FLOW CONTROLLER	X		I12	
9067 CO-2	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MFC-141

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-241	MAIN STEAM FLOW CONTROLLER	X		I12	
9073 CB-7	INSTRUMENT CABLE	X		CI3 CI5	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM. AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-210	MAIN STEAM PRESSURE PROTECTION		X	I14	
9074 0-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-211	MAIN STEAM Pressure Protection		X	I14	
906P 2.2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT MPP-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-212	MAIN STEAM PRESSURE PROTECTION		X	IS	
9050 W-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TIS	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT MPP-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-220	MAIN Steam Pressure Protection		X	I14	
9075 0-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TRAY AT INSTRUMENT		X	TIS	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP. 221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-221	MAIN STEAM PRESSURE PROTECTION		X	I14	
9074-B-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1

DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP-222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-222	MAIN STEAM PRESSURE PROTECTION		X	I15	
9050 Y-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT MPP-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-230	MAIN STEAM Pressure Protection		X	I14	
9068 0-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP-231

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-231	MAIN Steam Pressure Protection		X	I14	
9069 B-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT MPP-232

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-232	MAIN STEAM PRESSURE PROTECTION		X	I15	
9051 Y-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1 24
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-240	MAIN STEAM Pressure Protection		X	I14	
9069 O-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPP-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-241	MAIN STEAM PRESSURE PROTECTION		X	I14	
9075 B-2	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
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SYSTEM INSTRUMENT MDP-242 74

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MDP-242	MAIN STEAM PRESSURE PROT		X	I15	
9051 W-1	INSTRUMENT CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE MRV-213

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-213	ELECTRONIC PRESS. TRANS.		X	S9	
6P41-1	CONTROL CABLE		X	CI3 CI4 CI5	
	CONTROL CABLE TERM. AT TRANSMITTER		X	TCI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE MRV-223

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-223	ELECTRONIC PRES. TRANS		x	SQi	
18132 R-1	CONTROL CABLE		x	CI3 CIY CI5	
	CONTROL CABLE TERM. AT TRANSMITTER		x	TC15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE MRV-233

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-233	ELECTRONIC PRESS TRANS.		X	S9	
18133R-2	CONTROL CABLE		X	CI3 CI4 CI5	
	CONTROL CABLE TERM. AT TRANSMITTER		X	TC15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve MRV-243.

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-243	Electronic Press Trans.		X	89	
6842-1	Control Cable		X	CI3 CI4 CI5	
	Control Cable Term. at Transmitter		X	TC15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE ICM-111

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-111	VALVE MOTOR OPERATOR	X		V1	
9187CG-1	POWER CABLE	X		CP7 CP8 CP9	
9189CG-1	CONTROL CABLE	X		CC7 CC8	
	Power cable term at valve motor	X		TP3	
	Power cable term at Floodup term box	X		TP2	
	Power cable term inside floodup tube at Penetr.	X		TP1	
	control cable term at Valve Lim. Swts	X		TC3	
	control cable term at Floodup term. box	X		TC7	
	control cable term inside floodup tube at Penetration	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-129

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9128 CG-1	POWER CABLE	X		CP7 CP8 CP9	
9190 CG-1	CONTROL CABLE	X		CC7 CC8	
ICM-129	VALVE MOTOR OPERATOR	X		V1	
	Power cable term at valve motor	X		TP3	
	Power cable term at Floodup box	X		TP2	
	Power cable term inside Floodup tube at Pen.	X		TP1	
	Control cable term at valve lim swt.	X		TC3	
	control cable term at Floodup box	X		TC7	
	control cable term inside floodup tube at Pen.	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-250

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-250	VALVE MOTOR OPERATOR		X	V6	
817461	POWER CABLE		X	CP1 CP2 CP3	
817361	CONTROL CABLE		X	CC7 CC8	
817561	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-251

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-251	VALVE MOTOR OPERATOR		X	V6	
8174R1	POWER CABLE		X	CP1 CP2 CP3	
8173R1	CONTROL CABLE		X	CC7 CC8	
8175R1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-260

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-260	VALVE MOTOR OPERATOR		X	V6	
963761	POWER CABLE		X	CP1 CP2 CP3	
963861	CONTROL CABLE		X	CC7 CC8	
963961	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-265

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-265	VALVE MOTOR OPERATOR		X	V6	
826021	POWER CABLE		X	CP1 CA2 CP3	
826421	CONTROL CABLE		X	CC7 CC8	
826521	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-305

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-305	VALVE MOTOR OPERATOR	X		V10	
8267G-1	POWER CABLE		X	CP1 CP2 CP3	
9549G-1	POWER CABLE		X	EP02	
9603G-1	CONTROL CABLE		X	EP-02	
8268G-1	CONTROL CABLE		X	CC9 CC10	
	CONTROL CABLE TERM. AT VLV. MOTOR OPERATOR	X		TC14	
	CONTROL CABLE TERM. AT PENT. TERM. BOX		X	TC13	
	POWER CABLE TERM. AT VLV. MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM. AT PENT. TERM BOX		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-305

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-305	MOTOR VALVE OPERATOR	X		V10	
8267R-1	POWER CABLE		X	CP1 CP2 CP3	
9567R-1	POWER CABLE		X	EP-02	
9569R-1	CONTROL CABLE		X	EP02	
8268R-1	CONTROL CABLE		X	CC9 CC10	
	CONTROL CABLE TERM. AT VLV. MOTOR OPERATOR	X		TC14	
	CONTROL CABLE TERM. AT PENT. TERM. BOX		X	TC13	
	POWER CABLE TERM. AT VLV. MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM. AT PENT. TERM BOX		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE ICM-311

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-311	VALVE MOTOR OPERATOR		X	V8	
818761	POWER CABLE		X	CP1 CP2 CP3	
818961	CONTROL CABLE		X	CC7 CC8	
819061	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR L. SW'S.		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE ICM-321

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
ICM-321	VALVE MOTOR OPERATOR		X	V8	
8187R1	POWER CABLE		X	CP1 CP2 CP3	
8189R1	CONTROL CABLE		X	CC7 CC8	
8190R1	CONTROL CABLE		X	CC7 CC8	
	PWR. CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve MCM-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MCM-221	VALVE MOTOR OPERATOR		X	V6	
903721	POWER CABLE		X	CP1 CP2 CP3	
903821	CONTROL CABLE		X	CC7 CC8	
903921	CONTROL CABLE		X	CC7 CC8	
	Power cable term at Valve motor		X	TP3	
	control cable term at valve lim sw's.		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve MCM-231

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MCM-231	VALVE MOTOR OPERATOR		x	V6	
903361	POWER CABLE		x	CP1 CP2 CP3	
903461	CONTROL CABLE		x	CC7 CC8	
903561	CONTROL CABLE		x	CC7 CC8	
	Power cable term at valve motor		x	TP3	
	Control cable term at valve lim. sw's		x	TC11.	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM VALVE QCM-250

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
2774 CG-1	POWER CABLE	X		CP7 CP8 CP9	
2775 CG-1	CONTROL CABLE	X		CC7 CC8	
2776 G-1	CONTROL CABLE	X		CC7 CC8	
QCM-250	VALVE MOTOR OPERATOR	X		V5	
	PWR. CABLE TERMINATION AT VALVE MTR. OPERATOR	X		TP3	
	PWR. CABLE TERMINATION AT FLOOD UP TERM. BOX	X		TP2	
	PWR. CABLE TERMINATION inside flood up tube AT PENETRATION	X		TP1	
	control cable term at valve lim. sw's	X		TC1	
	control cable term at term. box	X		TC8	
	control cable term at penetration. box	X		TC7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-11

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-012	SOLENOID	X		S17	
9054R-1	CONTROL CABLE	X		CC1	
8+91CR-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at Solenoid	X		TC15	
	control cable term at term box	X		TC8	
	control cable term at Pen. term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-21

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-021	SOLENOID	x		S17	
9181R-1	CONTROL CABLE	x		CI1 CI2	
9171CR-1	CONTROL CABLE	x		CC7 CC8	
	control cable term at Solenoid	x		TC15	
	Control cable term at Pen. Term box	x		TC8	
	control cable term at term box	x		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-101

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-121	SOLENOID	X		S17	
8480CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC15	
	control cable term at Pen. term box	X		TC8	
	control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-102

PLANT ID No.	GENERIC NAME.	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-122	SOLENOID	X		S17	
9195G-1	CONTROL CABLE	X		CC1	
9191CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC16	
	control cable term at Pen. term box	X		TC8	
	control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-103

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-123	SOLENOID	X		S17	
8478G-1	CONTROL CABLE	X		CC1	
9196CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC16	
	control cable term at Pen. term box	X		TC8	
	Control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-104

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO - 124	SOLENOID	X		S17	
8479G-1	CONTROL CABLE	X		CC1	
				-	
				-	
9197CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC16	
	control cable term at Pen term box	X		TC8	
	control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-105

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-125	SOLENOID	X		S17	
9056G-1	CONTROL CABLE	X		CC1	
9052CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC16	
	control cable term at Pen term box	X		TC8	
	control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-106

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-126	SOLENOID	X		S17	
9061G-1	CONTROL CABLE	X		CC1	
9057CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC16	
	control cable term at Pen. term box	X		TC8	
	control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve VCR-107

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-127	SOLENOID	X		S17	
9070G-1	CONTROL CABLE	X		CC1	
9066CG-1	CONTROL CABLE	X		CC7 CC8	
	control cable term at solenoid	X		TC16	
	control cable term at Pen. term box	X		TC8	
	control cable term at term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPC-253

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MPC-253	PRESS. CONTROLLER		X	I13	
9318 0-1	CONTROL CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT CONTROLLER		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPC-253

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MPC-253	PRESS. CONTROLLER		X	I13	
9318 0-1	CONTROL CABLE		X	CI3 CI4 CI5	
	CABLE TERM. AT CONTROLLER		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM INSTRUMENT MPC-254

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPC-254	Press. Controller		X	I13	
9318 B-2	Control Cable		X	CI3 CI4 CI5	
	Cable Term. at Controller		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE NRV-153

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NRV-153	SOLENOID	X		S11	
	LIMIT SWITCH	X		LS1	
876461	CONTROL CABLE	X		CC7 CC8	
877161	CONTROL CABLE	X		CC5 CC6	
877261	CONTROL CABLE	X		CC5 CC6	
877361	CONTROL CABLE	X		CC5 CC6	
858861	CONTROL CABLE	X		CC1	
	CONTROL CABLE TERM. A SOLENOID	X		TC16	
	CONTROL CABLE TERM. A TERM. BOX	X		TC8	
	CONTROL CABLE TERM. A FLOOD UP TERM BOX	X		TC7	
	CONTROL CABLE TERM. A FLOOD UP TUBE	X		TC6	
	control cable term at Lim Sw's	X		LS1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE NRV-152

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NRV-152	SOLENOID	X		S11	
	LIMIT SWITCH	X		LS1	
875921	CONTROL CABLE	X		CC7 CC8	
876021	CONTROL CABLE	X		CC5 CC6	
876121	CONTROL CABLE	X		CC5 CC6	
876221	CONTROL CABLE	X		CC5 CC6	
862621	CONTROL CABLE	X		CC1	
	CONTROL CABLE TERM. A SOLENOID	X		TC16	
	CONTROL CABLE TERM A TERM. BOX	X		TC8	
	CONTROL CABLE TERM. A FLOOD UP TERM BOX	X		TC7	
	CONTROL CABLE TERM A FLOOD UP TUBE	X		TC6	
	control Cable term at lim. Sw's	X		LS1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM _____ VALVE NRV-151

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NRV-151	SOLENOID	X		S1	
	LIMIT SWITCH	X		LS1	
875421	CONTROL CABLE	X		CC5 CC6	
875521	CONTROL CABLE	X		CC5 CC6	
875621	CONTROL CABLE	X		CC5 CC6	
875721	CONTROL CABLE	X		CC5 CC6	
857721	CONTROL CABLE	X		CC1	
	CONTROL CABLE TERM at Solenoid	X		TC16	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TER. AT FLOOD UP TERM BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	
	control cable term at Lim. sw's	X		LS1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM NMO-151 Valve

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NMO-151	VALVE MOTOR OPERATOR	X		V9	
8758CR1	POWER CABLE	X		CP7 CP8 CP9	
8750CR1	CONTROL CABLE	X		CC7 CC8	
875121	CONTROL CABLE	X		CC1	
	POWER CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	control cable term at valve lim. sw's	X		TC12	
	control cable term at term box	X		TC8	
	control cable term at Pen. term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve NMO-153

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NMO-153	VALVE MOTOR OPERATO	X		V9	
8763CG1	POWER CABLE	X		CP7 CP8 CP9	
8764CG1	CONTROL CABLE	X		CC7 CC8	
8765G1	CONTROL CABLE	X		CC7 CC8	
	Power cable term at valve motor	X		TP3	
	Power cable term at Floodup box	X		TP2	
	Power cable term inside floodup tube at pen.	X		TP1	
	control cable term at valve lim. sw's	X		TC12	
	control cable term at term box	X		TC8	
	control cable term at Pen. Term box	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Valve NMO-152

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NMO-152	VALVE MOTOR OPERATOR	X		V9	
8752CR1	POWER CABLE	X		CP7 CP8 CP9	
8753CR1	CONTROL CABLE	X		CC7 CC8	
804921	CONTROL CABLE	X		CC7 CC8	
	Power cable term at valve motor	X		TP3	
	Power cable term at Floodup box	X		TP2	
	Power cable term inside Floodup tube at Pen	X		TP1	
	control cable term at valve lim sw's	X		TC12	
	control cable term at term box	X		TC8	
	control cable term at Pen term box	X		TC8	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 1
DOCKET No. 50-315, LICENSE No. DPR-58

SYSTEM Motor Operated Valve Grease

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
Mobilux EP-2	Grease	X	X	G-1	

ATTACHMENT 3 TO AEP:NRC:00356A

REVISED RESPONSE TO IE BULLETIN 79-01B ACTION ITEM 1

"MASTER LIST NO. 2, VOLUME 2: UNIT 2 COMPONENTS"

DONALD C. COOK NUCLEAR PLANT

ATTACHMENT 3 TO AEP:NRC:00356A

REVISED RESPONSE TO IE BULLETIN 79-01B ACTION ITEM 1

"MASTER LIST NO. 2, VOLUME 2: UNIT 2 COMPONENTS"

DONALD C. COOK NUCLEAR PLANT

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Electrical Penetrations

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
1P6	4KV CONTAINMENT PENETRATIONS	X		EP-01	
1P7		X		EP-01	
2P5		X		EP-01	
2P6		X		EP-01	
3P7		X		EP-01	
3P8		X		EP-01	
4P7		X		EP-01	
4P8		X		EP-01	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Electrical Penetrations

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
1P1	600V Containment Penetrations	X		EP-02	
1P2		X		EP-02	
1P3		X		EP-02	
1P4		X		EP02	
2P2		X		EP-02	
2P3		X		EP-02	
2P4		X		EP02	
2P7		X		EP 02	
2P8		X		EP02	
3P1		X		EP 02	
3P2		X		EP02	
3P3		X		EP-02	
3P6		X		EP02	
4P2		X		EP02	
4P3		X		EP-02	
4P4		X		EP-02	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM ELECTRICAL PENETRATIONS

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
4P5	600 V CONTAINMENT PENETRATIONS	X		EP-02	
4P6		X		EP-02	
4C1		X		EP-02	
4C2		X		EP-02	
4C3		X		EP-02	
1C1		X		EP-02	
1C3		X		EP-02	
1C4		X		EP-02	
4I5		X		EP-02	
4I6		X		EP-02	
4I7		X		EP-02	
4I8		X		EP-02	
1I5		X		EP-02	
1I6		X		EP-02	
1I8		X		EP-02	
3I8		X		EP-02	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316; LICENSE No. DPR-74

SYSTEM Electrical Penetrations

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
3I7	600v Containment Penetrations	X		EP 02	
3I6		X		EP 02	
3I5		X		EP 02	
2I8		X		EP-02	
2I7		X		EP-02	
2I6		X		EP-02	
2I5		X		EP-02	
3C4		X		EP 02	
3C2		X		EP 02	
3C1		X		EP-02	
2C4		X		EP-02	
2C3		X		EP 02	
2C1		X		EP 02	
1I7		X		EP 02	
EP-14		X		EP 02	

01

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

VALVE MRV-211

SYSTEM _____

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
				S7	
9000 G-2	CONTROL CABLE		X	CC7 CC8	
9002 G-2	CONTROL CABLE		X	CC7	
	CONTROL CABLE TERM. AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM AT SOL. XSO-211		X	TC15	
XSO-211	Solenoid		X	S7	

01

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE MRV-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
				S7	
9000R-2	CONTROL CABLE		X	CC7 CC8	
9002R-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT TERMINAL BOX		X	TC13	
	CONTROL CABLE TERM AT SOL. XSO-212		X	TC15	
XSO-212	SOLENOID		X		

DONALD C. COOK NUCLEAR PLANT UNIT No. 2 VALVE
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM MRV-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
0006 G-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT SOL. XSO-221		X	TC15	
XSO-221	SOLENOID		X	S7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE MRV-222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9006 R-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT SOL XSO-222		X	TC15	
XSO-222	SOLENOID		X	S7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

VALVE MRV-231

SYSTEM

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9018G-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT SOL XSO-231		X	TC15	
XSO-231	SOLENOID		X	S7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE MRV-232

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9018R-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT XSO-232		X	TC15	
XSO-232	SOLENOID		X	S7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

VALVE

SYSTEM _____ MRV-241.

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9022G-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT SOL. XSO-241		X	TC15	
XSO-241	SOLENOID		X	S7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

MRV-242

SYSTEM

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9022R-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM AT XSO-242		X	TC15	
XSO-242	SELONOID		X	S7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFI-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-210	FLOW INDICATOR		X	I5	
5152-2	INSTRUMENT CABLE		X	CI8 CI9 CI10 CI11	
	INSTRUMENT CABLE TERM AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFI-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-220	FLOW INDICATOR		X	I5	
5750-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFI-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-230	FLOW INDICATOR		X	IS	
5151-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	II1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT. FFI-240.

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFI-240	FLOW INDICATOR		X	I5	
5153-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FRV-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-292 20-FRV-210	SOLENOID		X	S3	
XSO-291	SOLENOID		X	S3	
9502R-2	CONTROL CABLE		X	CC7 CC8	
9327R-2	CONTROL CABLE		X	CC1	
9330 G-2	CONTROL CABLE		X	CE8 CE9 CE10 CE11	
9328G-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM.'s AT TERM. BOX		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM VALVE FRV-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-293	SOLENOID		X	S3	
XSO-294	SOLENOID		X	S3	
9334G-2	CONTROL CABLE		X	CC7 CC8	
9335G-2	CONTROL CABLE		X	CC1	
9329R-2	CONTROL CABLE		X	CI8 CI9 CI10 CI11	
9330R-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM.'S AT TERM. BOX		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FRV-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-295	SOLENOID		X	S3	
XSO-296	SOLENOID		X	S3	
9341G-2	CONTROL CABLE		X	CC7 CC8	
9342G-2	CONTROL CABLE		X	CC1	
9332G-2	CONTROL CABLE		X	CE8 CE9 CE10 CE11	
9333G-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM.'S AT TERM BOX		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FRV-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-298	SOLENOID		X	S3	
XSO-297	SOLENOID		X	S3	
9506R-2	CONTROL CABLE		X	CC7 CC8	
9336R-2	CONTROL CABLE		X	CC1	
9401G-2	CONTROL CABLE		X	CC8 CC9 CC10 CC11	
9349G-2	CONTROL CABLE		X	CC1	
	CONTROL CABLE TERM. AT SOLENOIDS		X	TC15	
	CONTROL CABLE TERM.'S AT TERM. BOX		X	TC13	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE FMO-201.

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-201	VLV. MOTOR OPERATOR		X	V8	
9753 G-2	POWER CABLE		X	CP3	
9754 G-2	CONTROL CABLE		X	CC9 CC10	
9755 G-2	CONTROL CABLE		X	CC9 CC10	
	CONTROL CABLE TERM AT MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM AT VA. TERM BOX		X	TL13	
	POWER CABLE TERM. AT MOTOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE FMO-202

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-202	VLV. MOTOR OPERATOR		X	V8	
9753R-2	POWER CABLE		X	CP1 CP2	
9754R-2	CONTROL CABLE		X	CC9 CC10	
9755R-2	CONTROL CABLE		X	CC9 CC10	
	CONTROL CABLE TERM. AT VLV. MOTOR OPERATOR		X	TC9	
	CONTROL CABLE TERM. AT VALVE TERM BOX		X	TC13	
	POWER CABLE TERM. AT MOTOR		X	TP3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE FMO-203

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-203	VALVE MOTOR OPERATOR		X	V8	
9759 R-2	POWER CABLE		X	CP1 CP2	
9760 R-2	CONTROL CABLE		X	CC9 CC10	
9761 R-2	CONTROL CABLE		X	CC9 CC10	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC9	
	CONTROL CABLE TERM. AT VALVE TERM. BOX		X	TC13	
	POWER CABLE TERM. AT VLV. MOTOR		X	TP3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FMO-204

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-204	VALVE MOTOR OPERATOR		X	V8	
9759 G-2	POWER CABLE		X	CP1 CP2	
9760 G-2	CONTROL CABLE		X	CC9 CC10	
9761 G-2	CONTROL CABLE		X	CC9 CC10	
	CONTROL CABLE TERM. AT VLV.		X	TC9	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	POWER CABLE TERM. AT VLV. MTR.		X	TP3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM FMO-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-211	VALVE MOTOR OPERATOR		X	V6	
9982 BR-2	POWER CABLE		X	CC2 CC3 CC4	
9983BR-2	CONTROL CABLE		X	CI14	
9981BR-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	
9955BR-2	CONTROL CABLE		X	CC7 CC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVS. FMO-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-212	VALVE MOTOR OPERATOR		X	V6	
9092R-2	POWER CABLE		X	CP1 CP2	
9093R-2	CONTROL CABLE		X	CC7 CC8	
9094R-2	CONTROL CABLE		X	CI14	
	POWER CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC13	
	CONTROL CABLE TERM. AT VLV. TERM. BOX		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE FMO-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-221	VALVE MOTOR OPERATOR		X	V6	
9998BR-2	POWER CABLE		X	CC2 CC3 CC4	
9999BR-2	CONTROL CABLE		X	CC7 CC8	
9904BR-2	CONTROL CABLE		X	CI14	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	
9985BR-2	CONTROL CABLE		X	CC7 CC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE FMO-222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-222	VALVE MOTOR OPERATOR		X	V6	
8533G-2	POWER CABLE		X	CP1 CP2	
8532G-2	CONTROL CABLE		X	CC7 CC8	
8536G-2	CONTROL CABLE		X	CI14	
	POWER CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC13	
	CONTROL CABLE TERM'S. AT VLV. TERM. BOX		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FMO-231

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-231	VALVE MOTOR OPERATOR		X	V6	
9993 BR-2	POWER CABLE		X	CC2 CC3 CC4	
9992 BR-2	CONTROL CABLE		X	CC7 CC8	
9994 BR-2	CONTROL CABLE		X	CC14	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	
9995 BR-2	CONTROL CABLE		X	CC7 CC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE FMO-232

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-232	VALVE MOTOR OPERATOR		X	V6	
8535G-2	POWER CABLE		X	CP1 CP2	
8534G-2	CONTROL CABLE		X	CC1	
8537G-2	CONTROL CABLE		X	CI14	
	POWER CABLE TERM. AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC13	
	CONTROL CABLE TERM'S. AT VLV. TERM. BOX		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FMO-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-241	VALVE MOTOR OPERATOR		X	V6	
9977BR-2	POWER CABLE		X	CC2 CC3 CC4	
9976BR-2	CONTROL CABLE		X	CC7 CC8	
9978BR-2	CONTROL CABLE		X	CI14	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	
9968BR-2	CONTROL CABLE		X	CC7 CC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE FMO-242

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FMO-242	VALVE MOTOR OPERATOR		X	V6	
9086R-2	POWER CABLE		X	CP1 & CP2	
9087R-2	CONTROL CABLE		X	CC7 CC8	
9088R-2	CONTROL CABLE		X	CI4	
	POWER CABLE TERMINATION AT VLV. MTR. OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT VLV. MTR. OPERATOR		X	TC13	
	CONTROL CABLE TERM. AT VLV. TERM. BOX		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WPS-702 PRESS. SW

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
WPS-702	PRESSURE SWITCH		X	I32	
84476-2	CONTROL CABLE		X	CC2 CC3 CC4	
	CONTROL CABLE TERM. AT PRES. SWITCH		X	TT6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE WMO-712

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-712	VALVE MOTOR OPERATOR		X	V6	
8294 G-2	POWER CABLE		X	CP1 CP2	
8295 G-2	CONTROL CABLE		X	CC7 CC8	
8296 G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE WMO-714

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-714	Valve Motor Operator		X	V6	
8197 G-2	Power Cable		X	CP1 CP2	
8198 G-2	Control Cable		X	CI12	
8968 G-2	Control Cable		X	CC1	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC11	
8199 G-2	Control Cable		X	CI12	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WMO-724 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-724	VALVE MOTOR OPERATOR		X	U6	
8057G-2	POWER CABLE		X	CP1 CP2	
80580-2	CONTROL CABLE		X	CC7 CC8	
8059G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT VA. TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WMO-726 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-726	VALVE MOTOR OPERATOR		X	U6	
8060G-2	POWER CABLE		X	CP1 CP2	
8061G-2	CONTROL CABLE		X	CC7 CC8	
8062G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT VA. TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPER.		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT WPS-706

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WPS-706	INSTRUMENT		X	I32	
8447R-2	Control Cable		X	CC2 CC3 CC4	
	Control Cable Term. at Instru		X	TI6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WMO-716

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-716	VALVE MOTOR OPERATOR		X	V6	
8294R-2	POWER CABLE		X	CP1 CP2	
8295R-2	CONTROL CABLE		X	CC7 CC8	
8296R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WMO-718

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-718	VALVE MOTOR OPERATOR		X	V6	
8255R-2	POWER CABLE		X	CP1 CP2	
8256R-2	CONTROL CABLE		X	CC7 CC8	
8968R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	
8257R-2	CONTROL CABLE		X	CC7 CC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE WMO-722

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-722	Valve Motor		X	U6	
8057R-2	Power Cable		X	CP1 CP2	
8058R-2	Control Cable		X	CC7 CC8	
8059R-2	Control Cable		X	CC7 CC8	
	Power Cable term. at motor		X	TP3	
	Control Cable term. at term. Box		X	TC13	
			X		
	Control Cable term. at valve		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE WMO-728

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
WMO-728	VALVE MOTOR		X	V6	
8060R-2	Power Cable		X	CP1 CP2	
8061R-2	Control Cable		X	CC7 CC8	
8062R-2	Control Cable		X	CC7 CC8	
	Power Cable Term. at Motor		X	TP3	
	Control Cable Term. at Term. Box		X	TC13	
	Control Cable Term. at valve		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM: INSTRUMENT NPS-121

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPS-121	INSTRUMENT	X		I23 I24	
9765C8-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM INSTRUMENT NPS-122

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NPS-122	INSTRUMENT	X		I23 I24	
9766CY-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316; LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-910

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-910	VALVE MOTOR OPERATOR		X	U8	
9955 G-2	POWER CABLE		X	CP1 CP2	
8031 G-2	CONTROL CABLE		X	CC9 CC10	
8032 G-2	CONTROL CABLE		X	CC9 CC10	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-911

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-911	VALVE Motor Operator		X	V8	
8026 R-1	Power CABLE		X	CP1 CP2	
8031 R-2	CONTROL CABLE		X	CC9 CC10	
8032 R-2	CONTROL CABLE		X	CC9 CC10	
	Power CABLE TERM. AT Valve Motor Operator		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE QMO-225

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
QMO-225	Valve Motor Operator		X	V6	
8039 G-2	Power Cable		X	CP1. LP2	
8037 G-2	Control Cable		X	CC7 CC8	
8038 G-2	Control Cable		X	CC7 CC8	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE QMO-226

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
QMO-226	VALVE MOTOR OPERATOR		X	V6	
8039 R-2	POWER CABLE		X	CP1 CP2	
8037 R-2	CONTROL CABLE		X	CC7 CC8	
8038 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM EAST CENTRIFUGAL CHARGING PUMP

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
PP-050E	EAST CENT. CHARGING PUMP MOTOR		X	M1	
800462	POWER CABLE		X	CP13	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G10	
	Coupling Grease		X	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WEST CENTRIFUGAL CHARGING PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-050W	WEST CENT. CHARGING PUMP MOTOR		X	M1	
800722	POWER CABLE		X	CP13	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G10	
	Coupling Grease		X	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM EAST CHARGING & LUBE OIL PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
Part of PP-050E	EAST CHARG. & LUBE OIL PUMP MOTOR		X	M1	
827662	POWER CABLE		X	CP1 CP2	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor O.i		x	G10	
	Coupling Grease		x	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM WEST CHARGING & LUBE OIL PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
Part of PP-050W	WEST CHARG. & LUBE OIL PUMP MOTOR		X	M1	
8276R2	POWER CABLE		X	CP1 CP2	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor O.L		X	G10	
	Coupling Grease		X	G11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM VA-CMO-419

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
CMO-419	VALVE MOTOR OPERATOR		X	V6	
8250G-2	POWER CABLE		X	CP1 CP2	
8908G-2	CONTROL CABLE		X	CC7 CC8	
8251G-2	CONTROL CABLE		X	CC7 CC8	
8252G-2	CONTROL CABLE		X	CC5 CC6	
8253G-2	CONTROL CABLE		X	CC7 CC8	
8909G-2	CONTROL CABLE		X	CC2 CC3 CC4	
8254G-2	CONTROL CABLE		X	CC2 CC3 CC4	
	POWER CABLE TERM AT VA CMO-419		X	TP3	
	CONTROL CABLE TERM AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VA MOTOR OPERATOR.		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM CMO-429

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
CMO-429	Valve Motor Operator		X	V6	
8902 R-2	Power Cable		X	CP1 CP2	
8908 R-2	Control Cable		X	CC2 CC3 CC4	
8903 R-2	Control Cable		X	CC7 CC8	
8907 R-2	Control Cable		X	CC7 CC8	
8906 R-2	Control Cable		X	CC2 CC3 CC4	
8905 R-2	Control Cable		X	CC5 CC6	
8904 R-2	Control Cable		X	CC7 CC8	
	Power Cable Term at Valve motor operator		X	TP3	
	Control Cable Term at Valve motor operator		X	TC13	
	Control Cable Term at Term. Box		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-51

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-51	FLOW INDICATOR	X		I7 I8 I9	
4410 CO-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-52

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-52	FLOW INDICATOR	X		I7 I8 I9	
6211 C8-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-53

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-53	FLOW INDICATOR	X		I7 I8 I9	
6210 CY-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT IFI-54

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
IFI-54	FLOW INDICATOR			I7 I8 I9	
6212 CW-2	INSTRUMENT CABLE			CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT			TI5	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING			TI3	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-260

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-260	INSTRUMENT		X	I10	
4610-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	CABLE TERM. AT INSTRUMENT		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-266

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-266	INSTRUMENT		X	I10	
1A897-2	INSTR. CABLE		X	CI5 CI6 CI7	
	CABLE TERM. AT INSTRUMENT.		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO51

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-51	VALVE MOTOR OPERATOR	X		V 1	
8315CG-2	POWER CABLE	X		CP9 CP10 CP11	
8316CG-2	CONTROL CABLE	X		CC7 CC8	
8317G-2	CONTROL CABLE	X		CC7 CC8	
	CONTROL CABLE TERM. AT VLV MTR. OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERM BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	
	POWER CABLE TERM. AT VLV. MTR. OPERATOR	X		TP3	
	POWER CABLE TERM AT FLOOD UP TERM BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____, VALVE IMO-52

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-52	VALVE MOTOR OPERATOR	X		V1	
8080 CR-2	POWER CABLE	X		CP9 CP10 CP11	
8081 CR-2	CONTROL CABLE	X		CC7 CC8	
8082 R-2	CONTROL CABLE	X		CC7 CC8	
	CONTROL CABLE TERM. AT MOTOR OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	
	POWER CABLE TERM. AT VALVE MTR. OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE.	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-53

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-53	VLV. MTR. OPERATOR	X		V 1	
8444CG-2	POWER CABLE	X		CP9 CP10 CP11	
8445CG-2	CONTROL CABLE	X		CC7 CC8	
	CONTROL CABLE TERM. AT MOTOR OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE.	X		TC6	
	POWER CABLE TERM. AT MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-54

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-54	VLV. MTR. OPERATOR	X		V. 1	
8472CR-2	POWER CABLE	X		CP9 CP10 CP11	
8473CR-2	CONTROL CABLE	X		CC7 CC8	
	CONTROL CABLE TERM. AT MOTOR OPERATOR	X		TC3	
	CONTROL CABLE TERM. AT FLOOD UP TERM BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	
	POWER CABLE TERM. AT. MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-255

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-255	Valve Motor Operator		X	V6	
8177 G-2	Power Cable		X	CP1 CP2	
8176 G-2	Control Cable		X	CC7 CC8	
8178 G-2	Control Cable		X	CC7 CC8	
	Power Cable Term. at Valve Motor Operator		X	TP3	
	Control Cable Term. at Term. Box		X	TC13	
	Control Cable Term. at Valve Motor Operator		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-256

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-256	VALVE MOTOR OPERATOR		X	V6	
8177 R-2	POWER CABLE		X	CP1 CP2	
8176 R-2	CONTROL CABLE		X	CC7 CC8	
8178 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-261

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-261	Valve Motor Operator		X	V8	
8030 R-2	Power Cable		X	CP1 CP2	
8250 R-2	Control Cable		X	CC7 CC8	
8251 R-2	Control Cable		X	CC7 CC8	
	Power Cable Term. At Valve Motor Operator		X	TP3	
	Control Cable Term. At Term. Box		X	TC13	
	Control Cable Term. At Valve Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-262

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-262	VALVE MOTOR OPERATOR		X	V6	
8258 G-2	POWER CABLE		X	CP1 CP2	
8259 G-2	CONTROL CABLE		X	CC7 CC8	
8260 G-2	CONTROL CABLE		X	CC9 CC10	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No: DPR-74

SYSTEM _____ VALVE IMO-263

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-263	VALVE MOTOR OPERATOR		X	V6	
8252 R-2	POWER CABLE		X	CP1 CP2	
8253 R-2	CONTROL CABLE		X	CC7 CC8	
8254-R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-270

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-270	VALVE MOTOR OPERATOR		X	V6	
9651 G-2	POWER CABLE		X	CP1 CP2	
9652 G-2	CONTROL CABLE		X	CC7 CC8	
9653 G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-275

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-275	VALVE MOTOR OPERATOR		X	V6	
9651 R-2	POWER CABLE		X	CP1 CP2	
9652 R-2	CONTROL CABLE		X	CC7 CC8	
9653 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-360

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-360	VALVE MOTOR OPERATOR		X	V8	
8255 G-2	POWER CABLE		X	CP1 CP2	
8256 G-2	CONTROL CABLE		X	CC7 CC8	
8257 G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-361

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-361	VALVE MOTOR OPERATOR		X	V8	
8261 G-2	POWER CABLE		X	CP1 CP2	
8262 G-2	CONTROL CABLE		X	CC7 CC8	
8263 G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-362

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-362	Valve Motor Operator		X	V8	
8261 R-2	Power Cable		X	CP1 CP2	
8262 R-2	Control Cable		X	CC7 CC8	
8263 R-2	Control Cable		X	CC7 CC8	
	Power Cable Term. At Valve Motor Operator		X	TP3	
	Control Cable Term. At Term. Box		X	TC13	
	Control Cable Term. At Valve Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM SAFETY INJECTION PUMP 2N

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-026N	SAFETY INJECTION PUMP 2N MOTOR		X	M1	
800062	POWER CABLE		X	CP7 CP8 CP12	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Pump Oil		X	G7	
	Motor Oil		X	G8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM SAFETY INJECTION PUMP 2S

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-026S	SAFETY INJECTION PUMP 2S MOTOR		X	M1	
800022	POWER CABLE		X	CP7 C8B CP12	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Pump Oil		x	67	
	Motor Oil		x	68	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument + IFC-315

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFC-315	Instrument		X	I6	
8872 G-2	Instrument Cable		X	CI8 CI9 CI10 CI11	
	Cable Term. at Instrument		X	TC13	
	Cable Term. at Term. Box		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFC-325

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFC-325	INSTRUMENT		X	I6	
8867 G.2	INSTRUMENT CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTRUMENT		X	TC13	
	CABLE TERM. AT TERM. BOX		X	TI1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-310

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-310	INSTRUMENT		X	I11	
6296-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-311

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-311	INSTRUMENT		X	I12	
5104-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-320

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-320	INSTRUMENT		X	I11	
6297-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT IFI-321

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IFI-321	INSTRUMENT		X	I12	
5103-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-310

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-310	VALVE Motor Operator		X	V6	
8076G2	Power CABLE		X	CP1 CP2	
8077G2	CONTROL CABLE		X	CC7 CC8	
8078G2	CONTROL CABLE		X	CC7 CC8	
	Power CABLE TERM. AT VALVE Motor Operator		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE Motor Operator		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-312

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-312	VALVE MOTOR OPERATOR		X	V6	
819162	POWER CABLE		X	CP1 CP2	
819262	CONTROL CABLE		X	CC7 CC8	
819362	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-314

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-314	VALVE Motor Operator		X	V6	
9645G2	Power CABLE		X	CP1 CP2	
9647G2	CONTROL CABLE		X	CC7 CC8	
9648G2	CONTROL CABLE		X	CC7 CC8	
	Power CABLE TERM. AT VALVE Motor Operator		X	TP3	
	CONTROL CABLE TERM. AT TERM. Box		X	TC13	
	CONTROL CABLE TERM. AT VALVE Motor Operator		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM 1MO-315 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
1MO-315	VA. MOTOR OPERATOR	X		V2	
9628CG-2	POWER CABLE	X		CP9 CP10 CP11	
9627CG-2	CONT. CABLE	X		CC7 CC8	
9643G-2	CONT. CABLE	X		CC7 CC8	
	POWER. CABLE TERM. AT VA. MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONT. CABLE TERM. AT VA. MOTOR OPERATOR	X		TC4	
	CONT. CABLE TERM. AT TERM. BOX	X		TC8	
	CONT. CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONT. CABLE TERM. AT FLOOD UP TUBE	X		TC6	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM IMO-316 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-316	VALVE MOTOR OPERATOR	X		V2	
9631 CG-2	POWER CABLE	X		CP8 CP10 CP11	
9644G-2	CONTROL CABLE	X		CC7 CC8	
9630 CG-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM. AT VALVE OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-320

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-320	VALVE MOTOR OPERATOR		X	V6	
807622	POWER CABLE		X	CP1 CP2	
807722	CONTROL CABLE		X	CC7 CC8	
807822	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-322

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-322	VALVE MOTOR OPERATOR		X	V6	
8191R2	POWER CABLE		X	CP1 CP2	
8192R2	CONTROL CABLE		X	CC7 CC8	
8193R2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-324

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-324	VALVE MOTOR OPERATOR		X	V6	
9645R2	POWER CABLE		X	CP1 CP2	
9647R2	CONTROL CABLE		X	CC7 CC8	
9648R2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM IMO-325 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-325	VALVE OPERATOR	X		V2	
9628 CR-2	POWER CABLE	X		CP9 CP10 CP11	
9643R-2	CONTROL CABLE	X		CC7 CC8	
9627 CR-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM. AT VALVE OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM IMO-326 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-326	VALVE OPERATOR	X		V2	
9631CR-2	POWER CABLE	X		CP9 CP10 CP11	
9644R-2	CONTROL CABLE	X		CC7 CC8	
9630 CR-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM. AT VALVE OPERATOR	X		TC4	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT. FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-330

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-330	VALVE MOTOR OPERATOR		X	V7	
8186 G-2	POWER CABLE		X	CP1 CP2	
8185 G-2	CONTROL CABLE		X	CC7 CC8	
8188 G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-331

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-331	VALVE MOTOR OPERATOR		X	V7	
8185 R-2	POWER CABLE		X	CP1 CP2	
8186 R-2	CONTROL CABLE		X	CC7 CC8	
8188 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-340

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-340	Valve Motor Operator		X	V8	
8194 G-2	Power Cable		X	CP1 CP2	
8195 G-2	Control Cable		X	CC7 CC8	
8196 G-2	Control Cable		X	CC7 CC8	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-350

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-350	VALVE Motor Operator		X	V8	
8182 R-2	Power Cable		X	CP1 CP2	
8183 R-2	Control Cable		X	cc7 cc8	
8184 R-2	Control Cable		X	cc7 cc8	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-128

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-128	VALVE Motor Operator	X		V1	
8086 CR-2	Power Cable	X		CP-9 CP-10 CP-11	
8094 R-2	Control Cable	X		CC7 CC8	
8087 CR-2	Control Cable	X		CC7 CC8	
	Power Cable Term at Valve Motor Operator	X		TP3	
	Power Cable Term at Floodup Term. Box	X		TP2	
	Power Cable Term at Pen. inside Floodup Tube	X		TP1	
	Control Cable Term at Valve Motor Operator	X		TC3	
	Control Cable Term at Floodup Term Box	X		TC7	
	Control Cable Term at Pen. inside Floodup Tubes	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM RHR PUMP 2E

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-035E	RHR PUMP 2E MOTOR		X	M1	
800362	POWER CABLE		X	CP7 CP8 CP12	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Grease		X	G8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM RHR PUMP 2W

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-035W	RHR PUMP 2W MOTOR		X	M1	
800322	POWER CABLE		X	CP7 CP8 CP12	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Grease		X	69	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT PPP-300

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-300	CONTAINMENT PRESSURE INSTRUMENT		X	I29	
9305 W-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	INSTRUMENT CABLE TERM AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT PPP-301

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-301	CONTAINMENT PRESSURE INSTRUMENT		X	I29	
9304Y-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT PPP-302

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-302	CONTAINMENT PRESSURE INSTRUMENT		X	I29	
9305B-2	INSTRUMENT CABLE		X	C15 C16 C17	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	T15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT PPP-303

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PPP-303	CONTAINMENT PRESSURE INSTRUMENT		X	E30	
9304 0-2	INSTRUMENT CABLE		X	CI 8 CI 9 CI 10 CI 11	
	INSTRUMENT CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT ILS-950

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9541G-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	

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SYSTEM INSTRUMENT ILS-951

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
9544R-2	INSTRUMENT CABLE		X	C-5 C-6 C-7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-212	VALVE MOTOR OPERATOR		X	V7	
P070G-2	POWER CABLE		X	CP1 CP2	
8071G-2	CONTROL CABLE		X	CC7 CC8	
8072G-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE IMO-222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-222	Valve Motor Operator		X	V7	
8070 R-2	Power Cable		X	CP1 CP2	
8071 R-2	Control Cable		X	CC7 CC8	
8072 R-2	Control Cable		X	CC7 CC8	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC10	

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SYSTEM _____ VALVE IMO-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-221	VALVE MOTOR OPERATOR		X	U7	
8067 R-2	POWER CABLE		X	CP1 CP2	
8068 R-2	CONTROL CABLE		X	CC7 CC8	
8069 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM _____ VALVE IMO-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-220	VALVE MOTOR OPERATOR		X	V7	
8064 R-2	POWER CABLE		X	CP2 CP1	
8065 R-2	CONTROL CABLE		X	CC7 CC8	
8066 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM _____ VALVE IMO-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-210	Valve Motor Operator		X	V7	
P064 G-2	Power Cable		X	CP1 CP2	
P065 G-2	Control Cable		X	CC2 CC3 CC4	
P066 G-2	Control Cable		X	CC7 CC8	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM VALVE IMO-211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-211	VALVE Motor Operator		X	V7	
8067 G-2	Power CABLE		X	CP1 CP2	
8068 G-2	CONTROL CABLE		X	CC7 CC8	
8069 G-2	CONTROL CABLE		X	CC7 CC8	
	Power CABLE TERM. AT Valve Motor Operator		X	TP3	
	CONTROL CABLE TERM. AT TERM. Box		X	TC13	
	CONTROL CABLE TERM. AT Valve Motor Operator		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE IMO-215

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-215	VALVE Motor Operator		X	V7	
8073 G-2	Power CABLE		X	CP1 CP2	
8074 G-2	CONTROL CABLE		X	CC7 CC8	
8075 G-2	CONTROL CABLE		X	CC7 CC8	
	Power CABLE TERM. AT VALVE Motor Operator		X	TP3	
	CONTROL CABLE TERM. AT TERM. Box		X	TC13	
	CONTROL CABLE TERM. AT VALVE Motor Operator		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM VALVE IMO-225

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
IMO-225	VALVE MOTOR OPERATOR		X	V7	
8073 R-2	POWER CABLE		X	CP1 CP2	
8074 R-2	CONTROL CABLE		X	CC7 CC8	
8075 R-2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC10	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM EAST CONT. SPRAY PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-009 East	EAST CONT. SPRAY PUMP MOTOR		X	M2	
8002G2	POWER CABLE		X	CP13	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G3	
	Motor Grease		X	G4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM WEST CONT. SPRAY PUMP

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
PP-009 West	WEST CONT. SPRAY PUMP MOTOR		X	M2	
800222	POWER CABLE		X	CP13	
	POWER CABLE TERM. AT PUMP MOTOR		X	TP4	
	Motor Oil		X	G3	
	Motor Grease		X	G4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM VMO-101 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
VMO-101	VALVE MOTOR OPERATOR	X		V4	
9540CR-2	CONTROL CABLE	X		CC7 CC8	
9541R-2	CONTROL CABLE	X		CC7 CC8	
9539CR-2	POWER CABLE	X		CP9 CP10 CP11	
	POWER CABLE TERM. AT VA. MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT VA. MOTOR OPERATOR	X		TC2	
	CONTROL CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VMO-102 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
VMO-102	VALVE MOTOR OPERATOR	X		V4	
9608CG-2	POWER CABLE	X		CP9 CP10 CP11	
9608G-2	CONTROL CABLE	X		CC7 CC8	
9609CG-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM AT VA. MOTOR OPERATOR	X		TP3	
	POWER CABLE TERM AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM AT VA. MOTOR OPERATOR	X		TC2	
	CONTROL CABLE TERM AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM AT FLOOD UP TERM. BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Cont. Vent. Fan - 2HV-CEQ1

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
2HV-CEQ1	VENT. FAN	X		F1	
9532CR-2	POWER CABLE	X		CP4 CP5	
	POWER CABLE TERM. AT FAN MOTOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM CONT. VENT. FAN 2HV-CEQ2

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
2HV-CEQ2	FAN MOTOR	X		F1	
9604CG-2	POWER CABLE	X		CP4 CP5	
	POWER CABLE TERM. AT FAN MOTOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Hyd. Recombiner #2

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
8972CG-2	Power Cable	X		CP4 CP5 CP6	
	Power Cable Term. at Recombiner	X		TP3	
	Power Cable Term. at Flood up Term. Box	X		TP2	
	Power Cable Term. at Flood up Tube	X		TP1	
HR-2	Hydrogen Recombiner	X		H1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Hydrogen Recombiner Htr #1

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
8978 CR-2	Power Cable	X		CP4 CP5 CP6	
	Power cable term. at Recombiner	X		TP3	
	Power cable term. at flood up term box	X		TP2	
	Power cable term. at flood up tube	X		TP1	
HR-1	Hydrogen Recombiner	X		H1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT N35

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N35-CV	INSTRUMENT	✓		I17	
N35-SIG	INSTRUMENT	✓		I17	
N35-HV	INSTRUMENT	✓		I17	
9258CΦ-2	INSTR. CABLE	✓		I17	
9259CΦ-2	INSTR. CABLE	✓		I17	
9260CΦ-2	INSTR. CABLE	✓		I17	
	CABLE TERM. AT INSTRUMENT	✓		I17	
	CABLE TERM. AT JUNC. BOX	✓		I17	
	CABLE TERM. AT PENETRATION	✓		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM _____ INSTRUMENT N36

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N36 - CV.	INSTRUMENT	✓		I17	
N36 - SIG	INSTRUMENT	✓		I17	
N36 - HV	INSTRUMENT	✓		I17	
9258 CB-2	INSTR. CABLE	✓		I17	
9259 CB-2	INSTR. CABLE	✓		I17	
9260 CB-2	INSTR. CABLE	✓		I17	
	CABLE TERM. AT. INSTR.	✓		I17	
	CABLE TERM. AT JUNC. BOX	✓		I17	
	CABLE TERM. AT PENETRATION	✓		I17	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM _____ INSTRUMENT N41

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N41A-SIG.	INSTRUMENT	✓		I18	
N41B-SIG.	INSTRUMENT	✓		I18	
9264 CΦ-2	INSTR. CABLE	✓		I18	
9266 CΦ-2	INSTR. CABLE	✓		I18	
	CABLE TERM. AT INSTR.	✓		I12	
	CABLE TERM. AT JUNC. BOX	✓		I12	
	CABLE TERM. AT PENETRATION	✓		I8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENTS N42 A & B.

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N42A-SIG	INSTRUMENT	✓		I18	
N42B-SIG	INSTRUMENT	✓		I18	
9264CB-2	INSTR. CABLE	✓		I18	
9266CB-2	INSTR. CABLE	✓		I18	
	CABLE TERM. AT INSTR.	✓		I18	
	CABLE TERM. AT JUNC BOX	✓		I18	
	CABLE TERM. AT PENETRATION	✓		I18	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENT N43

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N43A-SIG	INSTRUMENT	✓		I18	
N43B-SIG	INSTRUMENT	✓		I18	
8468 CY-2	INSTR. CABLE	✓		I18	
8470 CY-2	INSTR. CABLE	✓		I18	
	CABLE TERM. AT INSTR.	✓		I18	
	CABLE TERM. AT JUNC. BOX	✓		I18	
	CABLE TERM. AT PENETRATION	✓		I18	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM N44

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
N44A-SIG.	INSTRUMENT	✓		I18	
N44B-SIG.	INSTRUMENT	✓		I18	
8468 CW-2	INSTR. CABLE	✓		I18	
8470 CW-2	INSTR. CABLE	✓		I18	
	CABLE TERM. AT INSTR.	✓		I18	
	CABLE TERM. AT JUNC. BOX	✓		I18	
	CABLE TERM. AT. PENETRATION	✓		I18	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENT NTP-110

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-110	INSTRUMENT	X		I27	
8708 CO-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-111

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-111	INSTRUMENT	X		I26	
8710 CD-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM _____ INSTRUMENT NTP-120

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-120	INSTRUMENT	X		I27	
8420 C8-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-121

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-121	INSTRUMENT	X		I26	
8722 CB-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-130

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-130	INSTRUMENT	X		I27	
8721CY-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT NTP-131

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-131	INSTRUMENT	X		I26	
8723 CY-2	INSTRUMENT CABLE	X		C=8 C=9 C=11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-140

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-140	INSTRUMENT	X		I27	
8732CW-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-141

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-141	INSTRUMENT	X		I28	
8734 CW-2	INSTRUMENT CABLE	X		cI8 cI9 cI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT NTP-210

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-210	INSTRUMENT	X		I27	
8709 CO-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-211

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-211	INSTRUMENT	X		I26	
8711 CO-2	INSTRUMENT CABLE	X		CI8 CI9 CI4	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT NTP-220

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-220	INSTRUMENT	X		I27	
8421CB-2	INSTRUMENT CABLE	X		CI8 CI9 CI10	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-221	INSTRUMENT	X		I26	
8723C8-2	INSTRUMENT CABLE	X		C28 C29 C211	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTP-230	INSTRUMENT	X		I27	
8722 CY-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-231

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-231	INSTRUMENT	X		I26	
8724CY-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTP-240

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-240	INSTRUMENT	X		I27	
8733 CW-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ INSTRUMENT NTP-241

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTP-241	INSTRUMENT	X		I26	
8735CW-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	
	CABLE TERMINATION AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-110

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-110	INSTRUMENT	X		I28	
8725 CO-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-120

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-120	INSTRUMENT	X		I28	
8726 CO-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE HEAD UP TUBING	X		TI3	
	CABLE TERMINATION AT HEAD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-130

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NTR-130	INSTRUMENT	X		I28	
8727 CO-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-140

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-140	INSTRUMENT	X		I22	
8728 CO-2	INSTRUM OUT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-210	INSTRUMENT	X		I28	
8729 CB-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOR OF TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOR OF TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

SYSTEM INSTRUMENT NTR-220

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-220	INSTRUMENT	X		I2	
8730 CB-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FROM UP TUBING	X		TI3	
	CABLE TERMINATION AT FROM UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-830

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-830	INSTRUMENT	X		I28	
873 1 QB-2	INSTRUMENT CABLE	X		CI8 CI9 CI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT RECEPTACLE INSIDE MOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT MOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NTR-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NTR-240	INSTRUMENT	X		I28	
8732CB-2	INSTRUMENT CABLE	X		cI8 cI9 cI11	
	CABLE TERMINATION AT INSTRUMENT	X		TI2	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	
	CABLE TERMINATION AT TERMINAL BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NLP-151

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NLP-151	INSTRUMENT	X		I19	
8734CO-2	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NLP-152

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NLP-152	INSTRUMENT	X		I19	
8737CB-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NLP-153

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NLP-153	INSTRUMENT	X		I19	
9601 CY-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURNING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NPP-151

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPP-151	INSTRUMENT	X		I21 I20 I22	
873360-2	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NPP-152

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NPP-152	INSTRUMENT	X		I21 I20 I22	
8736 CB-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NPP-153

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
NPP-153	INSTRUMENT	X		I21 I20 I22	
9600 CY-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT NPS-153

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NPS-153	INSTRUMENT	X		I25	
9600CW-2	Instrument Cable.	X		CI5 CI7	
	Cable term. at Instrument	X		TI1	
	Cable term. at Penetration.	X		TI4	

DONALD C. COOK NUCLEAR PLANT, UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument BLP-110

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-110	Instrument	X		I2 I1	
8584 CW-2	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument BLP-111

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-111	Instrument	X		I2 I1	
8558 CB-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument BLP-112

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-112	Instrument	X		I2 I1	
8584 CX-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT REGISTRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM Instrument BLP-120

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-120	Instrument	X		I2 I1	
8585CW-2	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOR UP TURBINE	X		TI3	
	CABLE TERMINATION AT FLOOR UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2 74
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument BLP-121

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-121	Instrument	X		E2 I1	
8558 CO-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

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SYSTEM / Instrument BLP-122

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-122	Instrument	X		I2 I1	
8085 CX-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT, UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument BLP-130

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-130	Instrument	X		I2 I1	
8586CW-2	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT RECEPTACLE INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-315, LICENSE No. DPR-74

SYSTEM Instrument BLP-131

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-131	Instrument	X		I2 I1	
855960-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Instrument BLP-132

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-132	Instrument	X		I2 I1	
8586CY-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM Unstrument BLP-140

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-140	Unstrument	X		I2 I1	
8587 CW-2	INSTRUMENT CABLE	X		CI1 CI2	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

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SYSTEM Instrument BLP-141

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
BLP-141	Instrument	X		I2 I1	
8559 CB-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT PENETRATION INSIDE FLOOD UP TUBING	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL BOX	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM Instrument BLP-142

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
BLP-142	Instrument	X		I2 I1	
8587 CY-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERMINATION AT INSTRUMENT	X		TI1	
	CABLE TERMINATION AT REGISTRATION INSIDE FLOOD UP TERMINAL	X		TI3	
	CABLE TERMINATION AT FLOOD UP TERMINAL OUTSIDE	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFC-210

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-210	Instrument		X	I4	
9070 0-2	Instrument Cable		X	CI 8 CI 9 CI 10 CI 11	
	Cable Term at Instrument		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFC-211

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FFC -211	INSTR.		X	I4	
9064B-2	INSTR CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENT FFC-220

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FFC-220	INSTRUMENT		X	I4	
9071 0-2	INSTRUMENT CABLE		X	CI5 CI6 CI7	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENT FFC-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-221	INSTR.		X	I4	
9070B-2	INSTR. CABLE		X	cI5 cI6 cI7	
	TE CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFC-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-230	INSTRUMENT		X	I4	
9064 CO-2	INSTRUMENT & CABLE		X	CI5 CI6 CI7	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFC-231

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FFC-231	INSTR		X	I4	
9065B-2	INSTR CABLE		X	CI5 CI6 CI7	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENT FFC-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
FFC-240	INSTRUMENT		X	I4	
9065 CO-2	INSTRUMENT CABLE		X	CI8 CI7 CI10 CI11	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT FFC-241

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
FFC-241	INSTR		X	I4	
9071B-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
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SYSTEM INSTRUMENT MFC-110

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-110	INSTRUMENT	X		I13	
9072 CO-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-111

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MFC-111	INSTR	X		I13	
9066-CB-2	INSTR. CABLE	X		CI5 CI7	
	CABLE TERM. AT INSTR.	X		TI1	
	CABLE TERM. AT PEN.	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-120

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-120	INSTR.	X		I13	
9072 CB-2	INSTR. CABLE	X		CI5 CI7	
	CABLE TERM. AT INSTR	X		TI1	
	CABLE TERM. AT PEN.	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-121

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-121	INSTRUMENT	X		I13	
9073 CO. 1	INSTR. CABLE	X		CI5 CI7	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT. UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-130

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-130	INSTR	X		I13	
9067 CB-2	& INSTR. CABLE	X		CI5 CI7	
	CABLE TERM. AT INSTR.	X		TI1	
	CABLE TERM. AT PEN.	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-131

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-131	INSTRUMENT	X		I13	
9066 CO-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERM. AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-140

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MFC-140	INSTRUMENT	X		I13	
9067 CO-2	INSTRUMENT CABLE	X		CI5 CI7	
	CABLE TERM AT INSTRUMENT	X		TI1	
	CABLE TERM AT PENETRATION	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MFC-141

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MFC-141	INSTRUMENT	X		I13	
9073 CB-2	INSTR CABLE	X		CJ5 CJ7	
	CABLE TERM. AT INSTR.	X		TI1	
	CABLE TERM. AT PEN.	X		TI4	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-210

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MPP-210	INSTRUMENT		X	=15	
9074 D-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	Cable Term. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP 211

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP 211	INSTR		X	I15	
9068B-2	INSTR CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-212

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-212	INSTRUMENT		X	I16	
9050W-2	INSTRUMENT CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTRUMENT		X	C TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-220

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MPP-220	INSTRUMENT		X	I15	
9075 0-2	INSTR. CABLE		X	CI1 CI2	
	CABLE TERM. AT INSTRUMENT		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-221

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-221	INSTR.		X	I15	
9074B-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTR		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP 222

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-222	INSTRUMENT		X	I16	
9050 Y-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-230

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-230	Instrument		X	I15	
9068 0-2	Instrument Cable		X	CI8 CI9 CI10 CI11	
	Cable Term. at Instrument.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-231.

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MPP-231	INSTR		X	I15	
9069B-2	INSTR CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT. INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP 232

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
MPP-232	INSTRUMENT		X	I16	
9051Y-2	INSTR. CABLE		X	cI8 cI9 cI10 cI11	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-240

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPD-240	Instrument		X	I15	
9069 0-2	Instrument Cable		X	a I8 c I9 c I10 c I11	
	Cable term. at Instrument.		X	T I5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP-241

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP-241	INSTR.		X	I15	
9075B-2	INSTR. CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPP 242

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MPP- 242	INSTRUMENT		X	I16	
9051 W-2	INSTR. CABLE		X	C=8 C=9 C=10 C=11	
	CABLE TERM. AT. INSTR.		X	TI5	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE MRV-213

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-213	Press. Transmitter		X	S11	
6841-2	Control Cable		X	CI5 CI6 CI7	
	Cable Term at Transmitter.		X	TC15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

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SYSTEM VALVE MRV-223

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-223	PRESS. TRANSMITTER		X	S11	
18132-2	CONTROL CABLE		X	CI8 CI9 CI10 CI11	
	CABLE TERM. AT TRANSMITTER		X	JC15	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE MRV-233

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-233	Press. Transmitter		X	S11	
18133-2	Control Cable		X	a=8 b=9 c=10 c=11	
	Cable term at Transmitter		X	TC15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE MRV-243

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
EPT-243	Press Transmitter		X	S11	
6842-2	Control Cable		X	CI5 LI6 CI7	
	Cable term. at transmitter		X	TC15	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM ICM-111 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-111	VALVE OPERATOR	X		VI	
9187CG-2	POWER CABLE	X		CP9 CP10 CP11	
9189CG-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONT. CABLE TERM. AT VALVE OPERATOR	X		TC3	
	CONT. CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CON. CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM ICM-129 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-129	VALVE OPERATOR	X		V1	
9188CG-2	POWER CABLE	X		CP9 CP10 CP11	
9190CG-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP T. BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONT. CABLE TERM. AT VALVE OPERATOR	X		TC3	
	CONT. CABLE TERM. AT FLOOD UP T. BOX	X		TC7	
	CONT. CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE ICM-250

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-250	VALVE MOTOR OPERATOR		X	V6	
817462	POWER CABLE		X	CP1 CP2	
817362	CONTROL CABLE		X	CC9 CC10	
817562	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE ICM-251

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-251	VALVE MOTOR OPERATOR		X	V6	
817422	POWER CABLE		X	CP1 CP2	
817322	CONTROL CABLE		X	CC7 CC8	
817522	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE ICM-260

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-260	VALVE MOTOR OPERATOR		X	V6	
963762	POWER CABLE		X	CP1 CP2	
963862	CONTROL CABLE		X	CC7 CC8	
963962.	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE ICM-265

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-265	VALVE MOTOR OPERATOR		X	V6	
8260R2	POWER CABLE		X	CP1 CP2	
8264R2	CONTROL CABLE		X	CC7 CC8	
8265R2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM ICM-305 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-305	VALVE OPERATOR	X		V10	
8267G-2	POWER CABLE		X	CP1 CP2	
9549G-2	POWER CABLE		X	EP-02	
8268G-2	CONTROL CABLE		X	CC9 CC10	
9603G-2	CONTROL CABLE		X	EP-02	
	POWER CABLE TERM. AT PEN. T. BOX		X	TC13	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP7	
	CONT. CABLE TERM. AT PEN. T. BOX		X	TC13	
	CONT. CABLE TERM. AT VALVE OPERATOR	X		TC14	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM ICM-306 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-306	VALVE OPERATOR	X		V10	
8267R-2	POWER CABLE		X	CP1 CP2	
9567R-2	POWER CABLE		X	EP02	
9569R-2	CONTROL CABLE		X	EP02	
8268R-2	CONTROL CABLE		X	CC9 CC10	
	POWER CABLE TERM. AT PEN. T. BOX		X	TC13	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	CONT. CABLE TERM. AT PEN. T. BOX		X	TC13	
	CONT. CABLE TERM. AT VALVE OPERATOR	X		TC14	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE ICM-311

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-311	VALVE Motor Operator		X	V8	
818762	Power Cable		X	CP1 CP2	
818962	Control Cable		X	CC7 CC8	
819062	Control Cable		X	CC7 CC8	
	Power Cable Term. AT Valve Motor Operator		X	TP3	
	Control Cable Term. AT Term. Box		X	TC13	
	Control Cable Term. AT Valve Motor Operator		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE ICM-321

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
ICM-321	VALVE MOTOR OPERATOR		X	V8	
8187R2	POWER CABLE		X	CP1 CP2	
8189R2	CONTROL CABLE		X	CC7 CC8	
8190R2	CONTROL CABLE		X	CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR OPERATOR		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE MOTOR OPERATOR		X	TC9	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM MCM-221 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MCM-221	Valve Motor Operator		X	V6	
9037R-2	Power Cable		X	CP1 CP2	
9038R-2	Control Cable		X	CC7 CC8	
9039R-2	Control Cable		X	CC7 CC8	
	Power Cable Term. at Valve Motor Operator		X	TP3	
	Control Cable Term. at Term. Box		X	TC13	
	Control Cable Term. at Valve Motor Operator		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM MCM-231 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
MCM-231	VALVE Motor Operator		X	V6	
9033G-2	Power CABLE		X	CP1 CP2	
9034G-2	CONTROL CABLE		X	CC7 CC8	
9035G-2	CONTROL CABLE		X	CC7 CC8	
	Power CABLE TERM. AT VALVE Motor Operator		X	TP3	
	CONTROL CABLE TERM. AT TERM. BOX		X	TC13	
	CONTROL CABLE TERM. AT VALVE Motor Operator		X	TC11	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM QCM-250 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
QCM-250	VALVE OPERATOR	X		V5	
8774 CG-2	POWER CABLE	X		CP9 CP10 CP11	
8775 CG-2	CONTROL CABLE	X		CC7 CC8	
8776 G-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE OPERATOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP TERM. BOX.	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONT. CABLE TERM. AT. VALVE OPERATOR	X		TC1	
	CONT. CABLE TERM. AT TERM. BOX	X		TC8	
	CONT. CABLE TERM. AT FLOOD UP TERM. BOX	X		TC7	
	CONT. CABLE TERM. AT FLOODUP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-11 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
X50-12	SOLENOID	X		S17	
8491CR-2	CONTROL CABLE	X		CC7 CC8	
9054R-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-21 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-21	SOLENOID	X		S17	
917/CR-2	CONTROL CABLE	X		CC7 CC8	
918/R-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-101 VALVE

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
XSO-121	SOLENOID	X		S17	
8480CG-2	CONTROL CABLE	X		CC7 CC8	
8484G-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VCR-102 VALVE ____

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-122	SOLENOID	X		S17	
9191CG-2	CONTROL CABLE	X		CC7 CC8	
9195G-2	CONTROL CABLE	X		CC7 CC8	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-103 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-124	SOLENOID	X		S17	
9196CG-2	CONTROL CABLE	X		CC7 CC8	
8478G-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC1b	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-104 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-123	SOLENOID	X		S17	
9197CG-2	CONTROL CABLE	X		CC7 CC8	
8479 G-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-105 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
YSO-125	SOLENOID	X		517	
9052CG-2	CONTROL CABLE	X		CC7 CC8	
9056G-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-106 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-126	SOLENOID	X		S17	
9057CG-2	CONTROL CABLE	X		CC7 CC8	
9061G-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM AT SOLENOID VALVE	X		TC16	
	CONT. CABLE TERM AT TERM. BOX	X		TC8	
	CONT. CABLE TERM AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM. AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VCR-107 VALVE

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
XSO-127	SOLENOID	X		S17	
9066CG-2	CONTROL CABLE	X		CC7 CC8	
9070G-2	CONTROL CABLE	X		CC1	
	CONT. CABLE TERM. AT SOLENOID	X		TC16	
	CONT CABLE TERM AT TERM. BOX.	X		TC8	
	CONT. CABLE TERM. AT FLOOD UP TERM BOX	X		TC7	
	CONT. CABLE TERM AT FLOOD UP TUBE	X		TC6	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM INSTRUMENT MPC 253

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
9318Ø-2	CONTROL CABLE		X	CI5 CI6 CI7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM MAIN STEAM PRESS. INSTRUMENT MPC-254

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
93188-2	CONTROL CABLE		X	CI5 CI6 CI7	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE NMO-151

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NMO-151	VALVE MOTOR	X		V9	
8758 CR-2	POWER CABLE	X		CP9 CP10 CP11	
8751 R-2	CONTROL CABLE	X		CC7 CC8	
8750 CR-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR	X		TP3	
	POWER CABLE TERM. AT FLOODUP BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM AT VALVE LIM. SW'S.	X		TC12	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM AT PEN. TERM. BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE NMO-152

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NMO -152	VALVE MOTOR	X		V9	
8752 CR-2	POWER CABLE	X		CP9 CP10 CP11	
8049 R-2	CONTROL CABLE	X		CC7 CC8	
8753 CR-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR	X		TP3	
	POWER CABLE TERM. AT FLOOD UP BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM. AT VALVE LIM. SW'S	X		TC12	
	CONTROL CABLE TERM AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM AT PEN. TERM. BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

VALVE NMO-153

SYSTEM

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NMO-153	VALVE MOTOR	X		V9	
8763 CG-2	POWER CABLE	X		CP9 CP10 CP11	
8765 G-2	CONTROL CABLE	X		CC7 CC8	
8764 CG-2	CONTROL CABLE	X		CC7 CC8	
	POWER CABLE TERM. AT VALVE MOTOR	X		TP3	
	POWER CABLE TERM. AT. FLOOD UP BOX	X		TP2	
	POWER CABLE TERM. AT FLOOD UP TUBE	X		TP1	
	CONTROL CABLE TERM AT VALVE LIM. SW'S	X		TC12	
	CONTROL. CABLE TERM AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT PEN. TERM. BOX	X		TC8	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM VALVE NRV 151

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NRV-151	VALVE SOL.	X		S11	
8755 R-2	CONTROL CABLE	X		CC1	
8543 R-2	CONTROL CABLE	X		CC2 CC3 CC4	
9705 CR-2	CONTROL CABLE	X		CC7 CC8	
	CONTROL CABLE TERM AT VALVE LIM. SW'S.	X		LS1	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOODUP BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOOD UP TUBE	X		TC6	
	CONTROL CABLE TERM. AT SOL.	X		TC16	
	Limit Switch	X		LS1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE NRV-152

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NRV-152	VALVE SOL	X		S11	
8544R-2	CONTROL CABLE	X		CC2 CC3 CC4	
8760R-2	CONTROL CABLE	X		CC5 CC6	
9706CR-2	CONTROL CABLE	X		CC7 CC8	
	CONTROL CABLE TERM. AT VALVE LIM. SW'S	X		LS1	
	CONTROL CABLE TERM. AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOOD UP BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOODUP TUBE	X		TC6	
	CONTROL CABLE TERM. AT SOL.	X		TC16	
	Limit Switch	X		LS1	

DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM _____ VALVE NRV153

PLANT ID No.	GENERIC NAME	LOCATION INSIDE CONT.	LOCATION OUTSIDE CONT.	EQUIP QUAL. CHART REF.	
NRV-153	VALVE SOL.	X		S11	
8599 G-2	CONTROL CABLE	X		cc2 cc3 cc4	
8771 G-2	CONTROL CABLE	X		cc5 cc6	
8757CG2	CONTROL CABLE	X		cc7 cc8	
	CONTROL CABLE TERM. AT VALVE LIM. SW'S	X		LS1	
	CONTROL CABLE TERM AT TERM. BOX	X		TC8	
	CONTROL CABLE TERM. AT FLOODUP BOX	X		TC7	
	CONTROL CABLE TERM. AT FLOODUP TUBE	X		TC6	
	CONTROL CABLE TERM AT SOL.	X		TC16	
	Limit Switch			LS1	

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DONALD C. COOK NUCLEAR PLANT UNIT No. 2
DOCKET No. 50-316, LICENSE No. DPR-74

SYSTEM Motor Operated Valve Grease

PLANT ID No.	GENERIC NAME	LOCATION		EQUIP QUAL. CHART REF.	
		INSIDE CONT.	OUTSIDE CONT.		
Mobilux EP-2	Grease	X	X	G-1	

ATTACHMENT 4 TO AEP:NRC:00356A

GENERAL NOTES

1. Any one piece of equipment may be qualified by more than one test report. For instance, it may be qualified for steam environment by one report, for chemical spray environment by another, and for radiation environment by still another report. In a case like this; the qualification chart will list the different test reports and will specify, for each report, the qualification method (simultaneous, sequential, or separate testing).

2. The limit switches, along with their cable and their cable terminations, for the valves listed below have been deleted from Attachments 2 and 3 to our submittal AEP:NRC:00356 ("Master List No. 2"). These limit switches are used for valve position indication only; that is, they are not used in the valve control circuit and are therefore not needed for the operation of the valve.

Valve	Location: Inside Containment	Location: Outside Containment
MRV-211		X
212		X
221		X
222		X
231		X
232		X
241		X
242		X
213		X
223		X
233		X
FRV-210		X
220		X
230		X
240		X
VCR-11	X	
21	X	
101	X	
102	X	
103	X	
104	X	
105	X	
106	X	
107	X	

For the valves outside containment, valve position can be readily verified. Those inside containment (VCR's) are containment isolation valves; a redundant containment isolation valve located outside the containment, in series with the one inside the containment, will serve as a backup device. The position of the valve outside containment can be verified.

3. Some other changes to Master List No. 2 were necessary to correct editorial errors made on the first submittal.

4. The pressurizer relief valves (solenoid operated and motor operated), limit switches and limit switch cable connections are being considered for upgrade as per the requirements of the TMI-2 Lesson Learned NUREG-0578. They were not assumed to be safety-grade equipment in the FSAR.

5. Inside the containment, the LOCA pressure profile consists of an initial peak and a long-term peak after the ice melts out. The maximum calculated initial peak is 14.4 psid across the operating deck, as stated in Unit 2 FSAR Section 14.3.4. The long-term peak is shown in Figures 1 and 2 (attached) from Westinghouse letter AEW-6504 to AEPSC. For the Cook Plant, the minimum required ice mass is 2.13×10^6 or 1098 lbs/basket. This value is intermediate to the cases pictured and gives a long term peak of 12 psig.

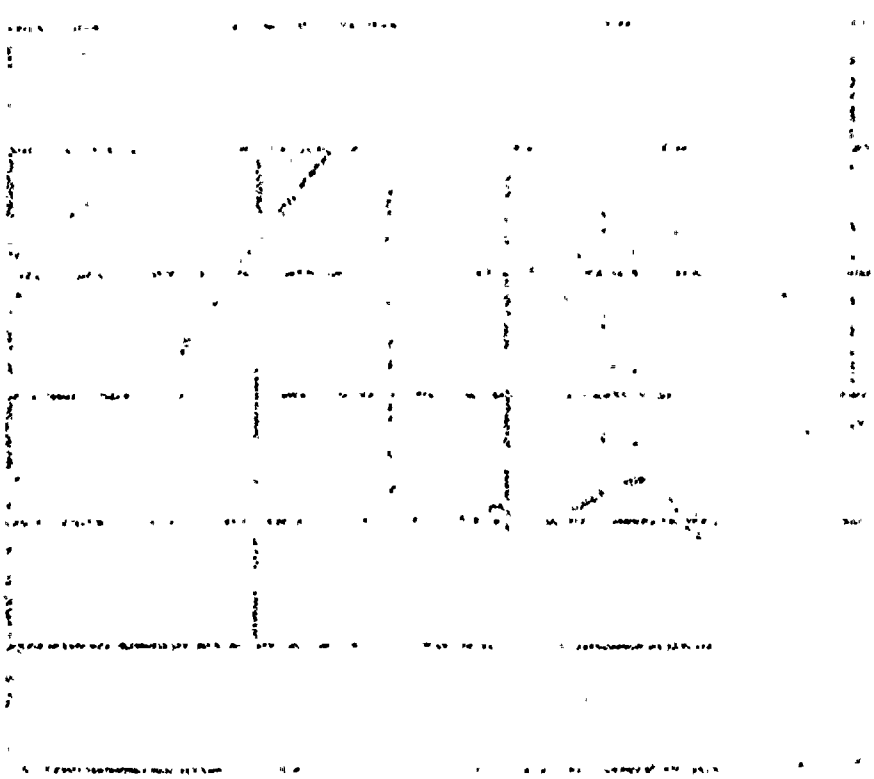
6. In the equipment qualification charts, the symbol "NA" means "not applicable."

7. In the equipment qualification charts, a blank "outstanding items" column means that no outstanding items were identified. Any items undergoing upgrade due to TMI lessons learned considerations are not considered outstanding items in this submittal.

8. The bounding values given in the specified environment column give a very conservative description of the adverse environment for two reasons. First, each bounding value may come from a different analyzed accident case, so that typically all the worst values are not calculated to occur during the same postulated scenario. Also, some of the equipment referenced to a specific chart may be subject to only some of the adverse environment parameters or to much less severe calculated values of some parameters.

9. Equipment required due to changes in emergency operating procedures after January 14, 1980 (the issue date of IE Bulletin 79-01B) is not always included in this submittal. The cut-off date was agreed to by members of your staff at the February 7, 1980 clarification meeting in Glen Ellyn, Illinois.

10. In the equipment qualification charts, the specified radiation dose is the calculated bounding dose from gamma radiation as per the licensing basis of the Cook Plant.



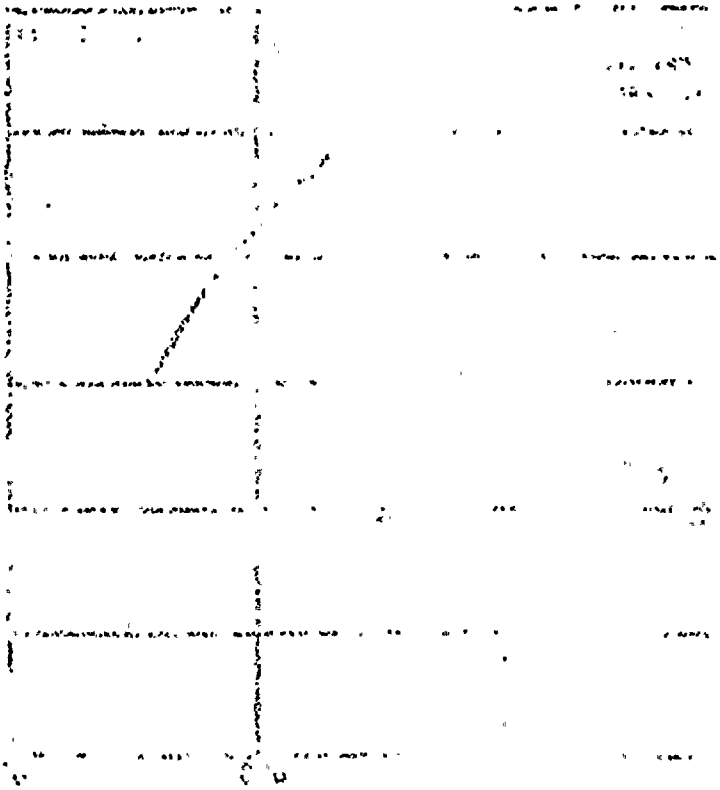
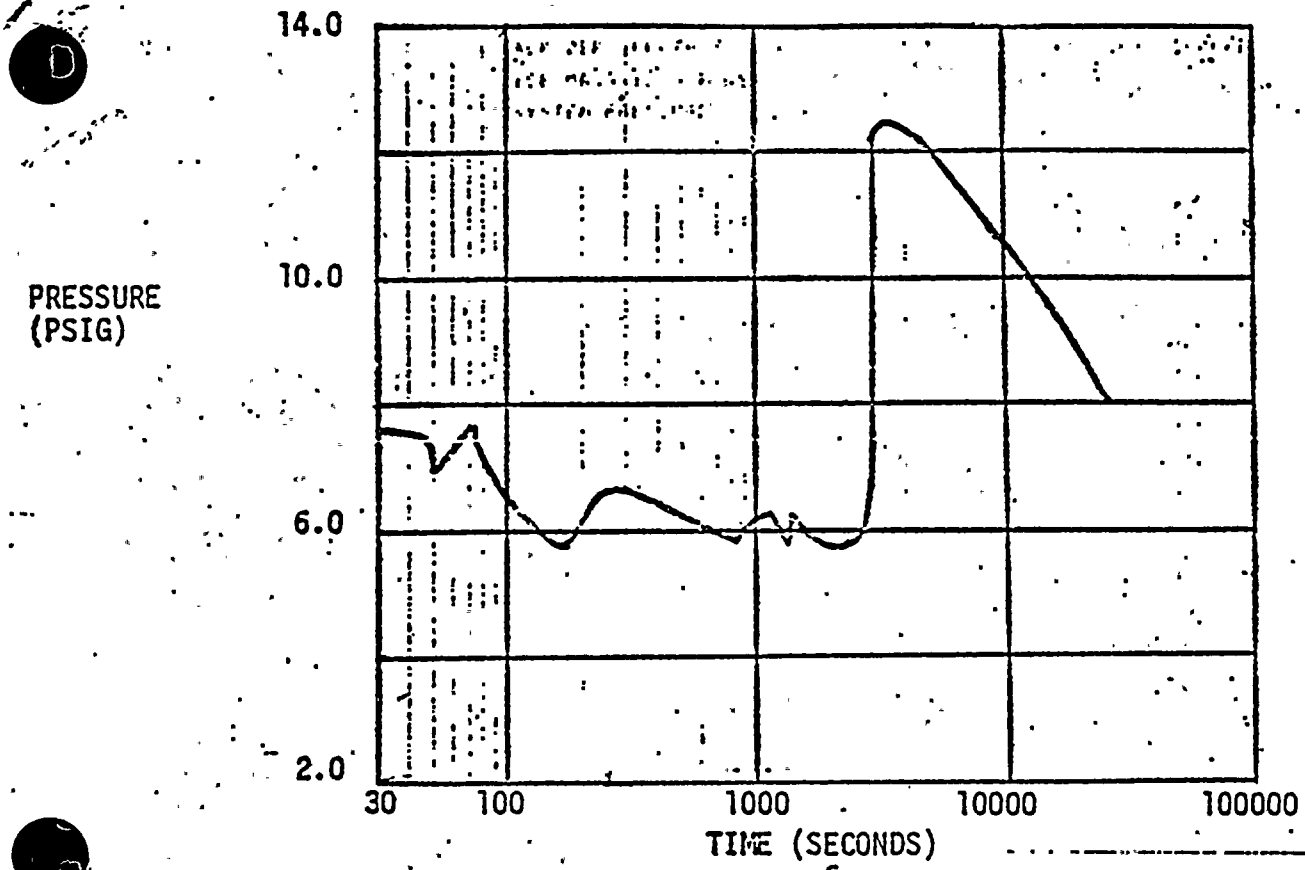


FIGURE 1

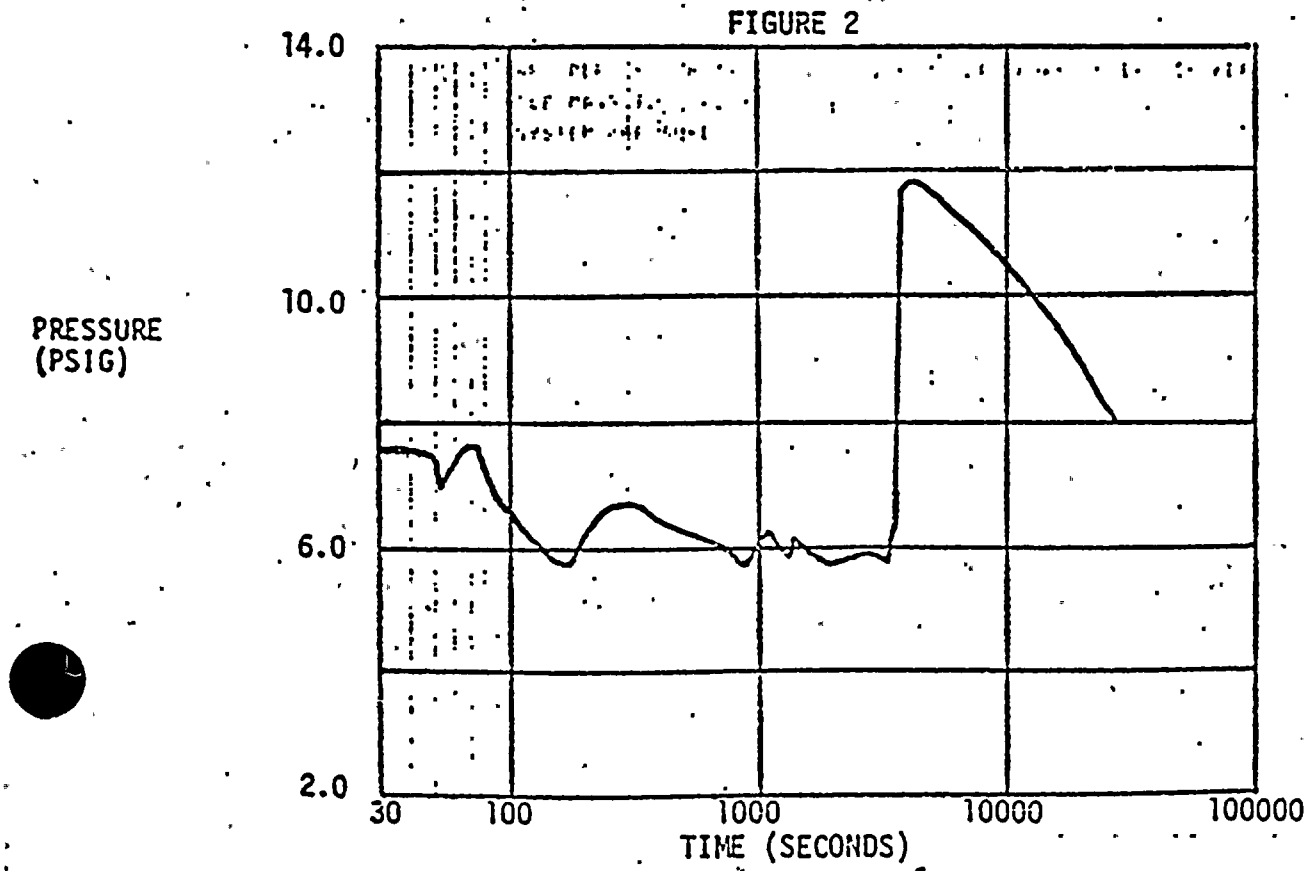
LOCA



Ice Mass = 2.07 (10^6) lbs. = 1064.8 lb/basket

FIGURE 2

LOCA



Ice Mass = 2.19 (10^6) lbs. = 1126.5 lb/basket

NOTES ON CABLES

1. Instrument cable for the following instruments inside containment is not in floodup tubes in either Unit 1 or Unit 2.

   a. Main steam flow transmitters:

      MFC-110,111,120, 121, 130, 131, 132, 140, 141 & 142 (ITT Barton Model No. 764)

   b. Pressurizer pressure transmitter:

      NPS-153 (ITT Barton Model No. 763)

   c. Reactor Coolant System narrow range temperature transmitters:
      Sostman Model No. 11834 B
      Rosemount Model No. 176 KF
      NTP-110, 111, 120, 121, 130, 131, 140, 141, 210, 211, 220, 230, 231, 240 & 241.

   Placing these instrument cables in floodup tubes is not necessary for the following reasons. The MFC's and the NTP's will only be used for actuation of protective systems immediately after the accident, long before their cable becomes submerged. NPS-153 provides an additional monitoring function to that already provided by NPP-151, 152 and 153 which have their cables protected by floodup tubes.

2. Control cable for the following equipment inside containment is not in floodup tubes in Unit 1 only.

   a. Containment isolation valves (VCR's) listed in General Note 2. Operation of these valves (closing them) will take place immediately after the accident, long before the cable will be submerged. Postulated cable damage (because of submergence or otherwise) is not capable of re-opening these valves.

   b. The control cable for pressurizer relief line motor operated block valves is not in floodup tubes. See General Note 4.

3. Calculated containment temperature 2.78 hours (10,000 seconds) after a LOCA is 185°F and decreasing (Figure 3 in response to Question 03.1 in Appendix N, FSAR). The electrical cable is rated for continuous operation at 194°F (90°C). Therefore the containment environmental temperature after 2.78 hours does not represent a challenge to the mechanical or electrical quality of the cable.

NOTES ON CABLE TERMINATIONS

1. Calculated containment temperature 2.78 hours after a LOCA is 185°F and decreasing (Figure 3 in response to Question 03.1 in Appendix N, FSAR). This long term environment does not pose a challenge to the mechanical or electrical quality of the termination.

2. 230°F for ten seconds and 11.5 psig for 0.1 seconds will not challenge the mechanical or electrical quality of the termination.

3. Regarding control cable terminations at the solenoid operated valves which serve the pressurizer PORVs (the NRVs), see General Note 4.

4. Environmental qualification for the control cable terminations at the solenoid operated valves which serve the air-operated containment isolation valves (the VCRs) is not needed for the following reason. Energization of the solenoid is necessary to keep the containment isolation valves open. If the valves were open at the time of the accident, a containment isolation signal would de-energize the solenoid, closing the valves. If the valves were closed, they would remain closed. No matter what the initial valves' position is at the time of the accident, no failure of the cable termination will succeed in energizing the solenoid, and opening the valves, when the containment isolation signal and/or the control switch in the control room has been actuated to close the valves.

5. Note 1 on valve motor operators pertains also to the terminations at the motors serving the valves listed.

NOTES ON CABLE TERMINATIONS

1. Calculated containment temperature 2.78 hours after a LOCA is 185°F and decreasing (Figure 3 in response to Question 03.1 in Appendix N, FSAR). This long term environment does not pose a challenge to the mechanical or electrical quality of the termination.

2. 230°F for ten seconds and 11.5 psig for 0.1 seconds will not challenge the mechanical or electrical quality of the termination.

3. Regarding control cable terminations at the solenoid operated valves which serve the pressurizer PORVs (the NRVs), see General Note 4.

4. Environmental qualification for the control cable terminations at the solenoid operated valves which serve the air-operated containment isolation valves (the VCRs) is not needed for the following reason. Energization of the solenoid is necessary to keep the containment isolation valves open. If the valves were open at the time of the accident, a containment isolation signal would de-energize the solenoid, closing the valves. If the valves were closed, they would remain closed. No matter what the initial valves' position is at the time of the accident, no failure of the cable termination will succeed in energizing the solenoid, and opening the valves, when the containment isolation signal and/or the control switch in the control room has been actuated to close the valves.

5. Note 1 on valve motor operators pertains also to the terminations at the motors serving the valves listed.

NOTES ON INSTRUMENTS

1. Lists A-J, which are referenced on the equipment qualification charts, are attached.

2. For those instruments which have a required minimum response time, the required and tested response times are given as the specified and qualified operating times, respectively.

NOTES ON INSTRUMENTS

1. Lists A-J, which are referenced on the equipment qualification charts, are attached.

2. For those instruments which have a required minimum response time, the required and tested response times are given as the specified and qualified operating times, respectively.

(ATTACHMENT TO "NOTES ON INSTRUMENTS")

LIST A

Engineered Safeguards Actuation	Unit 1 Only
Containment Phase A Isolation Actuation	Unit 1 Only
Main Steam Isolation Actuation	Both Unit 1 & 2
Reactor Trip Actuation	Both Unit 1 & 2
Main Steam - Normal System Monitoring	Both Unit 1 & 2

LIST B

Engineered Safeguards Actuation	Both Unit 1 & 2
Containment Phase A Isolation Actuation	Both Unit 1 & 2
Post Accident Monitoring	Unit 2 Only
Reactor Trip Actuation	Both Unit 1 & 2
Main Steam Normal System Monitoring	Both Unit 1 & 2
Remote Shut-down Monitoring	Both Unit 1 & 2

LIST C

Engineered Safeguards Actuation	Both Unit 1 & 2
Containment Phase A Isolation Actuation	Both Unit 1 & 2
Post Accident Monitoring	Unit 2 Only
Main Steam Isolation Actuation	Both Unit 1 & 2
Main Steam Normal System Monitoring	Both Unit 1 & 2
Remote Shut-down Monitoring	Both Unit 1 & 2

LIST D

Engineered Safeguards Actuation	Unit 1 Only
Containment Phase A Isolation Actuation	Unit 1 Only
Main Steam Isolation Actuation	Both Unit 1 & 2
Main Feedwater Isolation Actuation	Both Unit 1 & 2
Reactor Trip Actuation	Both Unit 1 & 2
Reactor Coolant Normal System Monitoring	Both Unit 1 & 2

LIST E

Engineered Safeguards Actuation	Both Unit 1 & 2
Containment Phase A Isolation Actuation	Both Unit 1 & 2
Remote Shut-down Monitoring	Both Unit 1 & 2
Reactor Coolant Normal System Monitoring	Both Unit 1 & 2

LIST F

Engineered Safeguards Actuation	Both Unit 1 & 2
Containment Phase A Isolation Actuation	Both Unit 1 & 2
Post Accident Monitoring	Unit 2 Only
Containment Phase B Isolation Actuation	Both Unit 1 & 2
Containment Spray Actuation	Both Unit 1 & 2
Main Steam Isolation Actuation	Both Unit 1 & 2

LIST G

Post Accident Monitoring	Unit 2 Only
Containment Phase B Isolation Actuation	Both Unit 1 & 2
Containment Spray Actuation	Both Unit 1 & 2
Main Steam Isolation Actuation	Both Unit 1 & 2

LIST H

Post Accident Monitoring	Unit 2 Only
Main Feedwater Isolation Actuation	Both Unit 1 & 2
Reactor Trip Actuation	Both Unit 1 & 2
Main Feedwater Normal System Monitoring	Both Unit 1 & 2

LIST J

Reactor Trip Actuation	Both Unit 1 & 2
Post Accident Monitoring	Unit 2 Only
Remote Shut-down Monitoring	Both Unit 1 & 2
Reactor Coolant Normal System Monitoring	Both Unit 1 & 2

ATTACHMENT 5 TO AEP:NRC:00356A

RESPONSE TO IE BULLETIN 79-01B ACTION ITEMS 2-5

ENVIRONMENTAL EQUIPMENT QUALIFICATION CHARTS FOR UNIT 1

DONALD C. COOK NUCLEAR PLANT

ATTACHMENT 5 TO AEP:NRC:00356A

RESPONSE TO IE BULLETIN 79-01B ACTION ITEMS 2-5

ENVIRONMENTAL EQUIPMENT QUALIFICATION CHARTS FOR UNIT 1

DONALD C. COOK NUCLEAR PLANT

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	8	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	345	FSAR APP Q	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	Fig 1 Fig 2	121.7	AEO 6504	8	SEQ.	
MANUFACTURER: CONTINENTAL	Relative Humidity (%)	100	100		8	SEQ.	
MODEL NUMBER: ITEM # 3119	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.6	8	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L VOL1	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		* FLOODUP Tubes				
LOCATION: IN & OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: NO							

*Documentation References:

8. CONAX CORP. TEST REPORT IPS-34B

Notes:

* EXCEPT for CABLES on VCR-11, 102, 103, 104, 105, 106 & 107. See Cable Note 2.a.

1) Containment temp 2.78 hrs after accident = 189°F (Fig 3, App N, FSAR) cable temp rating = 194°F/90°C).

2) XLPE/ASB. Braid. 40 yrs as per Table C-1 App C WPC TC 7901B.

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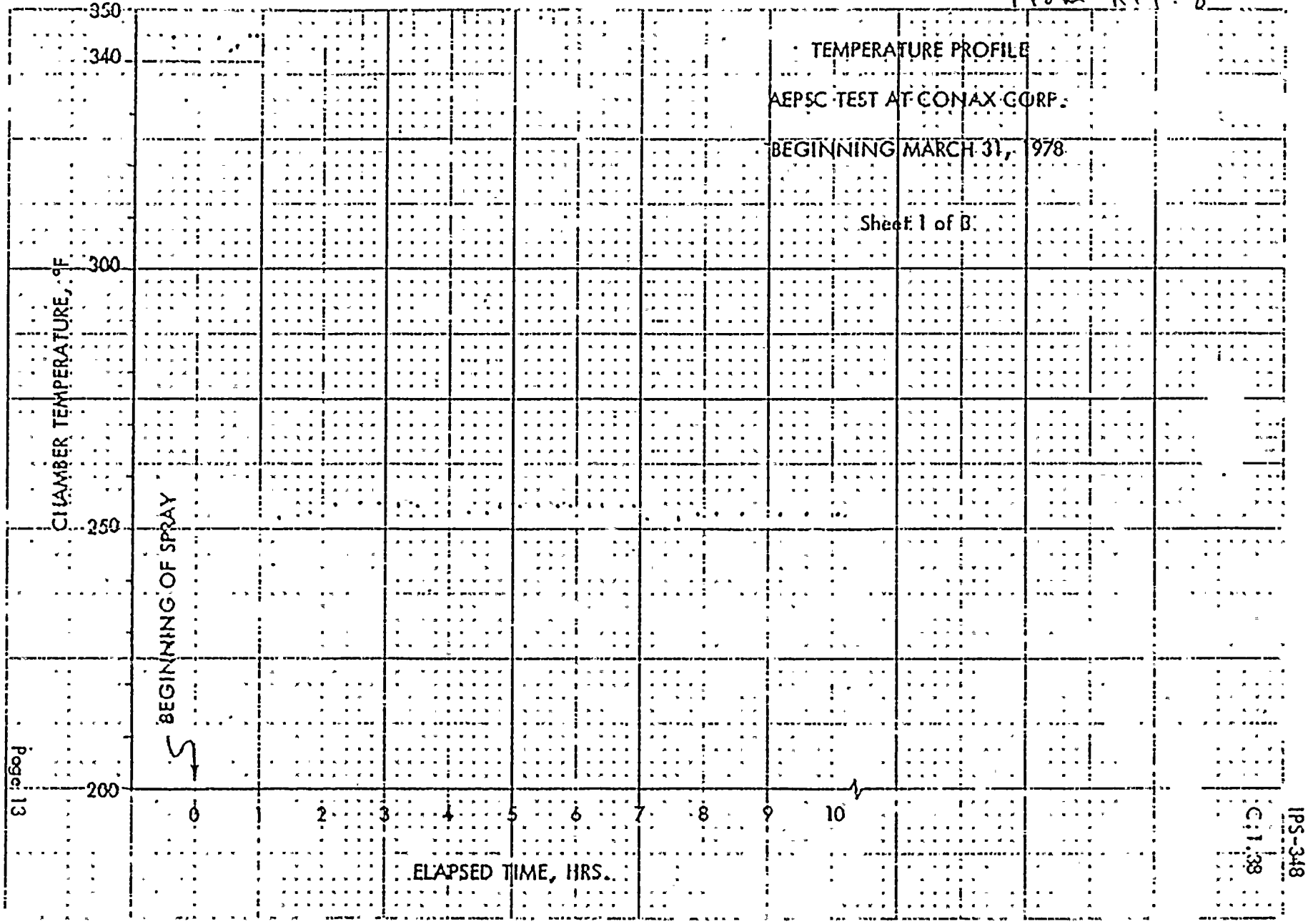

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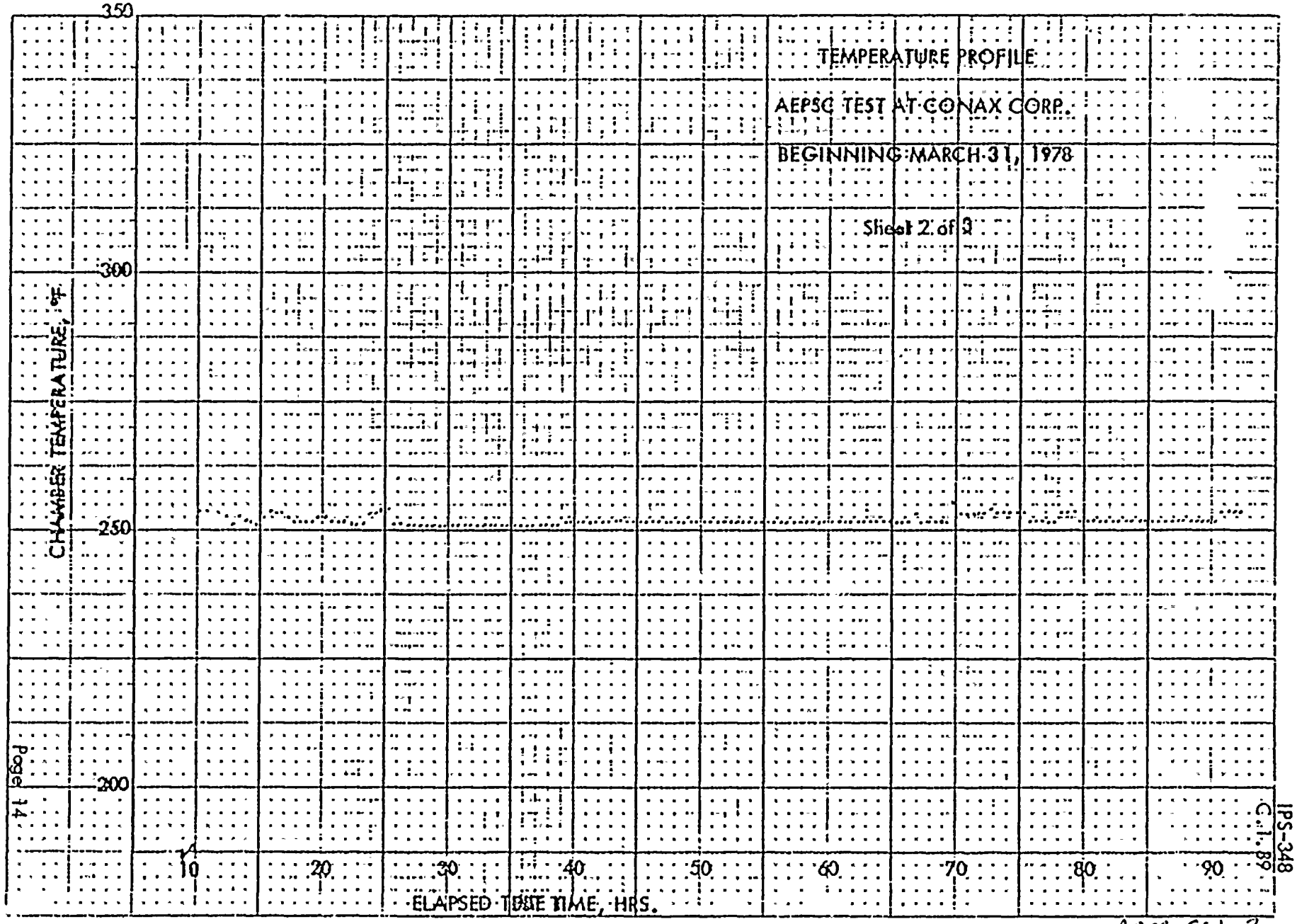
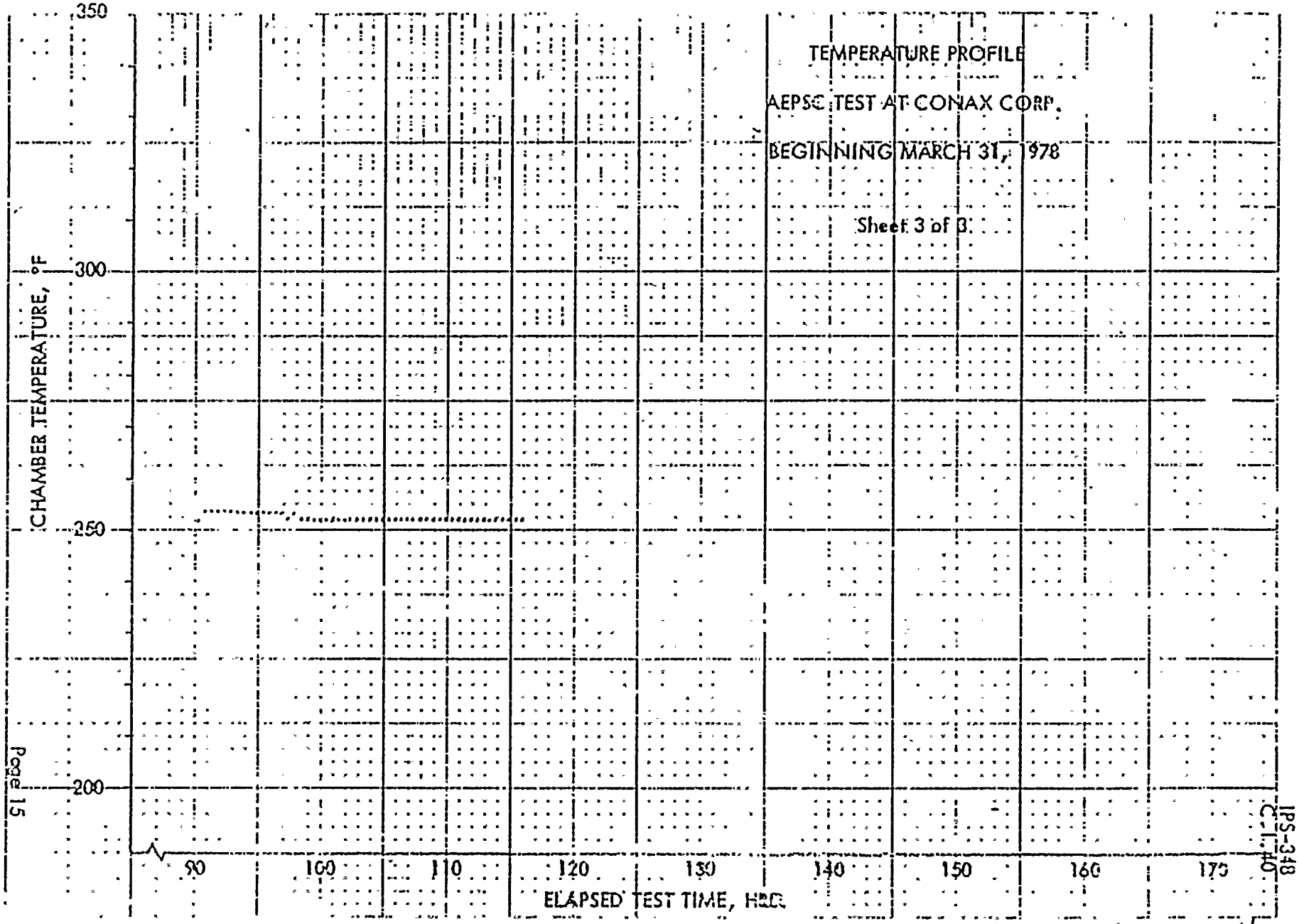
page CC1-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F.
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTE TIME, HRS.



IPS-348
C-1.40

page cc1-4

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1		8	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	345	FSAR APP O	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	Fig 0-27	121.7	FSAR APP O	8	SEQ.	
MANUFACTURER: CONTINENTAL							
MODEL NUMBER: ITEM # 3120	Relative Humidity (%)	NA	100	NA	8	SEQ.	
FUNCTION: VARIOUS	Chemical Spray	NA	2500 ppmB	NA	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	16.6	150	See Note 2	8	SEQ.	
LOCATION: OUT OF CONTAINMENT	Aging (years)		See Note 3				
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

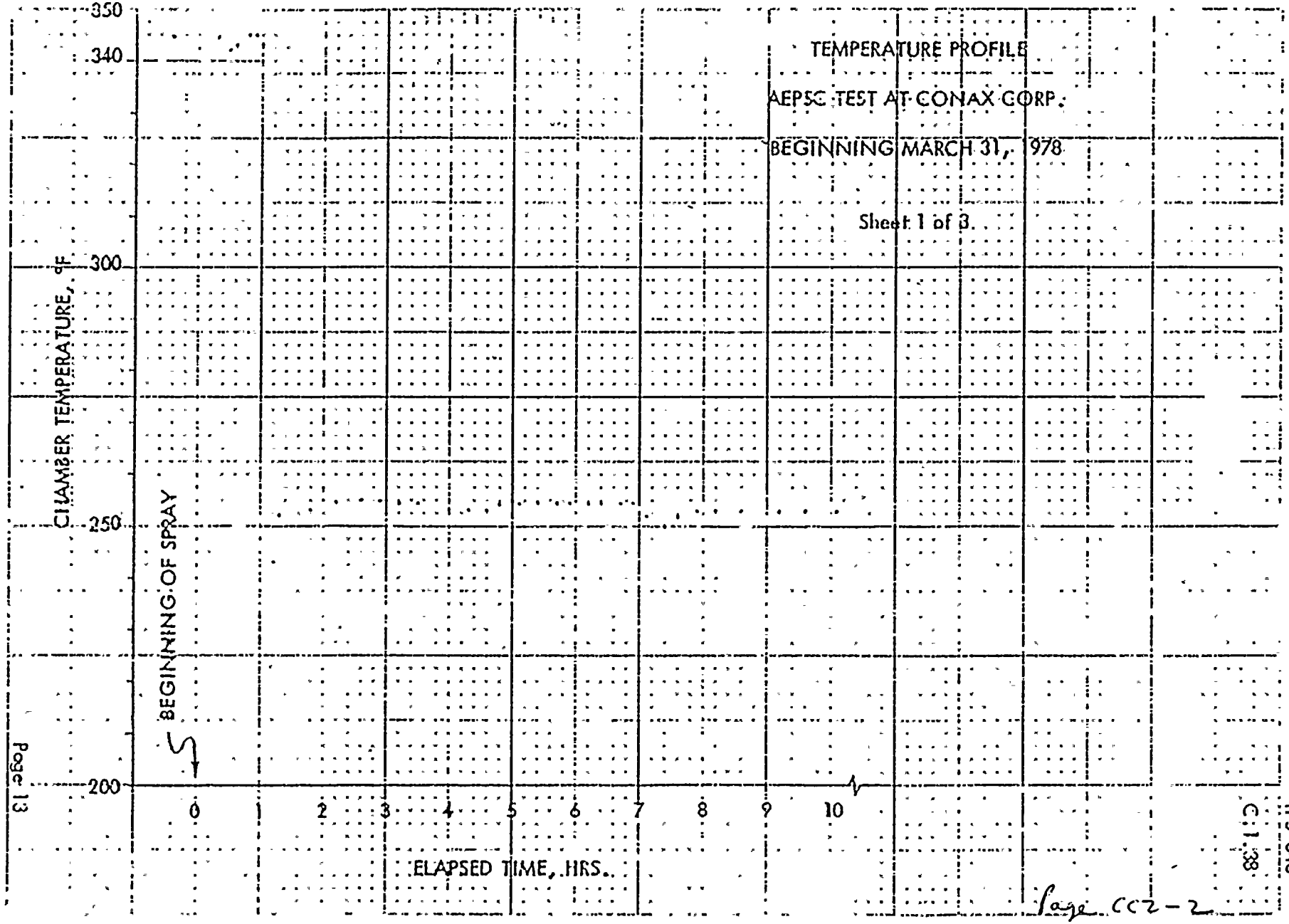
8. CONAX CORP. TEST REPORT IPS-348

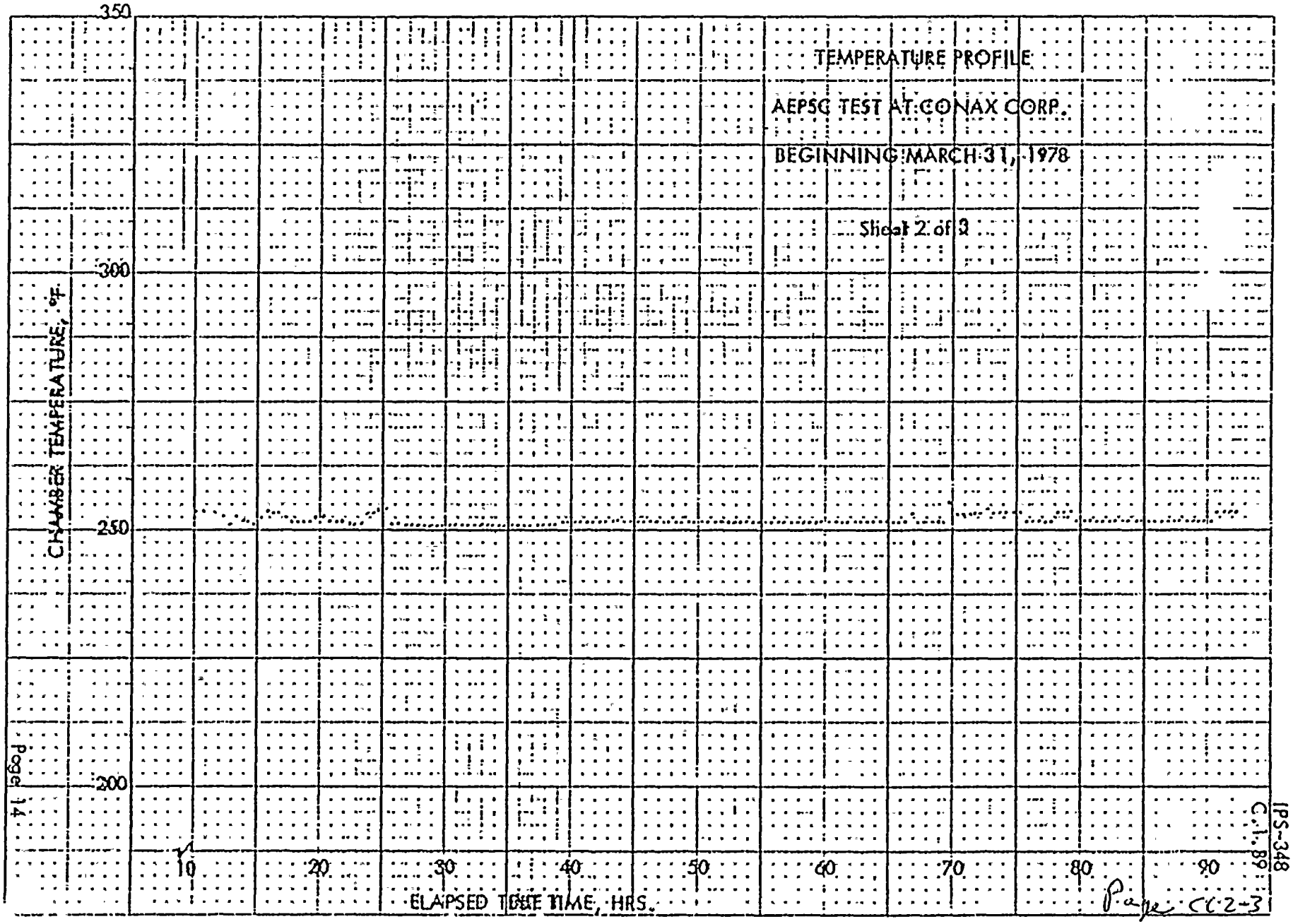
Notes:

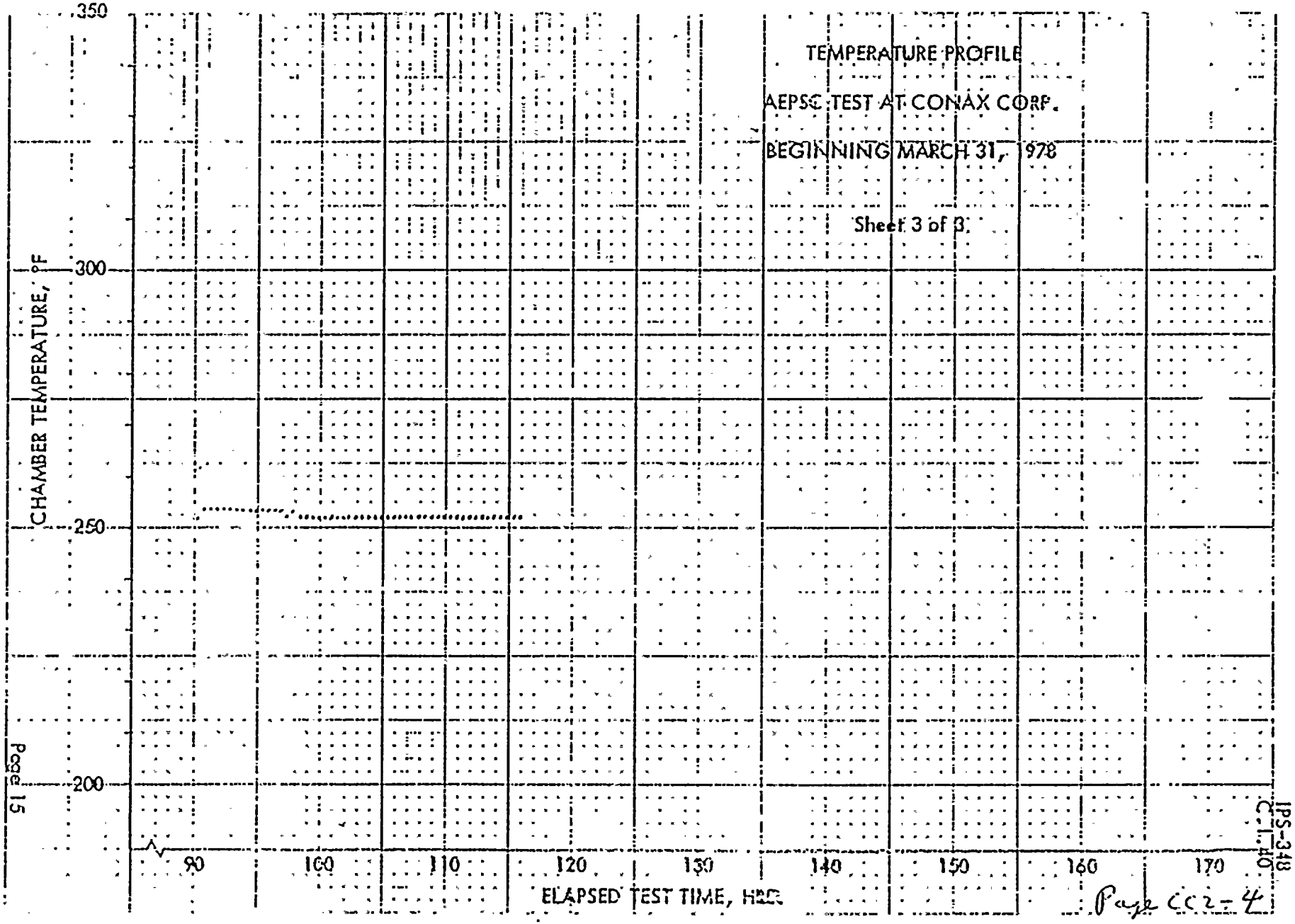
1) Cable temp rating 345°F will withstand 230°F for 10 sec and 11.5 psig for .1 sec does not represent a challenge to the cable mechanical or electrical quality.

2) Outside Cont. RAD. Bounding CALCULATION AEPSC NS+L CALCULATION DC-N-6420-2.

3) XLPE/PES. Qual. 40 years AA per Table C-1 App C, Enclosure 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3.
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F.
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTE TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		8	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	345	FSAR APP 0	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	Fig 0-27	121.7	FSAR APP 0	8	SEQ.	
MANUFACTURER: GENERAL ELECTRIC	Relative Humidity (%)	NA	100	NA	8	SEQ.	
MODEL NUMBER: ITEM # 3120	Chemical Spray	NA	2500 ppmB	NA	8	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	150	See Note 2	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 3				
SERVICE: VARIOUS							
LOCATION: OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL:	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

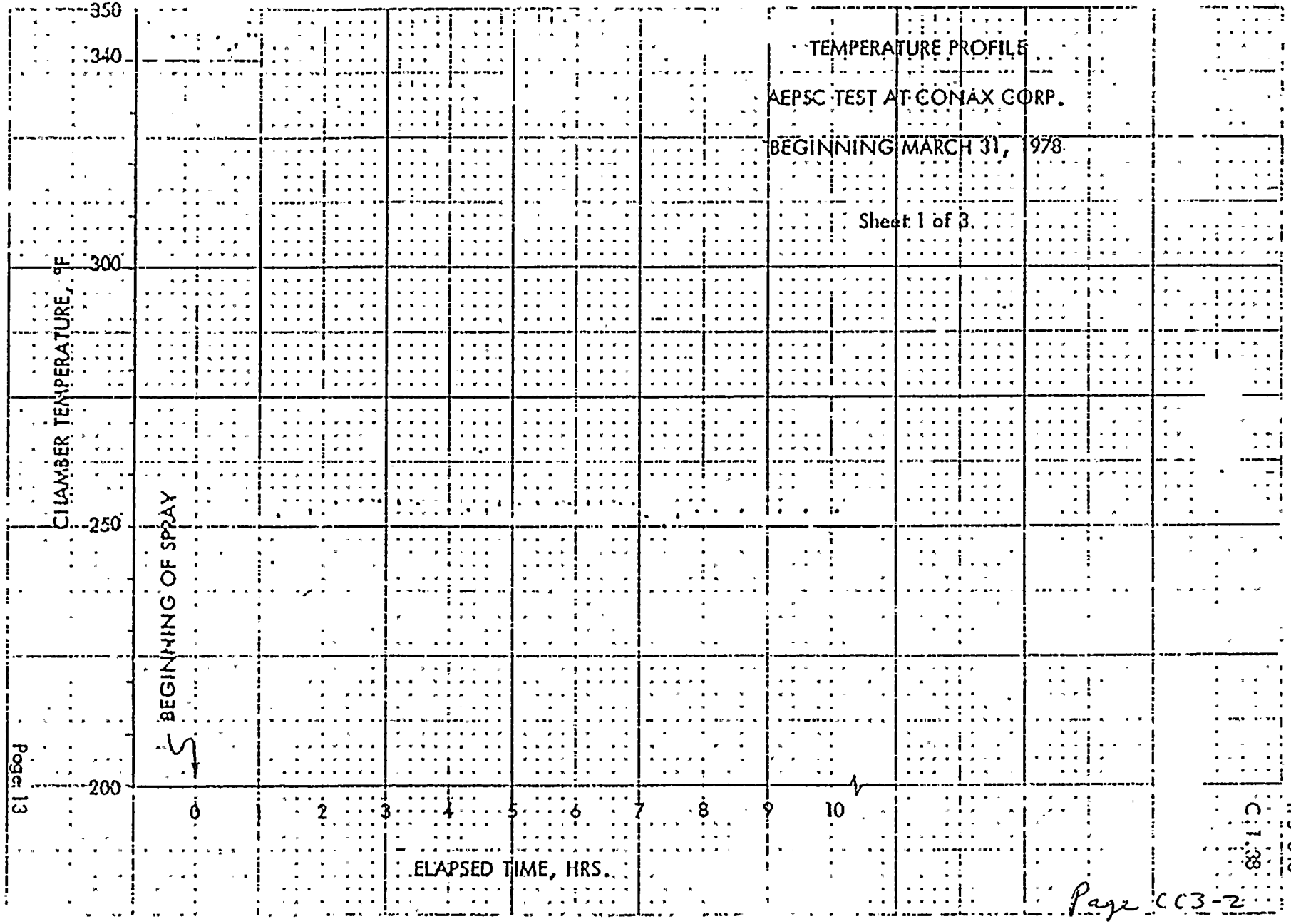
8. CONAX CORP. TEST REPORT IPS-348

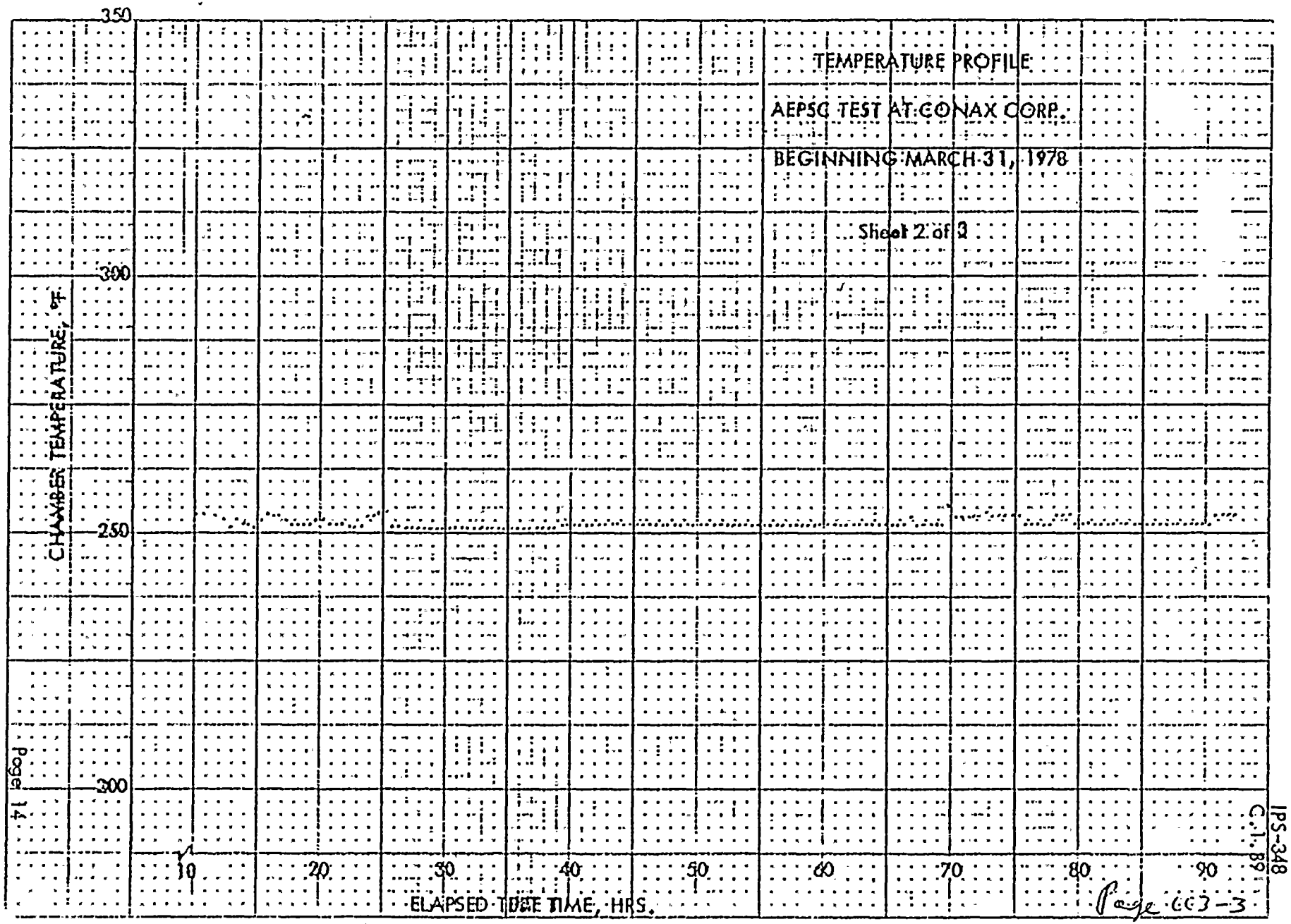
Notes:

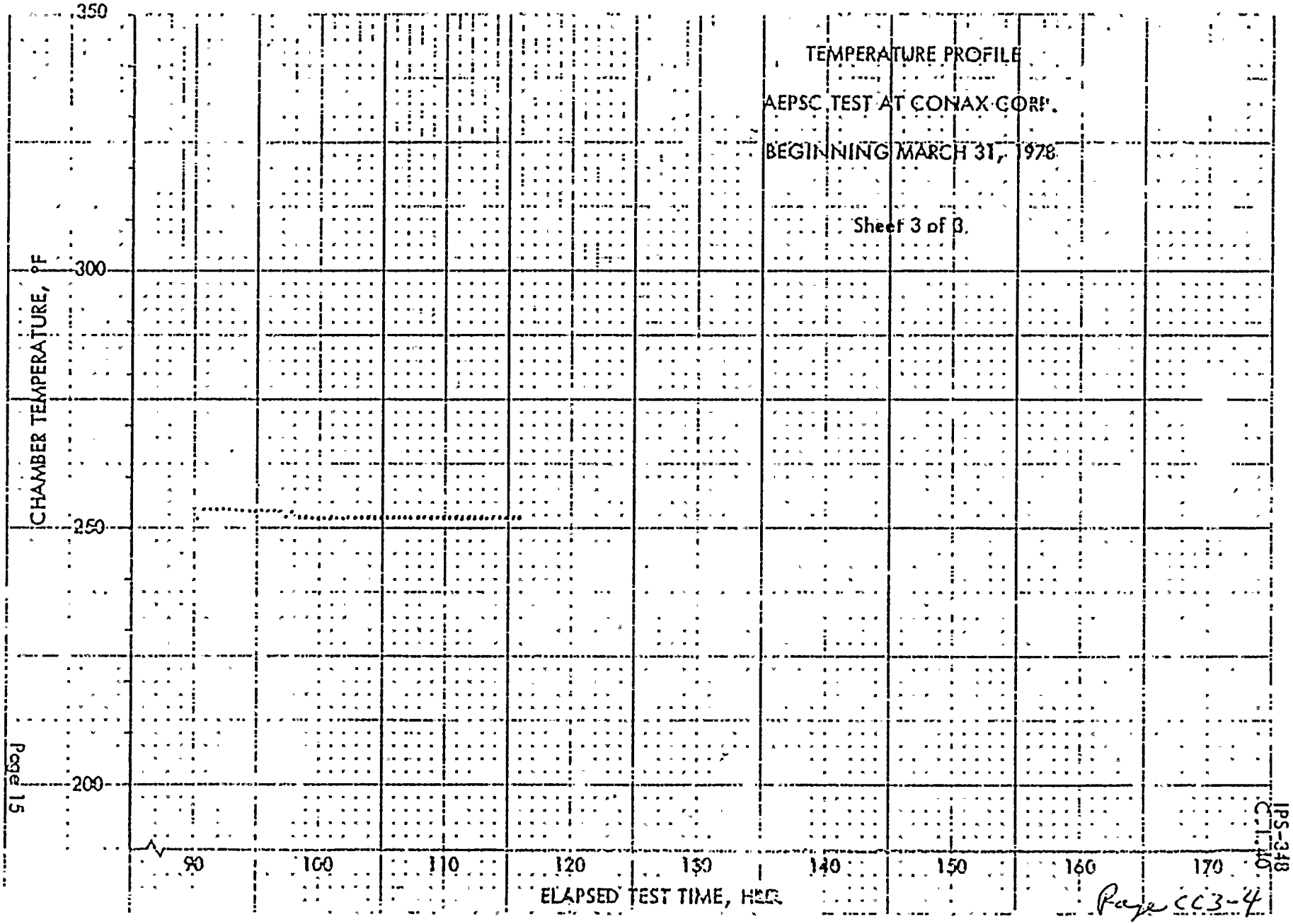
1) 230°F for 10 sec and 11.5 psig for 1 sec does not represent a challenge to the cable mechanical or electrical quality.

2) Outside Cont. RAD. Bounding Calculation AEPSC NS+L CALCULATION DC-N-6420-2

3) NUREG/CR-0588, Bound. 40 yrs as per Table C-1 App C, Enclosure 4 to NRC IE Bulletin 79-01B


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3.
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 8.
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		5	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	340	FSAR App 0	5	Simul.	
COMPONENT: Power CABLE	Pressure (PSIA)	Fig 0-27	119.7	FSAR App 0	5	Simul.	
MANUFACTURER: ANACONDA	Relative Humidity (%)	NA	100	NA	5	Simul.	
MODEL NUMBER: Item # 3120	Chemical Spray	NA	2000 PPMB	NA	5	Simul.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	200	See Note 2	5	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		250°F/70 DAYS Yes		5	Simul.	
SERVICE: VARIOUS							
LOCATION: Out of Containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

5. FIRL TEST Report F-C 3341

Notes:

1) 230°F for 10 sec and 11.5 psig for 1 sec does not represent a challenge to the cable mechanical or electrical quality

2) AEPSC NS+L CALCULATION DC-N-6420-2.

5. Qualified by Franklin Institute Research Laboratory (FIRL) Test Report #F-C3341, Jan. 1973.

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.51 Mrads/hr, 200 Mrads
340°F, 105 psig for 3 hrs
320°F, 75 psig for 3 hrs
250°F, 15 psig for 4 days
210°F, 5 psig for 9 days

Chemical Spray: Solution of boric acid and Na OH , PH = 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	8	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2.	345	FSAR APP Q	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	Fig 2 Fig 1	121.7	AEW 6504	8	SEQ.	
MANUFACTURER: CONTINENTAL							
MODEL NUMBER: ITEM # 3121	Relative Humidity (%)	100	100		8	SEQ.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.b	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L Vol 1	8	SEQ.	
SERVICE: VARIOUS							
LOCATION: IN + OUT OF CONTAINMENT	Aging (years)		See Note 2				
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		FLOODUP TUBES				

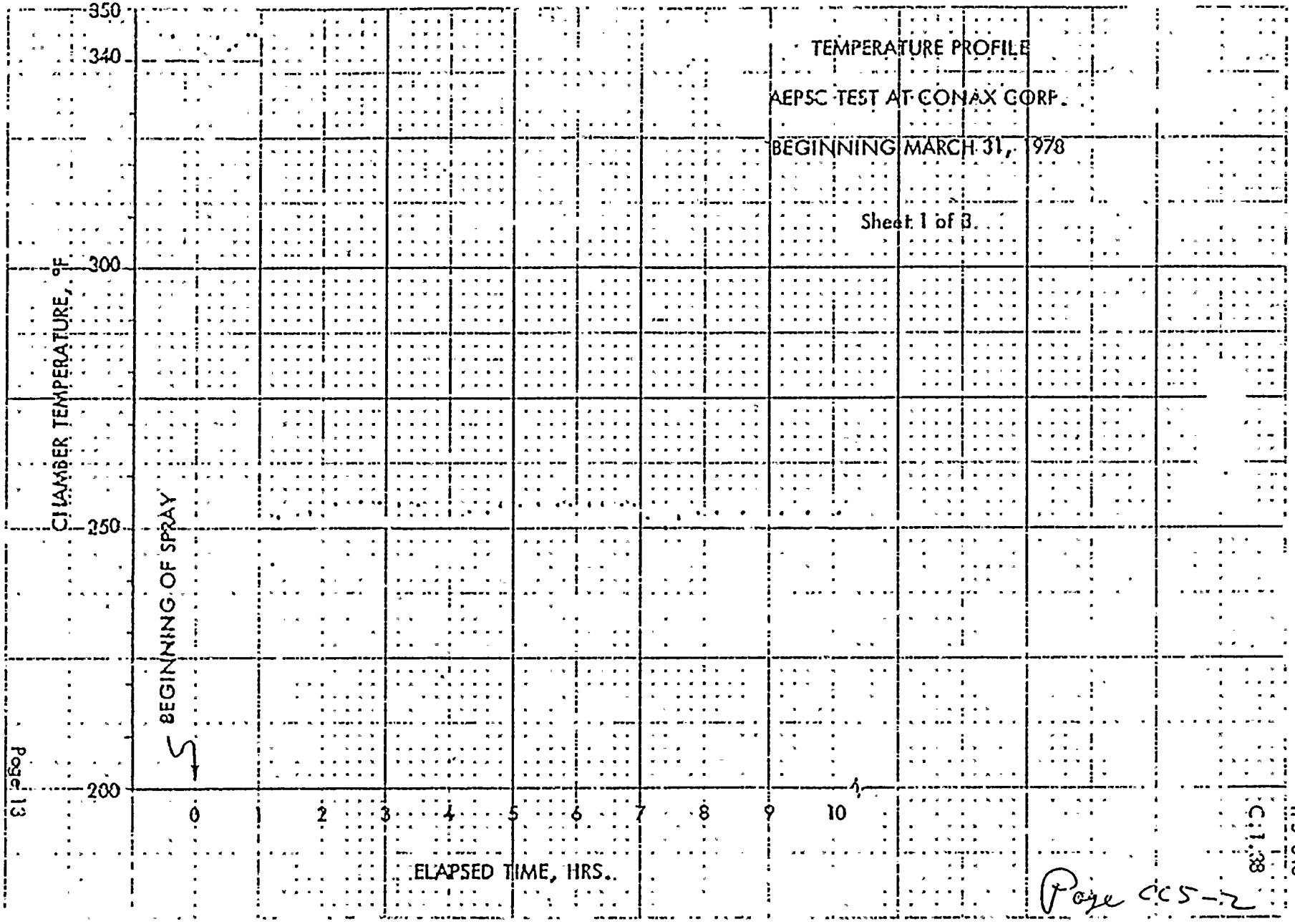
*Documentation References:

8. CONAX CORP. TEST REPORT IPS-348

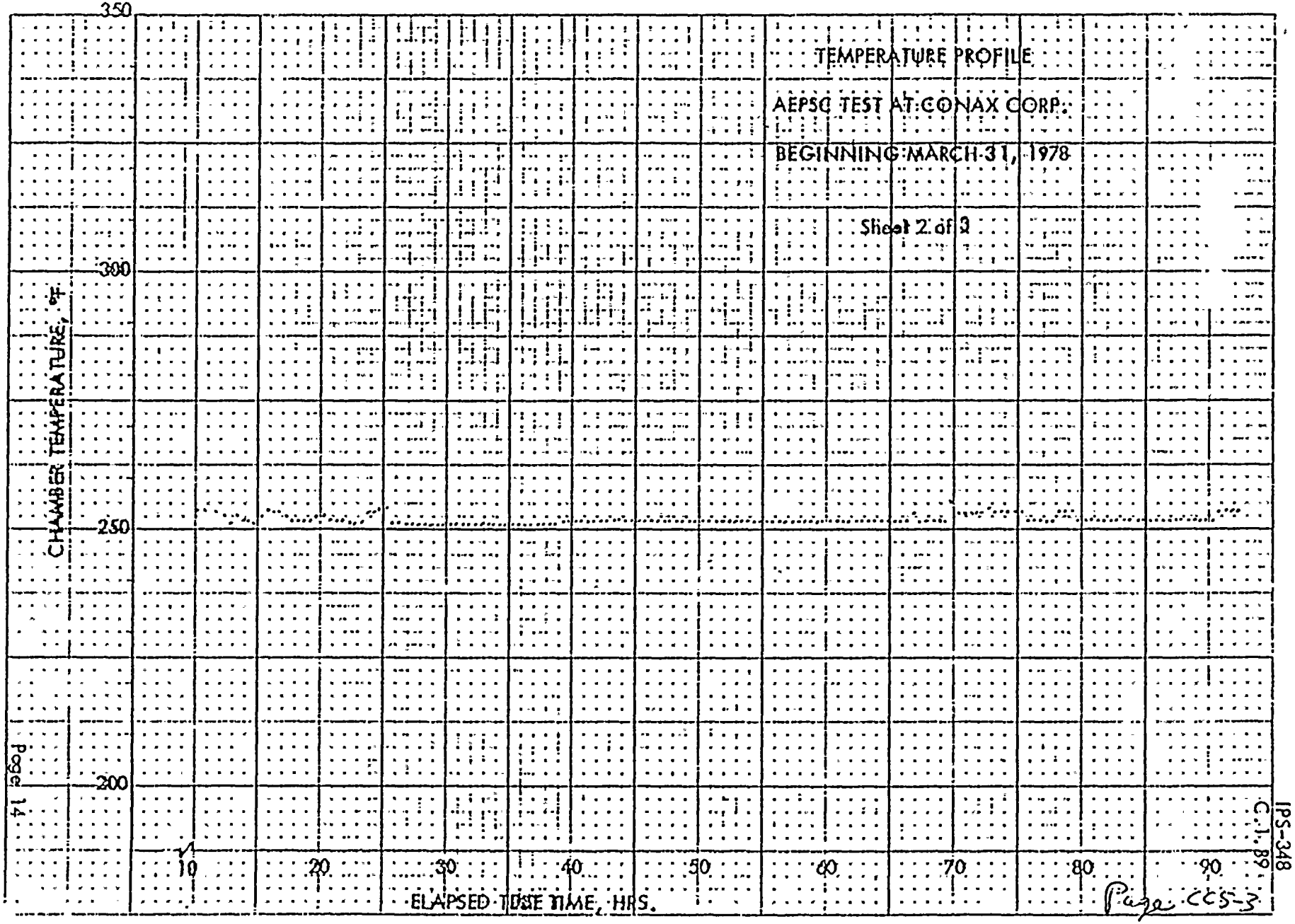
Notes:

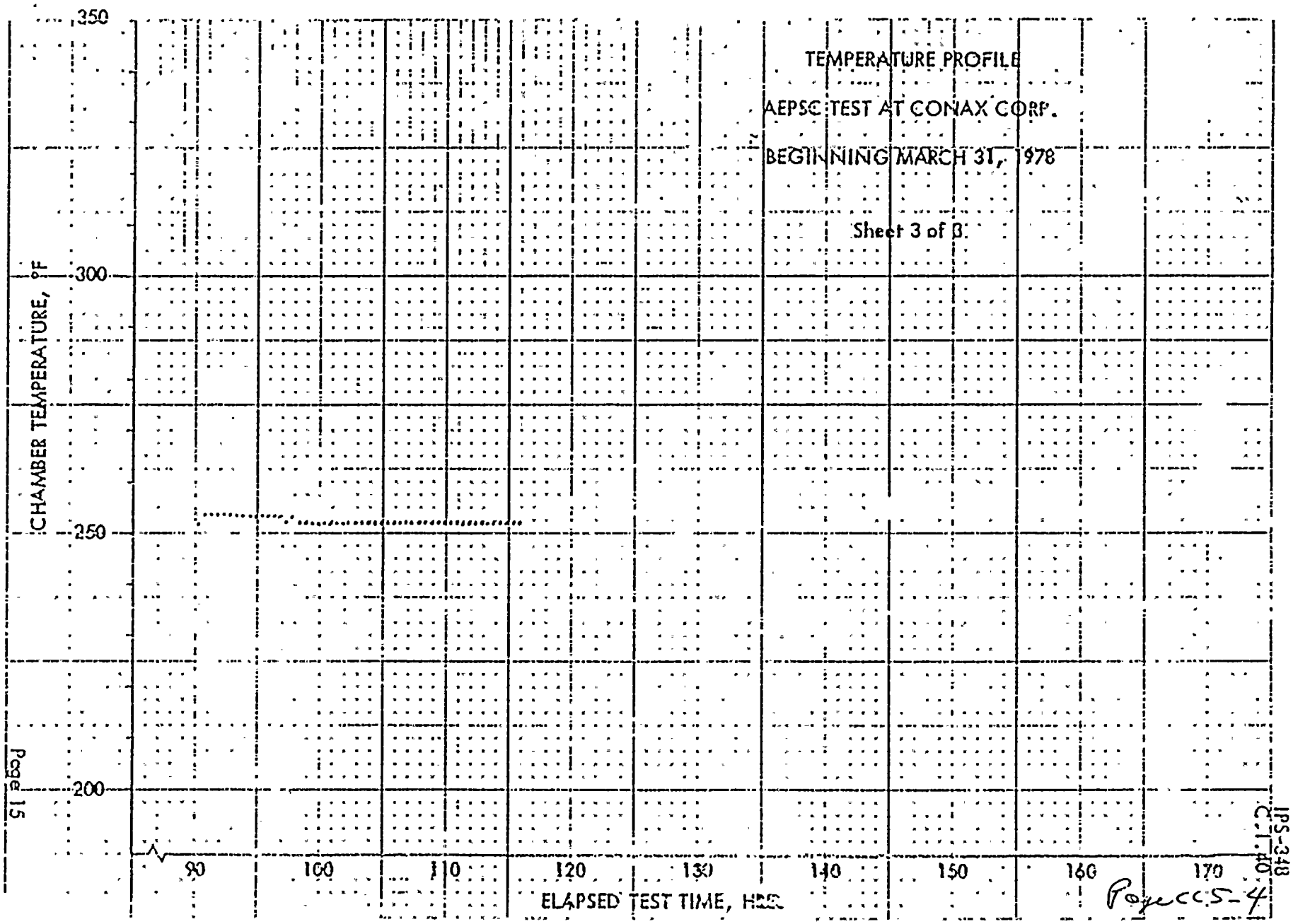
1) containment temp 2.78 hrs after accident is 185°F (Fig 3, AppN FSAR), cable temp rating is 194°F/90°C)

2) XLPE/ASB Braid. 40 yrs as per Table C-1 App C, transmitted to NRC I.E Bulletin 79-01B


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC5-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTAL TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 8
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

Page CC5-4

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 year	See Note 1	Table 7.5-2 FSAR	8	Seq	
PLANT ID NO: Various	Temperature (°F)	Fig 022.9-1,-2	345	FSAR App Q	8	SEQ.	
COMPONENT: Control Cable	Pressure (PSIA)	Fig. 2 Fig 1	121.7	AEW 6504	8	SEQ.	
MANUFACTURER: General Electric							
MODEL NUMBER: NEM # 3121	Relative Humidity (%)	100	100		8	SEQ.	
FUNCTION: Various	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.6	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: Various	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L Vol 1	8	SEQ.	
LOCATION: IN & OUT OF CONTAINMENT	Aging (years)		See Note 2				
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		FLOODUP Tubes				

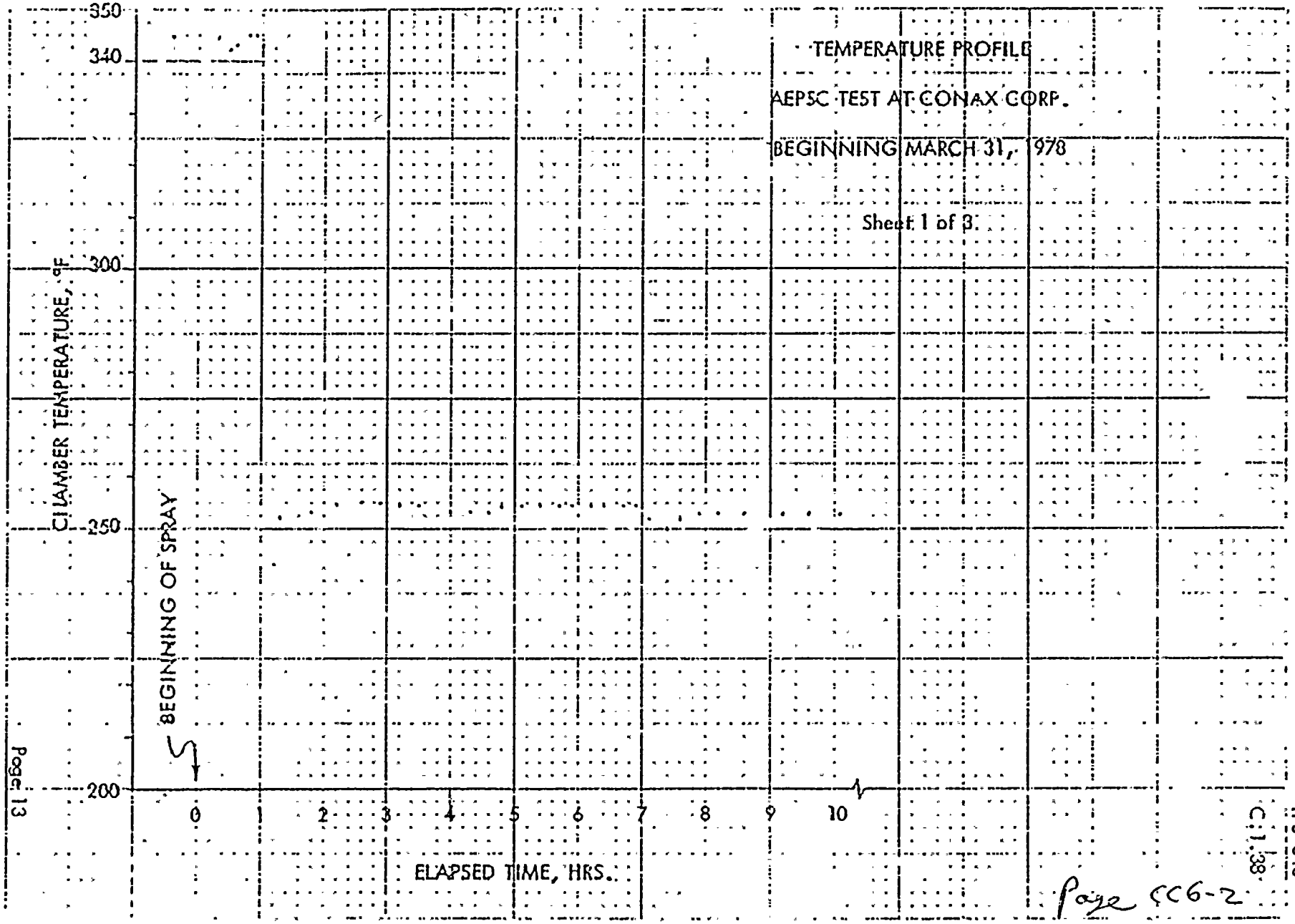
*Documentation References:

8. CONAX CORP. TEST REPORT IPS-348

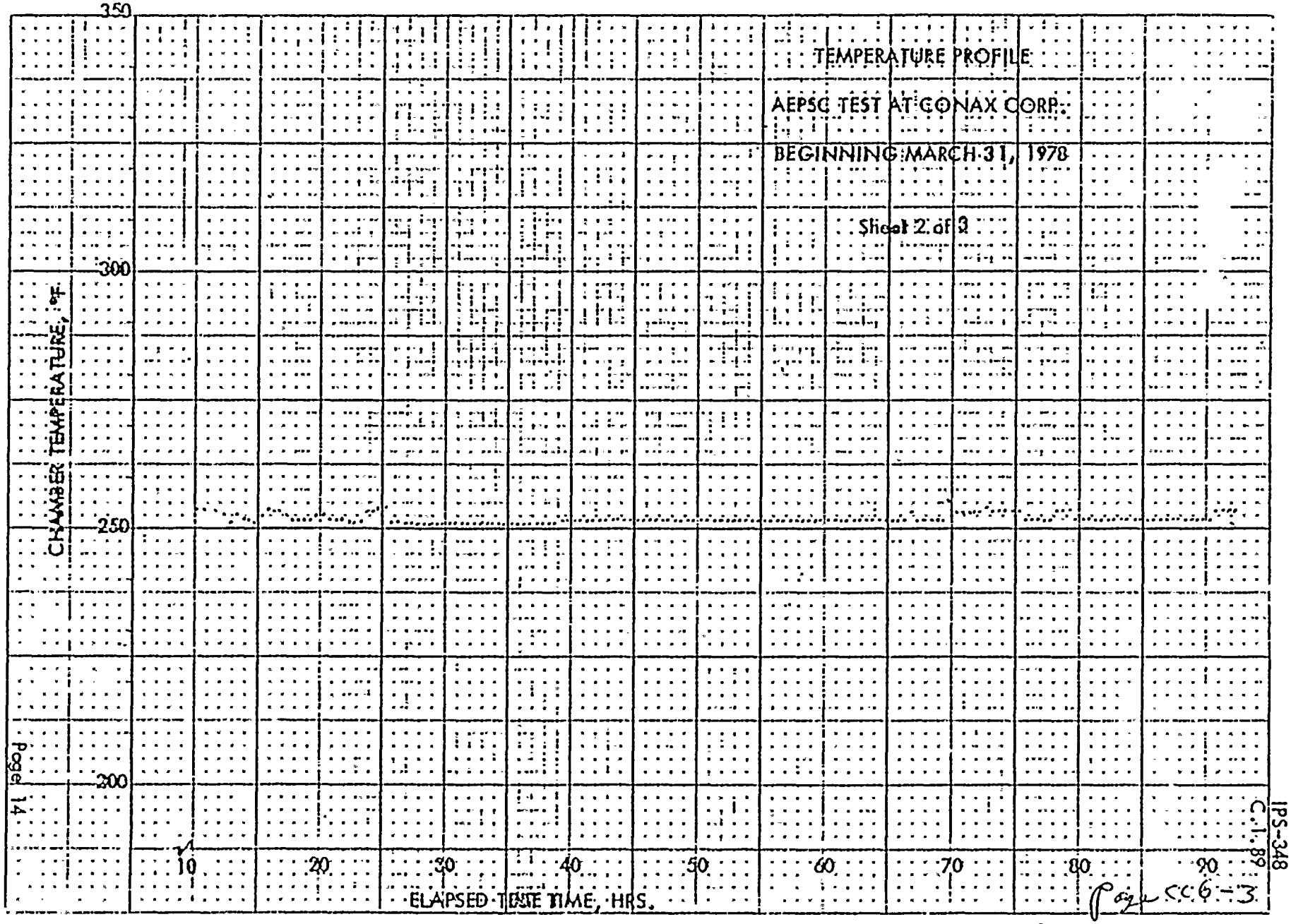
Notes:

1) Containment temp 2,72 hrs after accident is 185°F (Fig 3, App N, FSAR), cable temp rating = 194°F (90°C)

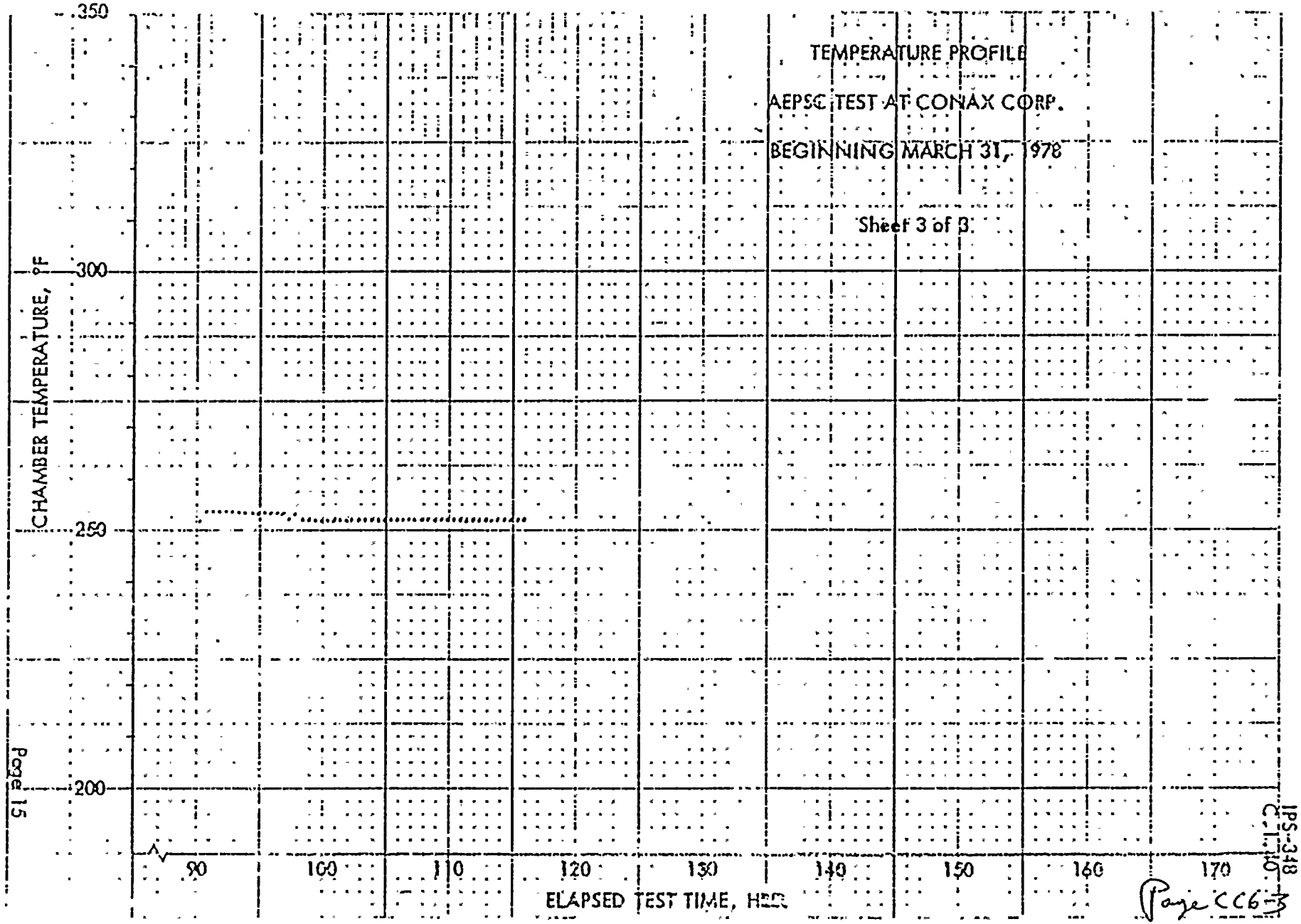
2) XLPE/ASB. Braid. 10 yrs as per Table C-1 App C, Enclosure 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC6-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F.
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TEST TIME, HRS.

Page CC6-3


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR		FSAR Table 7.5-2			
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 027.9-1,-2	345	FSAR App Q	8	SEQ.	
COMPONENT: CONTROL CABLE MANUFACTURER: CONTINENTAL	Pressure (PSIA)	Fig 2 Fig 1	121.7	AEC 6504	8	SEQ.	
MODEL NUMBER: ITEM # 3122	Relative Humidity (%)	100	100		8	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.6	8	SEQ.	
SERVICE: VARIOUS	Radiation (10^6 rads)	Fig 4 150	150	UCAP 7410-L Vol 1	8	SEQ.	
LOCATION: IN + OUT OF CONTAINMENT	Aging (years)		See Note 2				
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No	Submergence		FLOODUP Tubes *				

*Documentation References:

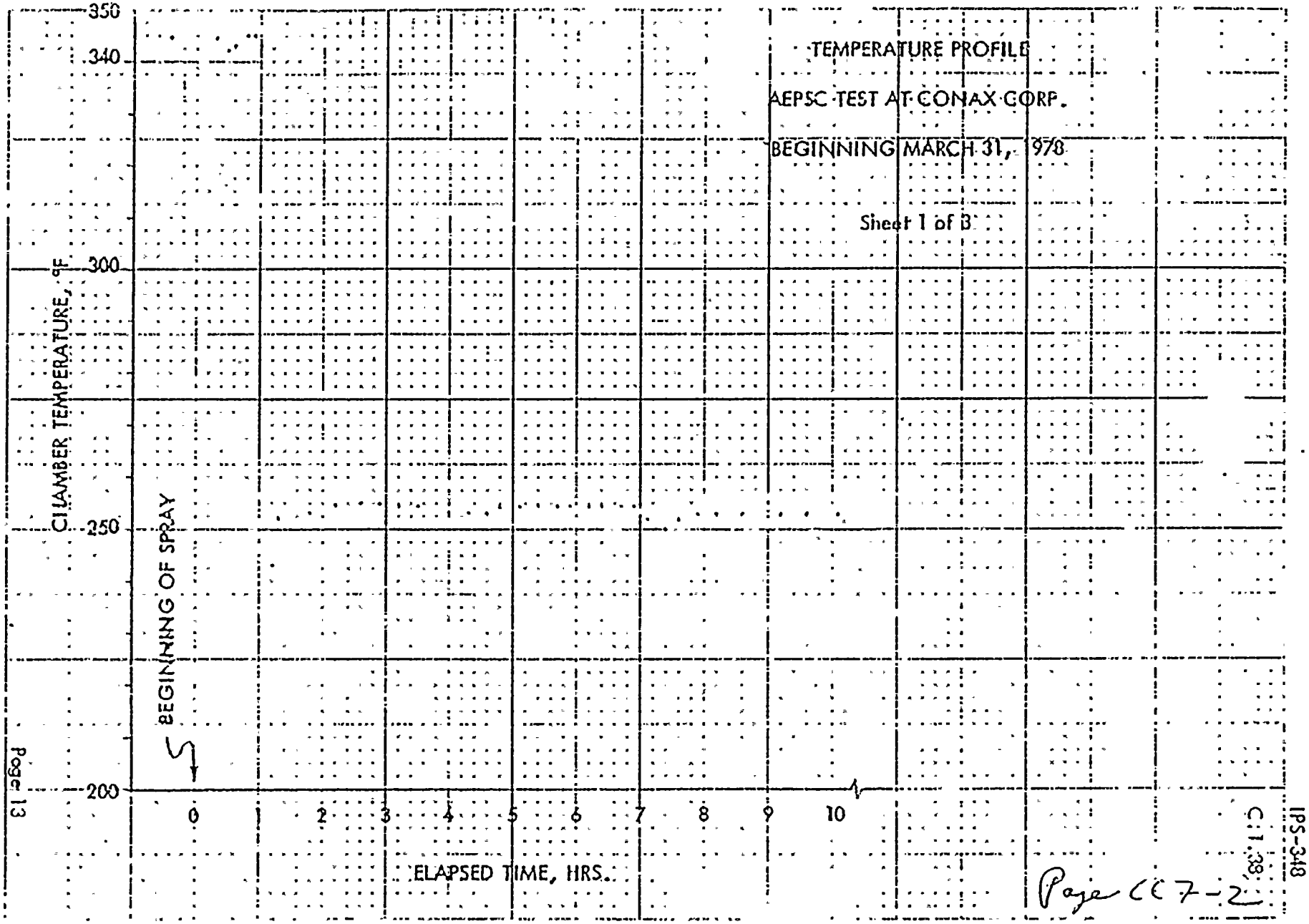
8. CONAX CORP. TEST REPORT IPS-348

Notes:

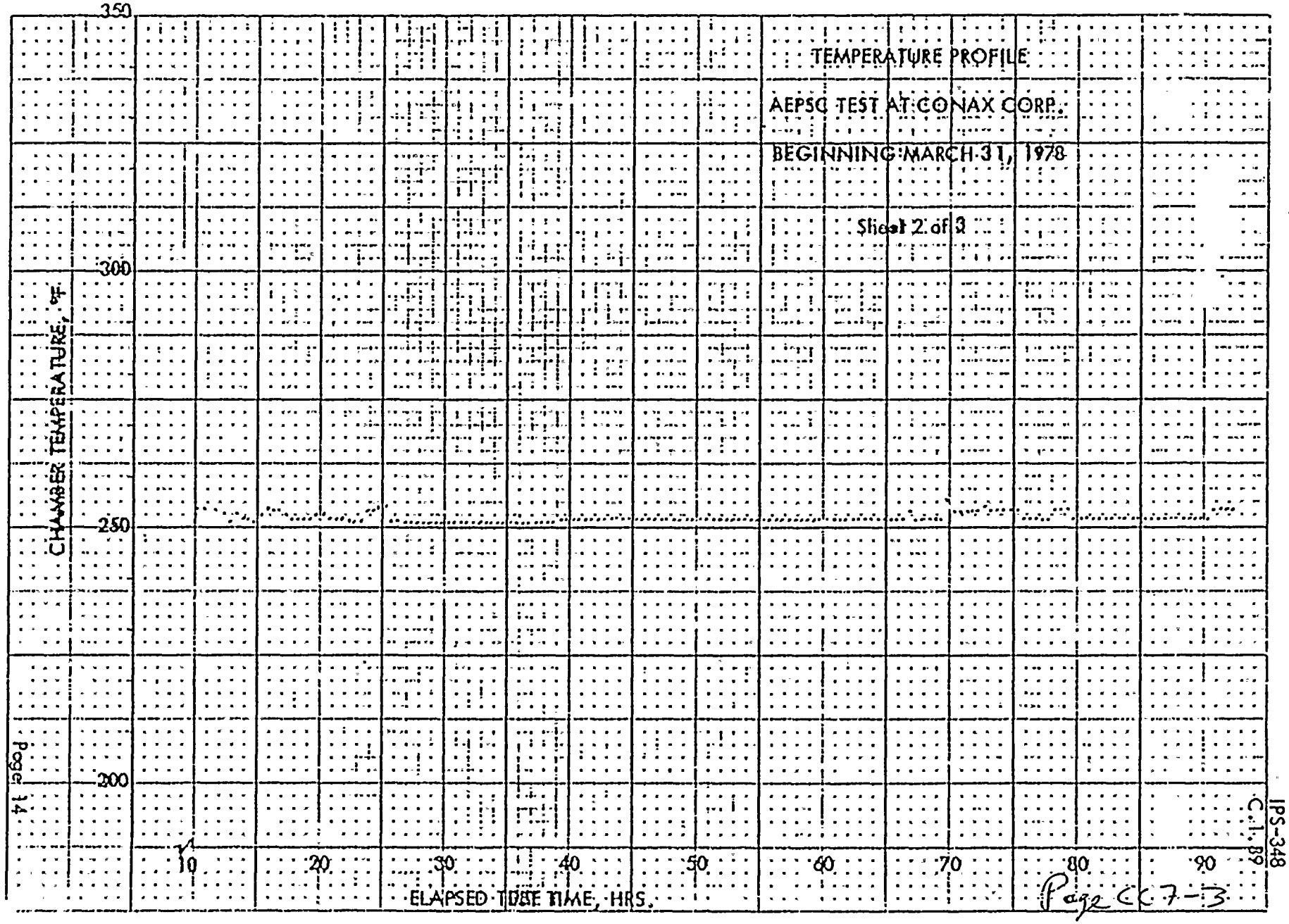
* EXCEPT for CABLES on VCR-11, 21, 101, 102, 103, 104, 105, 106 & 107 AND NMO-151, 152 & 153. See Cable Note 2.

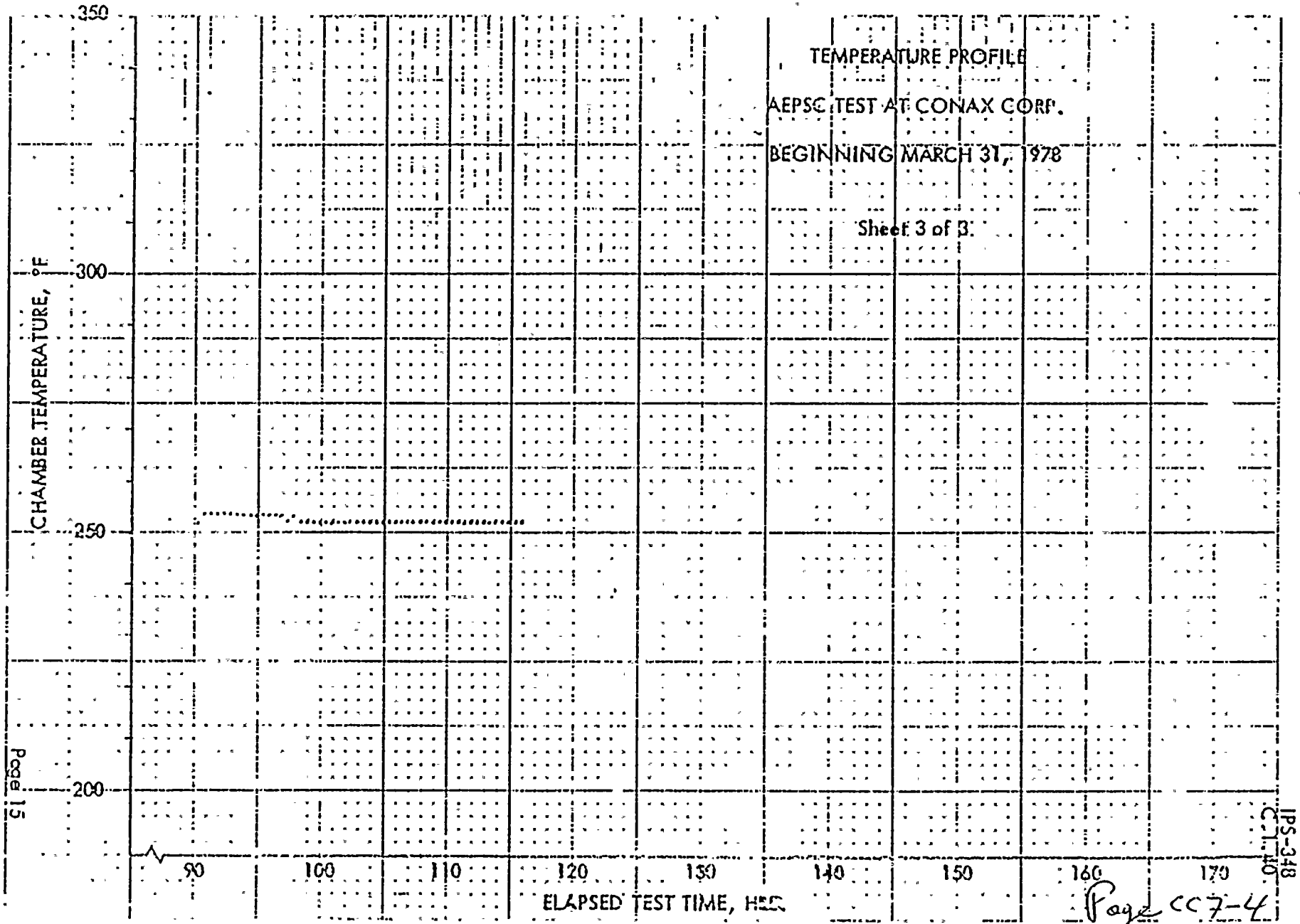
1) Containment temp 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating 194°F (90°C)

2) XLPE/ASB. braid 40 yr life per Table C-1 & App C, Enclosure 4 to NRC 77 Bulletin 77-02.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC7-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	8	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	345	FSAR App Q	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	FIG. 2 Fig 1	121.7	NEW 6504	8	SEQ.	
MANUFACTURER: GENERAL ELECTRIC	Relative Humidity (%)	100	100		8	SEQ.	
MODEL NUMBER: ITEM # 3122	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.L	8	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L Vol 1	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		* FLOODUP Tables				
LOCATION: IN + OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No							

*Documentation References:

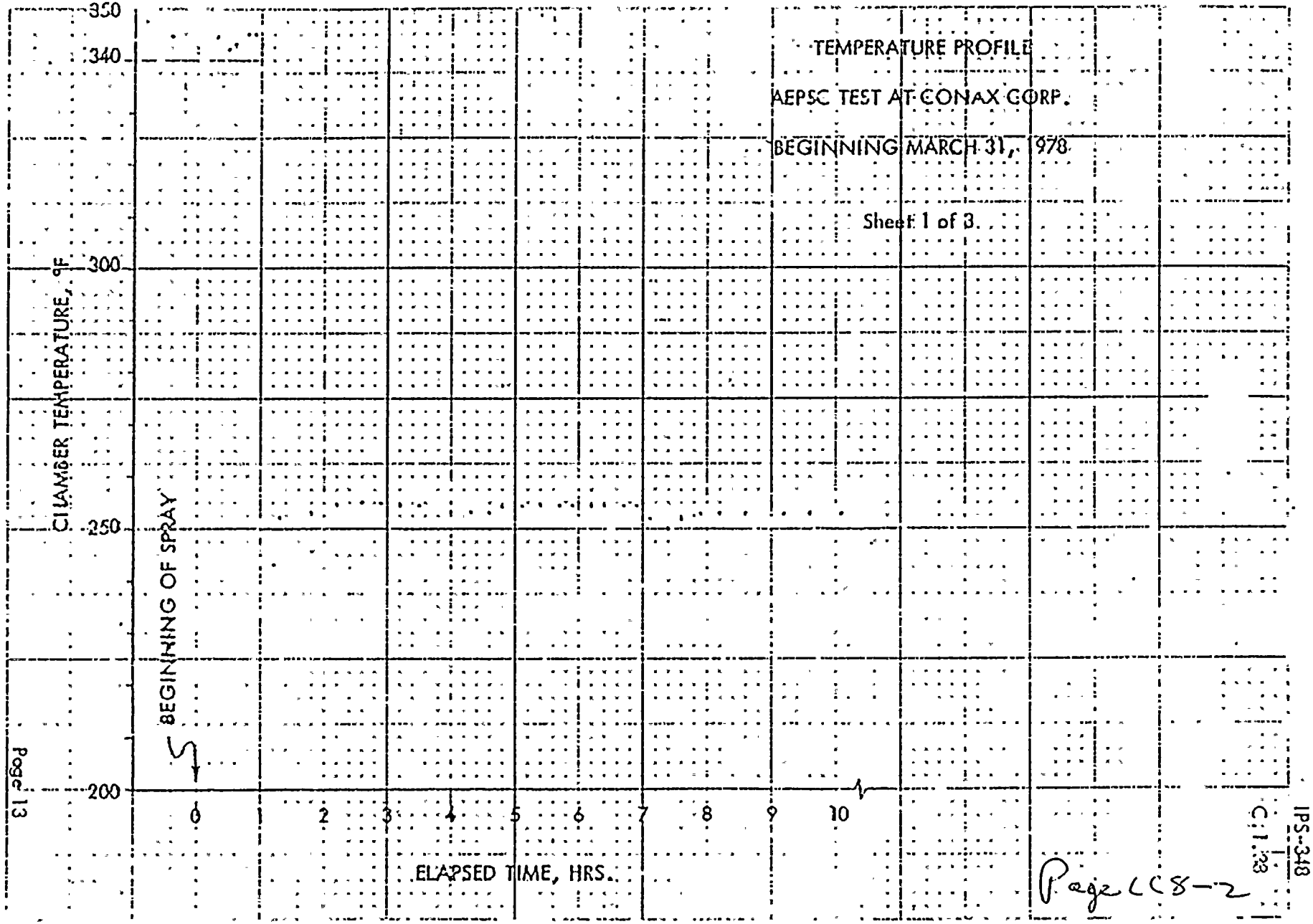
8. CONAX QUAL. TEST REPORT IPS-348

Notes:

* EXCEPT for CABLES on VCR-11, 21, 101, 102, 103, 104, 105, 106 #107 AND NMO-151, 152, & 153. See Cable Note 2.

1) Containment temp 2.78 hrs after accident = 185°F (Fig 3, App Q, FSAR), cable temp rating 194°F (90°C)

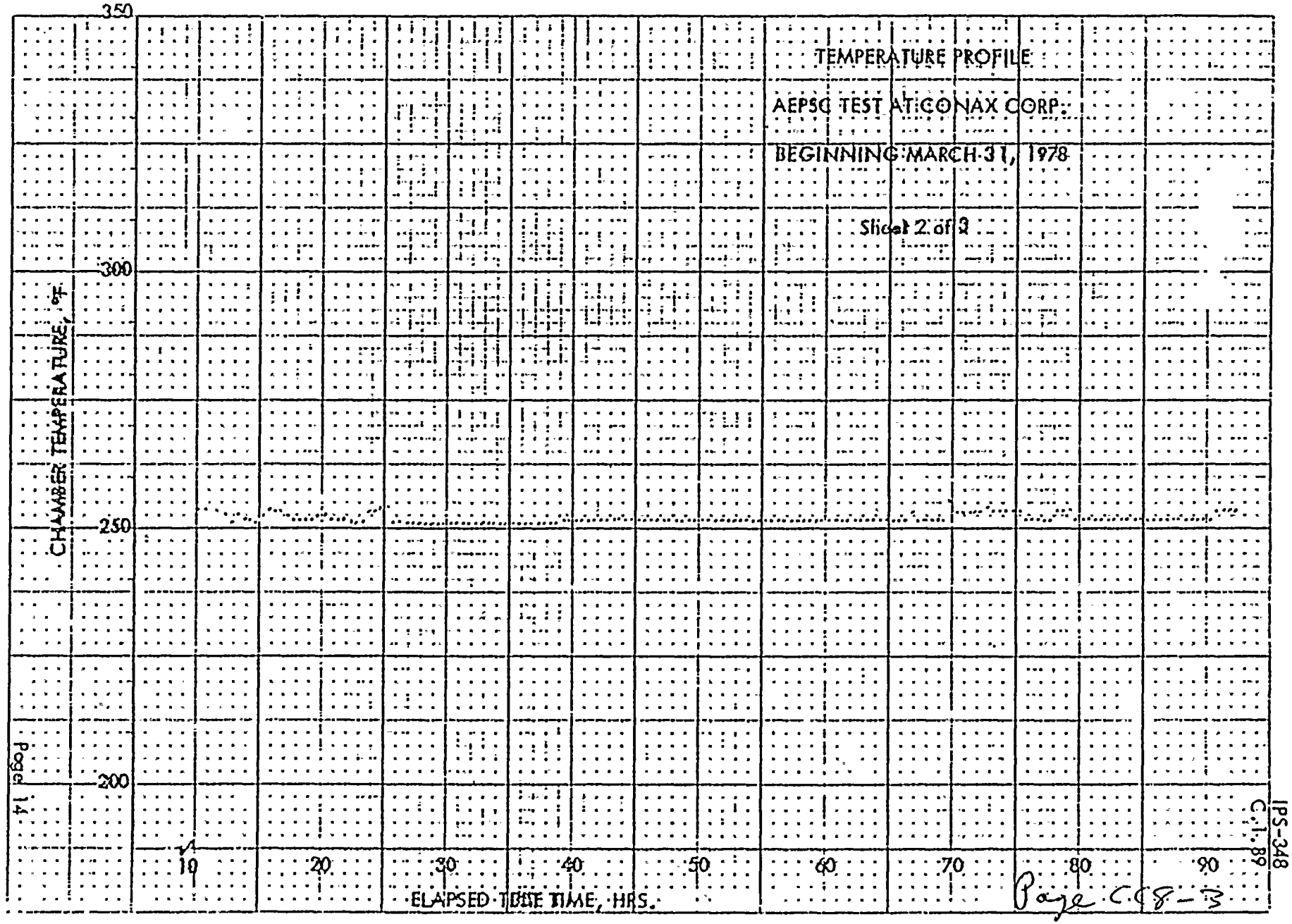
2) XLPE/HSF Rated 10 yrs as per Table C-1 App C, Enclosure 4) to NRC IE Bulletin 79-01B.



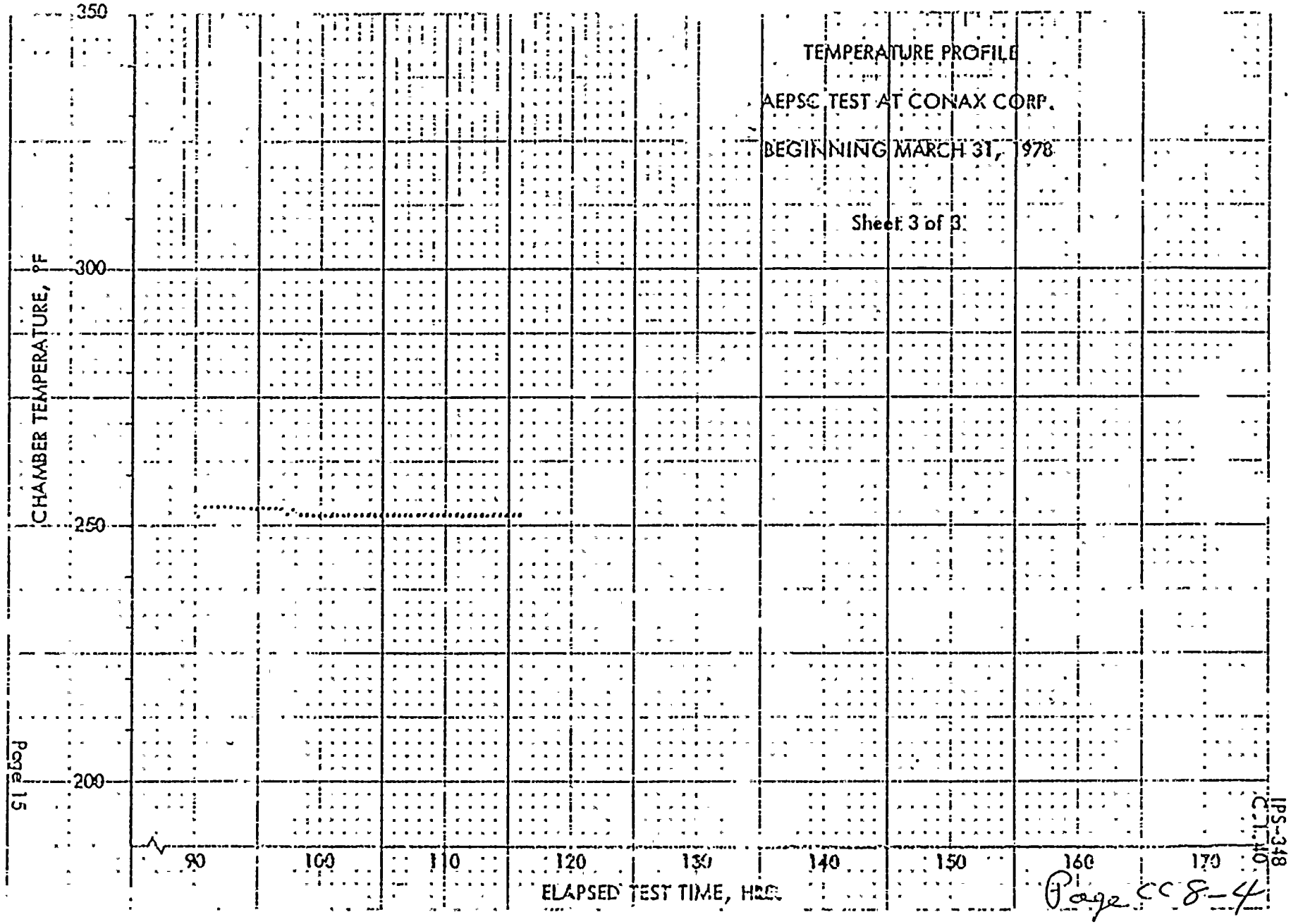
Page 13

IPS-348
C.1.23

Page C8-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.

Page C.8-3


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1		8	See	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	345	FSAR APP. 0	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	Fig 0-27	121.7	FSAR APP. 0	8	SEQ.	
MANUFACTURER: CONTINENTAL	Relative Humidity (%)	NA	100	NA	8	SEQ.	
MODEL NUMBER: ITEM # 3123	Chemical Spray	NA	2500 ppmB	NA	8	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	150	See Note 2	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 3				
SERVICE: VARIOUS							
LOCATION: OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

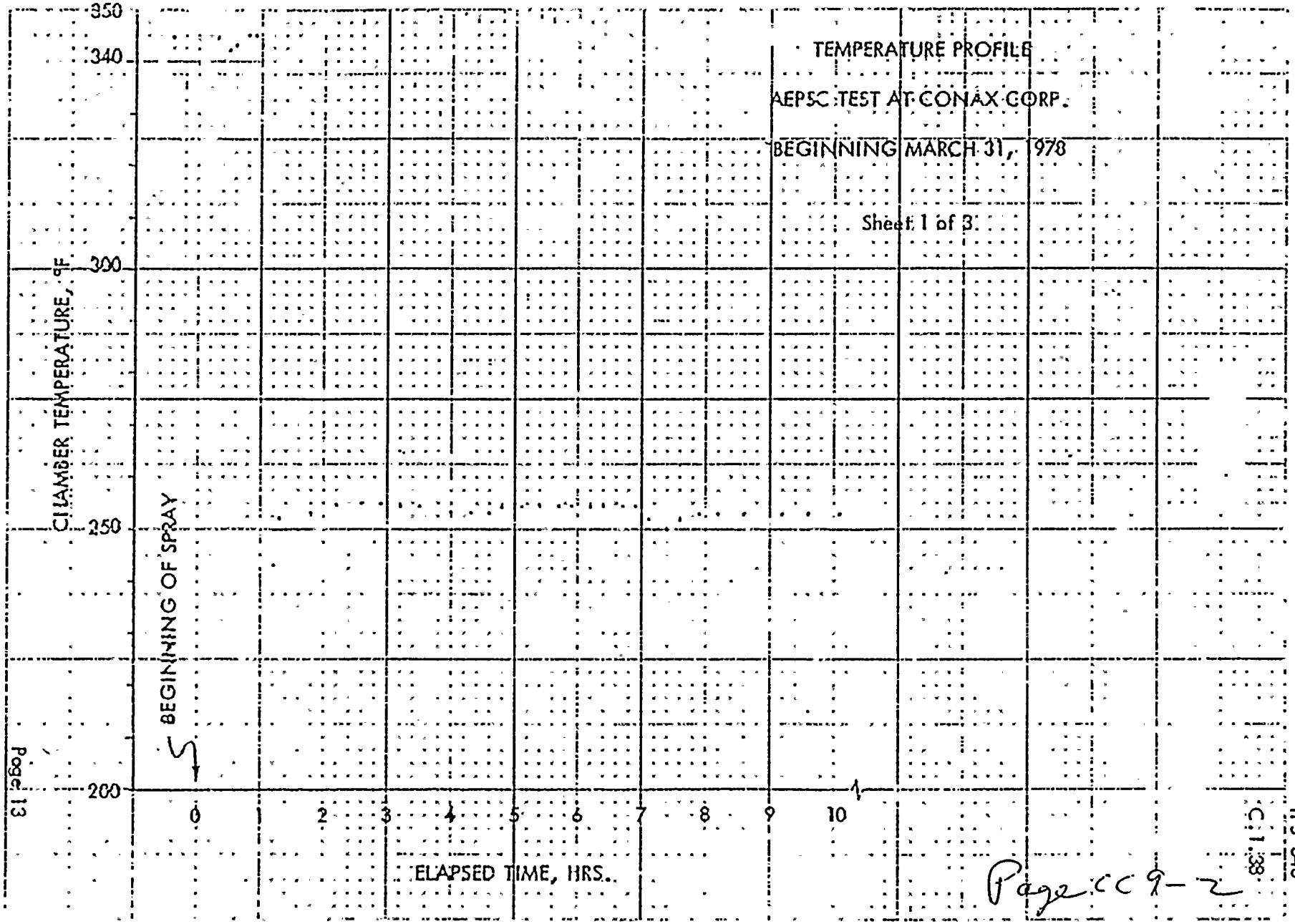
8. CONAX CORP. TEST REPORT IPS-348

Notes:

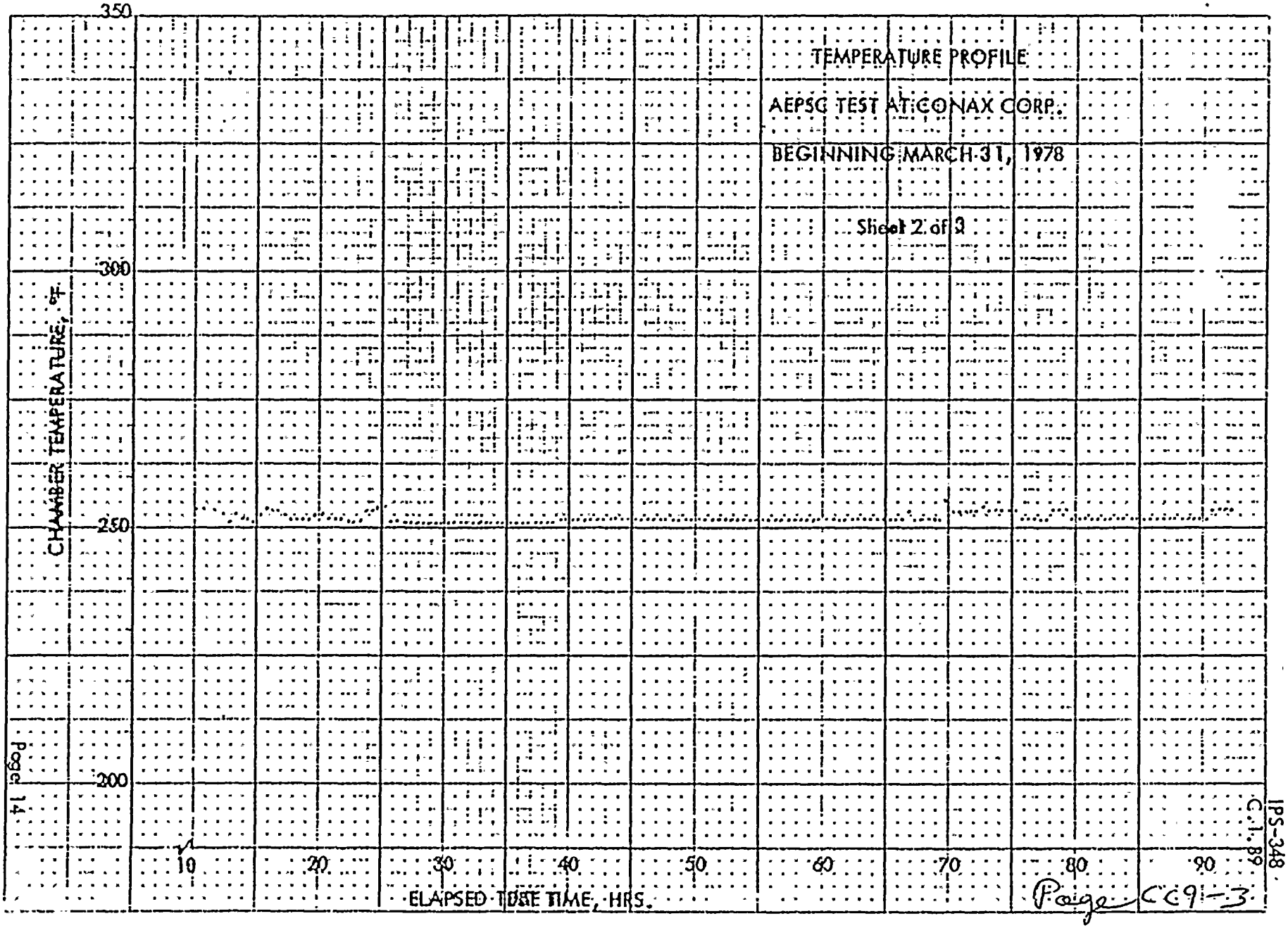
1) 230°F for 10 secs and 11.5 psig for .1 sec does not represent a challenge to the cable mechanical or electrical quality. Cable Temp rating 194°F

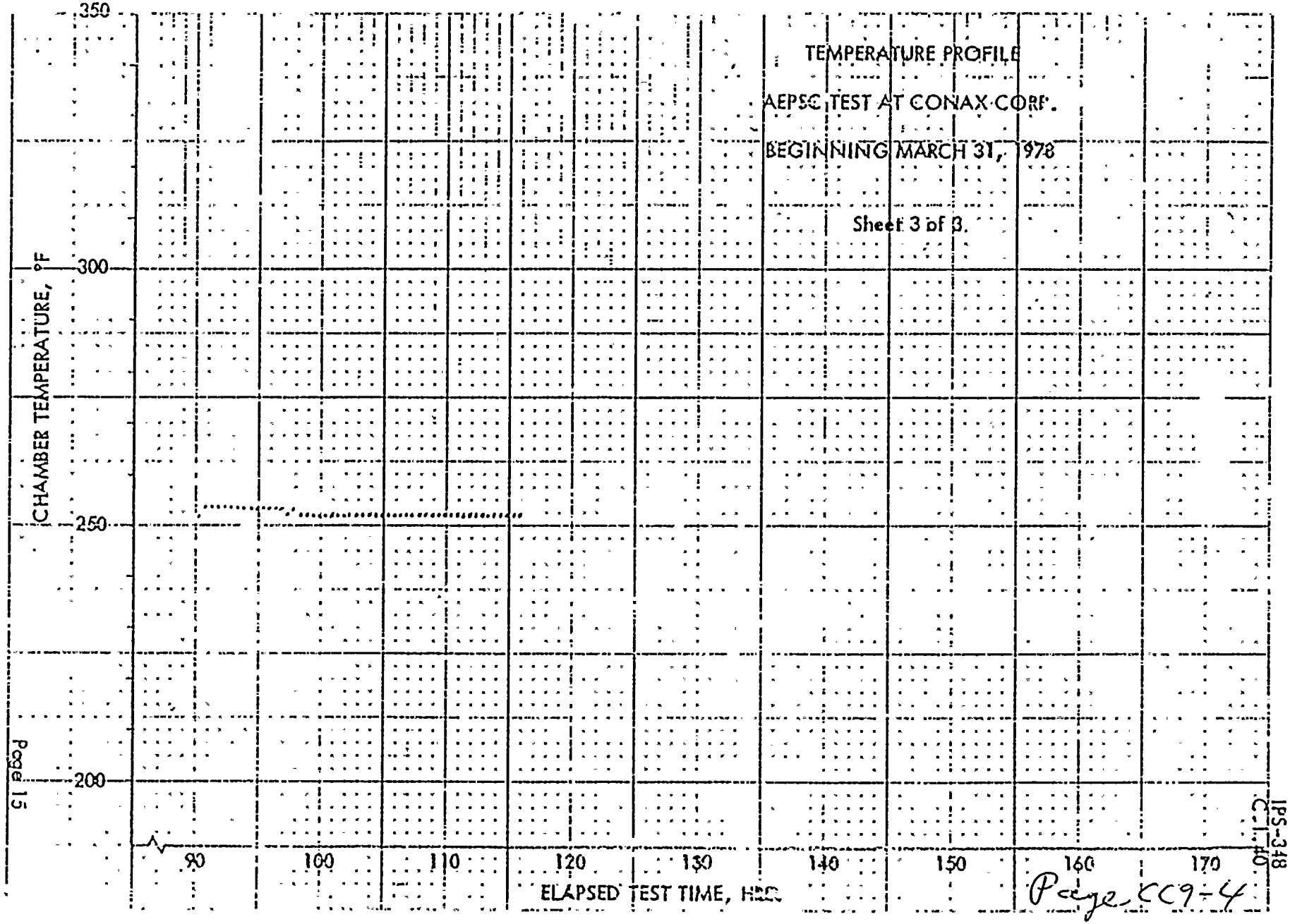
2) AEPSC NSRL CALCULATION DC-N-6420-2

3) XLPE/FISF [illegible] 40 yrs 00 psi. Table C-1 Appx C, Enclosure 4 to NRC IE Bulletin 79-01B. Page CC 9-1


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC9-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3.
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	345	FSAR APP O	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	FIG 0-27	121.7	FSAR APP O	8	SEQ.	
MANUFACTURER: GENERAL ELECTRIC	Relative Humidity (%)	NA	100	NA	8	SEQ.	
MODEL NUMBER: ITEM # 3123	Chemical Spray	NA	2500 PPMB	NA	8	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	150	See note 2	8	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 3				
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	
LOCATION: OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL:							

*Documentation References:

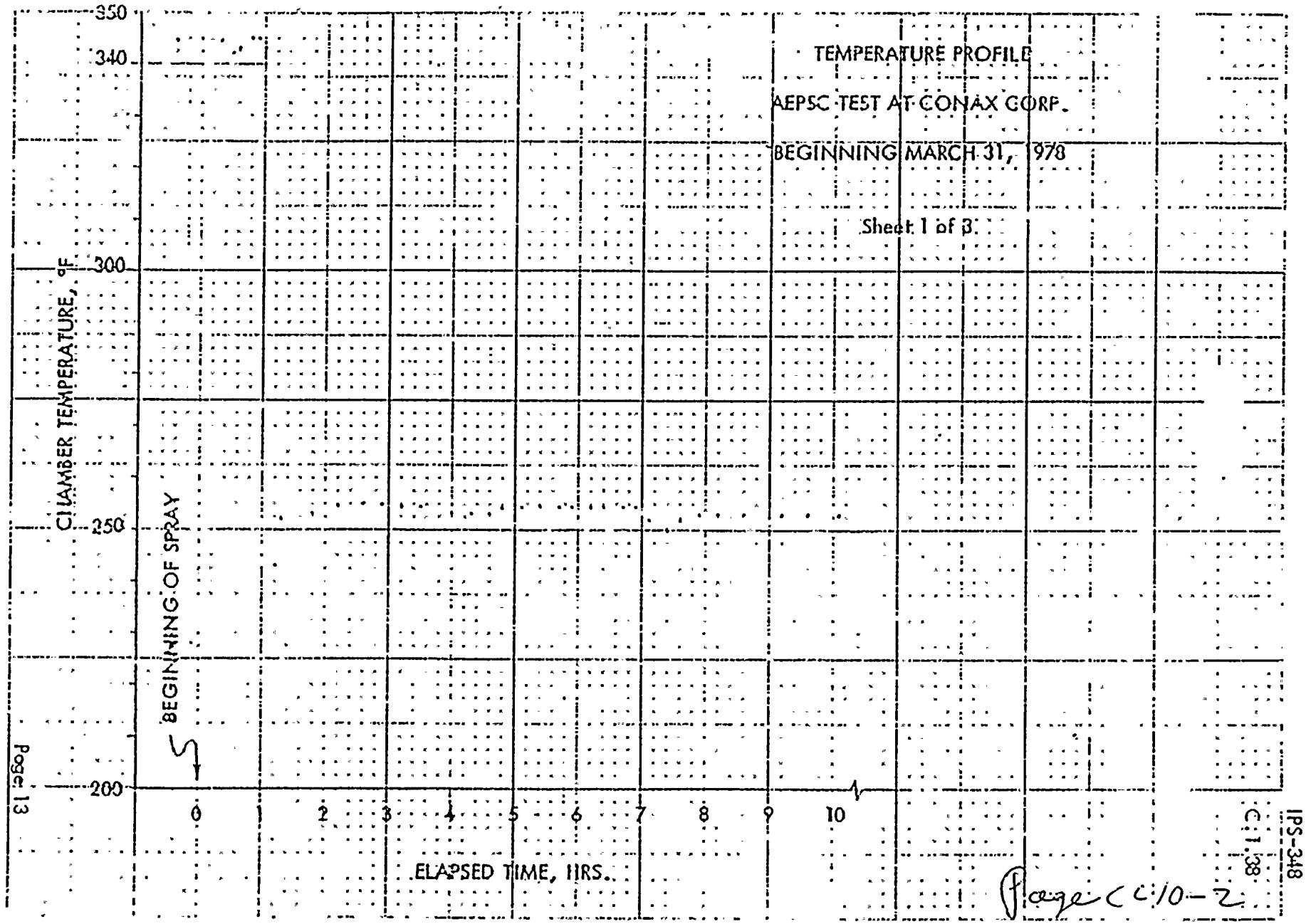
8. CONAX CORP. TEST REPORT IPS-34B

Notes:

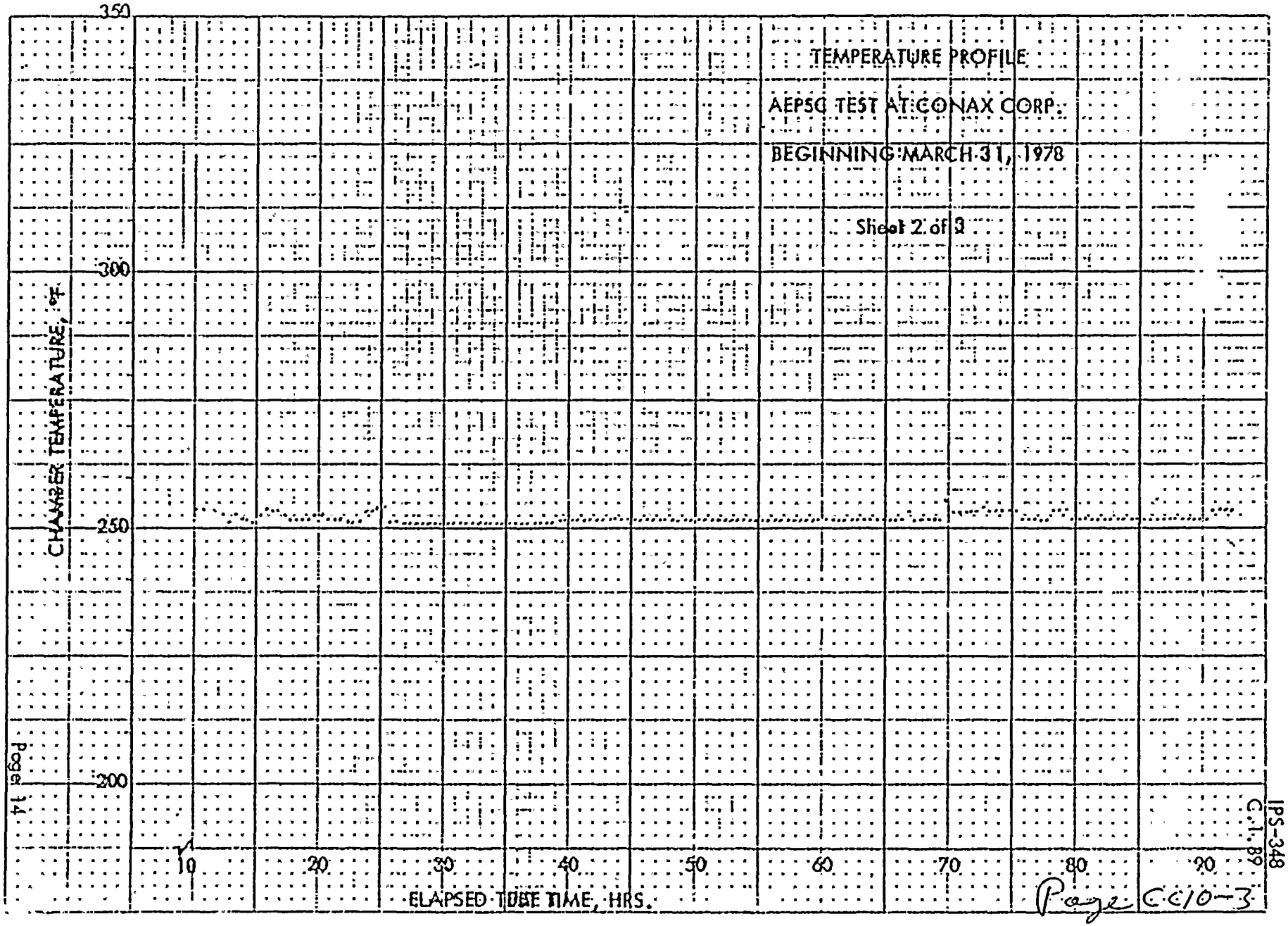
1) 238°F for 10 sec and 11.5 psig for 1 sec does not represent a challenge to the cable mech. or elec. quality. Cable temp rating 194°F

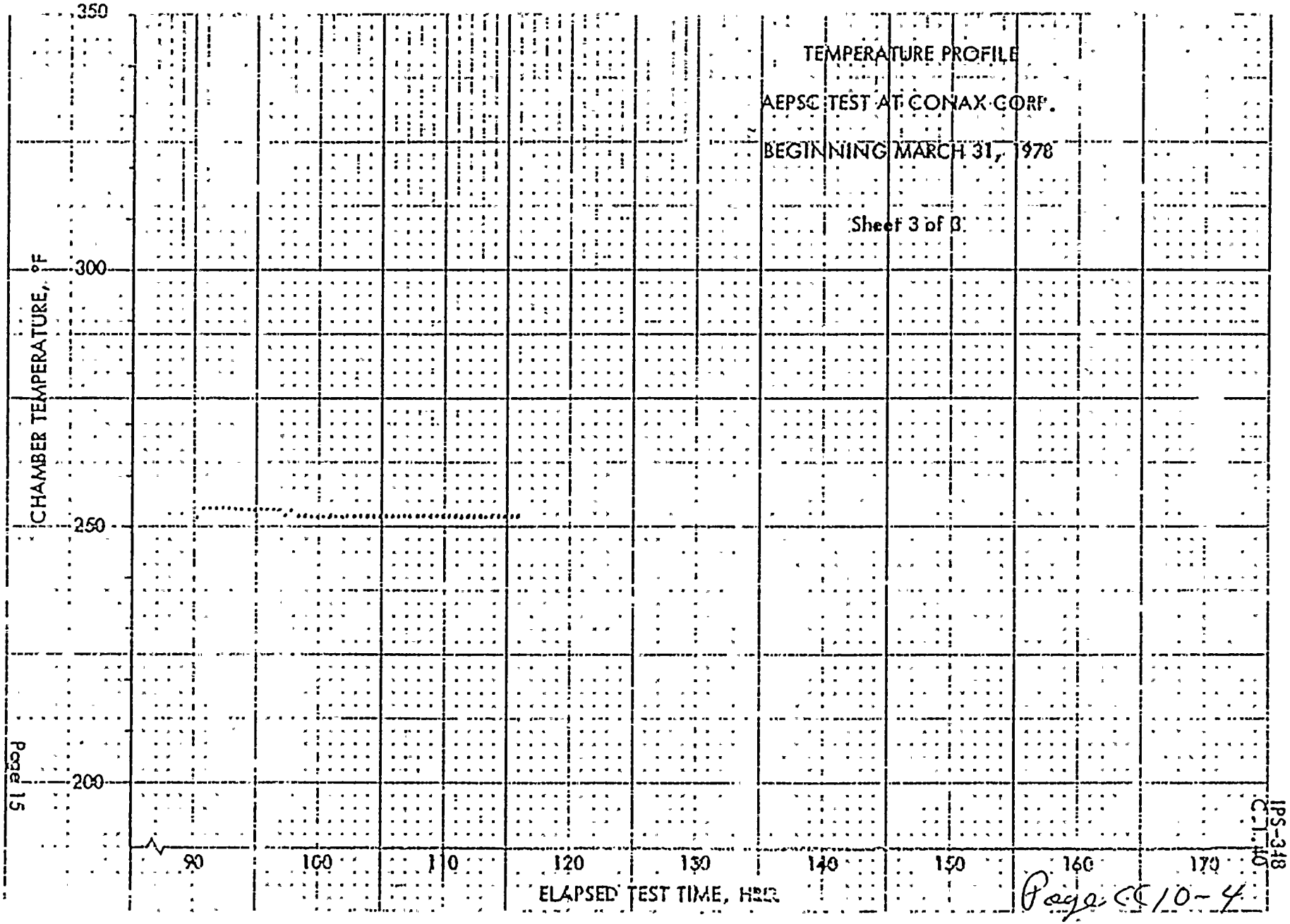
2) AEPSC NS+L CALCULATION DC-N-6120-2

3) XLPE/ABS. Rated 40 yrs as per Table C-1 App C in Enclosure 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page C.10-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TUBE TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 8
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	Note 2	FSAR TABLE 7.1-2	7	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	325	FSAR APP O	7	SEQ.	
COMPONENT: Power Cable	Pressure (PSIA)	FIG 0-27	96.7	FSAR APP O	7	SEQ.	
MANUFACTURER: KERITE	Relative Humidity (%)	NA	100	NA	7	SEQ.	
MODEL NUMBER: Item # 3127	Chemical Spray	NA	2600 ppm B	NA	7	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	17	200	See Note 3	See note 1		
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		No Details Yes		See note 1		
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	
LOCATION: Out of Containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA							

*Documentation References:

7. Kerite Co. Report on the Effects of Gamma Rad. and Autoclaving on Kerite Power + Control Cable.

Notes:

1. Letter from Robert Henry (Kerite) to L.F. Cusso (AEP) of 4-18-80.
2. Cable Temp rating 194°F. 230°F for 10 sec and 11.5 psig for 1 sec does not represent a challenge to the mech or elect. quality of the cable
3. AEPSC NS+L CALCULATION DC-N-6120-2.

7. Qualified by Kerite Co. Report on the effects of Gamma Radiation and Autoclaving on Kerite Power and Control Cables
April 30, 1970.

Type of Test: Sequential, gamma radiation
steam
chemical spray

Test Profile:

.8 Mrads/hr, 120 Mrads
325°F, 82 psig for 13 hrs
228°F, 5 psig for 7 days

Chemical Spray: Borated water, 1-1/2% solution of boric acid and distilled water buffered at a PH of 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	Table 7.5-2 FSAR	31	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 13.13-1	290	FSAR App N	31	Seq.	
COMPONENT: Instrument Cable	Pressure (PSIA)	Fig 13.6-1 13.6-2	59.7	FSAR App N	31	Seq.	
MANUFACTURER: Boston Insulated Wire Co.	Relative Humidity (%)	100	100		31	Seq.	
MODEL NUMBER: Item # 3064	Chemical Spray	2000 ppm B	2000 ppm B	T.S. 3/4.5 3/4.5.6	32	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	150 Mrad Fig 4	200	WCAP 7410-L Vol 1	32	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		168 hrs at 121°C Yes XLPE/CSPE		31	Seq	
SERVICE: VARIOUS	Submergence		Flood Dep * Tables				
LOCATION: In and Out Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

*Documentation References:

31. BIW Test Report 73C212
32. BIW Test Report 75C008

Notes:

* Except for cable for VCR-21. See Cable Note 2a.

1) Containment temp 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating = 194°F

31. BOSTON INSULATED WIRE Co. Item # 3064
TEST No. 73C212

Test type: Sequential
RADIATION: 100 MRADS
PROFILE:
290°, 45psig, 12 hr
220°, 5psig, 7 DAYS
Chem Spray: 1800 ppm B

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	Table 7.5-2 FSAR	34	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022-9-1,-2	346	FSAR APP Q	34	Seq.	
COMPONENT: INSTRUMENT CABLE MANUFACTURER: Rockbestos	Pressure (PSIA)	Fig 1 FIG 2	127.7	AEW 6504	34	Seq.	
MODEL NUMBER: Item #3064	Relative Humidity (%)	100	100		34	Seq.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	34	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	Fig 4	150°C for 1300 hrs 200	WCAP 7410-L VOL 1	34	Seq.	
LOCATION: IN AND OUT Containment	Aging (years)		Yes		34	Seq	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		* FLOODUP Tubes				

*Documentation References:

34. Rockbestos. QUAL. of Firewall III CLASS 1E ELECTRIC CABLE MAY, 1976

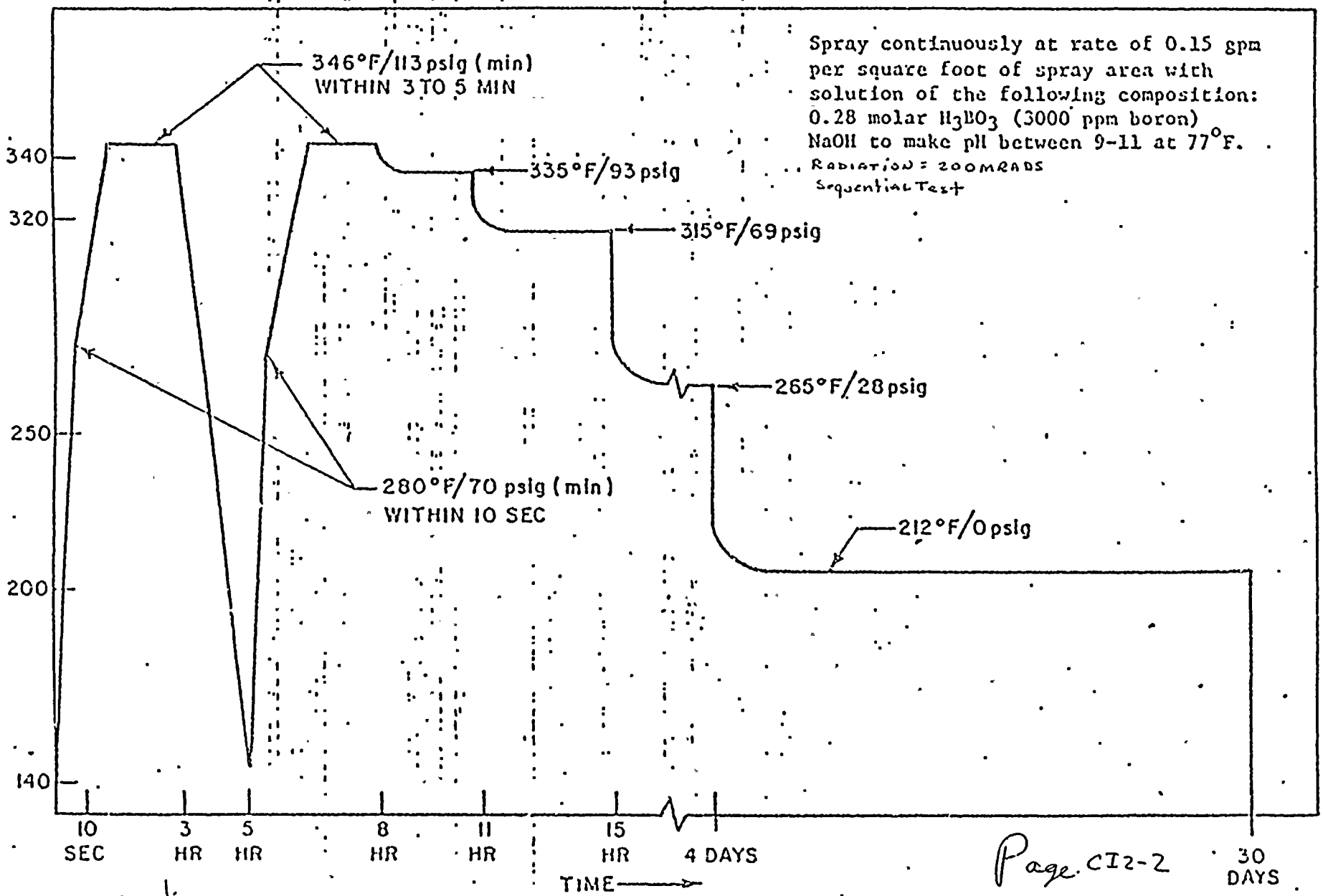
Notes:

* EXCEPT FOR CABLES on VCR-21. See Cable Note 1.

1) Containment Temp 2.77 hrs after accident = 195°F (Fig 3, APP Q, FSAR) Cable Temp rating = 192°F

34 Rockbestos Products: Qual. of Firewall III Class 1E Electric Cables

LOCA Profile



Page CI2-2

LOCA PROFILE

7.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	Table 7.5-2 FSAR	10	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	340	FSAR APP Q	10	SEQ.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	Fig 1 Fig. 2	119.4	AEC 6504	10	SEQ.	
MANUFACTURER: SAMUEL MOORE & CO.	Relative Humidity (%)	100	100		10	SEQ.	
MODEL NUMBER: ITEM # 3075	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 3/4.5 3/4.5.6	11	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	200	WCAP 7410-L VOL 1	10	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		250°F/1 DAY Yes		10	Seq	
SERVICE: VARIOUS	Submergence		* FLOODUP Tubes				
LOCATION: IN & OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

*Documentation References:

10. FIRL TEST REPORT F-C3683
11. ISOMEDIX CORP. TEST REPORT OF MAY, 1976

Notes:

*EXCEPT FOR CABLES ON NTP-140, MFC-110, 111, 120, 121, 130, 131, 140, 141. See Cable Note 1.

1) Containment temp 2.77 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating = 194°F

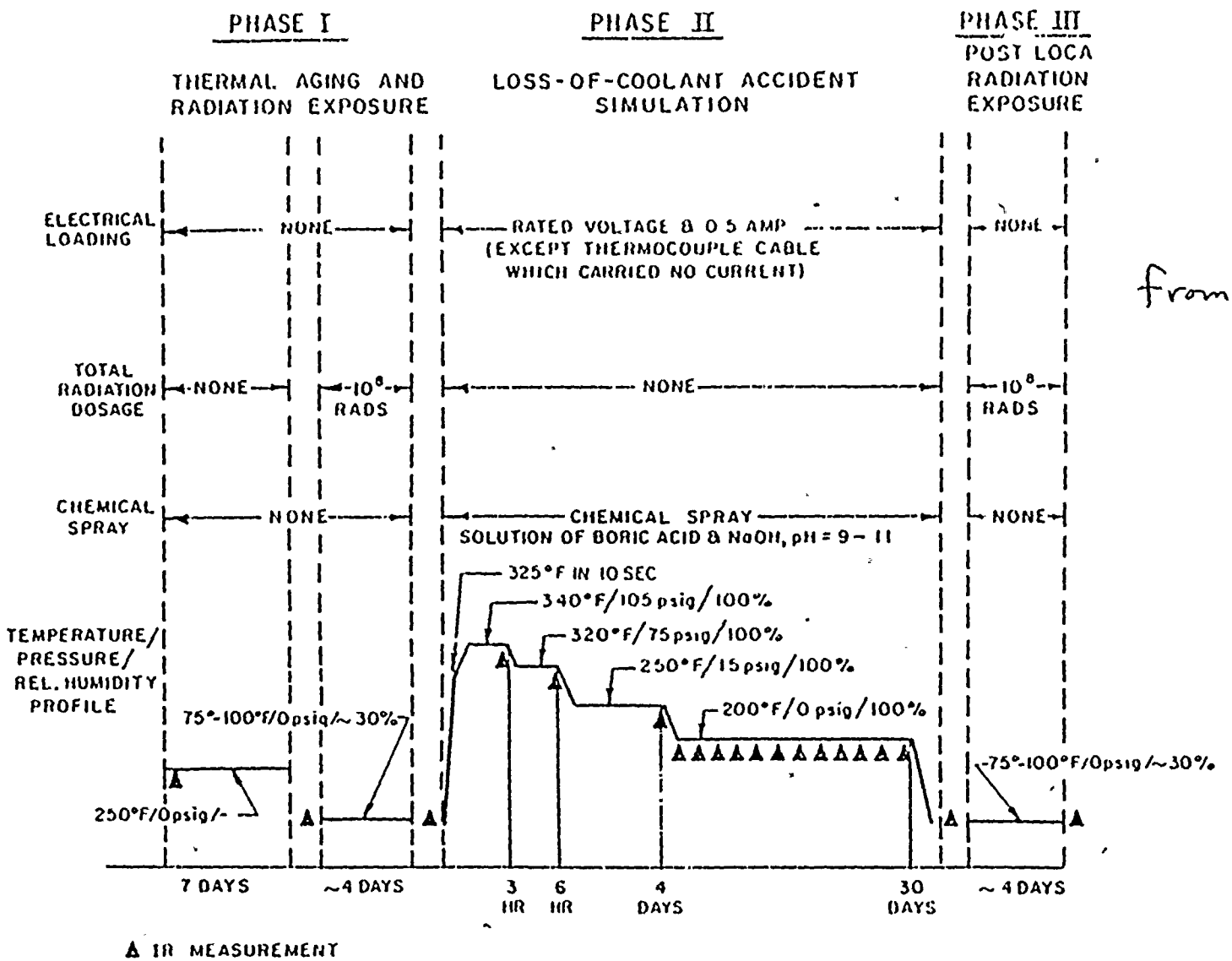
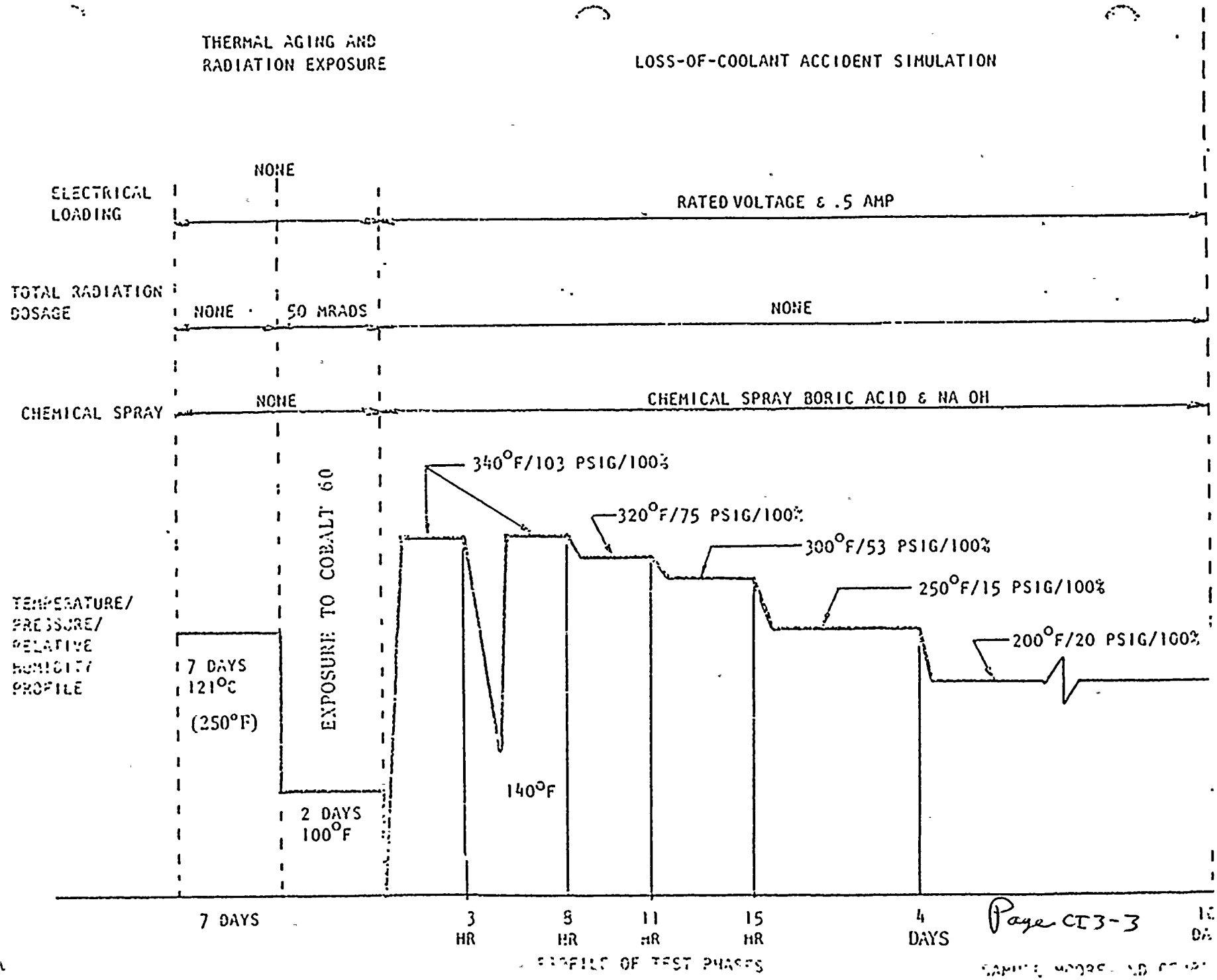


Figure 2. Profile of Test Phases

from Ref. 10

F-C3683

Page CI 3-2


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
ELECTRICAL
LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION
DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/
PRESSURE/
RELATIVE
HUMIDITY
PROFILE
7 DAYS
121°C
(250°F)
EXPOSURE TO COBALT 60
2 DAYS
100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3
HR
8
HR
11
HR
15
HR
4
DAYS
PROFILE OF TEST PHASES

Page CI3-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Note 1		33	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0.27	340	FSAR App O	33	Seq.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	Fig 0.27	114.7	FSAR App O	33	Seq.	
MANUFACTURER: Continental							
MODEL NUMBER: Item #3075	Relative Humidity (%)	NA	100	NA	33	Seq.	
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA	NA	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	10	See Note 2	33	Seq.	
LOCATION: Out of CONTAINMENT	Aging (years)		See Note 3				
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

33. FIRL TEST REPORT F-C2935; EXCERPT FROM

Notes:

1) 230°F for 10 sec and 11.5 psig for 0.1 sec does not challenge the cable mech. or elect. quality. cable temp rating 194°F.

2) AEPSC NSYL Calculation DC-N-6420-2

3) XLPE/HYPALON, 40 yrs per Table 3-1 App C of Ind... IEEE to NRC IE Bulletin 79-01B.

from
Ref.
33. FIRL TEST REPORT F-C 2935, EXCERPT FROM

Type of test: Sequential
gamma Radiation
Steam/

.45 MRAD/hr ; 10 MRAD
340°F, 100 psig, 2hrs
160°F, , 20hrs

Item # 3075, 3077 CONTINENTAL WIRE + CABLE Co.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	8	SEQ.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0229-1,-2	345	FSAR-APP Q	8	SEQ.	
COMPONENT: INSTRUMENT CABLE MANUFACTURER: BOSTON INSULATED WIRE CO.	Pressure (PSIA)	FIG. 2 FIG 1	121.7	AOW 6504	8	SEQ.	
MODEL NUMBER: ITEM # 3075	Relative Humidity (%)	100	100		8	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.6	8	SEQ.	
SERVICE: VARIOUS	Radiation (10^6 rads)	FIG 4 150	150	WCAP 7410-1 VOL 1	8	SEQ.	
LOCATION: IN + OUT OF CONTAINMENT	Aging (years)		See note 2				
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		* FLOODUP Tubes				

*Documentation References:

8. CONAX CORP. TEST REPORT IPS-348

Notes:

* FOR ALL CABLES EXCEPT ON NTP-140, MFC-110,111,120,121,139,140,141. See Cable Note 1.

1) containment temp 2.77 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating = 194°F

2) Hypalon/Hypalon 40 yrs as per Table C-1 App C of Enclosure 4 to NRC IE Bulletin 79-01B.

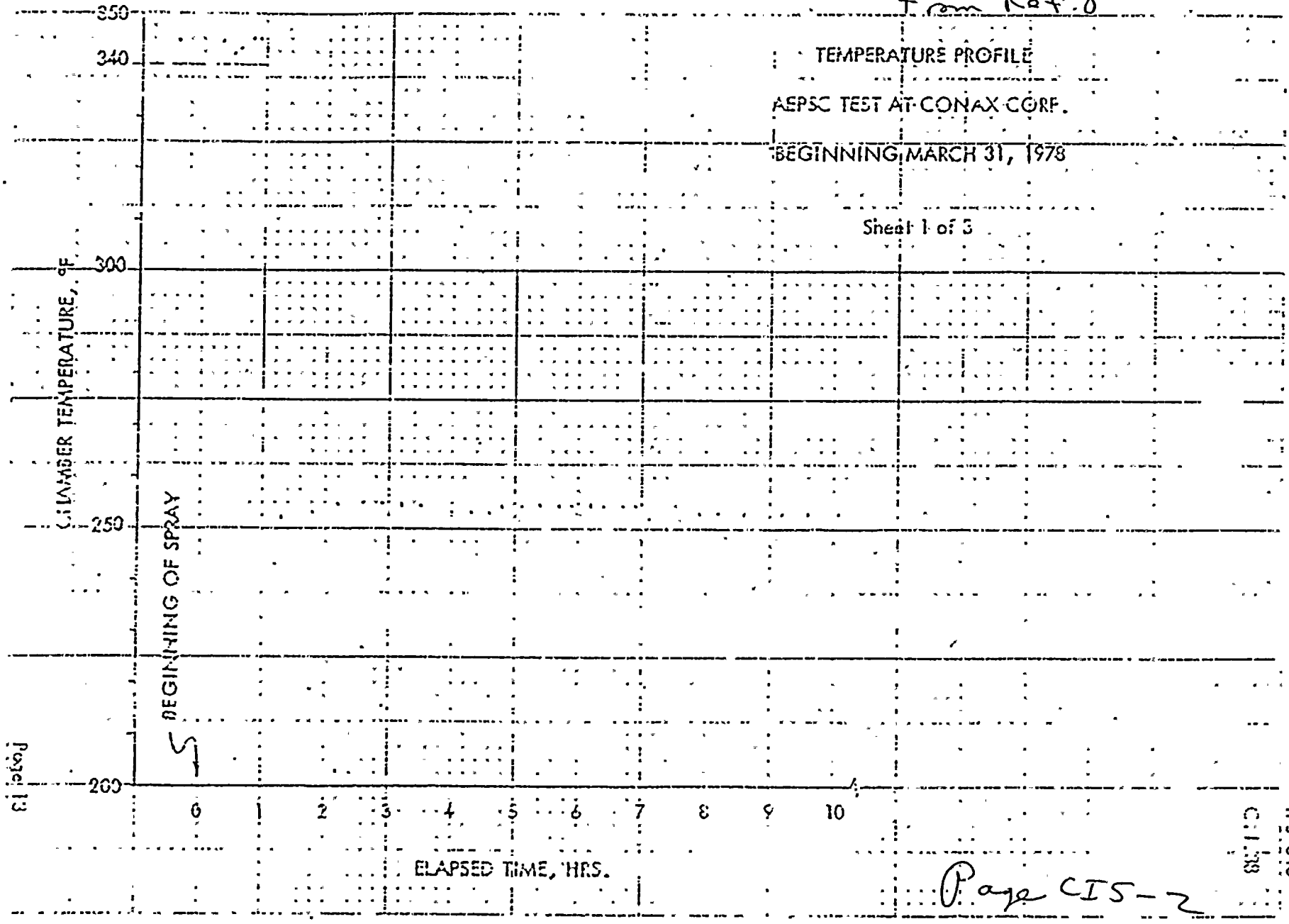
from Ref. 8

TEMPERATURE PROFILE

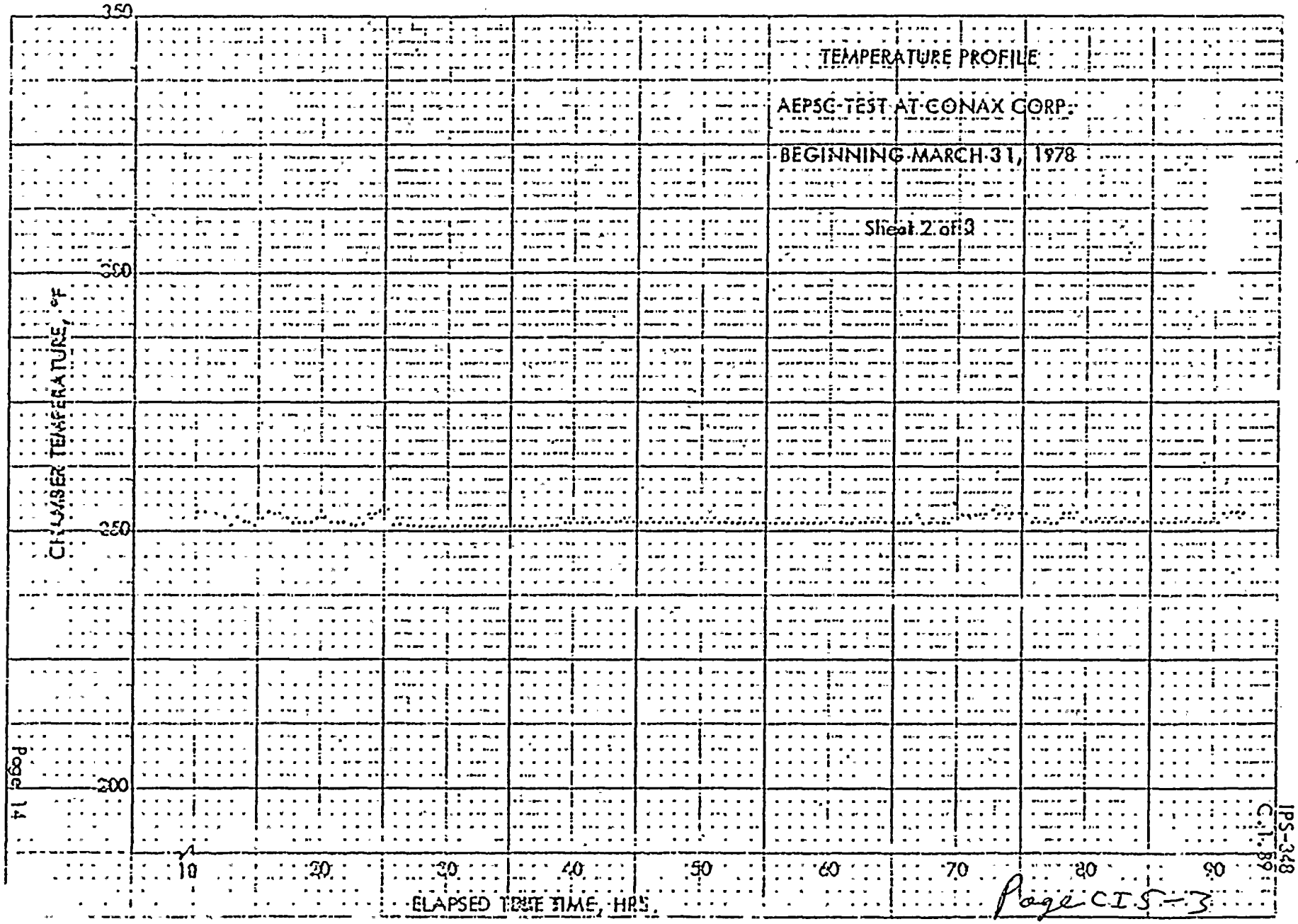
AEPSC TEST AT CONAX CORP.

BEGINNING MARCH 31, 1978

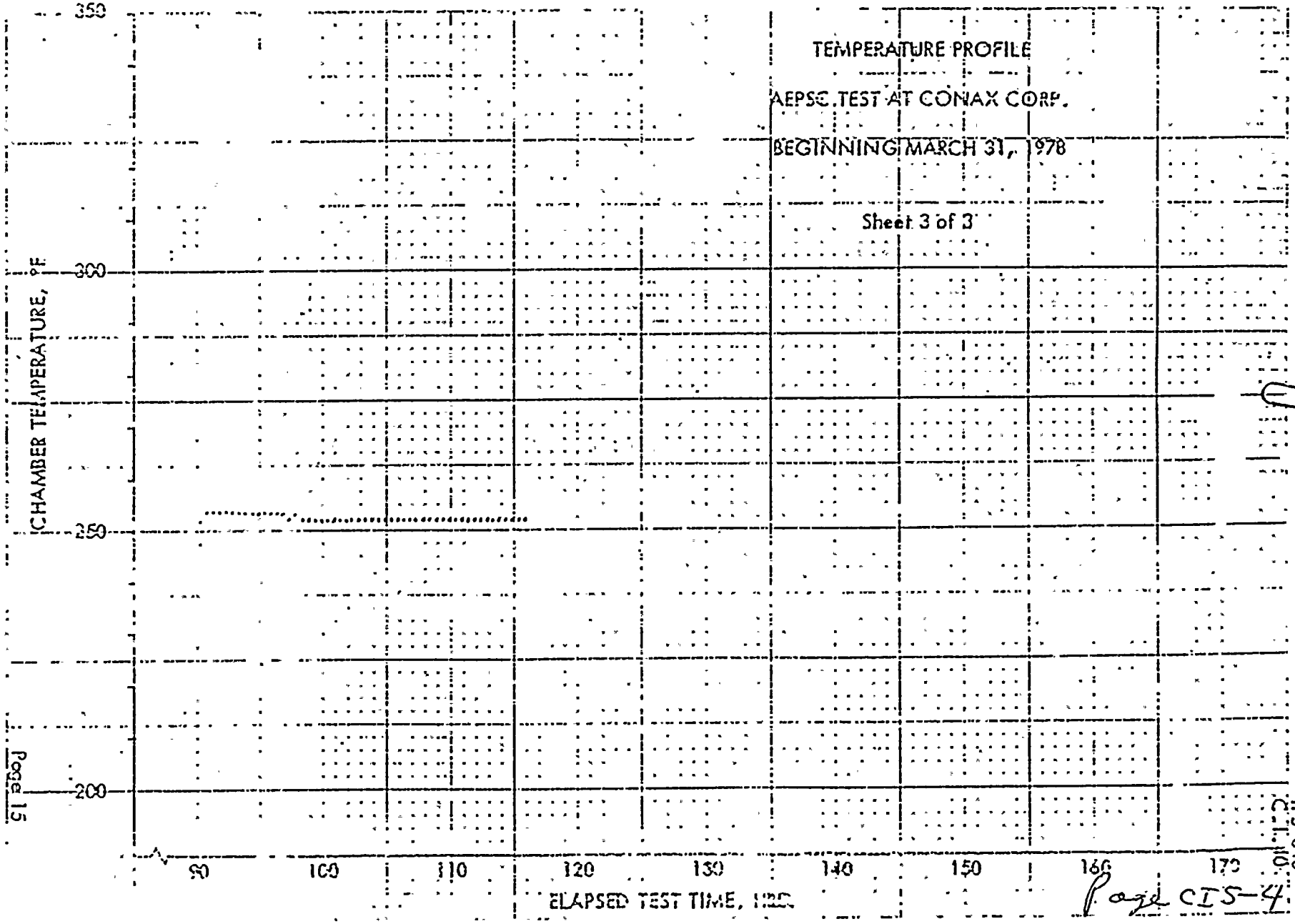
Sheet 1 of 3



Page CIS-2


TEMPERATURE PROFILE
AEPSC-TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.

Page CI5-3



IPS-348
C.I. 110

Page CIS-4

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	Table 2.5-2 FSAR	12	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2	346	FSAR APP Q	12	SEQ.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	FIG 1 FIG 2	127.7	AWW 6504	12	SEQ.	
MANUFACTURER: CERRO WIRE + CABLE CO.	Relative Humidity (%)	100	100		12	SEQ.	
MODEL NUMBER: ITEM # 3077	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 314.5 314.5.6	12	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L VOL1	12	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		150°C/1300hrs Yes		12	SEQ	
SERVICE: VARIOUS	Submergence		*FLOODUP TUBES				
LOCATION: IN + OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NO							

*Documentation References:

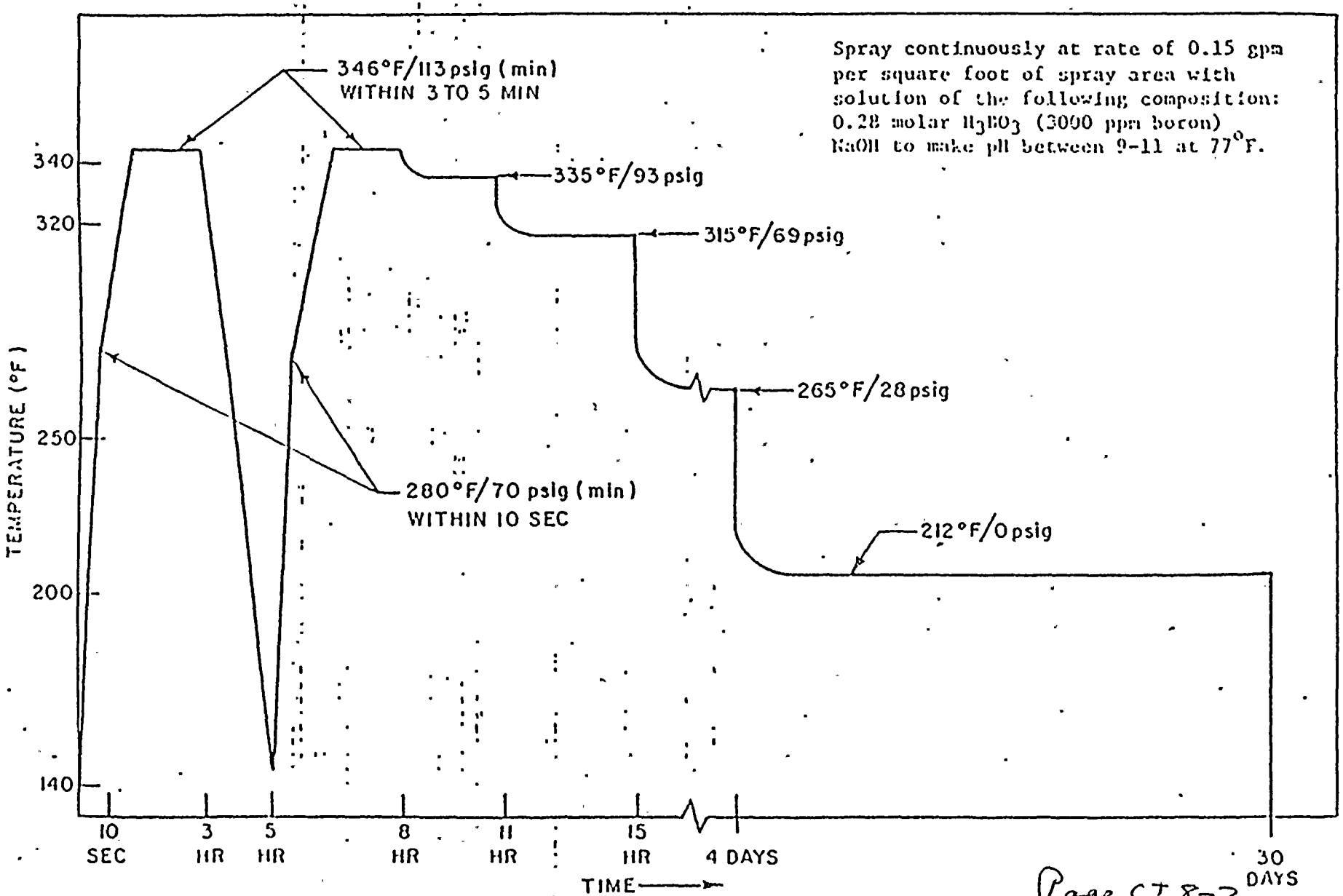
12. CERRO WIRE AND CABLE TEST REPORT OF MAY, 1976

Notes:

* EXCEPT FOR CABLES ON NTP-110, 111, 120, 121, 130, 131, 141, 210, 211, See Cable Note 1c.

1) containment temp 2.77 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating = 194°F

LOCA Profile



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DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	Table 7.5-2 FSAR	10	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	340	FSAR App Q	10	SEQ.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	FIG. 2 Fig 1	119.7	AERO 6504	10	SEQ.	
MANUFACTURER: SAMUEL MOORE & CO.	Relative Humidity (%)	100	100		10	SEQ.	
MODEL NUMBER: ITEM # 3077	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 3.4.5 3.4.5.6	11	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	200	WCAP 7410-L Vol 1	10	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		256°F/hours Yes		10	SEQ	
SERVICE: VARIOUS	Submergence		* FLOODUP Tubes				
LOCATION: IN & OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

*Documentation References:

10. FIRL TEST REPORT F-C3683
11. ISOMEDIX CORP. TEST REPORT OF MAY, 1976

Notes:

* EXCEPT for CABLES on NTP-110, 111, 120, 121, 130, 131, [illegible] 210, 211, 220, 221, [illegible] See Cable Note 1c.

1) Containment Temp 2.77 hrs after accident is 185°F (Fig 3, App N, FSAR), cable temp rating 194°F.

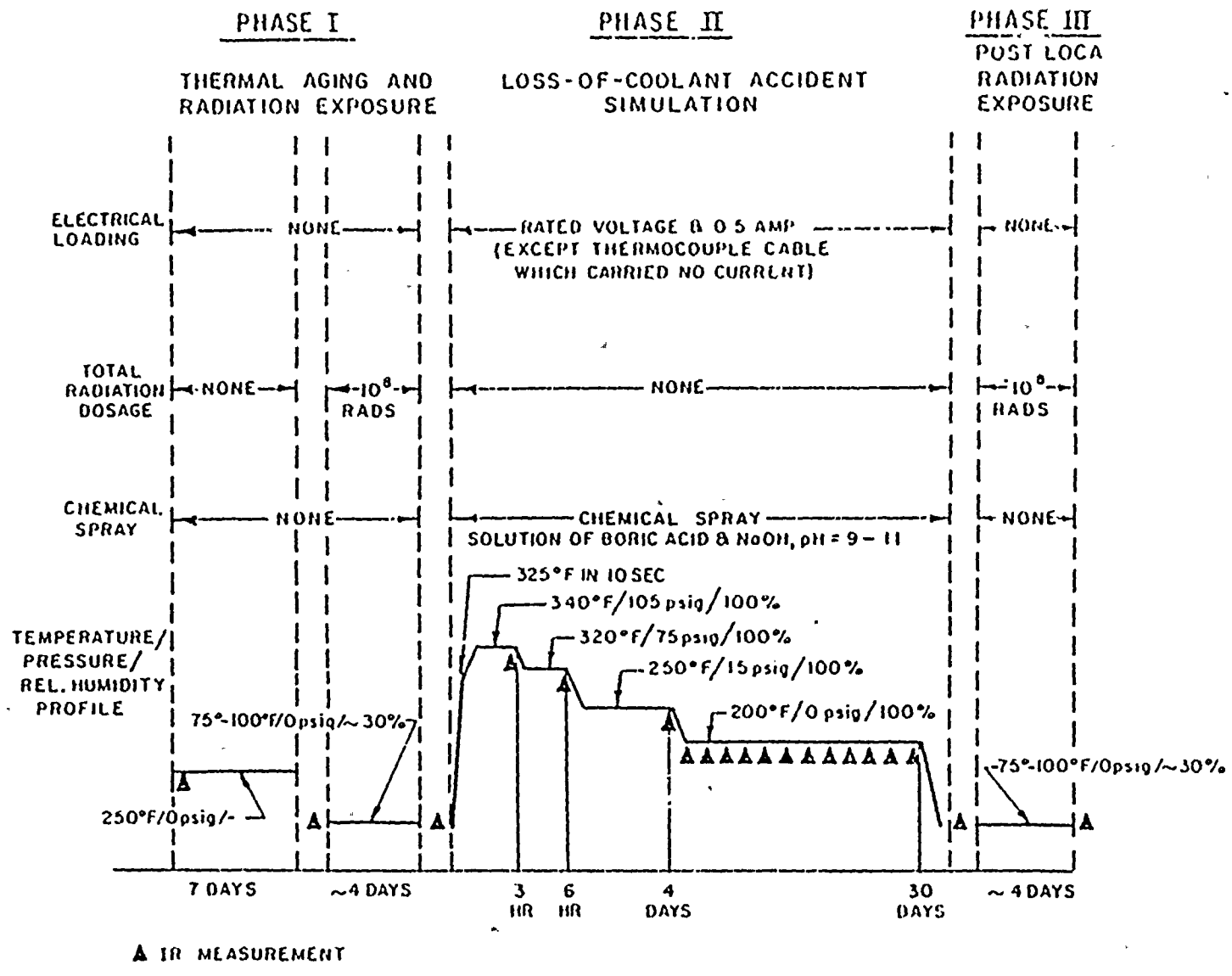
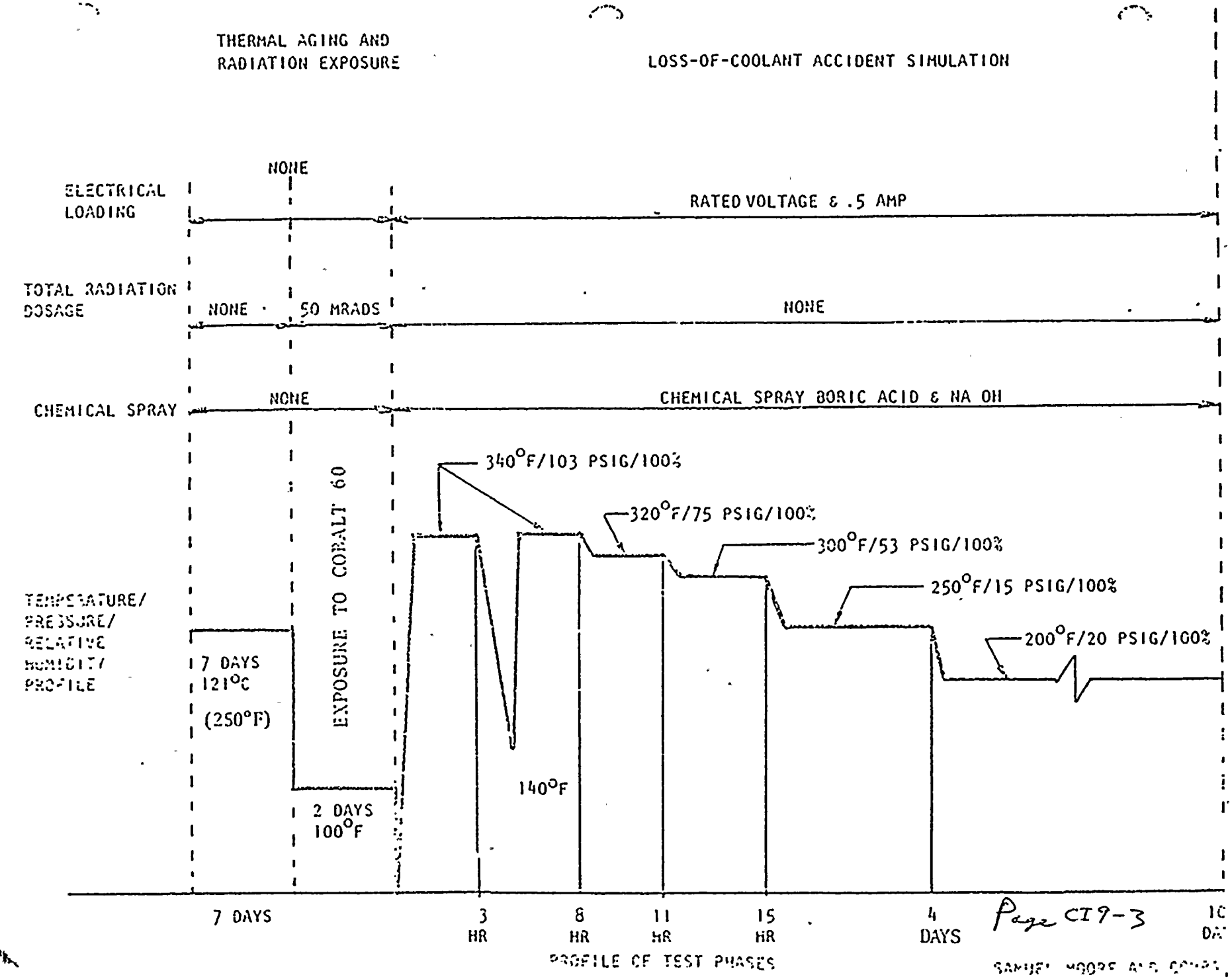


Figure 2. Profile of Test Phases

Page CI 9-2

F-C3683


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
ELECTRICAL LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/ PRESSURE/ RELATIVE HUMIDITY/ PROFILE
7 DAYS 121°C (250°F)
EXPOSURE TO COBALT 60
2 DAYS 100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3 HR
8 HR
11 HR
15 HR
4 DAYS
PROFILE OF TEST PHASES

Page CI9-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Note 1		33	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	340	FSAR App O	33	Seq	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	Fig 0-27	114.7	FSAR App O	33	Seq.	
MANUFACTURER: Continental							
MODEL NUMBER: Item #3077	Relative Humidity (%)	NA	100	NA	33	Seq.	
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA	NA	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	10	See Note 2	33	Seq.	
LOCATION: OUT CONTAINMENT	Aging (years)		See Note 3				
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

33. FIRL TEST REPORT F-C 2955, EXCERPT FROM.

Notes:

1) 230°F for 10 sec and 11.5 psig for .1 sec does not challenge the mech or elect. quality of the cable. cable temp rating 194°F

2) AEPSC NS+L calculation DC-N-6420-2.

3) XLPE/HYPALON 40 yrs as per Table C-1 App C of Encl. 4 of NRC IE Bulletin 79-01B.

from
Ref.
33. FIRL TEST REPORT F-C 2935, EXCERPT FROM
Type of test: Sequential
Gamma Radiation
Steam/

.45 MRAD/hr ; 10 MRAD
340°F, 100 psig, 2hrs
160°F, , 20hrs

Item # 3075, 3077 CONTINENTAL WIRE + CABLE Co.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 year	1 year	. .	49	Sequential See Note	
PLANT ID NO: Various	Temperature (°F)	Fig. 0-27	346	FSAR App. 0	49	"	
COMPONENT: Power Cable	Pressure (PSIA)	Fig. 0-27	127.7	FSAR App. 0	49	"	
MANUFACTURER: Okonite	Relative Humidity (%)	NA	100	NA	49	"	
MODEL NUMBER: Item # 324	Chemical Spray	NA	3000	NA	49	"	
FUNCTION: Various	Radiation (10^6 rads)	16.6	200	AEPSC NSSL calc. DC-N-6420-2	49	"	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		IEEE 383-1974 Sect. 4 PARA 2.3.3.2		49	"	
SERVICE: Various	Submergence	NA	NA	NA	NA	NA	
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA							

*Documentation References:

49. The Okonite Company Form N-1, Revised 7/3/78

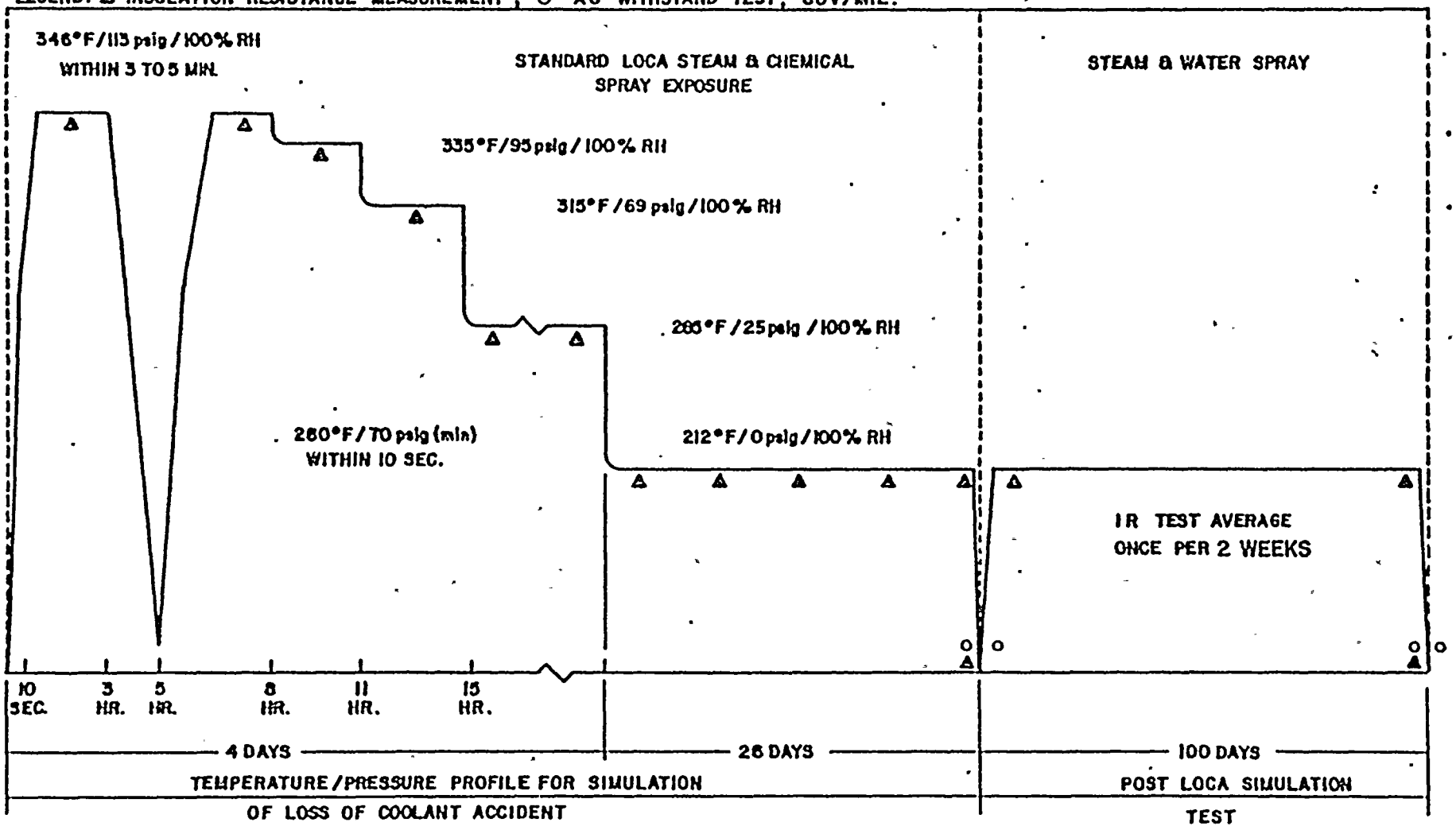
Notes:

Cable Tested: 1/c #12 7(x) coated Cu .030 Okonite Insulation

Cable Installed at DC Cook Plant: 1/c #12 (7x) coated Cu .030 Okonite Insulation .015 Okoprene Jacket

FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS

LEGEND: Δ INSULATION RESISTANCE MEASUREMENT ; O AC WITHSTAND TEST, 80V/MIL.



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DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: RHR	Operating Time	1 YEAR	1 year	Table 7.5-2	49	Sequential See note	
PLANT ID NO: IMO-325 IMO-326	Temperature (°F)	FIG 13.13-1	346	FSAR App D	49	Sequential	
COMPONENT: Power CABLE	Pressure (PSIA)	FIG 1 FIG 2	127.7	AEW 6504	49	Sequential	
MANUFACTURER: OKONITE	Relative Humidity (%)	100	100		49	Sequential	
MODEL NUMBER: Item # 324	Chemical Spray	2000 ppmB	3000	T.S 3/4.5 3/4.6.5	49	Sequential	
FUNCTION: VARIOUS	Radiation (10^6 rads)	150	200	WCAP 7410-L VOL I	49	Sequential	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		IEEE 323-1974 YES PARA 2.3.3.2		49	Sequential	
SERVICE: VARIOUS	Submergence		FLOOD UP TUBES				
LOCATION: In Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

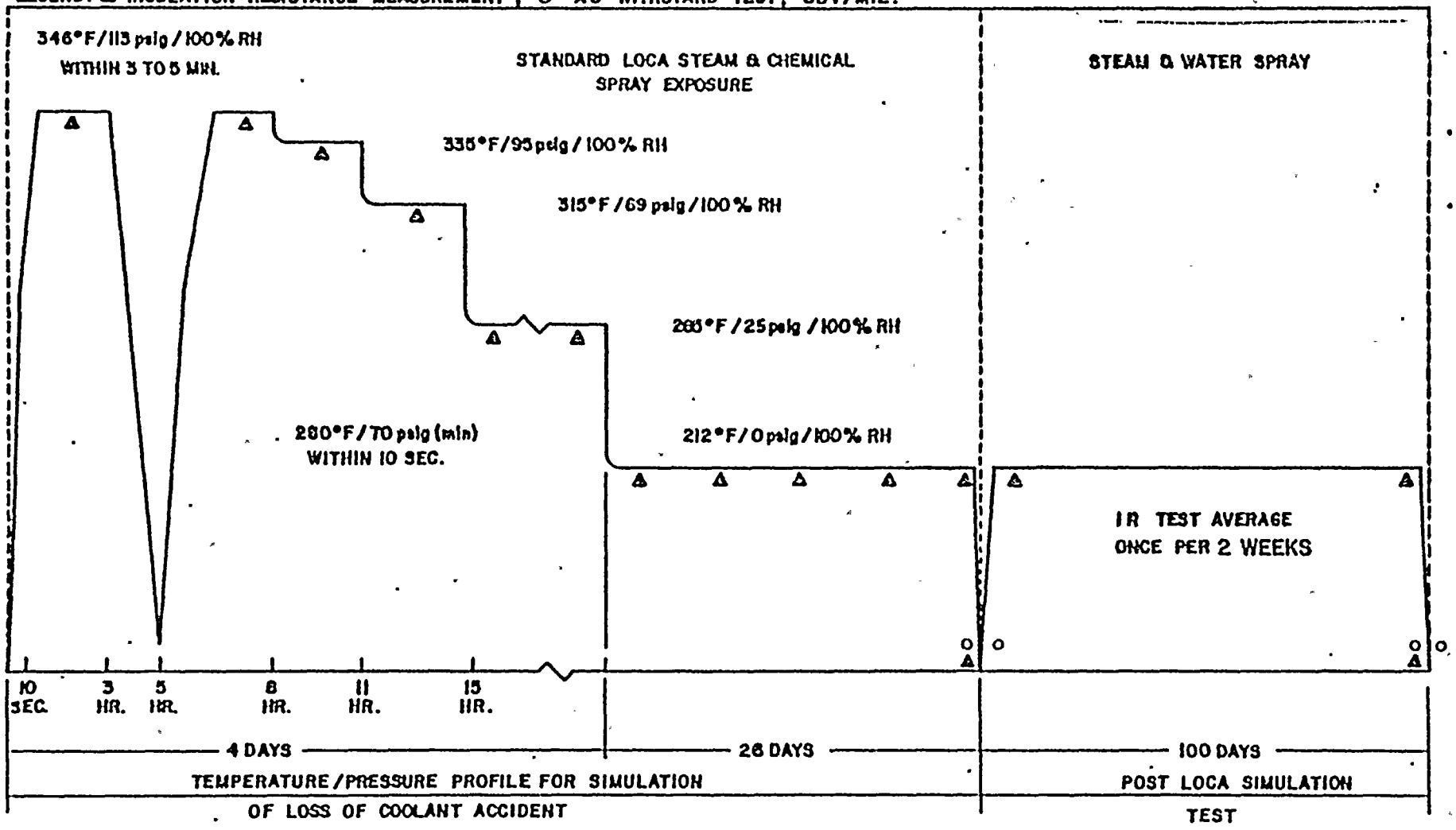
49. The Okonite Company Form N-1, Revised 7/3/78.

Notes: cable tested: 1/c #12 (7X) coated Cu
.030 okonite insulation

cable installed at DCCook plant:
1/c #12 (7X) coated Cu
.030 okonite insulation
.015 okoprene jacket

FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS

LEGEND: Δ INSULATION RESISTANCE MEASUREMENT ; O AC WITHSTAND TEST, 80V/MIL.



Page CP 2-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Notes 1+2		Notes 1+2	Eng'g Review	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	See Note 2	FSAR APP. O	Note 2	Eng'g Review	
COMPONENT: Power CABLE MANUFACTURER: Essex	Pressure (PSIA)	Fig 0-27	See Note 2	FSAR APP. O	Note 2	Eng'g Review	
MODEL NUMBER: Item # 324	Relative Humidity (%)	NA	NA	NA	NA	NA	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	See Note 1		See Note 1	Engineering Review See Note 1 below	
LOCATION: Outside Containment	Aging (years)		See Notes 1+2			Eng'g Review	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

Notes:

Note 1) As per table C-1 Opp. C to NRC IE Bulletin 79013, cable insulation material (EPR-Neoprene) is good for 10 MRADS AND ≥ 10 yrs AGING.

2) Cable temp rating equals 90°C (194°F), 230°F for 10 secs and 11.5 psig for 1 sec does not represent a challenge to the cable mechanical or electrical quality.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	Table 7.5-2 FSAR	6	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2	346	FSAR APP Q	6	SIMUL.	
COMPONENT: POWER CABLE	Pressure (PSIA)	FIG 1 FIG 2	127.7	AED 6504	6	SIMUL.	
MANUFACTURER: OKONITE	Relative Humidity (%)	100	100		6	SIMUL.	
MODEL NUMBER: ITEM # 399	Chemical Spray	2000 ppmB	2000 ppmB	T.S. 3/4.5 3/4.5.6	6	SIMUL.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L Vol 1	6	SIMUL.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		240°F/7 DAYS Yes		6	Simul.	
SERVICE: VARIOUS	Submergence		FLOODP Tables				
LOCATION: IN + OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

*Documentation References:

6. FIRL TEST REPORT F-C3694

Notes:

1) containment temp @ 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating 194°F

from Ref. 6

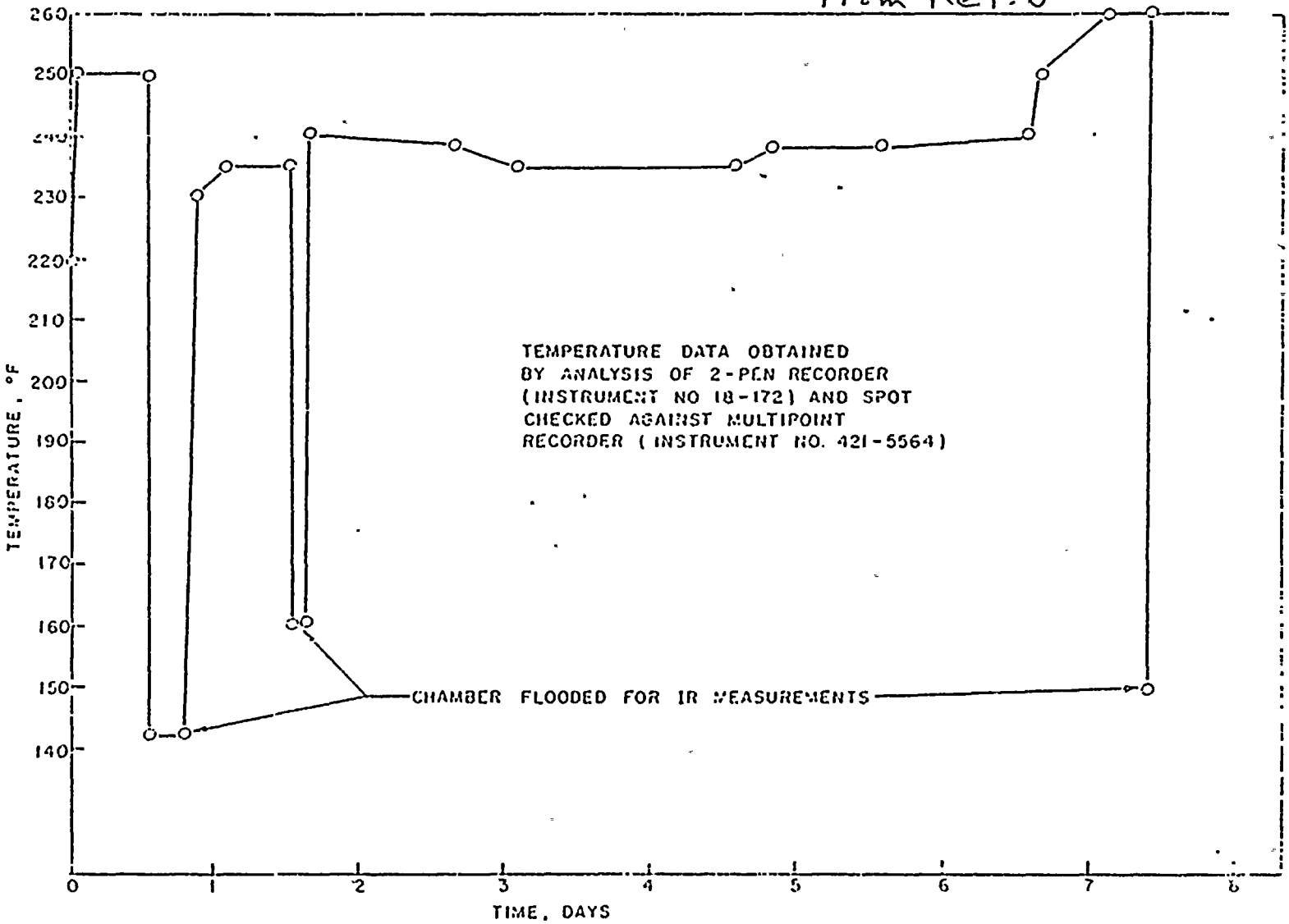
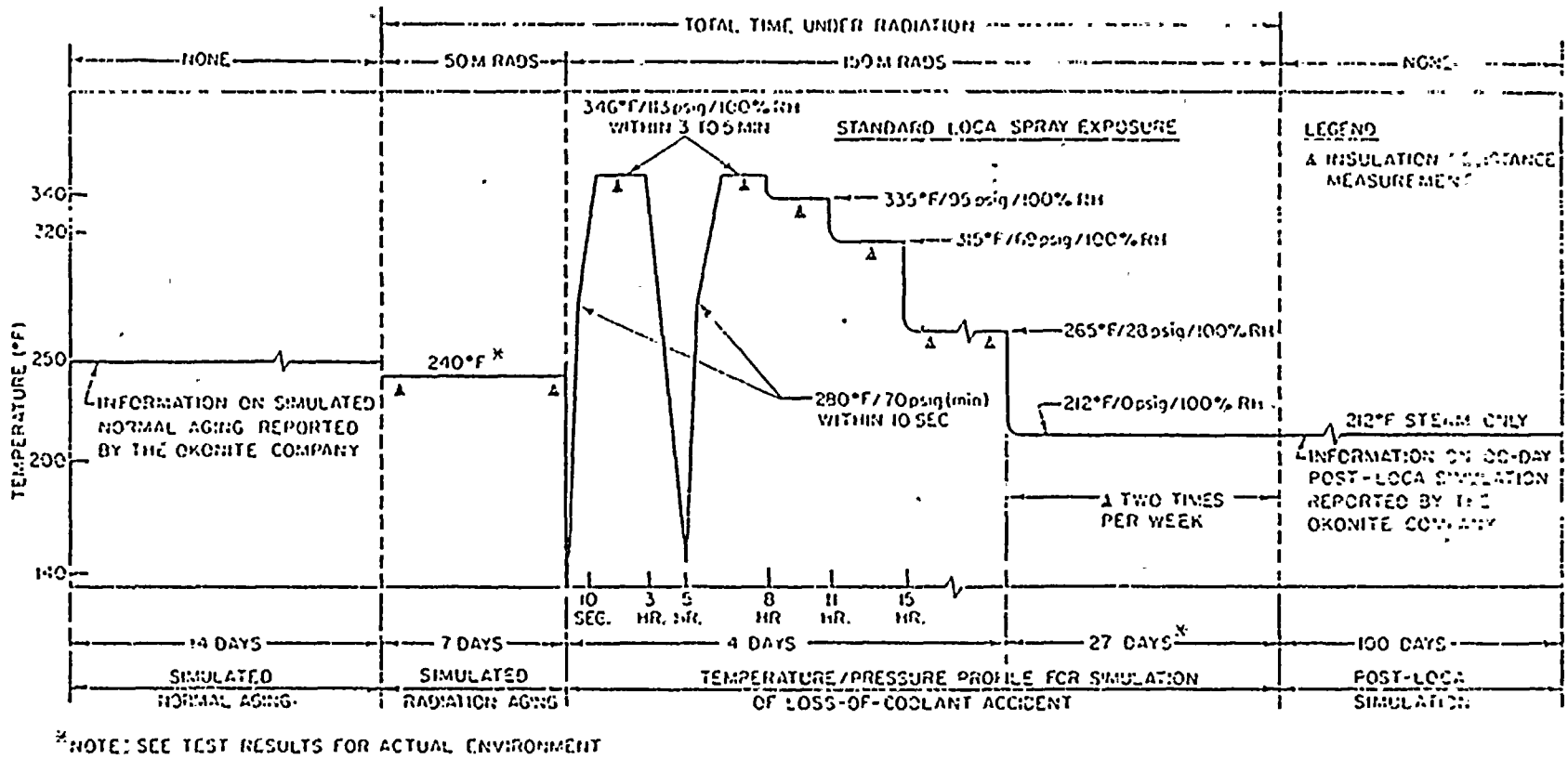


Figure 6. Actual Temperature Profile for Simultaneous Thermal Aging with Radiation . Page CP4-2

F-C3651

from Ref. 6



*NOTE: SEE TEST RESULTS FOR ACTUAL ENVIRONMENT

Figure 1. Cable Qualification Test Profile for Life, LOCA and Post-LOCA Simulation

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DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Notes 1+2		Notes 1+2	Eng'g Review	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	See Note 2	FSAR APP. O	Note 2	Eng'g Review	
COMPONENT: Power CABLE	Pressure (PSIA)	FIG 0-27	See Note 2	FSAR APP. O	Note 2	Eng'g Review	
MANUFACTURER: ANACONDA							
MODEL NUMBER: Item #3102	Relative Humidity (%)	NA	NA	NA	NA		
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA		
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	10	See Note A	See Note	Engineering Review See Note.	
LOCATION: Outside Containment	Aging (years)		See Notes 1+2		Notes 1+2	Eng'g Review	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA		

*Documentation References:

Notes:

Note 1) As per Table C-1 App C of Enclosure 4, to NRC IE Bulletin 79-01B, cable insulation material (EPR-Hypalon) is good for 10 MRADS) AND ≥ 10 yrs AGING

2) Cable Temp rating equals 90°C (194°F). 230°F for 10 secs and 11.5 psig for .1 secs does not represent a challenge to the cable mechanical or electrical qualif.

A) AEPSC NS+L Calculation SC-10-6420-2.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See note 1		37	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	346	FSAR APP 0	37	SEQ.	
COMPONENT: INSTRUMENT CABLE MANUFACTURER: OKONITE	Pressure (PSIA)	Fig 0-27	127.7	FSAR APP 0	37	SEQ.	
MODEL NUMBER: Item # 3102	Relative Humidity (%)	NA	100	NA	37	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	IEEE 323 1974	NA	37	SEQ.	
SERVICE: VARIOUS	Radiation (10^6 rads)	16.6.	200	See Note 2	37	SEQ.	
LOCATION: Out of Containment	Aging (years)		IEEE 323-1974 Yes		37	SEQ	
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

37. OKONITE. QUAL of OKOGUARD Ethylene-Propylene Rubber Insolation for NUCLEAR PLANT Service

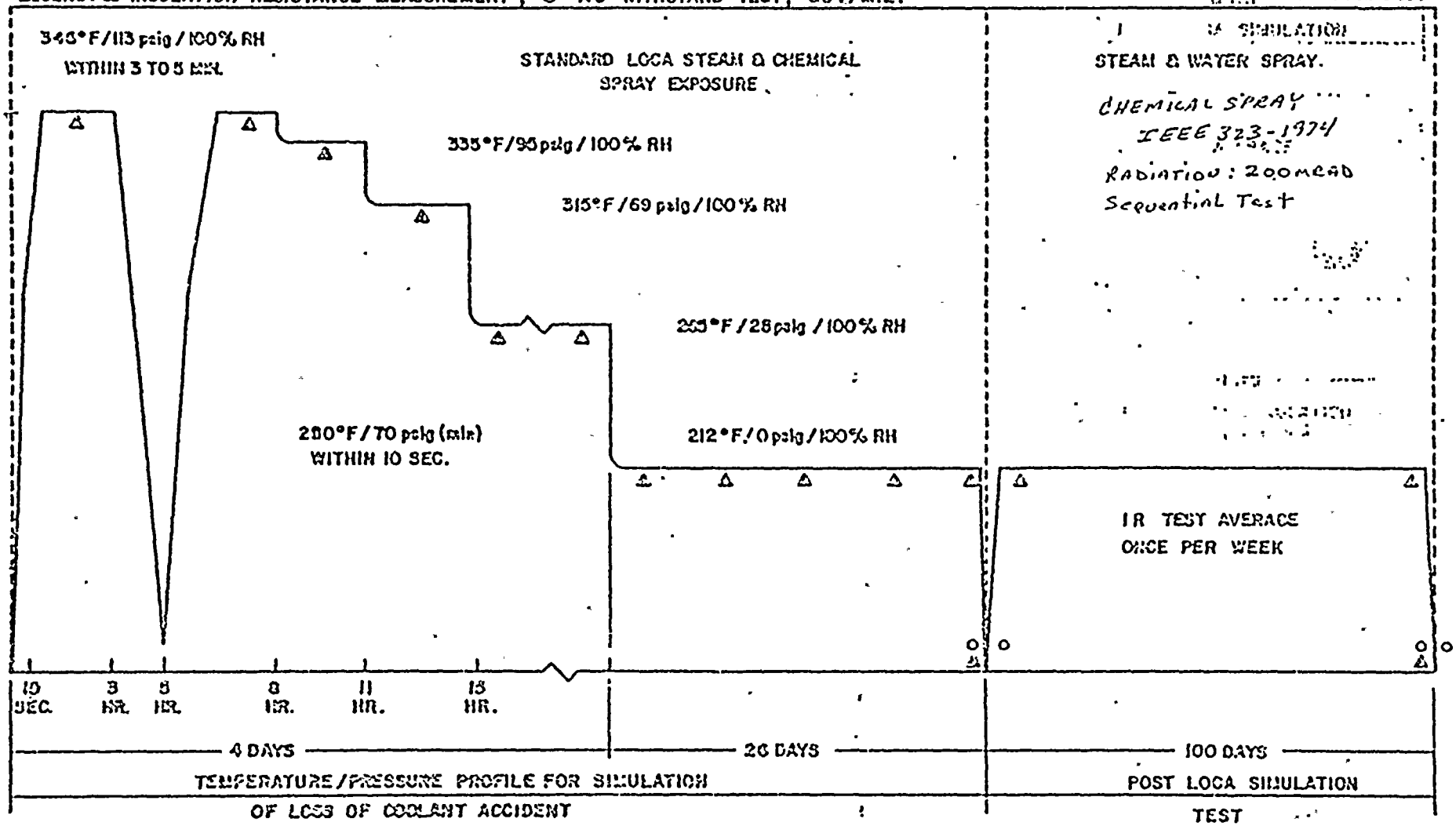
Notes:
1) 230°F for 10 sec and 11.5 psig for 1 sec does not challenge the cable mech. or elect. quality
cable temp rating = 194°F
2) AEPSC NS+L calculation DC-N-6420-2

37 OKONITE Co. QUAL. of OKOGUARD Ethylene-Propylene Rubber Insulation for Nuclear Plant Service

FIGURE II CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS

From Ref. 37

LEGEND: Δ INSULATION RESISTANCE MEASUREMENT ; O AC WITHSTAND TEST, 80V/MIL.



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DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	5	Simul	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	340	FSAR App Q	5	SIMUL.	
COMPONENT: POWER CABLE	Pressure (PSIA)	FIG. 2 Fig 1	119.7	ACW 6504	5	SIMUL.	
MANUFACTURER: ANACONDA WIRE + CABLE	Relative Humidity (%)	100	100		5	SIMUL.	
MODEL NUMBER: ITEM # 3116	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 3/4.5 3/4.5.6	5	SIMUL.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	200	WCAP 7410-L Vol 1	5	SIMUL.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		250°F/7 DAYS Yes		5	Simul.	
SERVICE: VARIOUS	Submergence		FLOODUP Tubes				
LOCATION: IN + OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

*Documentation References:

5. FIRL TEST REPORT F-C3341

Notes:

1) Containment temp 2.77 hrs after accident is 185°F (Fig 3, App N, FSAR), cable temp rating 194°F

from Ref. 5. Qualified by Franklin Institute Research Laboratory (FIRL) Test Report #F-C3341, Jan. 1973.

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.51 Mrads/hr, 200 Mrads
340°F, 105 psig for 3 hrs
320°F, 75 psig for 3 hrs
250°F, 15 psig for 4 days
210°F, 5 psig for 9 days

Chemical Spray: Solution of boric acid and Na OH , PH = 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	25	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	346	FSAR App Q	25	Simul	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 1 FIG 2	127.7	AEW 6504	25	Simul.	
MANUFACTURER: Essex International	Relative Humidity (%)	100	100		25	Simul.	
MODEL NUMBER: Item #3116	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 3/4.5 3/4.5.6	25	Simul.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	200	WCAP 7410-L Vol 1	25	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		250°F/7DAYS Yes		25	Simul.	
SERVICE: VARIOUS	Submergence		FLOODUP Tubes				
LOCATION: IN AND OUT of CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

25. Isomedix Corp. Test Report of Nov, 1975

Notes:
1) containment temp 2.78 hrs after accident = 195°F (Fig 3, App N, FSAR). Cable temp rating 194°F

from Ref. 25. Qualified by Isomedix Corp. Test Report of November 1975

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
346°F, 113 psig for 5 hrs
265°F, 28 psig for 4 days
215°F, 2 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid in solution with .064 molar sodium thiosulfate buffered with sodium hydroxide to a PH of 9 to 11.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	6 mo.	See Note 1		7	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2	325	FSAR App Q	7	SEQ.	
COMPONENT: POWER CABLE MANUFACTURER: KERITE	Pressure (PSIA)	Fig 1 FIG 2	96.7	AEPD 6504	7	SEQ.	
MODEL NUMBER: ITEM # 3116	Relative Humidity (%)	100	100		7	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2600 ppmB	T.S. 3/4.5 3/4.5.6	7	SEQ.	
SERVICE: VARIOUS	Radiation (10^6 rads)	120	120	WCAP 7410-1 vol. I	7	Seq	
LOCATION: IN + OUT OF CONTAINMENT	Aging (years)		No details Yes		See note 2		
FLOOD LEVEL ELEV: .6141 ABOVE FLOOD LEVEL: No	Submergence		FLOODUP Tubes				

*Documentation References:

7. KERITE CO. Report on the Effects of GAMMA RAD. AND Autoclaving on Kerite Power + Control CABLE.

Notes:

1) Containment temp 2.77 hrs after accident = 185°F (Fig 3, App N, FSAR). cable temp rating 194°F

2) Kerite Co. statement of 7-27-79

From Ref. 7. Qualified by Kerite Co. Report on the effects of Gamma Radiation and Autoclaving on Kerite Power & Control Cables
April 30, 1970.

Type of Test: Sequential, gamma radiation
steam
chemical spray

Test Profile:

.8 Mrads/hr, 120 Mrads
325°F, 82 psig for 13 hrs
228°F, 5 psig for 7 days

Chemical Spray: Borated water, 1-1/2% solution of boric acid and distilled water buffered at a PH of 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See notes 1+2 below				
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	See Note 2	FSAR APP. O	Note 2 below	Engineering review See note 2 below	
COMPONENT: Power CABLE	Pressure (PSIA)	FIG 0-27	See Note 2	FSAR APP O	Note 2 below	Engineering review See note 2 below	
MANUFACTURER: ANACONDA							
MODEL NUMBER: Item #3103	Relative Humidity (%)	NA	NA	NA	NA		
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA		
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	1.6/SI pump 3.6/RHR pump	See Note 1	See note 4	See Note 1 below	Engineering review See Note 1 below.	
LOCATION: Outside Containment	Aging (years)		See Notes 1+2 below		Notes 1+2 below	Engineering review Notes 1 & 2 below	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA		

*Documentation References:

Notes:

Note 1) As per Table C-1 App C of Enclosure 4 to NRC IE Bulletin 79013, cable insulation material (EPR-Hypalon) is good for 10 MRADS AND ≥ 10 yrs AGING

2.) Cable temp rating equals 90°C (194°F). 230°F for 10 secs and 11.5 psig for .1 sec does not represent a challenge to the cable mechanical or electrical quality.

4) AEPSC NS+L Calculation SC-N-6420.2, with accounting for distance from source.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

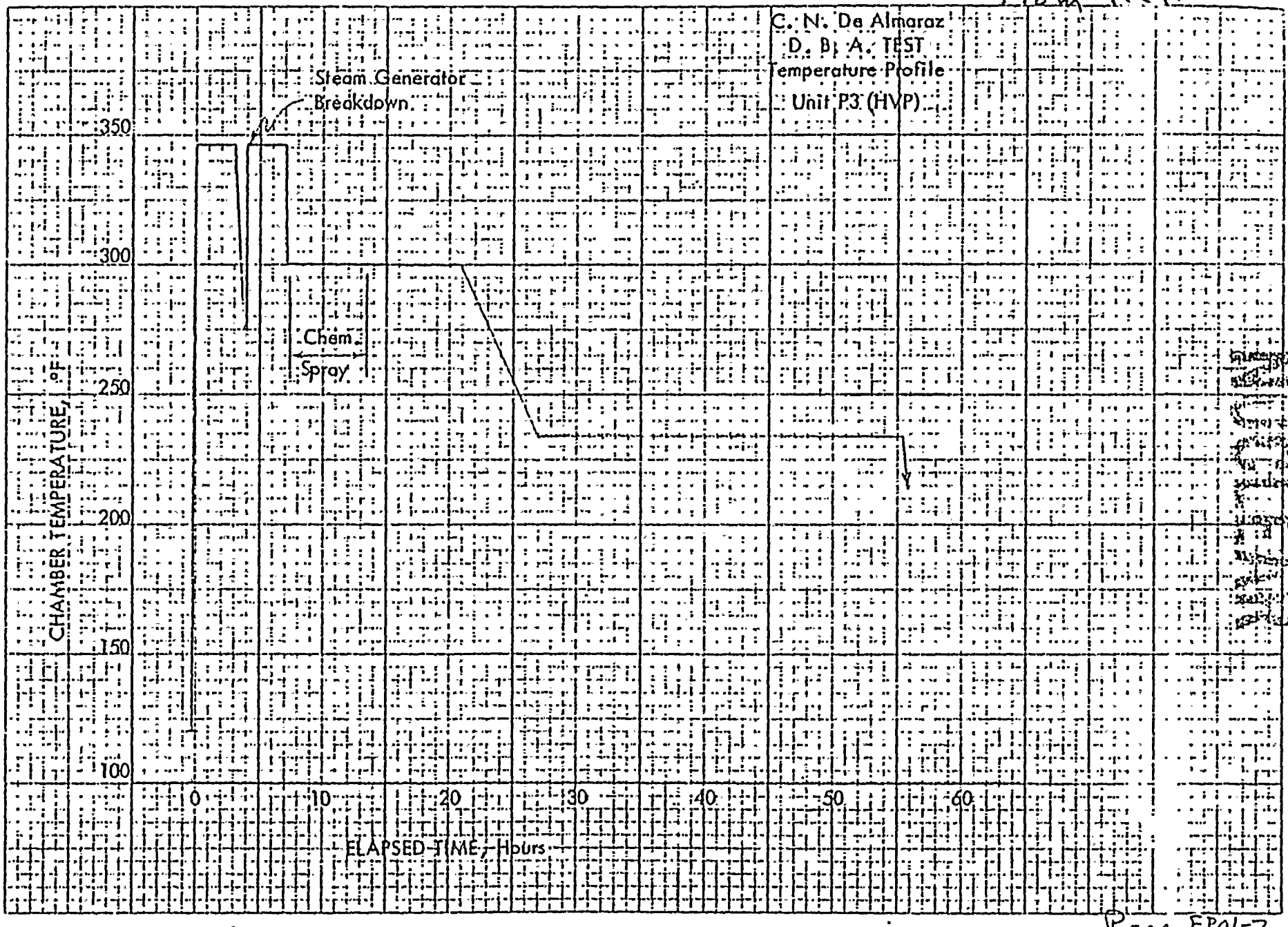
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: NA	Operating Time	1 year	30 days*	TABLE 7.5-2 FSAR	3	SeQ	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2	346	FSAR App Q	3	SeQ.	
COMPONENT: 4KV ELECTRICAL PENETRATIONS MANUFACTURER: CONAX CORP.	Pressure (PSIA)	FIG. 2 Fig 1	122	AEW 6104	3	SeQ.	
MODEL NUMBER: EP-1	Relative Humidity (%)	100	100		3	SeQ.	
FUNCTION: Containment Isolation ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	2098 ppm B.	T.S. 3/4.5 3/4.5.6	3	SeQ.	
SERVICE: Isolate Containment	Radiation (10^6 rads)	60	100	letter W→AEP AEW-729	3	SeQ.	
LOCATION: Inside Containment	Aging (years)						
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Yes		17,18	Sequential	

*Documentation References:

3. CONAX Corp. Test Report IPS-137
17. CONAX Corp. Test Report IPS-326
18. CONAX Corp Test Report IPS-527

Notes:
* Test length was limited. However, the radiation dose corresponds to more than one year expected post-accident dose.

from Ref. 3



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DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: NA	Operating Time	1 year	6hrs ☆	TABLE 7.5-2 FSAR	1	Sequential	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1, -2	340	FSAR App Q	1	Seq	
COMPONENT: 600V AND Below Electrical Penetrations MANUFACTURER: Conax Corp.	Pressure (PSIA)	Fig 2 Fig 1	116	AEW 6504	1	Seq	
MODEL NUMBER: EB2 through EP-11	Relative Humidity (%)	100	100		1	Seq	
FUNCTION: Containment Isolation ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	2098 ppm B	T.S. 3/4.5 3/4.5.6	3	Seq	
SERVICE: Isolate Containment	Radiation (10^6 rads)	60	100	letter AEW-729.	1	Seq	
LOCATION: Inside Containment	Aging (years)						
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		Yes		17,18	Sequential	

*Documentation References:

1. Conax Corp. Test Report IPS-234
3. Conax Corp. Test Report IPS-137
17. Conax Corp Test Report IPS-326
18. Conax Corp Test Report IPS-327

Notes: ☆ See note page EP01-1, Unit 1.

Comm Ref 1. Qualified by Conax Corp. Test Report IPS-234

June 9, 1977

Type of Test: Sequential Irradiation/steam

Test Profile

1.0 – 1.1 Mrads/hr for 100 hrs.

100 – 110 Mrads total dose

340°F, 116 psia for 3 hrs

Perform leakage test and repeat steam test

340°F, 11.6 psia for 3 hrs.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR		Table 7.5-2	21	Seq	
PLANT ID NO: HV-CEQ-1 HV-CEQ-2	Temperature (°F)	F16 13.13-1	320	FSAR App N	21	Seq.	
COMPONENT: FAN Motors	Pressure (PSIA)	Fig. 2 Fig 1	89.7	AEW 6804	21	Seq.	
MANUFACTURER: WESTINGHOUSE CORP.							
MODEL NUMBER: TBDP	Relative Humidity (%)	100	100		21	Seq.	
FUNCTION: CIRCULATE AIR	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3.4.5 3.4.5.6	21	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	150	200	WCAP 7410-L VOL1	21	Seq.	
SERVICE: VARIOUS	Aging (years)		200°C / 5 wks Yes		21	Seq.	
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence	NA	NA		N.A	NA	

*Documentation References:

21. Westinghouse Corp. Test Report WCAP-7829.

Notes:

from Ref. 21.

Qualified by Westinghouse Corp. Test Reports:
WCAP-7829, April, 1972.

Type of Test: Sequential: Irradiation
Steam
Chemical Spray

Test Profile (for motor without heat exchanger)

324°F, 80 psig for 4 hrs.
250°F, 16 psig for 7 days

Test Profile (for motor with heat exchanger)

320°F, 75 psig for 24 hrs.
250°F, 16 psig for 168 hrs.

Chemical Spray: 1.43 weight percent boric acid
PH=9.5 with Na OH

Irradiation: .5 Mrad/hr., 200 Mrads.

See page 33 of WCAP-7829 for Test Profile summary.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 day	> 1 yr	See Note C	Ref. 47	TEST	
PLANT ID NO: Mobilux EP-2	Temperature (°F)	Fig 022.9-1,-2	250 cont. service 350 drop pt.	FSAR App O	Ref. 48	Tech. Description Sheet	
COMPONENT: GREASE MANUFACTURER: MOBIL	Pressure (PSIA)	Fig 1 Fig 2	See Note A	AEW 6504	Ref. 48	"	
MODEL NUMBER: MOBILUX EP-2	Relative Humidity (%)	100	100		Ref. 48	"	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	See Note B		NA	NA	
SERVICE: VARIOUS – VALVE OPERATOR MOTORS	Radiation (10^6 rads)	26	240	WCAP 7410-L Vol 1	Ref. 47	TEST	
LOCATION: In + Out Containment	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence	NA	NA				

*Documentation References:

47. Qual. by Letter of 6-2-71
FROM: W.F. Hergroeter - Customer Service LAB Bklyn, NY.
TO: R.H. Statton - Boston Edison Co.

48. Letter of 4-17-80 from J.M. Allen (Mobil Oil Corp.) to Allen Feibelman (AEP).

Notes:

A. Refer to Tech. Description Sheet.

B. Grease enclosed in a container will not be subjected to direct caustic spray impingement.

C. Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

Mobilux® EP 0, 1, 2

Extreme Pressure Industrial Greases

Mobilux EP 0, 1, and 2 are unleaded multiservice, extreme pressure greases designed for normal through heavy-duty industrial applications. They are formulated to resist the effects of both the extremely heavy loads and shock loads to which plant equipment is commonly exposed. Heavy loads tend to squeeze lubricant from mating surfaces, and shock loads rupture the lubricant film, thus creating a condition of metal-to-metal contact and causing parts wear, shortening equipment life. Equipment experiencing these loading extremes may also be exposed to conditions where extremes of temperature, moisture, or water washing are present. Greases for these applications must provide good extreme pressure characteristics and cling strongly to resist the pressures and pounding to which they are exposed. They must also provide good protection against rust and corrosion, resist water washing and dispense and lubricate satisfactorily over a broad range of temperature. The Mobilux EP greases fulfill these requirements.

PRODUCT DESCRIPTION

The Mobilux EP greases are lithium 12 hydroxystearate soap based greases which contain an unleaded EP additive and oxidation, rust and corrosion inhibitors. They are smooth textured, brown colored greases in the NLGI No. 0, 1, or 2 consistency classification.

The use of lithium 12 hydroxystearate as the soap base for these greases ensures good resistance to softening under severe working, good water resistance and a consistency which will remain relatively constant over the recommended operating temperature range.

The extreme pressure characteristic of the Mobilux EP greases is supplied by an unleaded additive which provides them with exceptional wear protection, also improving their ecological acceptability. Other formulation improvements provide good water wash resistance, low temperature dispensing, and long service life in bearings operating at elevated temperatures.

The petroleum oil used in the greases meets the lubrication requirements of most heavy-duty industrial operations. It also provides low-temperature pumpability and enhances the greases' high temperature oxidation resistance.

The Mobilux EP greases pass the ASTM Rust Test (D 1743) and are noncorrosive to steel and copper. The latter is of importance because of the use of bronze cages in many anti-friction bearings. The greases show good resistance to bleeding and superior resistance to water washout. Their load carrying and antiwear characteristics are illustrated by their Timken OK load of 40 lbs., 18.2 Kg.

Characteristic	Mobilux EP 0	Mobilux EP 1	Mobilux EP 2
NLGI No.	0	1	2
Structure	smooth	smooth	smooth
Soap Type	Unleaded Lithium 12 Hydroxystearate		
Color	brown	brown	brown
Penetration at 77°F (25°C)			
Unworked, min-max	350-390	305-345	260-300
Worked 60 strokes, min-max	355-385	310-340	265-295
Dropping Point, min. F (C)	340 (171)	340 (171)	350 (177)
Mineral Oil %	92	89	87
Viscosity			
SUS at 100°F	750	750	750
SUS at 210°F	75	75	75
cSt at 40°C	143	143	143
cSt at 100°C	13.8	13.8	13.8
Timken OK Load, min. lb (kg)	40 (18)	40 (18)	40 (18)
Rust Test ASTM D 1743	Pass	Pass	Pass
Bomb Oxidation Stability			
ASTM D942			
PSI Drop, max	10	10	10

Mobilux EP 0, 1, 2

TYPICAL CHARACTERISTICS

Physical and chemical characteristics of the Mobilux EP greases are shown in the data sheet table. Values not shown as maximums or minimums are typical characteristics and may vary slightly.

APPLICATION

Mobilux EP greases are recommended for the lubrication of plain and rolling element bearings in normal through heavy-duty industrial applications. They are particularly recommended where loads are high or shock loads are present, or where severe vibration is a problem. They are also suitable for the lubrication of geared couplings. The softer grade may be considered for the lubrication of gear sets that do not have oil-tight cases.

Mobilux EP 0 and 1 greases have excellent handling and dispensing properties at low temperature. The lowest recommended ambient temperature for operating bearings lubricated with Mobilux EP 0 or 1 is about -20°F (-29°C); and for Mobilux EP 2, a stiffer grease, about -10°F (-23°C).

All three Mobilux EP greases are recommended for the lubrication of plain bearings. The highest operating temperature recommended for these greases is 250°F (121°C). For continuous service at temperatures above 200°F, proper purging and relubrication frequencies are critical to maintenance of correct bearing protection.

The excellent water resistance and rust and corrosion protection afforded by the Mobilux EP greases makes them particularly applicable for equipment such as the wet ends of paper machines, steel mill hot strip rolling operations, underground mining equipment, tunneling projects and ore crushing plants where moisture or wet conditions are common. Their excellent dispensing characteristics will also be advantageous in many of these applications because of the exposed nature of the operations.

Mobilux EP greases are compatible with some other greases, particularly those made with lithium soap. However, the best procedure is not to mix greases of different soap types. When replacing another grease with a Mobilux EP grease, the previously used grease should be completely cleaned or flushed from the system.

In plants where human or animal foods are being processed, Mobilux EP greases, despite their unleaded extreme pressure formulation, are not recommended for applications where contamination of food could result. Mobilux EP greases have U.S. Department of Agriculture (USDA) Category BB approval.

ADVANTAGES

When used as recommended, the Mobilux EP greases will provide the following outstanding benefits and advantages:

- Superior lubrication under heavy or shock loading
- Good load carrying ability
- Longer service life in bearings at temperatures up to 250°F
- Good low temperature dispensing characteristics
- Excellent resistance to water washing
- Good rust protection and corrosion resistance
- Extreme pressure protection with an unleaded formulation
- Reduction of plant inventories through multipurpose capabilities

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50-316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Essential Service Water	Operating Time	500 hours for Pump	N/A	Mfgr Lit.	—	Tests & Consultation With Mobil	None
PLANT ID NO: PP-007	Temperature (°F)	110 Ambient	250 contin. service 350 drop pt.	FSAR Sect 9.9.2	#48		
COMPONENT: Pump Grease	Pressure (PSIA)	1500	No effect	Mfgr Lit	—		
MANUFACTURER: Mobil							
MODEL NUMBER: Mobilux #2	Relative Humidity (%)	N/A	No effect	—	—		
FUNCTION: Lubrication							
ACCURACY: SPEC: DEMON: N/A	Chemical Spray	N/A	N/A	—	—		
SERVICE: ESW Pump	Radiation (10^6 rads)	N/A	100	—	#48		
LOCATION: Aux Bldg. 591'-0"	Aging (years)	N/A	N/A	—	—		
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A	—	—		

*Documentation References: 48. Letter of 4-17-80 from J.M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Pump manufacturer recommends the following greases:

Shell Oil Co. – Darina EP #2
Mobil Oil Co. – Mobilux EP #2
Phillips Petroleum Co. – Philube EP #2
Std. Oil of Co. – Chevron Industrial Grease – Heavy
Union Oil Co – Royal Unoba #2
Texaco Inc – Multifak #2
Atlantic Richfield Oil Co – Rocolube #2 MP

AEP uses Mobilux No. 2 grease, recommended by Mobil as suitable for this application

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Spray	Operating Time	N/A	N/A	—	—	Tests + Consultation with Mobil	None
PLANT ID NO: PP-009	Temperature (°F)	Ambient 110	250 contin. service 400 flash pt.	FSAR Sect. 9.7.2	#48		
COMPONENT: Motor Oil	Pressure (PSIA)	N/A	No Effect	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No Effect	—	—		
MODEL NUMBER: D.T.E. Oil Medium	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	17	100	AEPSC NSEL calc. DC-N-6420-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: CTS Pump Motor	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg El. 573'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References:

48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Fiebelman (ACP).

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Spray PLANT ID NO: PP-009 COMPONENT: Motor Grease MANUFACTURER: Mobil MODEL NUMBER: Mobilux #2 FUNCTION: Lubrication ACCURACY: SPEC: DEMON: N/A SERVICE: CTS Pump Motor LOCATION: Aux Bldg El 573'-0" FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Operating Time	N/A	N/A	—	—	Tests + Consultation With Mobil	None
	Temperature (°F)	Ambient 110	250 cont. service 350 drop pt.	FSAR Sect. 9.9.2	#48		
	Pressure (PSIA)	N/A	No effect	—	—		
	Relative Humidity (%)	N/A	No effect	—	—		
	Chemical Spray	N/A	N/A	—	—		
	Radiation (10^6 rads)	17	100	AEPSC NSEL calc. DC-N-6420-2	#48		
	Aging (years)	N/A	N/A	—	—		
	Submergence	N/A	N/A	—	—		

*Documentation References:

48. Letter dated 4-17-80 from J. A. Allen (Mobil) to A. Teibelman (AEP).

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Component Cooling Water	Operating Time	N/A	N/A	—	—	Tests + Consultation with Mobil	NONE
PLANT ID NO: PP-010	Temperature (°F)	AMBIENT 110	flash pt. 410	FSAR Sect 9.9.2	# 48		
COMPONENT: Pump Oil	Pressure (PSIA)	N/A	NO EFFECT	-	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	NO EFFECT	—	—		
MODEL NUMBER: DTE 797 0.1	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	N/A	100	—	# 48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: CCW Pump	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg El. 609'-6"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP). Notes:

Pump Manufacturer recommends oil with characteristics:

Oil Characteristic	Napthene Base	Paraffin Base
Flash Point	300°F, min	360°F, min
Saybolt Viscosity 100°F	150 sec, min 200 sec, max	140 sec, min 185 sec, max
Pour Point	50°F max	30°F, max

AEP uses Mobil D.T.E 797 0.1, a paraffinic oil which meets mfgr specifications.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD		OUTSTANDING ITEMS	
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.				
SYSTEM: Component Cooling Water	Operating Time	N/A	N/A	—	—	Tests & Consultation with Mobil		NONE	
PLANT ID NO: PP-DID	Temperature (°F)	AMBIENT 110	250 cont. Service 350 drop pt.	FSAR Sect 9.2.2	#48				
COMPONENT: Coupling Grease	Pressure (PSIA)	N/A	No Effect	—	—				
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No Effect	—	—				
MODEL NUMBER: Coupling Grease	Chemical Spray	N/A	N/A	—	—				
FUNCTION: Lubrication	Radiation (10^6 rads)	N/A	100	—	#48				
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—				
SERVICE: CCW Pump Coupling	Submergence	N/A	N/A	—	—				
LOCATION: Aux Bldg El 609'-6"									
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A									

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Coupling manufacturer recommends grease with NGLI No. 2 with worked penetration value of 250 to 300.

AEP uses Mobilux No. 2 grease which meets mfgr specs.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: SAFETY INJECTION	Operating Time	N/A	N/A	—	—	TESTS + CONSULTATION WITH MOBIL	NONE
PLANT ID NO: PP-026	Temperature (°F)	AMBIENT 110	flash pt. 410	FSAR Sect 9.9.2	#48		
COMPONENT: PUMP OIL	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: MOBIL	Relative Humidity (%)	N/A	NO EFFECT	—	—		
MODEL NUMBER: DTE 797 0.1	Chemical Spray	N/A	N/A	—			
FUNCTION: Lubrication	Radiation (10^6 rads)	1.7	100	AEPSC NS&L calc DC-N-5420-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: SI Pump	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg EL. 587'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes: Pump manufacturer recommends high grade turbine oil with a viscosity of 150 SSU @ 100°F. AEP uses Mobil DTE 797 oil which meets listed spec.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: SAFETY INJECTION	Operating Time	N/A	N/A	—	—	TESTS & CONSULTATION WITH MOBIL	NONE
PLANT ID NO: PP-026	Temperature (°F)	AMBIENT 110	250 cont. service 400 flash pt.	FSAR Sect 9.9.2	# 48		
COMPONENT: MOTOR OIL	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: MOBIL							
MODEL NUMBER: DTE OIL Heavy Medium	Relative Humidity (%)	N/A	NO EFFECT	—	—		
FUNCTION: Lubrication	Chemical Spray	N/A	N/A	—	—		
ACCURACY: SPEC: DEMON: N/A							
SERVICE: SI Pump Motor	Radiation (10^6 rads)	17	100	AEPSC NSRL calc. DC-N-6420-2	# 48		
LOCATION: Aux Bldg El. 587'-0"	Aging (years)	N/A	N/A	—	—		
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A	—	—		

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Motor manufacturer recommends oil with viscosity of 180 to 220 SSU @ 100°F. } AEP uses Mobil D.T.E. Oil Heavy Medium.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Residual Heat Removal	Operating Time	N/A	N/A	—	—	Tests + Consultation with Mobil	NONE
PLANT ID NO: PP-035	Temperature (°F)	110 Ambient	250 cont. service 350 drop pt.	FSAR Sect 9.9.2	#48		
COMPONENT: Pump + Motor Grease	Pressure (PSIA)	N/A	No effect	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No effect	—	—		
MODEL NUMBER: Mobilux #2	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	17	100	AEPSC NS&L calc. DC-N-6420-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: RHR Pump RHR Pump Motor	Submergence	N/A	N/A	—	—		
LOCATION: Rx Bldg. EL. 573'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feiteleman (AEP).

Motor Manufacturer recommends Westinghouse Grease #55272-BA } AEP uses Mobilux No. 2 Grease, recommended by Mobil as a suitable substitute.

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS/ECCS	Operating Time	N/A	N/A	—	—	Tests + Consultation With Mobil	None
PLANT ID NO: PP-050	Temperature (°F)	AMBIENT 110	250 cont. service 400 flash pt.	FSAR Section 9.9.2	#48		
COMPONENT: Pump + Motor Oil	Pressure (PSIA)	N/A	No Effect	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No Effect	—	—		
MODEL NUMBER: D.T.E Oil Heavy Medium	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	.17	100	AEPSC NS&L calc. UC-N-6420-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: CCW Pump	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg. El 587'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Pump manufacturer recommends using high grade mineral oil of the turbine type, having viscosity of 150-250 SSU @ 100°F.

Motor manufacturer recommends bearing oil with a viscosity of 200 SSU @ 100°F

Gear case manufacturer recommends oil with viscosity of 180-240 SSU @ 100°F

AEP uses Mobil D.T.E Oil Heavy Medium.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS / ECCS	Operating Time	N/A	N/A	—	—	Tests Combination With Mobil	NONE
PLANT ID NO: PP-050	Temperature (°F)	AMBIENT 110	drop pt. 400	FSAR Sect 9.9.2	# 48		
COMPONENT: Coupling Grease	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	NO EFFECT	—	—		
MODEL NUMBER: Sovarex L-0	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	17	100	AEPSC NS&L calc. DC-N-6420-2	# 48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: Cent. Charging Pump Coupling	Submergence	N/A	N/A				
LOCATION: Aux Bldg EL 587'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from A. M. Allen (Mobil) to A. Feibelman (AEP).

Notes: Coupling manufacturer recommends the following greases:

LANTIC REFINING COMPANY	ATLANTIC LUBRICANT #17	RICHFIELD OIL CORPORATION	ROCOLUBE RR
IERICAN OIL COMPANY	AMOBAR S	SHELL OIL COMPANY	SHELL ALVANIA GREASE #2 SIMNIA 012
OOKS OIL COMPANY	LEADOLENE 375 LIGHT	SINCLAIR REFINING COMPANY	SINCOLUBE #1, OR LITHOLINE MULTI-PURPOSE GREASE #2
DES SERVICE PETROLEUM, Inc.	TROJAN GREASE A-1	SOCONY-MOBIL OIL CO., Inc. →	SOVAREX L-O MOBILPLEX EP #0
NTINENTAL OIL COMPANY	CONOCO SUPER LUBE	STANDARD OIL CO. OF CALIFORNIA	CALOL SA #1
YE BROTHERS REFINING COMPANY	LUBRIPLATE #630 AA	STANDARD OIL CO. OF OHIO	SOHIO #77
AF OIL CORPORATION	CROWN #1	SUN OIL COMPANY	N 751 AND 741 EP
MBLE OIL AND REFINING COMPANY	FIBRAX 370 OR NEBULA EP 0	TEXAS COMPANY	MAREAK #1
YSTONE LUBRICATING COMPANY	KEYSTONE #15 EP XX LIGHT	TIDEWATER ASSOCIATED OIL CO.	TYCOL ALITHO #10
STER LUBRICANTS COMPANY	LUBRIKO GREASE M-54	UNION OIL CO. OF CALIFORNIA	BALL ROLL #1 OR ELNOBA #1
ILLIPS PETROLEUM COMPANY	PHILUBE #1 STOCK 401		
RE OIL COMPANY	POCO FIBRE GREASE #1		

AEP uses Mobil Sovarex L-0 grease.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Hydrogen Recombiner	Operating Time	3 months		Table 7.5-2	20	Sep	
PLANT ID NO: HR-1 HR-2	Temperature (°F)	Fig 13.13-1	310	FSAR APP D	20	Sep.	
COMPONENT: Hydrogen Recombiners MANUFACTURER: Westinghouse	Pressure (PSIA)	Fig 2 Fig 1	77	AEW 6504	20	Sep.	
MODEL NUMBER: NA	Relative Humidity (%)	100	100		20	Sep.	
FUNCTION: Hydrogen Recombiner ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	20	Sep.	
SERVICE: Hydrogen Recombiner	Radiation (10^6 rads)	85	200	WCAP 7410-L Vol 1	20	Sep.	
LOCATION: Inside Containment	Aging (years)		See Note Yes		20	Sep.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence	NA	NA		NA	NA	

*Documentation References:

20. Westinghouse Corp. Test Report WCAP-7709-L, Suppl. 2

Notes: 80 heatup and cooldown.

from Ref. 20. Qualified by Westinghouse report WCAP-7709-L, supplement 2 of Sept. 1973.

Type of Test: Separate, seismic steam/chem. spray gamma radiation.

Test Profile:

Horizontal (side-to-side) force = 2g
(back-to-back) force = 2g
Vertical force = 1.33g
Frequencies = 1 through 35 Hz

.33 to .80 Mrads/hr
200-220 Mrads

Assumed saturated steam. (310°F, 77 psia for 4 hrs
) 259°F, 35 psia for 20 hrs
(228°F, 20 psia for 1 hr

Chemical Spray: Sodium thiosulfate 2500 ppm boron as boric acid with Na OH added for a PH = 10.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST H PLANT ID NO: BLP-110,111,112,130,131,[illegible],140,141,142 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 764 FUNCTION: POST ACCIDENT & NORMAL MONITORING (LONG TERM) ACCURACY: SPEC: +10% DEMON: -5% SERVICE: STEAM GENERATOR LEVEL LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTH	4 MONTH	Q(LB) 020.1	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Temperature (°F)	160	160	FIG N 13.13-2	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	26.2	53.13 147	FIG N 5.3-11	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .17% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.6	50		REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT	75 FT	DRWG 5570E	ENGRG JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED REFERENCES ARE FOOTNOTES.

30 - WESTINGHOUSE ELECTRIC CORP. COMMERCIAL NS-TMH-1750

Notes: (LB) REQUIREMENTS ADDRESSED IN REPORT NO. 30 WHICH WAS SUBMITTED IN RESPONSE TO QUESTION 020.1 THESE DEVICES WERE NOT CERTIFIED WITH ASSUMED OPERATION FOR ANY ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: AUXILIARY FEEDWATER PLANT ID NO: CLR 110 III COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: TEXAS INSTRUMENT MODEL NUMBER: 1D00212 FUNCTION: MONITORING ACCURACY: SPEC: DEMON: SERVICE: CONDENSATE STORAGE TANK LEVEL LOCATION: OUTSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence						

NOT APPLICABLE

*Documentation References:

Notes:

THE TRANSMITTER IS LOCATED SUCH THAT NO SOURCE-TARGET INTERACTION OR ADVERSE ENVIRONMENT WILL EFFECT IT. THE SIGNAL LINES ARE SUBJECT TO MSLB AND MFWLB ENVIRONMENT. HOWEVER, FAILURE OF THE SIGNAL LINE (PNEUMATIC) CAUSES THE SIGNAL TO GO TO ZERO THEREBY CAUSING THE OPERATOR TO SWITCH TO AUXILIARY FEEDWATER BACKUP SOURCE.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN FEEDWATER [illegible] TRANSMISSION PLANT ID NO: FCC 210,211, 2[illegible],[illegible],230,231,240 [illegible] COMPONENT: DIFFERENTIAL [illegible] TRANSMITTER MANUFACTURER: [illegible] MODEL NUMBER: [illegible] (MCD) FUNCTION: NORMAL MONITOR [illegible] IGNITION ACCURACY: SPEC: ± 16% DEMON: -11.75% SERVICE: MAIN FEEDWATER [illegible] LOCATION: OUTSIDE CONTAINMENT	Operating Time	1.5 & 25 SEC	±1.5	TBUS [illegible] 0-25	TECH. SPEC. [illegible]	RESPONSE TIME TESTING FOR STM. GEN WATER LEVEL	NONE
	Temperature (°F)	223	290	FIG 0-26	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	5.8	74.7	FIG 0-26	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	NA	NA	NA	NA		NONE
	Radiation (10^6 rads)	NA	NA	NA	NA		NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA	NA	NA	NA		NONE

*Documentation References: UNLESS OTHERWISE NOTED [illegible] REFERENCES ARE [illegible] SECTIONS. [illegible] WESTINGHOUSE ELECTRIC CORP TYPICAL REPORT FOR ENVIRONMENTAL TESTING OF [illegible] TRANSMITTERS

Notes: 0.4.2 & 14.2.8 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS TAKEN FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: AUXILIARY FEEDWATER PLANT ID NO: FFI 210 [illegible] 230 & 240 COMPONENT: DIFFERENTIAL [illegible] TRANSMITTER MANUFACTURER: LITT BARTON MODEL NUMBER: 368 FUNCTION: MONITORING ACCURACY: SPEC: DEMON: SERVICE: AUXILARY FEEDWATER FLOW LOCATION: OUTSIDE [illegible] CONTAINMENT	Operating Time	CONTINUOUS	NOTE(L)	14.2.8	NOTE(L)	NOTE (L)	NONE
	Temperature (°F)	230		FIG 0.27			NONE
	Pressure (PSIA)	262		FIG 0.27			NONE
	Relative Humidity (%)	100		7.5			NONE
	Chemical Spray	NA					NONE
	Radiation (10^6 rads)	NA					NONE
	Aging (years)						
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:	Submergence	NA					NONE

*Documentation References: [illegible] UNLESS OTHERWISE NOTED [illegible] REFERENCES REF. [illegible] SECTIONS.

Notes: (L) PRESENTLY INSTALLED DEVICES ARE CONTROL GRADE DEVICES WHICH ARE TO BE REPLACED TO MEET THE REQUIREMENTS ON NUREG 0578 ITEM 2.1.7.b. SEE REF: NRC: 00253 DATED OCT. 24 1979.

THESE DEVICES ARE NOT EXPOSED TO LOCA LONG TERM REQUIREMENTS OR RADIATION EXPOSURE DOSES.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY [illegible]	Operating Time	CONTINUOUS	CONTINUOUS	ENERGY REQ'S	ENERG BUDGET	ENGINEERING REVIEW	NONE
PLANT ID NO: IFC 315 [illegible]	Temperature (°F)	110	200	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
COMPONENT: DIFFERENTIAL [illegible] SWITCH	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT	ENGINEERING REVIEW	NONE
MANUFACTURER: [illegible] FAKTON	Relative Humidity (%)	110°F DRY BULB 76°F WET BULB	WEATHER-PROOF CASE	9.9	MNFTR LIT	ENGINEERING REVIEW	NONE
MODEL NUMBER: [illegible] A/199	Chemical Spray	NA	NA				NONE
FUNCTION: [illegible] PROTECTION	Radiation (10^6 rads)	NOTE (M)	NA	NOTE (M)	NOTE (M)	ENGINEERING REVIEW	NONE
ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6%	Aging (years)						
SERVICE: RHR PUMP MINIMUM [illegible] CONTROLLER	Submergence	NA	NA				NONE
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:							

*Documentation References: UNLESS OTHERWISE NOTED ALL [illegible] TO FSAR SECTIONS MNFTR LIT ITT BARTON PRODUCT BULLETIN [illegible] AND TECHNICAL MANUAL 505-400

Notes: (M) LOCATION OF PRESSURE SWITCH IS OUTSIDE ROOM CONTAINING RADIATION SOURCE AND IS THEREFORE SHIELDED FROM EFFECT.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 51, 52, 53 & 54 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DM-HSA81 MCR FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: BORON INJECTION TANK CHARGE FLOW LOCATION: INSIDE CONTAINMENT	Operating Time	< 60 MIN	90 MIN	TABLE 7.5-2	WCAP 8541	SEPARATE EFFECTS	NONE
	Temperature (°F)	250	290	NO.3.1-3 FIG NB.3-1	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	28.8	74.7	N 13.2	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID .15% NaOH	1.5% BORIC ACID @ 125°C 10M NaOH	N 5.3.6	WCAP 8541	SEQUENTIAL	NONE
	Radiation (10^6 rads)	3.9	76	WCAP 7410-L Vol. I	WCAP 8541	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	11'-6"	60 PSIG	DRWG 5708B CDEE	ENGRG DGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS
AEW-8541 WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: LSI 51, 52, 53 & 54 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DM-[illegible] MCB FUNCTION: LONG TERM MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: BORON INJECTION TANK DISCHARGE FLOW LOCATION: INSIDE CONTAINMENT	Operating Time	< 60 MIN	90 MIN	TABLE 7.5-2	WCAP 8541	SEPARATE EFFECTS	NONE
	Temperature (°F)	160	290	FIG N 13.B-2	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	26.2	74.7	FIG N 5.3-11	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID, .15% NaOH	1.5% BORIC ACID @ 95°C 10pH NaOH	N 5.3.6	WCAP 8541	SEQUENTIAL	NONE
	Radiation (10^5 rads)	40	76	REF 30	WCAP 8541	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	11'-6"	60 PSIG	DRWG 557068 & DEE	ENGRG ASSMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS
AEW-8541 WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 51, 52, 53 & 54 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DM-HSAHT-MCD FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: BORON INJECTION TANK DISCHARGE FLOW LOCATION: INSIDE CONTAINMENT	Operating Time	< 60 MIN	90 MIN	TABLE 7.5-2	WCAP 8541	SEPARATE EFFECTS	NONE
	Temperature (°F)	233 330	290	NB3.7 N13.6	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	35.5	74.7	NB3.8	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID .15% NHOH	1.5% BORIC ACID @ 125 TO 1000 PPM NHOH	N 53.6	WCAP 8541	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.6	76	REF 30	WCAP 8541	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	11'-6"	60 PSIG	DRWG 5570B CURE	ENGRG JUDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS

AEW-8541 WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES. INDICATIONS FROM OTHER, DIVERSE INSTRUMENTS CAN SERVE OR CORROBORATE THE INTENDED FUNCTION.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI-260 & 266 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 332 FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: SIS PUMP DISCHARGE FLOW LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	EMRGY PROCS	ENGRG JDGMT	ENG'G REVIEW	NONE
	Temperature (°F)	110	160	9.9	MNFTR LIT.	ENG'G REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT.	ENG'G REVIEW	NONE
	Relative Humidity (%)	90°F DRY BULB 76°F WET BULB	EXPLOSION PROOF CASE	9.9	MNFTR LIT.	ENG'G REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA(M)	NA (M)	NA (M)	NOTE (M)	ENG'G REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA	NA				NONE

*Documentation References:
ALL REFS ARE TO FSAR SECTIONS UNLESS OTHERWISE NOTED

Notes: (M) TRANSMITTER IS LOCATED OUTSIDE ROOM CONTAINING RADIATION SOURCE & IS THUS SHIELDED FROM EFFECT.

MNFTR LIT: ITT BARTON PRODUCT/BULLETIN G1-23-3

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFT 310 & 320 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: [illegible] - HSAMI FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: [illegible] SERVICE: RHR FLOW [illegible] EXCHANGER OUTLET LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	ENERGY PROCS	MANFTR LIT. WORPS	SEPARATE EFFECTS & ENGINEERING REVIEW	NONE
	Temperature (°F)	110	180	9.9	MANFTR LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MANFTR LIT	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	90°F DRY BULB 76°F WET BULB	NEAR 4 WATER TIGHT	9.9	MANFTR LIT	ENGINEERING REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA (M)	NA (M)	NA (M)	NOTE (M)	ENGINEERING REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:	Submergence	NA	NA				NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL [illegible] FSAR SECTIONS.
MANFTR LIT -- FOXBORO GENERAL SPECIFICATION GS-2A-1C1E

Notes: (M) LOCATION OF TRANSMITTER IS OUTSIDE ROOM FOR WHICH RADIATION SOURCE IS GENERATED THEREFORE SHIELDED FROM EFFECT

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 311 & 321 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 332 FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: RHR FLOW HEAT EXCHANGER OUTLET LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	DESIGN PROC.	ENGINEERING JDGMT	ENGINEERING REVIEW	NONE
	Temperature (°F)	110	160	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	110°F DRY BULB 76°F WET BULB	EXPLOSION PROOF CASE	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA (M)	NA (M)	NA	NOTE (M)	ENGINEERING REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA	NA				NONE

*Documentation References: ALL REFERENCES ARE ESAR UNITS 1 & 2 UNLESS OTHERWISE NOTED MNFTR LIT. ITT BARTON PRODUCT / BULLETIN G1-23-3

Notes: (M) LOCATION OF TRANSMITTER IS OUTSIDE ROOM FOR WHICH RADIATION SOURCE IS GENERATED THEREFORE SHIELDED FROM EFFECT.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST A PLANT ID NO: MFC-110, 111, 120, 121, 130, 131, 140 & 141 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 764 FUNCTION: ACTUATION & NORMAL MONITORING ACCURACY: SPEC: ~10% DEMON: +-5% SERVICE: MAIN STEAM FLOW LOCATION: IN CONTAINMENT	Operating Time	5 SEC	≤ 3.0 SEC	N 13.7	TECH. SPEC. 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	233 330	360 & 250	N13.7 N13.6	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	35.5	8.7 & 14.7	N13.8	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .17% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.04	50 @ 2.5/HR		REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	18 ft	75 PSIG	DRWG 5570D	ENGR JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950.

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES IS 14.2.5

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN STEAM & LOW TEMP MONITOR	Operating Time						
PLANT ID NO: MPC 253 & 254	Temperature (°F)						
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)						
MANUFACTURER: FOXBORO	Relative Humidity (%)						
MODEL NUMBER: E11GM-H5AD1	Chemical Spray						
FUNCTION: NORMAL MONITOR TEMPERATURE	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON:	Aging (years)						
SERVICE: FIRST STAGE SHELL PRESSURE	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

NOT APPLICABLE

*Documentation References:

Notes:

THESE DEVICES WERE INCLUDED IN THE FIRST SUBMITTAL OF IEB 79-01B TO ACCOUNT FOR DEVICES REFERENCED BY 14.2.5 ACCIDENT ANALYSIS. THESE DEVICES ARE NOT REQUIRED EQUIPMENT DUE TO THE Q022.16 EXCLUSION OF THE NEUTRON DETECTORS. THE DETECTORS AND THESE DEVICES FORMED A COINCIDENCE LOGIC FOR REACTOR TRIP. THEREFORE EXCLUSION OF THE DETECTORS CAUSES EXCLUSION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50-316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST B PLANT ID NO: MPP 210, 211 2[illegible],221,230,231,240 [illegible] COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: [illegible] YOKOGO MODEL NUMBER: [illegible] 1-[illegible]E1 (MCA) FUNCTION: POST ACCIDENT [illegible] MONITORING & INDICATION ACCURACY: SPEC: +10% DEMON: -12.5% SERVICE: PABW STEAM PRESSURE LOCATION: OUTSIDE CONTAINMENT	Operating Time	5 SEC & LONG TERM	≤3 SEC	N13.7-1	TECH. SPEC. 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	230	318	FIG. 0-27	NS-PLC-5023	SEQUENTIAL	NONE
	Pressure (PSIA)	26.2	90	FIG. 0-27	NS-PLC-5023	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	NS-PLC-5023	SEQUENTIAL	NONE
	Chemical Spray	NONE	NONE	N/A	N/A	N/A	NONE
	Radiation (10^6 rads)	N/A	50	N/A	NS-PLC-5023	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:	Submergence	N/A	N/A				

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE TO FSAR SECTIONS

NS-PLC-5023 WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE WITH AS NOTED IDENTITY.

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES IS 14.2.5

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST C PLANT ID NO: MPP-212, 222, [illegible] & 242 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: [illegible]-HSAE1 FUNCTION: POST ACCIDENT [illegible] MONITOR & ACTUATE ACCURACY: SPEC: ± 10 % DEMON: ± 2.5 % SERVICE: MAIN STEAM PRESSURE LOCATION: OUTSIDE CONTAINMENT	Operating Time	.5 SEC & LONG TERM	≤ 3 SEC	NB3.7	TECH. SPEC. 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	230	180	FIG. 0-27	MANFR. LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	26.2	14.7	FIG 0-27	NONE	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	100	NEMA 4 WATER-TIGHT	7.5	MANFR LIT.	ENGINEERING REVIEW	NONE
	Chemical Spray	NONE	NONE	N/A	N/A	N/A	NONE
	Radiation (10^6 rads)	N/A	N/A	N/A	N/A	N/A	NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A				

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE TO FSAR SECTIONS. FOR THE LIT. FOXBORO PRODUCT SPECIFICATION DSS 711-183 A

Notes: THE ARRANGEMENT OF THE DIFFERENTIAL PRESSURE BETWEEN STEAMLINES LOGIC IS SUCH THAT FAILURE OF THESE DEVICES COUPLED WITH A SINGLE FAILURE WILL STILL GENERATE THE ACCIDENT ANALYSIS ASSUMED OPERATION. THEREFORE CONTROL GRADE HARDWARE IS ACCEPTABLE. ACCIDENT ANALYSIS SECTION IS 14.2.5.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.-	QUAL.	SPEC.	QUAL.		
SYSTEM: [illegible] INSTRUMENTATION PLANT ID NO: [illegible] 36 COMPONENT: ION CHAMBER MANUFACTURER: WESTINGHOUSE MODEL NUMBER: [illegible] 25690 FUNCTION: NORMAL MONITORING [illegible] ACTUATION (D) ACCURACY: SPEC: DEMON: SERVICE: INTERMEDIATE [illegible] NEUTRON FLUX LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray	NOT APPLICABLE					
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence						

*Documentation References:

Notes: (D) ACTUATION REQUIREMENTS ARE FOR NON-ADVERSE ENVIRONMENT ACCIDENT ANALYSIS. CREDIT FOR FUNCTION OF DEVICE REFERENCED BY P.1, 14.3.1, 14.2.5 & 14.2.8 ANALYSIS. AS PER Q02.2.16, OPERATION IS NOT ASSUMED IN LOCA OR MSLB ANALYSIS.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR TRIP INSTRUMENTATION PLANT ID NO: N 418, 418, 428, 428, 438, 438, 448 & 448 COMPONENT: ION CHAMBER MANUFACTURER: WESTINGHOUSE MODEL NUMBER: WL 23686 FUNCTION: NUCLEAR MONITORING & ACTUATION (D) ACCURACY: SPEC: DEMON: SERVICE: POWER RANGE NEUTRON FLUX LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence						

NOT APPLICABLE

*Documentation References:

Notes: (D) ACTUATION REQUIREMENTS ARE FOR NON-ADVERSE ENVIRONMENT ACCIDENT ANALYSIS. CREDIT FOR FUNCTION OF DEVICE REFERENCED BY P.1, 14.3.1, 14.2.5 & 14.2.8 ANALYSIS. AS PER Q022.16, OPERATION IS NOT ASSUMED IN LOCA OR HELB ANALYSIS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST J	Operating Time	4 MONTHS	4 MONTHS	(B) Q. 030.1	REF. 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
PLANT ID NO: NLP-151 NLP-152 NLP-153	Temperature (°F)	160	160	FIG N 13.13.2	"	"	"
COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON	Pressure (PSIA)	26.2	29.7 & 14.17	FIG N 5.3-11	"	"	"
MODEL NUMBER: 764	Relative Humidity (%)	100	100	7.5	"	"	"
FUNCTION: POST ACCIDENT & NORMAL MONITORING-* LONG TERM	Chemical Spray	1.14% BORIC ACID & 0.15% NAOH	1.14% BORIC ACID & 0.17% NAOH	N 5.3.6	"	SEQUENTIAL	"
ACCURACY: SPEC: ± 25 % DEMON: -5 %	Radiation (10^6 rads)	40	50 AT 2.5 / HR.	Q(B) 030.1	"	SEPARATE EFFECTS	"
SERVICE: PRESSURIZER LEVEL	Aging (years)						
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	DRWG 5581B	NA	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS. REF 30 = WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1957

Notes: (B) REQUIREMENTS ADDRESSED IN REF. 30 WHICH WAS SUBMITTED IN RESPONSE TO QUESTION Q30.1

*ACTUATION FUNCTION IN 14.2.5 ANALYSIS RELIEVED PER OUR RESPONSE TO IEB 79-06A. WHICH REPLACED LEVEL CONTRIBUTION TO ACTUATION LOGIC WITH A CONSTANT "TRIP" SIGNAL.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST E PLANT ID NO: NPP-151, 152 & 153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: POST ACCIDENT & NORMAL MONITOR & ACTUATION ACCURACY: SPEC: ±10 % DEMON: +14% (A) & -5% SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	5 SEC & 4 MONTH	≤ 3.0 SEC	Q (B) 030.1 & NB.7-1	TECH SPEC 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	233	360 & 250	NB.7	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	35.5	89.7 & 14.7	NB.8	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .15% NAOH	N5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.6	50 @ 2.5/HR	WCAP 7410-L VOL I	REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 55818	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF. 30 – WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950

Notes: (B) REQUIREMENTS ADDRESSED IN REFERENCE 30 WHICH WAS SUBMITTED IN RESPONSE TO THIS QUESTION 030.1

14.2.5 IS THE ACCIDENT ANALYSIS GENERATING THE ADVERSE ENVIRONMENT IN WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST E PLANT ID NO: NPP-151, 152 & 153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: POST ACCIDENT & NORMAL MONITOR ACTUATION ACCURACY: SPEC: ± 10% DEMON: +14% (A) SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	3.4 SEC LLOCA 32 SEC [illegible]	≤ 3.0 SEC	P.1-5 & TABLE P.1-1	TECH SPEC 3.[illegible]	RESPONSE TIME TESTING	NONE
	Temperature (°F)	250	320 & 250	N0.3.1-3 & FIG N13.13-1	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	28.8	89.7 & 14.7	N13.2	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .17% NAOH	N5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.07	50 @ 25/HR	WCAP 7410-L VOL I	REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 5581B	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
REF. 30 - WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950

Notes: P.1 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT IN WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.
(A) FRACTURE MECHANICS ANALYSIS HAS SHOWN THIS VALUE TO BE ACCEPTABLE
REFERENCE AEP : NRC : 00192

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST E PLANT ID NO: NPP 151, 152 & 153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: LONG TERM POST ACCIDENT + NORMAL MONITOR + ACTUATION ACCURACY: SPEC: ± 10% DEMON: -.5% SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTH	4 MONTH	Q(B) D30.1	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Temperature (°F)	160	160	FIG N 13.13-2	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Pressure (PSIA)	26.2	89.7	FIG N 5.3-11	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID + .15% NAOH	1.14% BORIC ACID + .17% NAOH	N5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	40	50 @ 2.5/HR	Q(B) D30.1	REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 55818	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF. 30 - WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950

Notes: (B) REQUIREMENTS [illegible] WHICH [illegible] D30.1 P.1 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT IN WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT + POST ACCIDENT MONITOR PLANT ID NO: NPS 121 + 122 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: MONITORING ACCURACY: SPEC: ± 10 % DEMON: ± 10 % SERVICE: REACTOR COOLANT PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTHS	4 MONTHS	REF 30	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Temperature (°F)	233 330	330 & 320	N13.7 N13.6	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Pressure (PSIA)	35.5	89.7 & 14.7	N13.8	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID + .015% NAOH	1.14% BORIC ACID + .017% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	< .6	.76	REF 30	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT	75 PSIG	DRWG 55708+C	ENGR JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF 30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950.

Notes: Q022.8, Q022.16 + Q212.35 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT + POST ACCIDENT MONITOR	Operating Time	4 MONTHS	4 MONTHS	REF 30	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
PLANT ID NO: NPS 121 & 122	Temperature (°F)	250 & 160	280	FIGS N 13.13-1 & -2	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)	28.8 & 26.2	89.7 & 14.7	N13.2 & FIG N5.3-11	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
MANUFACTURER: ITT BARTON	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL	NONE
MODEL NUMBER: 763	Chemical Spray	1.14% BORIC ACID + .015% NAOH	1.14% BORIC ACID + .017% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
FUNCTION: LONG TERM MONITORING	Radiation (10^6 rads)	40	50	REF 30	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
ACCURACY: SPEC: ±10% DEMON: ±10%	Aging (years)						
SERVICE: REACTOR COOLANT PRESSURE							
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT	75 PSIG	DRWG 557086-C	ENGR JUGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF 30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950.

Notes: Q022.8, Q022.16 + Q212.35 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: NUCLEAR [illegible] PLANT ID NO: NPS 153	Operating Time	4 MONTH	4 MONTH	Q030.1 NOTE(B)	REF. 30	SEQ. & SEP. EFFECTS	NONE
COMPONENT: PRESSURE TRANSMITTER	Temperature (°F)	160	160	FIG. 14.3.4-5	REF. 30	SEQ. & SEP. EFFECTS	NONE
MANUFACTURER: ITT BARTON	Pressure (PSIA)	27.2	89.7	ACW 6504	REF. 30	SEQ. & SEP. EFFECTS	NONE
MODEL NUMBER: 763	Relative Humidity (%)	100	100 & 0	7.5	REF. 30	SEQ. & SEP. EFFECTS	NONE
FUNCTION: LONG TERM MONITORING	Chemical Spray	1.14% boric acid & .15% NaOH	1.14% boric acid & .15% NaOH	N 5.3.6	REF. 30	SEQ.	NONE
ACCURACY: SPEC: ± 10% DEMON: - 5%	Radiation (10^6 rads)	40	50 @ 2.5/HR	Q030.1 NOTE(B)	REF. 30	SEP. EFFECTS	NONE
SERVICE: PRESSURIZER PRESSURE	Aging (years)						
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	DRWG 5581B	ENGRG REVIEW	ENGINEERING REVIEW	NONE

*Documentation References:
UNLESS OTHERWISE NOTED, ALL REFS. ARE TO FSAR SECTIONS.

REF. 30: WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950.

Notes: REQUIREMENT & QUALIFICATIONS SAME AS MONITORING PHASE REQUIREMENTS AND QUALIFICATIONS OF NPP-151, 152 & 153 DEVICES.

(B) REQUIREMENTS ADDRESSED IN REF. 30 WHICH WAS SUBMITTED IN RESPONSE TO FSAR QUESTION Q 030.1. 14.3.1 IS THE ACCIDENT ANALYSIS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST D PLANT ID NO: NTP-111,121,131, 141,211,221,231 & 241 COMPONENT: RESISTANCE TEMPERATURE DETECTOR MANUFACTURER: SOSTMAN OR ROSEMOUNT MODEL NUMBER: 118348 OR 176 KF RESPECTIVELY FUNCTION: ACTUATION + NORMAL MONITOR ACCURACY: SPEC: ± 7.3 % DEMON: -2.29% SERVICE: REACTOR COOLANT TEMPERATURE LOCATION: INSIDE CONTAINMENT	Operating Time	3.4 SEC LOCA 32 SEC SLOCA	≤ 5.0 SEC ≤ 15.0 SEC	P.1-5 & TABLE P.1-1	TECH SPEC 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	250	320	N 03.1-3 & FIG N13.13-1	REF 28	SEQUENTIAL	NONE
	Pressure (PSIA)	28.8	89.7	N13.2	REF 28	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	REF 28	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .15% NAOH	N5.3.6	REF 28	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.07	100	WCAP 7410-L VOL I	REF 28	SEQUENTIAL	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 5507		

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

28 - WESTINGHOUSE ELECTRIC CORP. ENVIRONMENTAL QUALIFICATION OF PIS, WCAP-9157.

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES IS P.I.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST D PLANT ID NO: NTP-111, 121, 131, 141, 211, 221, 231 [illegible] COMPONENT: RESISTANCE TEMPERATURE DETECTOR MANUFACTURER: SOSTMAN OR ROSEMOUNT MODEL NUMBER: 11834B OR 176 KF RESPECTIVELY FUNCTION: ACTUATION + NORMAL MONITOR ACCURACY: SPEC: ± 7.3% DEMON: -2.29% SERVICE: REACTOR COOLANT TEMPERATURE LOCATION: INSIDE CONTAINMENT	Operating Time	10 SEC	[illegible]	N13.7	TECH SPEC 3.3-[illegible]	RESPONSE TIME TESTING	NONE
	Temperature (°F)	233 330	330	N13.7 N13.6	REF 28	SEQUENTIAL	NONE
	Pressure (PSIA)	35.5	89.7	N13.8	REF 28	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	REF 28	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID +.15% NAOH	1.14% BORIC ACID +.15% NAOH	N5.3.6	REF 28	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.04	100	WCAP 7410-L VOL I	REF 28	SEQUENTIAL	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 5507		

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

28 - WESTINGHOUSE ELECTRIC CORP. ENVIRONMENTAL QUALIFICATIONS WCAP - 9157.

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS REQUIRED FOR OPERATION OF THIS [illegible] IS N13.7.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT PLANT ID NO: NTP 110 120 130 210 220 230 E COMPONENT: RESISTANCE TEMPERATURE DETECTOR MANUFACTURER: [illegible] OR ROSEMOUNT MODEL NUMBER: 118 34B OR 176 NTP RESPECTIVELY FUNCTION: IN PLACE SPARES ACCURACY: SPEC: DEMON: N A SERVICE: REACTOR COOLANT TEMPERATURE LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence						

SEE NTP-11, 12, 13, 141, 211, 221, 231 & 241 SHEETS

*Documentation References:

Notes: REQUIREMENTS AND QUALIFICATION FOR THESE DEVICES IDENTICAL TO NTP-III ETC. REQUIREMENTS AND QUALIFICATIONS

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT POST ACCIDENT MONITORING	Operating Time	4 MONTHS	4 MONTHS	NOTE (E)	REF. 28	SEQUENTIAL & SEPERATE EFFECTS AND ENGINEERING ANALYSIS	NONE
PLANT ID NO: NTR 110,120,130, 140,210, 0,230 & 240	Temperature (°F)	160 & 233/ 330	160 & 330	FIG N 13.13-2 & N13.7/ 13.6	"	SEQUENTIAL	"
COMPONENT: RESISTANCE TEMPERATURE DETECTOR MANUFACTURER: SOSTMAN OR ROSEMOUNT	Pressure (PSIA)	26.2 & 35.5	89.7	FIG N 5.3-11 & N13.8	"	"	"
MODEL NUMBER: 11901B OR 176KS, RESPECTIVELY	Relative Humidity (%)	100	100	7.5	"	"	"
FUNCTION: NORMAL & ACCIDENT MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ~7.5%	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .17% NAOH	N 5.3.6	"	"	"
SERVICE: REACTOR COOLANT TEMPERATURE	Radiation (10^6 rads)	40	100	NOTE (E)	"	SEPARATE EFFECTS AND ENGINEERING ANALYSIS	"
LOCATION: INSIDE CONTAINMENT	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence	NA	NA	NA	DRWG-5507	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS. REF 28 = WESTINGHOUSE ELECTRIC CORP ENVIRONMENTAL QUALIFICATION REPORT: WCAP-8157

Notes: A-022.8 & Q22.16 & Q212.35 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSES FOR WHICH CREDIT IS ASSUMED FOR THE OPERATION OF THESE DEVICES

(E) REF 28 STATES THAT A RADIATION DOSE OF 1×10^8 RADS IS EQUIVALENT TO 12 YEARS OF OPERATION PLUS 2 WEEKS OF MONITORING. REVIEW OF FIG. 2-1 IN REF 28 SHOWS THAT FOR THE ACCIDENT DOSE OF 40×10^6 RADS SPECIFIED FOR OTHER ACCIDENT MONITORING DEVICES AT 4 MONTHS, THESE DEVICES WOULD QUALIFY FOR A NOMINAL 8 YEARS OF OPERATION.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST F	Operating Time						
PLANT ID NO: PPP-300, 301 & 302	Temperature (°F)						
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)						
MANUFACTURER: PAXEDRO	Relative Humidity (%)						
MODEL NUMBER: 11GM-H5AA1	Chemical Spray						
FUNCTION: ACCIDENT MONITORING & ACTUATION	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON:	Aging (years)						
SERVICE: CONTAINMENT PRESSURE	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

NOT APPLICABLE

*Documentation References:

Notes:

THESE DEVICES WERE INCLUDED IN THE FIRST SUBMITTAL OF 79-01B TO ACCOUNT FOR DEVICES REFERENCED BY ACCIDENT ANALYSIS 14.1, 14.2.5, 14.2.8 & 14.3.1.
AS DISCUSSED IN Q 020.16 & 020.35 THESE DEVICES ARE NOT EXPOSED TO AN ADVERSE ENVIRONMENT FOR AN IN CONTAINMENT EVENT AND FOR AN ACCIDENT EVENT OUTSIDE CONTAINMENT WHERE CONTAINMENT PRESSURE SUPPRESSION IS REQUIRED. THESE DEVICES THEREFORE ARE ADEQUATELY PROTECTED FROM THE ACCIDENT EVENT.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST G	Operating Time						
PLANT ID NO: PPP-302	Temperature (°F)						
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)						
MANUFACTURER: FOXBORO	Relative Humidity (%)						
MODEL NUMBER: [illegible]-HSAA1	Chemical Spray						
FUNCTION: ACCIDENT MONITORING	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON:	Aging (years)						
SERVICE: CONTAINMENT [illegible]	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

NOT APPLICABLE

*Documentation References:

Notes:

THESE DEVICES WERE INCLUDED IN THE FIRST SUBMITTAL OF 79-01B TO ACCOUNT FOR DEVICES REFERENCED BY ACCIDENT ANALYSIS 14.1, 14.2.5, 14.2.8, & 14.3.1.

AS DISCUSSED IN Q 022.16 & Q 212.35, THESE DEVICES ARE NOT EXPOSED TO AN ADVERSE ENVIRONMENT FOR AN INCONTAINMENT EVENT AND FOR AN ACCIDENT EVENT OUTSIDE CONTAINMENT NO CONTAINMENT PRESSURE SUPPRESSION IS REQUIRED. THESE DEVICES THEREFORE ARE ADEQUATELY PROTECTED FROM THE ACCIDENT EVENT.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT VENTILATION INSTRUMENTATION PLANT ID NO: VRC-302 COMPONENT: RADIATION MONITOR MANUFACTURER: WESTINGHOUSE MODEL NUMBER: 1101 FUNCTION: ACTUATION ACCURACY: SPEC: ± 6% DEMON: < 1% SERVICE: CONTAINMENT VENTILATION LOCATION: INSIDE CONTAINMENT	Operating Time	NA	NA				
	Temperature (°F)	250	120	FIGS. B-1E B-3.1-3	E SPEC 677271		NONE (C)
	Pressure (PSIA)	28.8 & 29.1	28.7	NB.2 & 14.3.4	E SPEC 677271		NONE (C)
	Relative Humidity (%)	100	100	7.5	E SPEC 677271		NONE (C)
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	NONE	N53.6			NONE (C)
	Radiation (10^6 rads)	.07	10mR/HR	WCAP 7410-L VOL. I	E SPEC 677271		NONE (C)
	Aging (years)						
FLOOD LEVEL ELEV: 644'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA				

*Documentation References:

Notes:

(C) ITEM INDICATED IN FIRST SUBMITTAL OF 79-01B TO ACCOUNT FOR DEVICES WHICH ARE A CONTAINMENT PURGE RADIATION ACTUATION DEVICE. THIS DEVICE IS ONE OF THE "DEFENSE IN DEPTH" DEVICES FOR ISOLATION WHICH INCLUDES ALL ESF ACTUATION DEVICES, THE CONTAINMENT AIR PARTICULATE & RADIOGAS DETECTOR, CONTAINMENT PRESSURE AND THIS AREA MONITOR. SINCE FOR AN INCONTAINMENT ACCIDENT EVENT THIS DEVICE SERVES A SECONDARY FUNCTION IN RELATION TO THE ESF ACTUATION AND CONTAINMENT PRESSURE DEVICES THAT ARE OF CONTROL GRADE EQUIPMENT IS CONSIDERED ADEQUATE. HOWEVER THIS DEVICE IS TO BE UPGRADED AS REQUIRED BY OUR COMMITMENT TO NUREG 0578 ITEMS. THEREFORE THIS DOES NOT REPRESENT AN OUTSTANDING ITEM.

E SPEC: WESTINGHOUSE EQUIPMENT SPECIFICATION 677271.

FIGURE 2 TEST PROFILE

From Ref 13

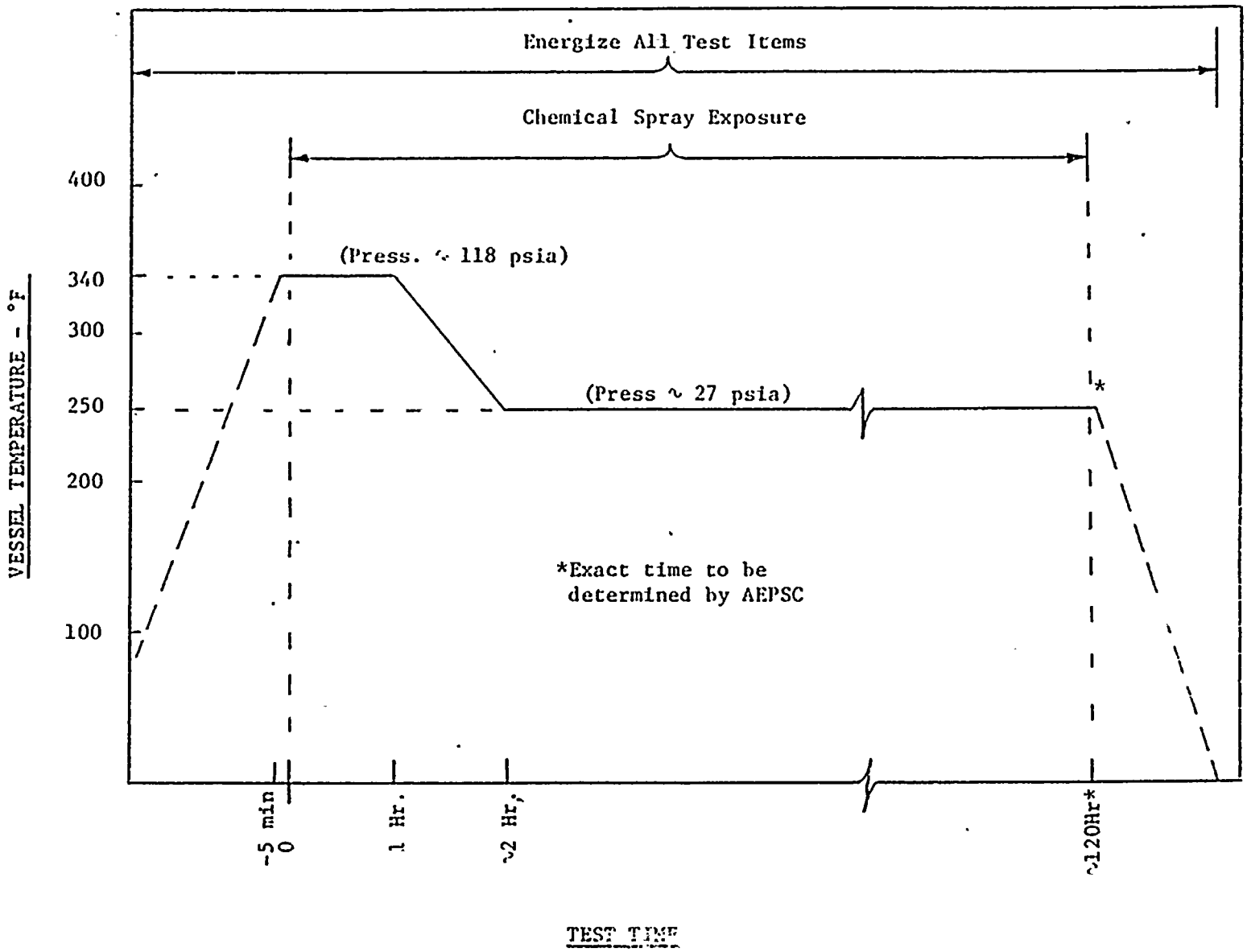
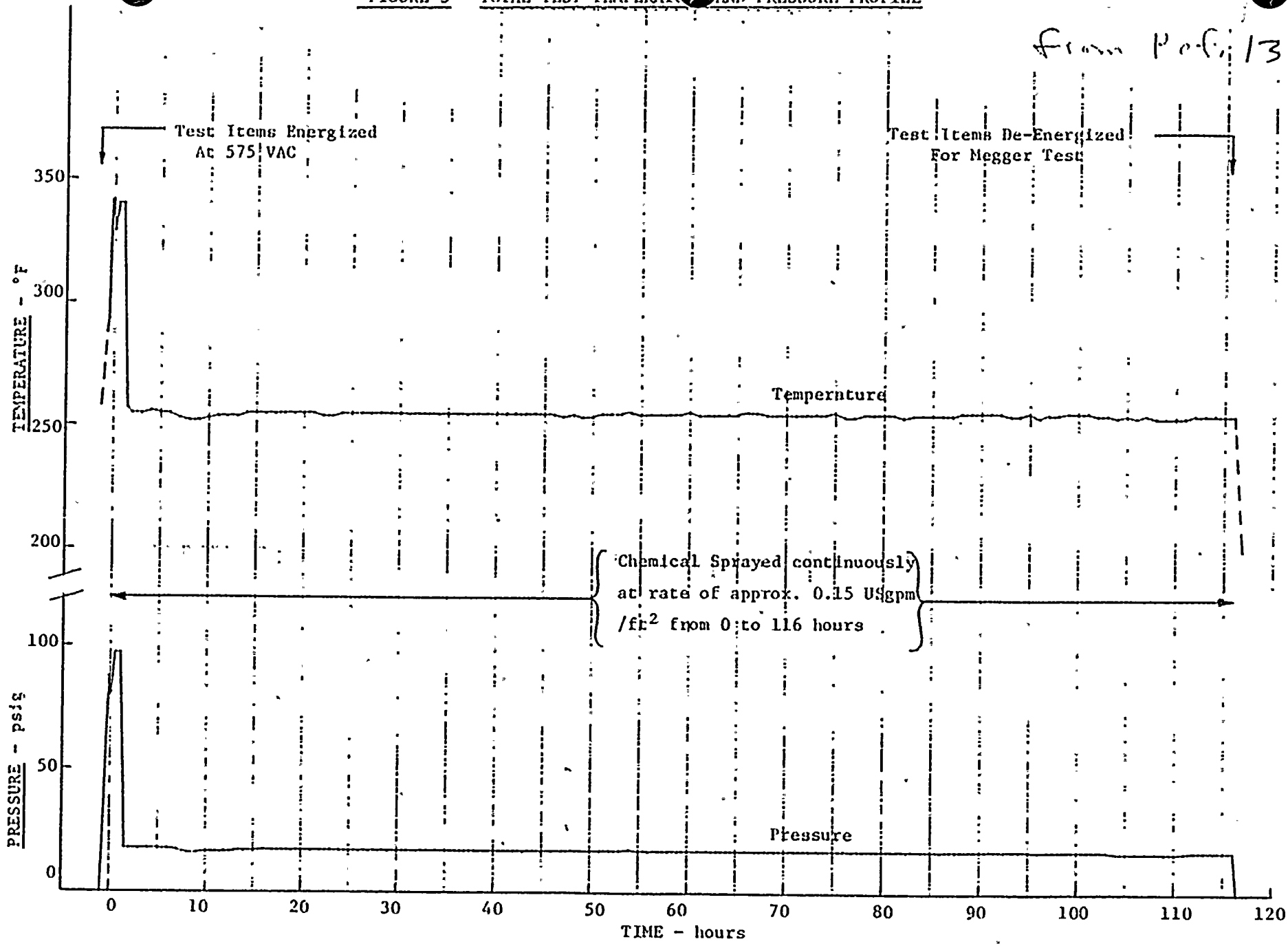


FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

from Pg. 13



Page TC 6-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Termination	Table 7.5-2	8	Seq.	
PLANT ID NO: N/A	Temperature (°F)	FIG 0229-1,-2	345	FSAR App Q	8	Seq.	
COMPONENT: CONTROL CABLE TERMINATION	Pressure (PSIA)	FIG 2. FIG 1	124.7	AEC 6504	8	Seq.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		14	Simul.	
MODEL NUMBER: STRANDED KAPTON SPLICED TO SOLID XL POLYETHYLENE	Chemical Spray	2000 ppm B	2500 PPM B	T.S. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION:	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	8	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Aging (years)		302°F, 7 days Yes		14	Simul.	
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	
LOCATION: In Containment							
FLOOD LEVEL ELEV: 611' ABOVE FLOOD LEVEL: Yes							

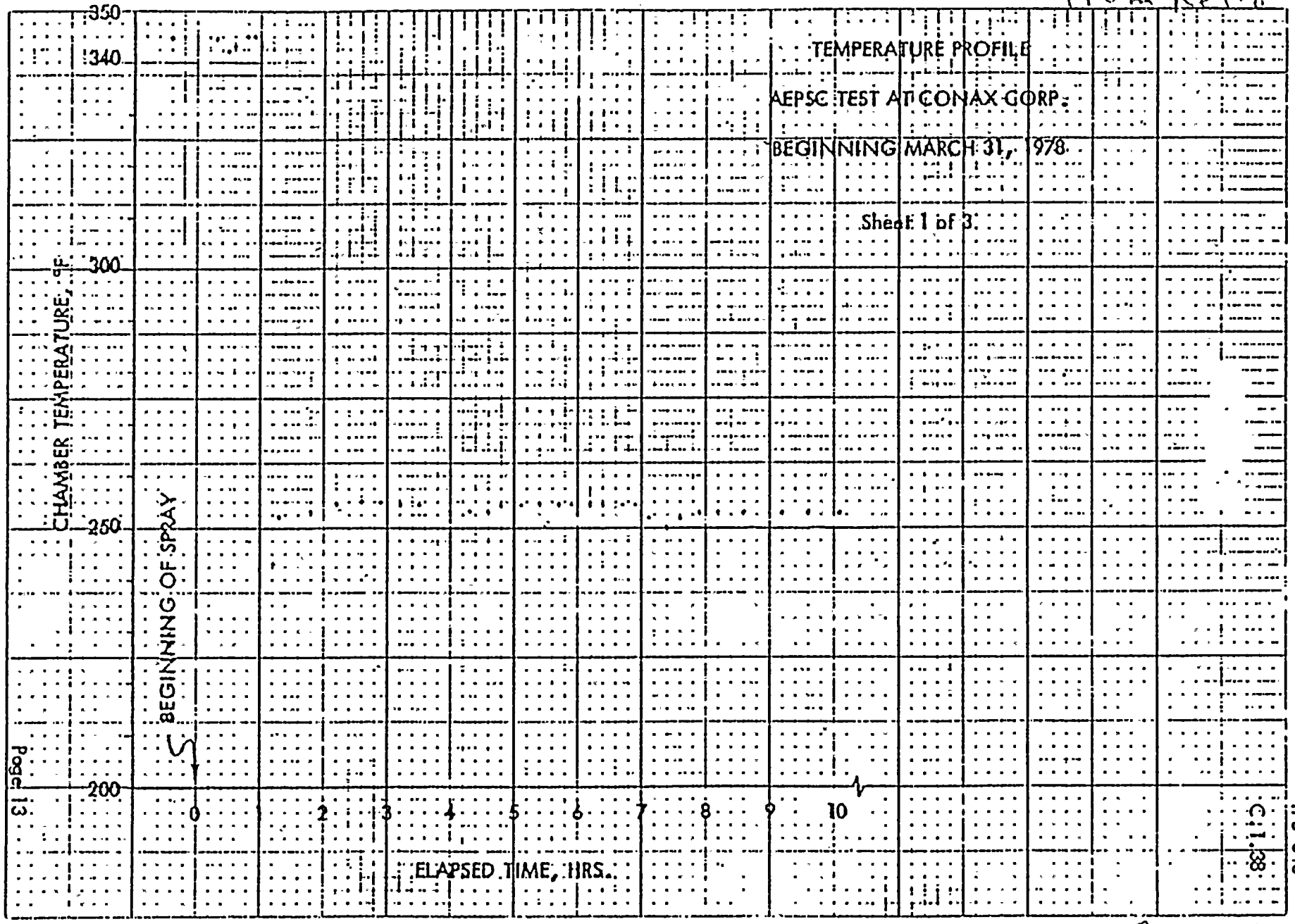
*Documentation References:

8. Conax Corp. Test Report IPS-348

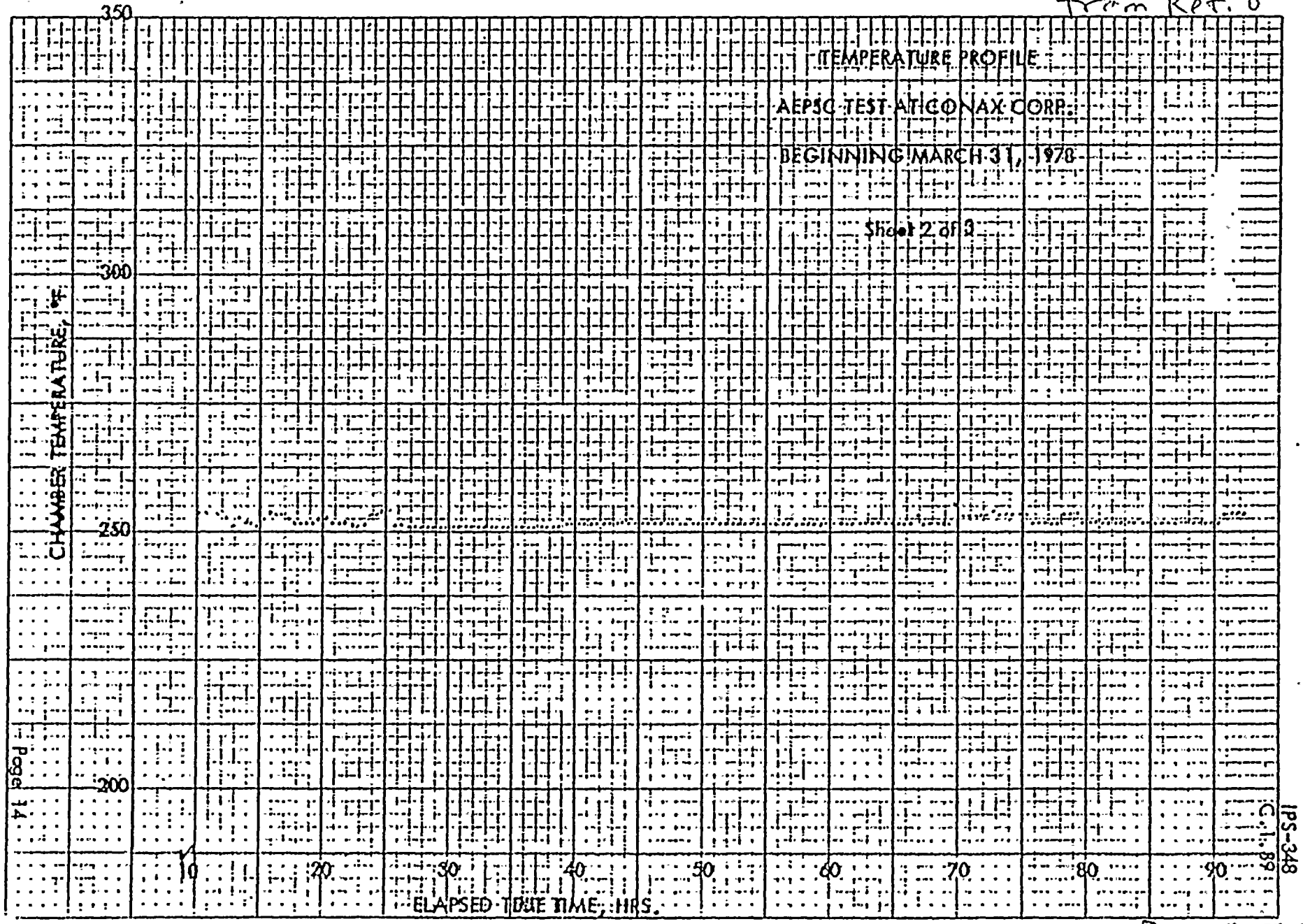
14. FIRL Test Report F-C 4033-3

Notes:

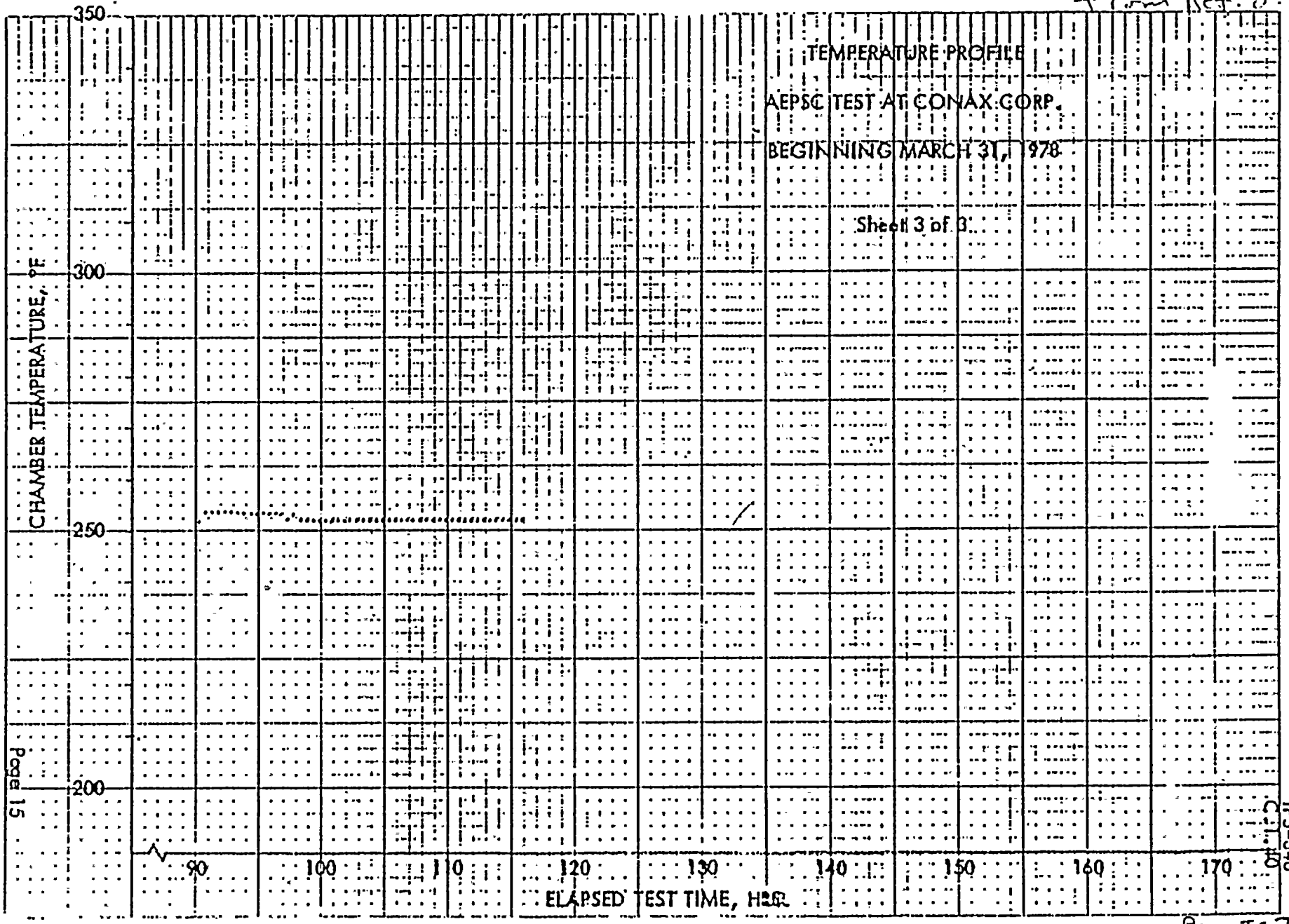
from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 2
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTAL TIME, HRS.

from Ref. 8.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HR

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Term.	Table 7.5-2	8	Seq.	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.9-1,-2	345	FSAR App Q	8	Seq.	
COMPONENT: CABLE TERMINATION	Pressure (PSIA)	FIG2 FIG1	124.7	AEW 6504	8	Seq.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		14	Simul.	
MODEL NUMBER: XL Polyethylene solid spliced to XL Polyethylene solid	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION:	Radiation (10^6 rads)	150	150	CWAP 7410-L VOL1	8	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Aging (years)		302°F, 7 days Yes		14	Simul.	
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	
LOCATION: In Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes							

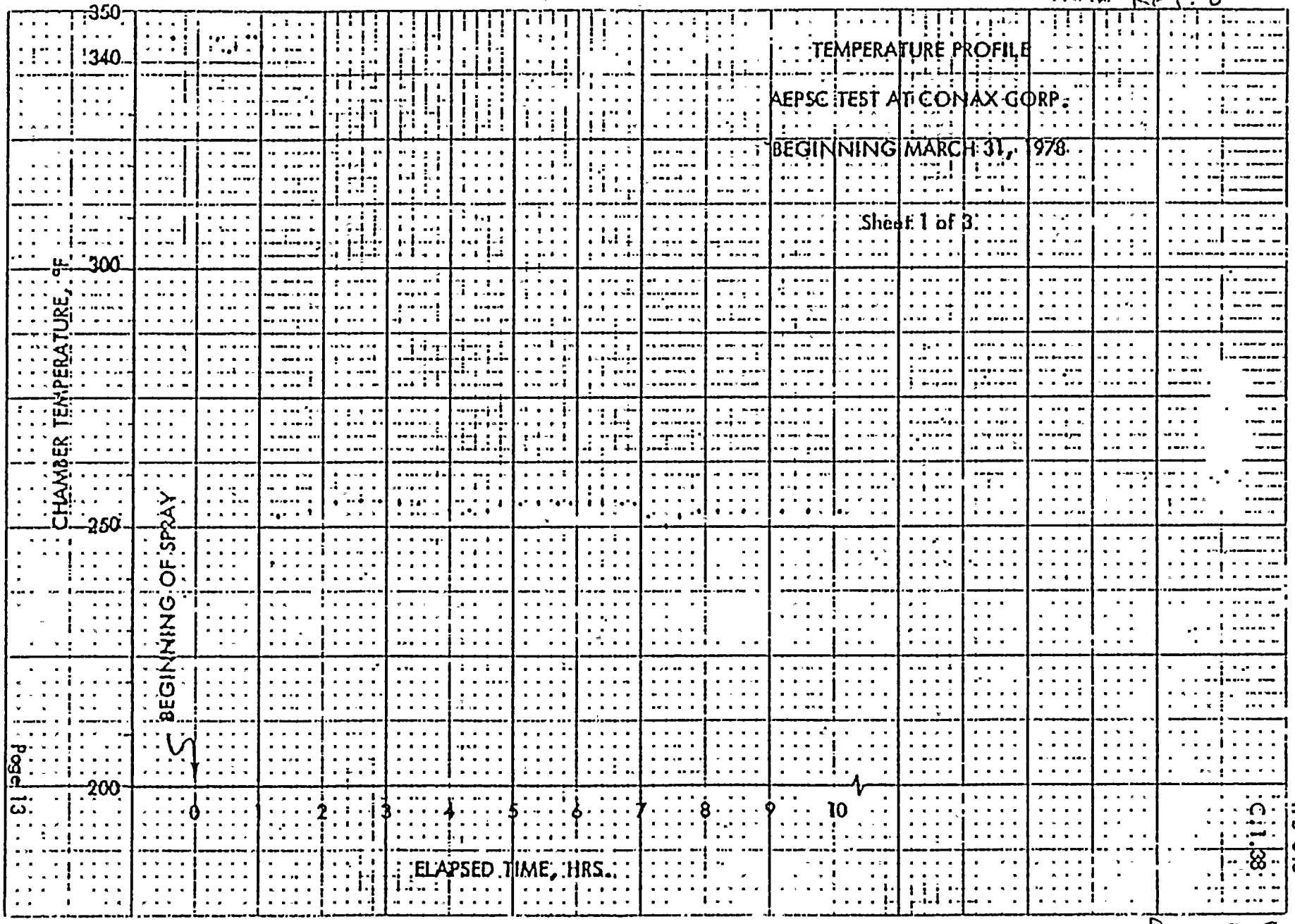
*Documentation References:

8. Conax Corp. Test Report IPS-348

14. FIRL Test Report F-C4033-3

Notes:

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

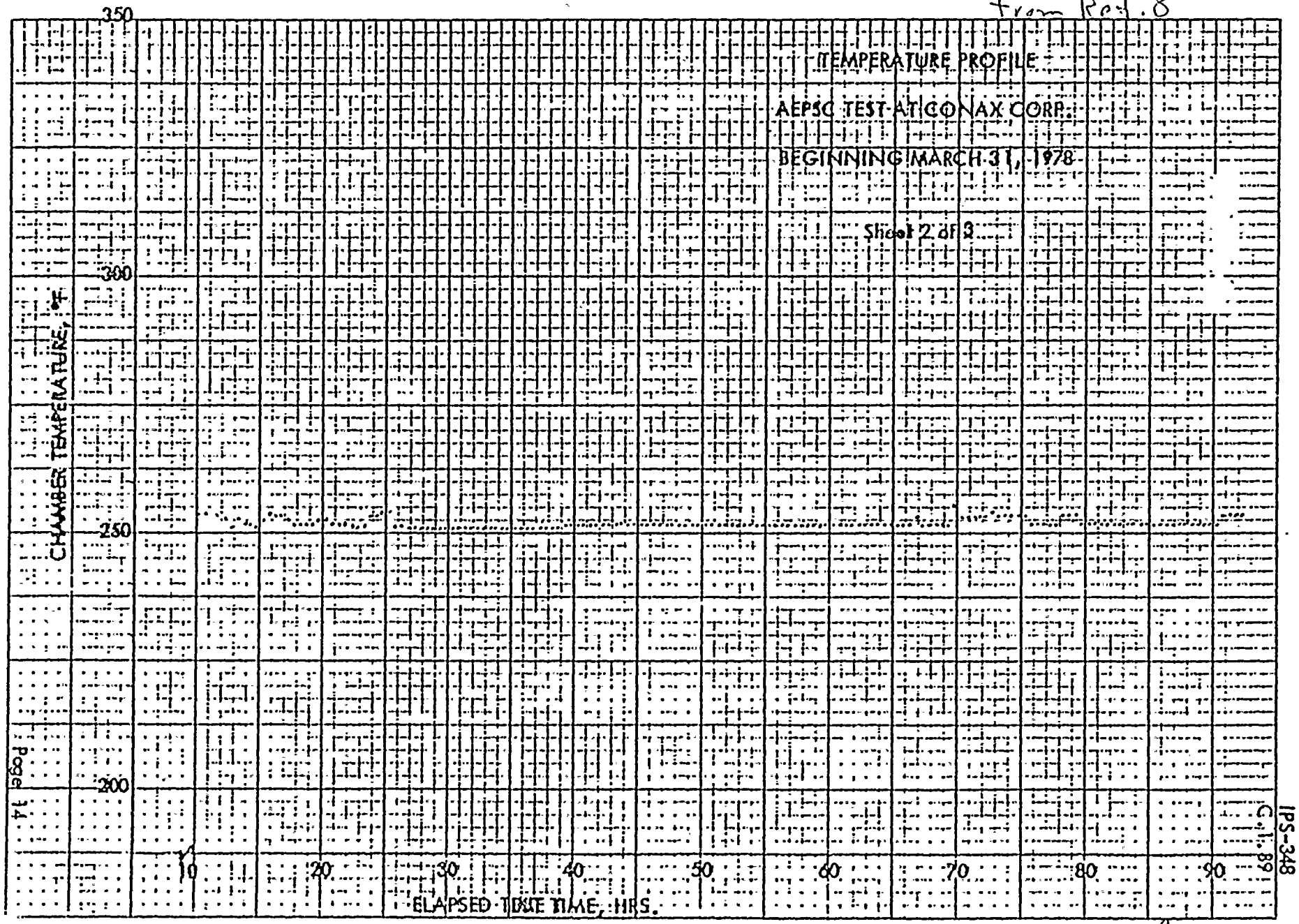
from Ref. 8

TEMPERATURE PROFILE

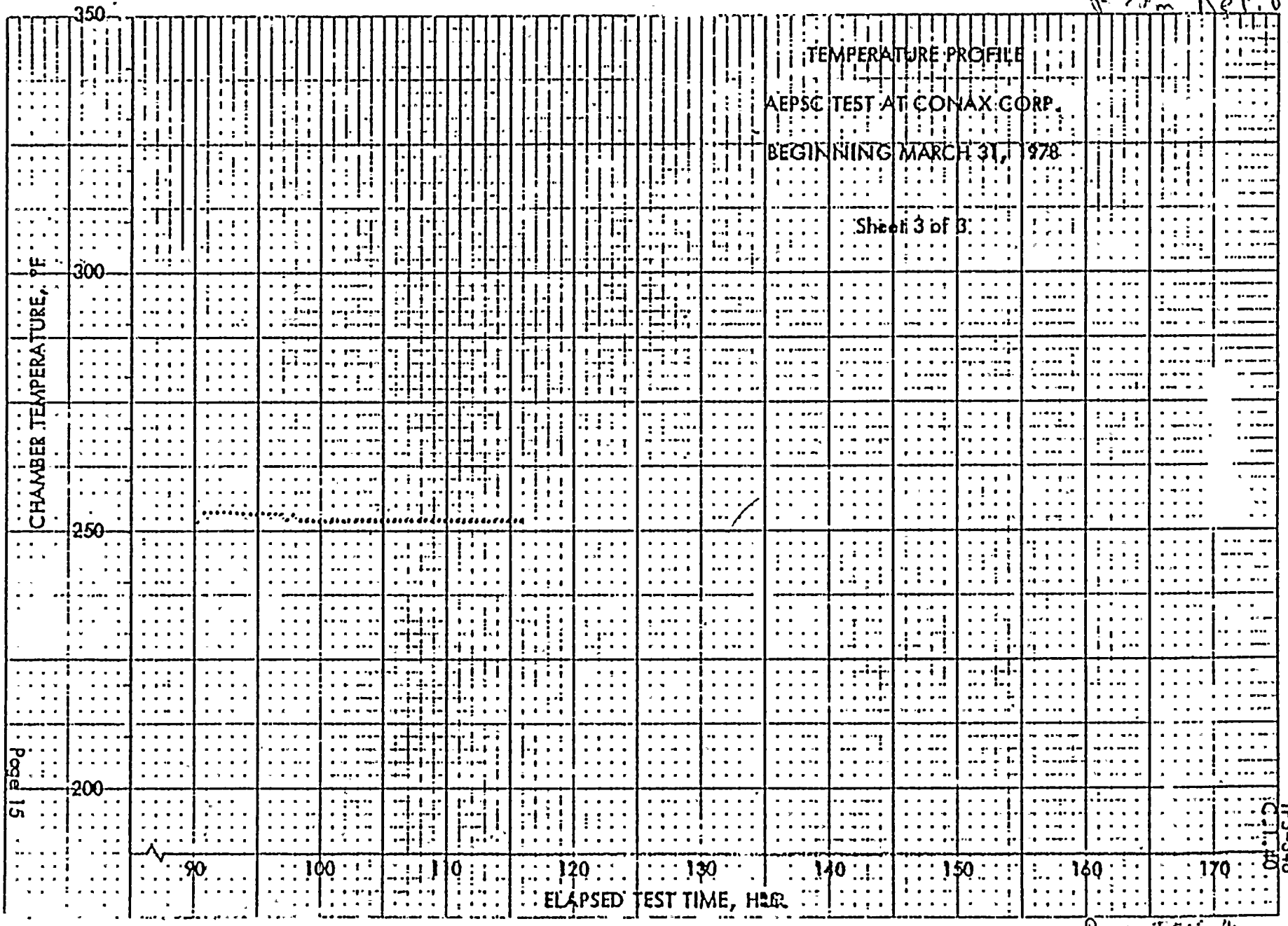
AEPSC TEST AT CONAX CORP.

BEGINNING MARCH 31, 1978

Sheet 2 of 3



From Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HR

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 day	See Note 2 on Cable Terminat.	Note A below	44	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0.27	212	FSAR App O	☆ 44	Seq.	
COMPONENT: CONTROL CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 0-27	14.7	FSAR App O	44	Seq	
MODEL NUMBER: TERM. AT VALVE MOTOR OPERATOR FUNCTION: VARIOUS	Relative Humidity (%)	NA	100		44	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	See Note 1 on Valve Motor Oper.	AEPSC NS&L calc DC-N-10420-2			See Note 1 on Valve Motor Operators
LOCATION: Outside Containment	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

44. FIRL Test Report F-C3271

Notes:

☆ see Note 2 on Cable Terminations

A) Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 & 9-29-75.

44. EXCERPT FROM FIRL F-C 2935

RADIATION: 10 MRAD @ .45 MRAD/HR
100% R.H.
151°F, , 6hr preconditioning
340°F, 100psig, 2hr
160°F, , 20hr

Type of Test: Sequential

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	see Note 2 on Cable Tunnel		23	Sep	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	340	FSAR APP. 0	23	Sep.	
COMPONENT: CONTROL CABLE TERMINATION/. MANUFACTURER: N/A	Pressure (PSIA)	Fig 0-27	119.7	FSAR APP. 0	23	Sep	
MODEL NUMBER: VARIOUS	Relative Humidity (%)	NA	100	NA	23	Sep	
FUNCTION: VARIOUS	Chemical Spray	NA	2600 ppmB	NA	22	Simul.	
ACCURACY: SPEC: N/A DEMON: N/A	Radiation (10^6 rads)	16.6	204	See Note A	23	Sep.	
SERVICE: VARIOUS	Aging (years)		180°C, 100 hrs Yes		23	Sep.	
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

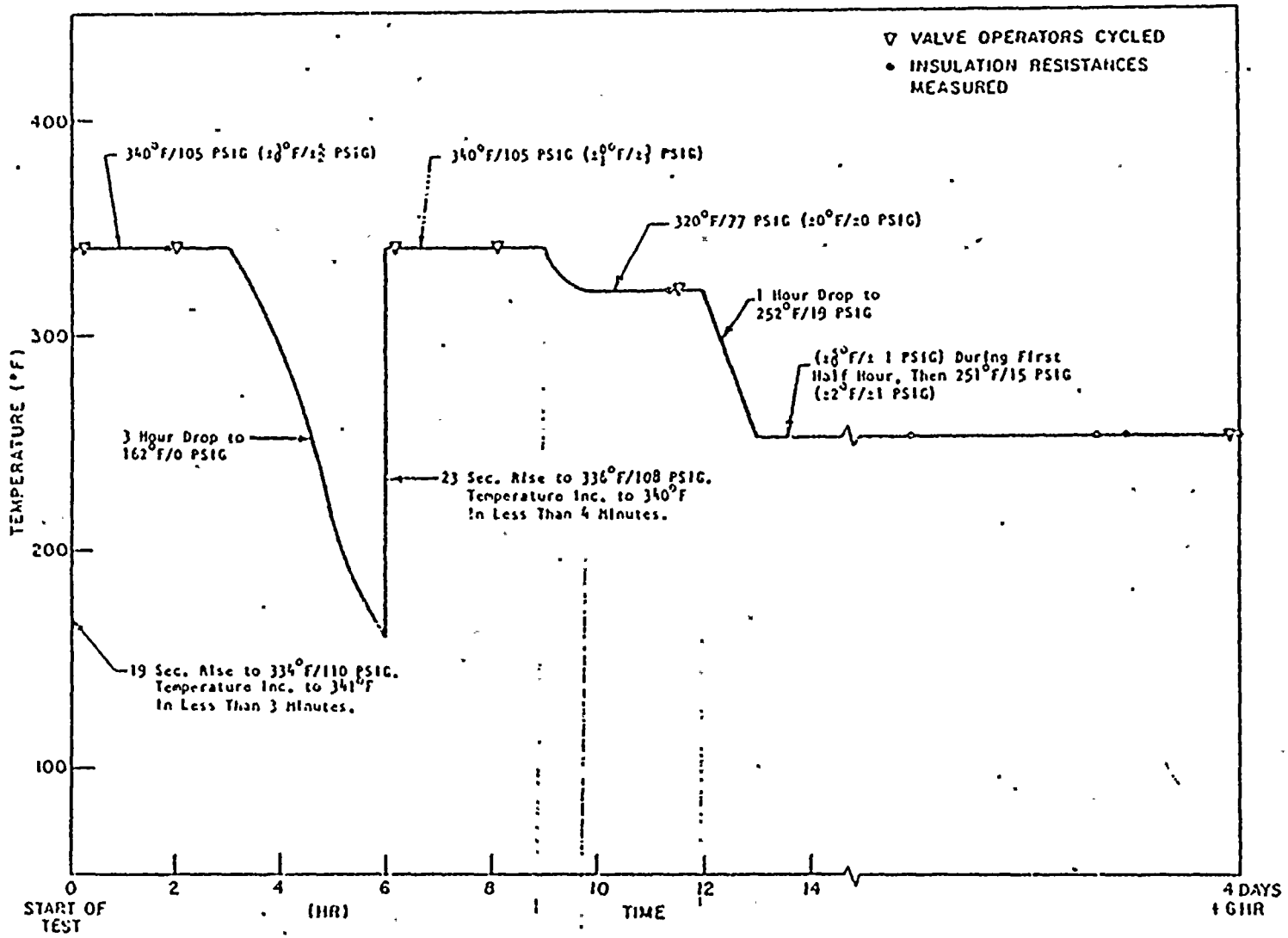
*Documentation References:

22. Limitorque test Report #600198
23. Limitorque test Report # 600376A

Notes:

A. AEPSC NS+L Calculation DC-N-6420-2

from Ref. 23



F-C3441

Figure 3. Actual Steam Exposure Profile

Page TC 10-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 2 on Cable Terminal	-	24	Seq.	
PLANT ID NO: NA	Temperature (°F)	Fig 0.27	250	FSAR App. O	24	Seq.	
COMPONENT: Control Cable Termination	Pressure (PSIA)	Fig 0.27	39.7	FSAR App. O	24	Seq.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100	.	24	Seq.	
MODEL NUMBER: TERM. AT VALVE MOTOR	Chemical Spray	NA	NA	NA	NA	NA	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	204	See Note A	24	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Aging (years)		165°F, 200 hrs Yes		24	Seq.	
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA							

*Documentation References:

24. Limitorque test Report #600461

Notes:

A) AEPSC NS+L calculation DC-N-6420-2

Cross Ref. 24

TEMPERATURE PROFILE

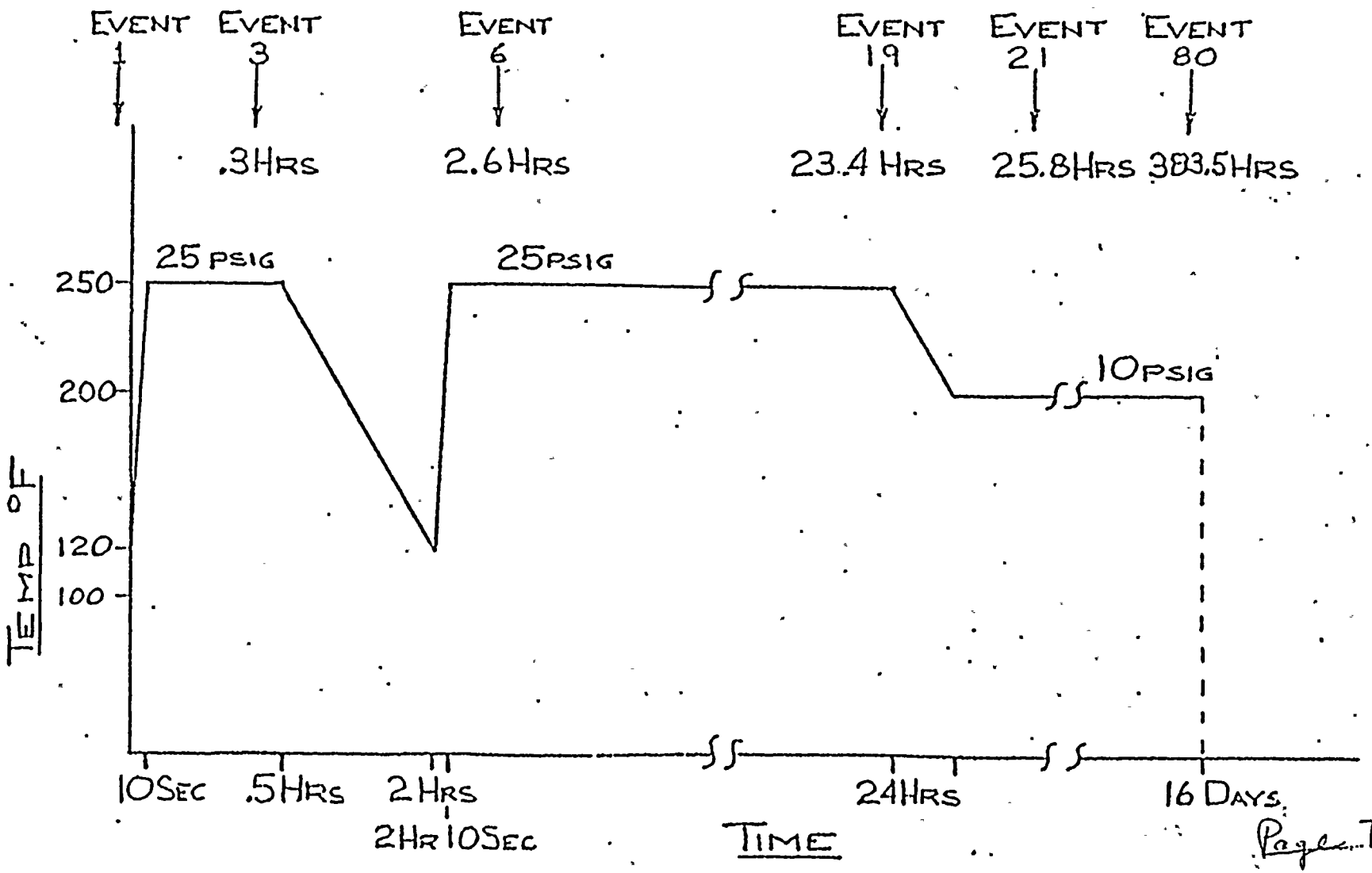


FIGURE 1

Page T.C 11-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Pressurizer	Operating Time	1 year	See Note 1 on Cable Terms.	Table 7.5-2	24	Seq.	
PLANT ID NO: NM0-151, 152, 153	Temperature (°F)	Fig 022.9-1, -2	250 see Note 1(C)	FSAR App Q!	24	Seq.	
COMPONENT: Control cable term. MANUFACTURER: N/A	Pressure (PSIA)	Fig 1 Fig 2	39.7	AEW 6604	24	Seq.	
MODEL NUMBER: Term. at valve motor operation	Relative Humidity (%)	100	100	-	24	Seq.	
FUNCTION: Pzr relief block valves ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	See Note A	NA	See Note B	NA	NA	
SERVICE: Pzr relief line	Radiation (10^6 rads)	150	204	WCAP 7410-4 Vol. 1	24	Seq.	
LOCATION: Inside containment	Aging (years)		105°F, 200hrs Yes		24	Seq	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. Limitorque Corp. Test Report # 600461

Notes:

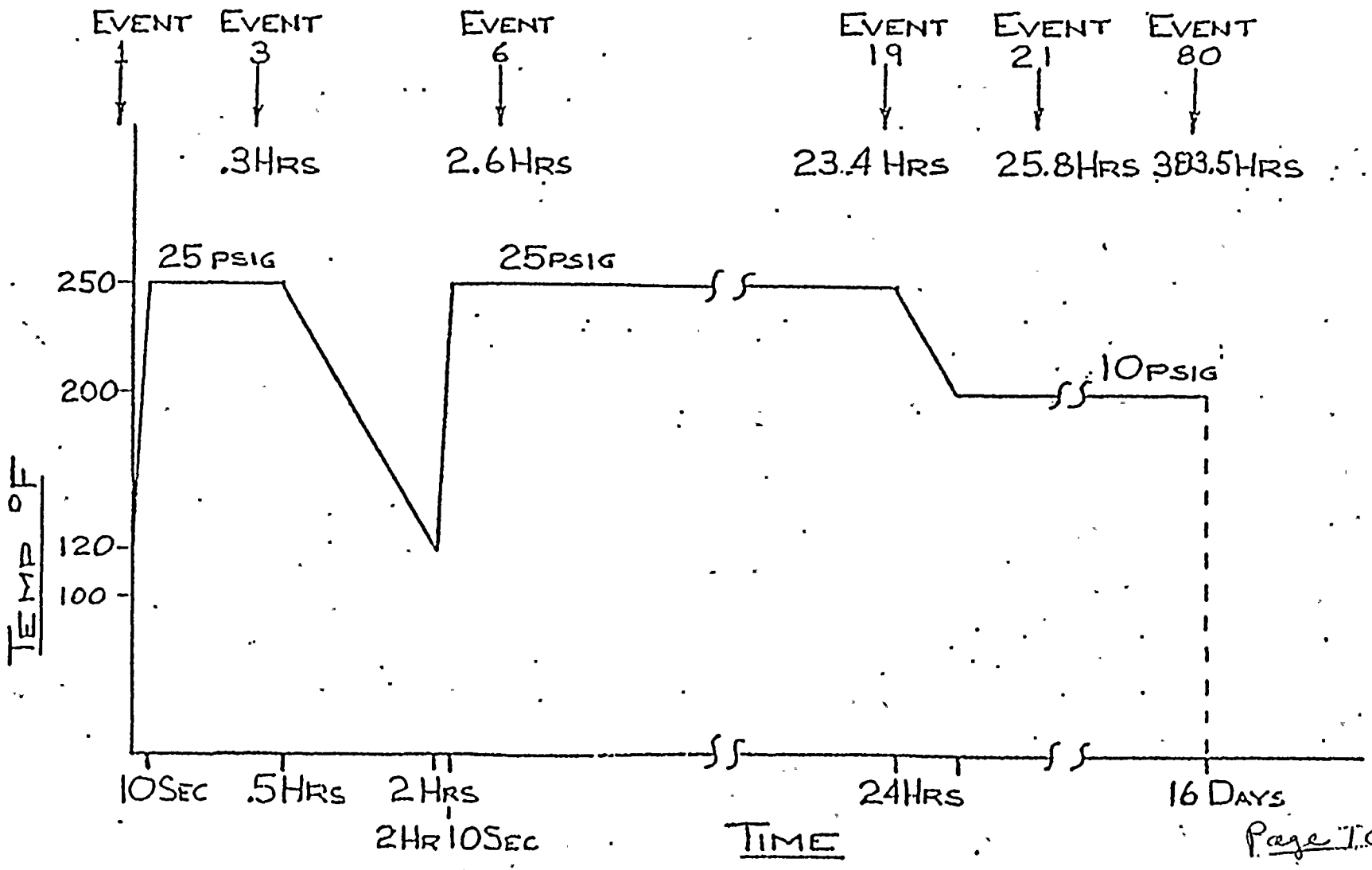
A) Valve location is not subjected to direct caustic spray impingement.

B) mech installation drawings
1-5435
1-5435A
1-5436

C) See General Note 4.

from Ref. 24

TEMPERATURE PROFILE



Page T.C.12-2

FIGURE 1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 2 on Cable Terminal		45	SIMUL.	
PLANT ID NO: N/A	Temperature (°F)	FIG 0-27	345	FSAR APP. O	45	SIMUL.	
COMPONENT: CABLE TERMINATION	Pressure (PSIA)	FIG 0-27	124.7	FSAR APP. O	45	SIMUL.	
MANUFACTURER: N/A							
MODEL NUMBER: TERM AT TERM. BLOCK	Relative Humidity (%)	NA	100%	NA	45	SIMUL.	
FUNCTION: CABLE CONNECTION	Chemical Spray	NA	2500 ppm B	NA	45	SIMUL.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	16.6	20	See Note A	46	SEQ.	
LOCATION: Outside Cont.	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

45. Conax Test Report IPS-339

46. Conax Test Report IPS-349

Notes:

A) AEPSC NSTL Calculation DC-N-6420-2.

from Ref. 45

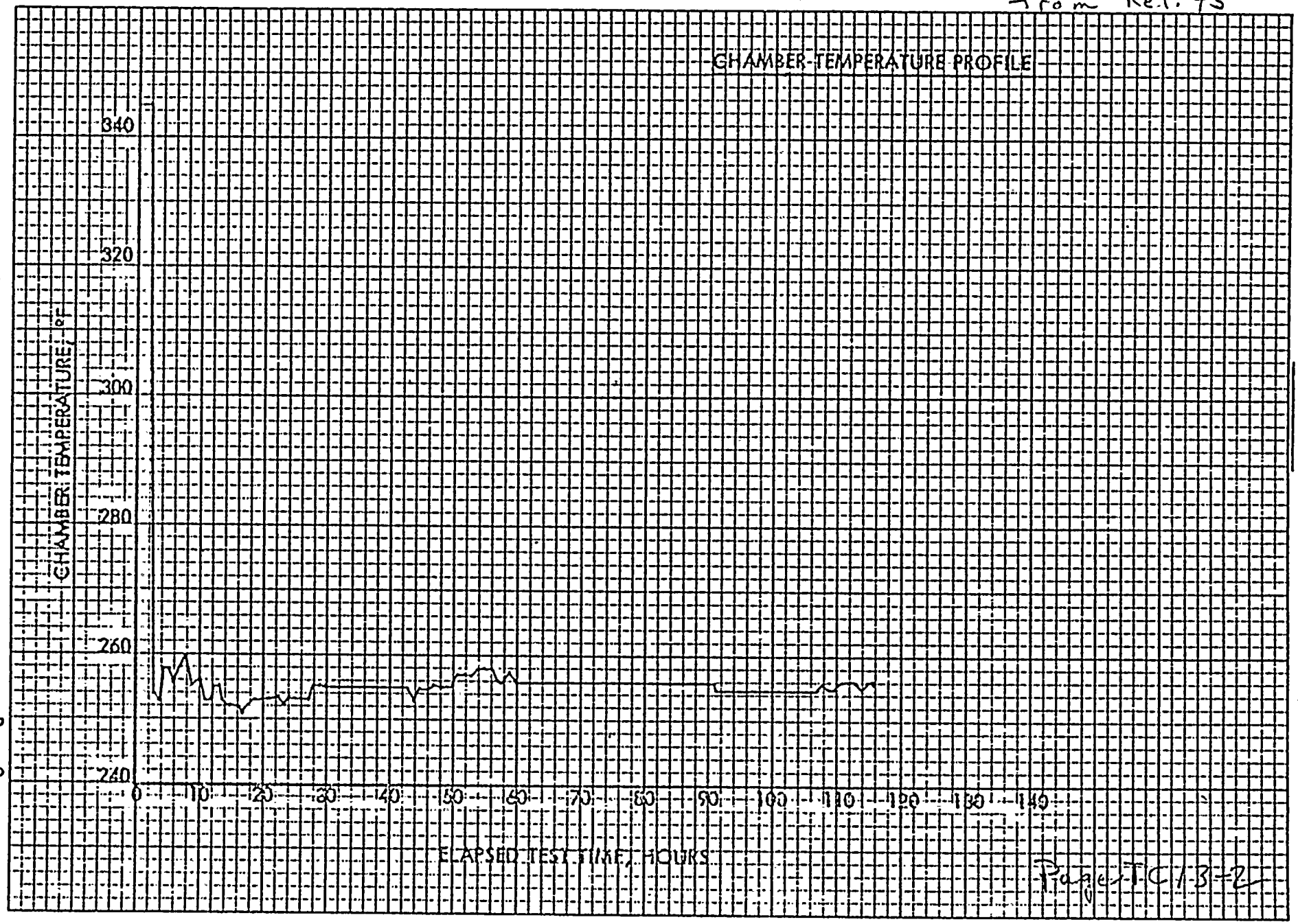


FIGURE 6.1

Page TC 13-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: RHR	Operating Time	1 DAY	See Note 1 on Cable Terminal	Note A below	22	Simul.	
PLANT ID NO: ICM-305,-306,	Temperature (°F)	Fig 022.9-1,-2	330	FSAR App Q	22	Simul	
COMPONENT: Control Cable Termination MANUFACTURER: NA	Pressure (PSIA)	Fig 1 Fig 2	104.7	AEW 6704	22	Simul.	
MODEL NUMBER: Cable Term at Valve FUNCTION: long term post-accident cooling ACCURACY: SPEC: NA DEMON: NA	Relative Humidity (%)	100	100		22	Simul.	
	Chemical Spray	NA	2600 ppm B	INSIDE CT EXTERIOR	22	Simul.	
SERVICE: RECIRCULATION [illegible] LOCATION: In Containment	Radiation (10^6 rads)	<4.6	100	NEP NSEL CALCULATION [illegible]	1		
	Aging (years)		180°C / 1 mbrs Yes		22	Simul.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Floodup Tubes				

*Documentation References:

22. Limitorque Corp Test Report #600198.

1. Conax Corp. Test Report IPS-234.

Notes: (A) Letter from J. Tilling (AEP) to K. Kniel (NRC) dated 4-14-75 & 9-29-75.

from Ref. 22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.6%.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	5 sec	5 sec	14.2.5	TECH SPEC 3.7.15	RESPONSE TIME TESTING	NONE
PLANT ID NO: NA	Temperature (°F)	FIG 0-27	150	FSAR App O	MFR LIT	Eng'g Review	NONE (L)
COMPONENT: CABLE TERM	Pressure (PSIA)	FIG 0-27	14.7	FSAR App O	"	Eng'g Review	NONE (L)
MANUFACTURER: NA	Relative Humidity (%)	NA	NA	NA	NA	NA	NA
MODEL NUMBER: Control Cable Term at Solenoid	Chemical Spray	NA	NA	NA	NA	NA	NA
FUNCTION: VARIOUS	Radiation (10^6 rads)	NA	NA				NA
ACCURACY: SPEC: NA DEMON: NA	Aging (years)						
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	NA
LOCATION: Out Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA							

*Documentation References:
MFR LIT - AUTOMATIC SWITCH CO. CATALOG NO 30 BULLETIN F316

Notes: 14.2.5 & 14.2.8 ARE THE ADVERSE ENVIRONMENT ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THE DEVICES.

(L) ACCIDENT ANALYSIS Q212.15 SHOWS THAT MAIN STEAM LINE BREAK PLUS THE FAILURE OF ANOTHER STEAM LINE TO ISOLATE IS ACCEPTABLE. SINCE THE LOCATION OF THESE DEVICES IS SUCH THAT ONLY TWO STEAM GENERATOR STOP VALVES CAN BE AFFECTED BY ONE BREAK, USE OF CONTROL GRADE DEVICES IS ACCEPTABLE.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	5 sec	≤ 10 sec	Q 27.4	TECH SPEC 3.6-1	RESPONSE TIME TESTING	NONE
PLANT ID NO: NA	Temperature (°F)	Fig 022.9-1,-2	SEL. TEST PROFILE	FSAR APP Q	REF. 29	SEQUENTIAL	NONE
COMPONENT: CABLE TERM MANUFACTURER: NA	Pressure (PSIA)	Fig 1 Fig 2	SEL. TEST PROFILE	AEW 6504	"	"	"
MODEL NUMBER: Control Cable Term at Solenoid FUNCTION: VARIOUS	Relative Humidity (%)	100	100	7.5	"	"	"
ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	3000 ppm Boric Acid w/.064 M $Na_2S_2O_3$	T.S. 3/4.5 3/4.6.5	"	"	"
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol. 1	"	"	"
LOCATION: IN CONTAINMENT	Aging (years)		4		"	"	"
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence	NA	NA		ALP DWG	ENGINEERING DRAWING REVIEW	"

*Documentation References: UNLESS OTHERWISE STATED REFERENCE PER FSAR ALL DIS

REF 29 - AUTOMATIC SWITCH CO. REPORT AQS 21578/TR

Notes:

from REF. 29

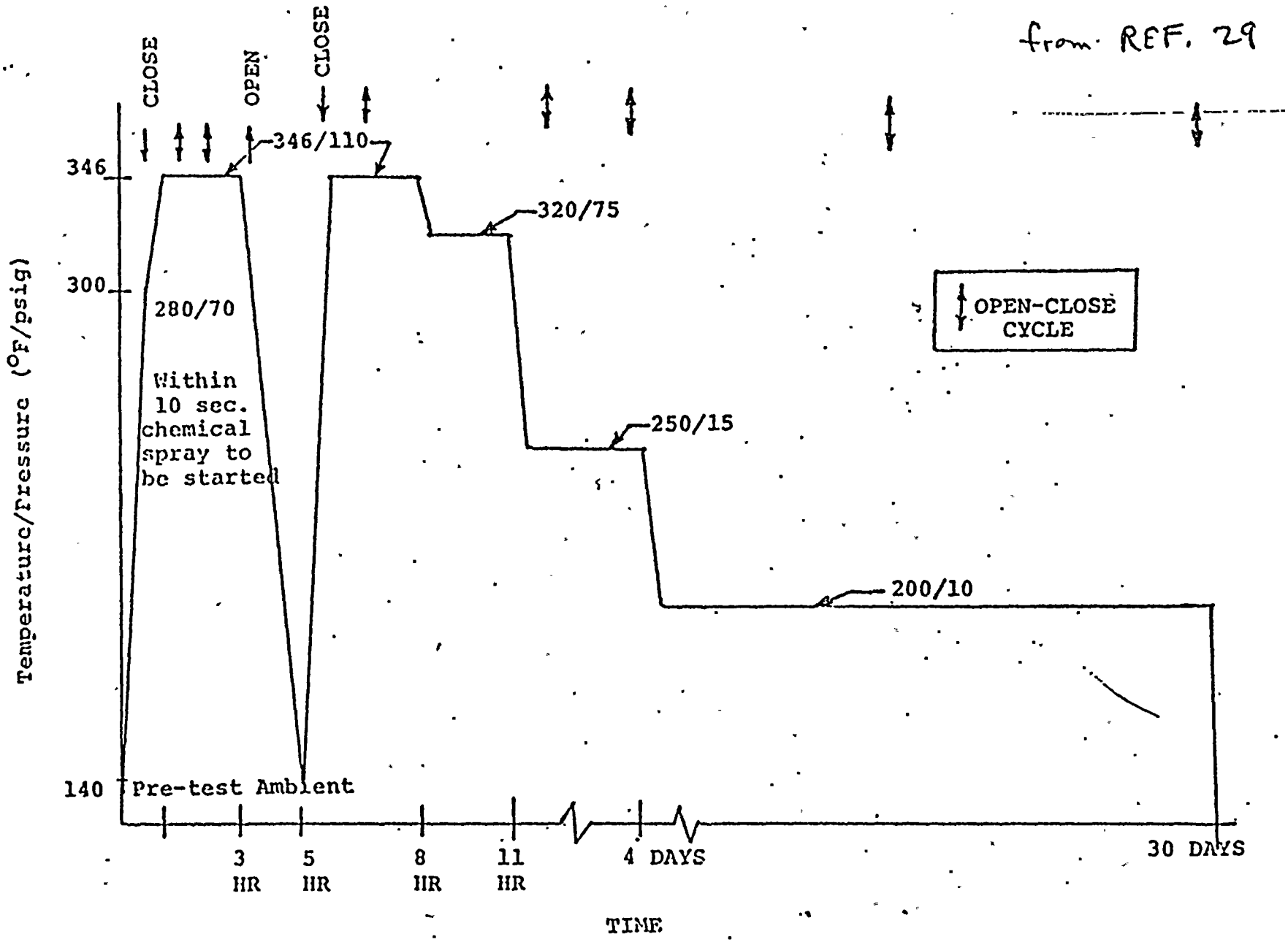


FIGURE 1
LOCA SIMULATION BY ENVIRONMENTAL EXPOSURE (STEAM/CHEMICAL)

Temperature/Pressure Profile for simulation of loss-of coolant accident (LOCA) design basis event (DBE) by steam/chemical-spray environmental exposure.

Page TC16-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

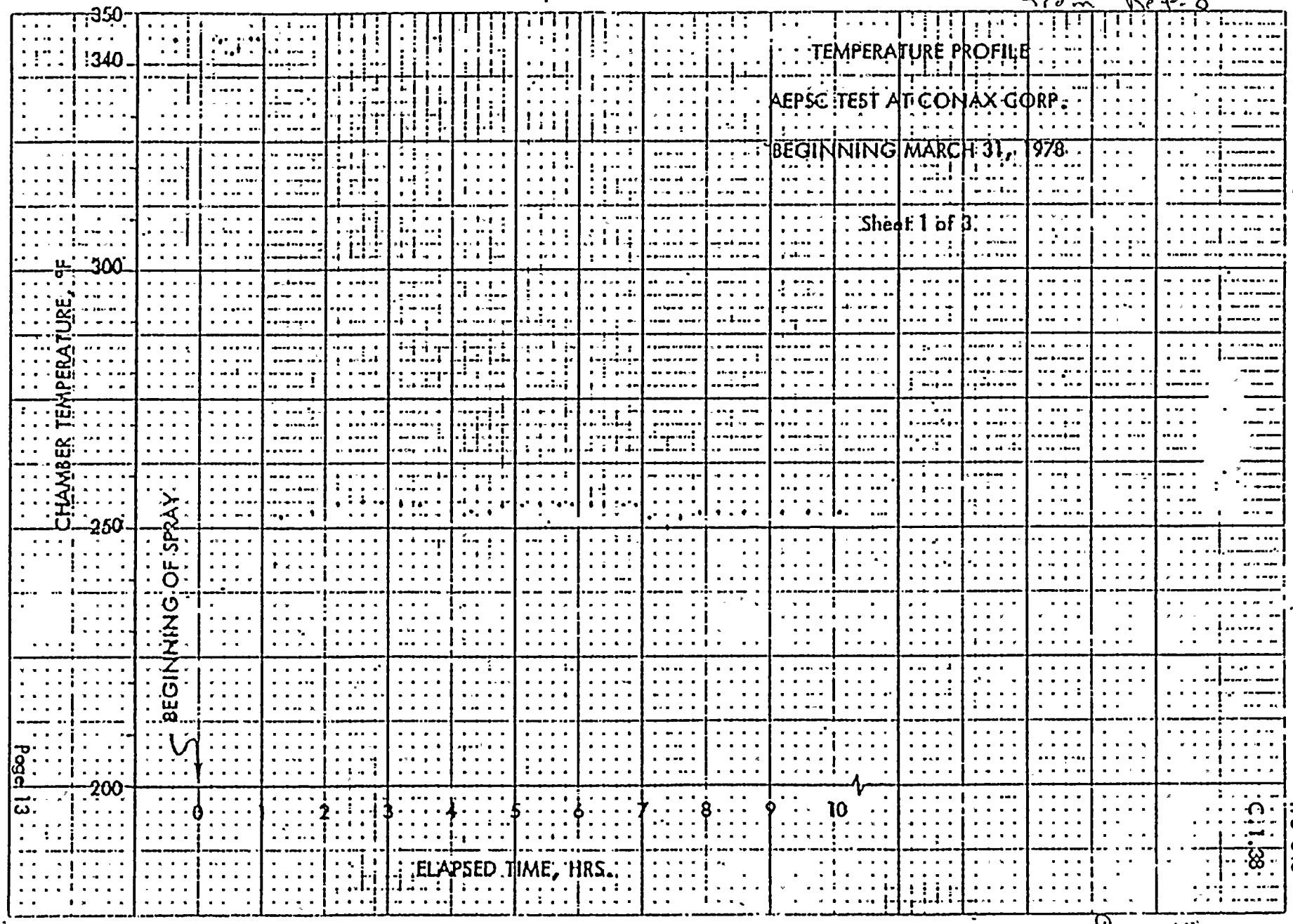
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Terminat	Table 7.5-2	8, 9, 10,	11, 12, 14 Separate	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.9-1,-2	340	FSAR APP Q	8, 9, 10,	11, 12, 14 Separate	
COMPONENT: INSTRUMENTATION TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG 2 FIG 1	119.7	AEW 6504	8, 9,	10, 11, 12, 14 Separate	
MODEL NUMBER: BARTON INSTRUMENT TERMINATION FUNCTION:	Relative Humidity (%)	100	100		8, 9,	10, 11, 12, 14 Separate	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2000 ppm B	T.S. 3/4.5 3/4.5.6	8, 9,	10, 11, 12, 14 Separate	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	8, 9,	10, 11, 12, 14 Separate	
LOCATION: In Containment	Aging (years)		250°F, 7 days Yes		8, 9,	10, 11, 12, 14 Separate	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Yes		8, 9,	10, 11, 12, 14 Separate	

*Documentation References:

8. Conax Corp. Test Report IPS-348
9. FIRL Test Report F-C4033-1
10. FIRL Test Report F-C3683
11. Isomedix Corp. Test Report of May 1976
12. Cerro Wire + Cable Test Report of May 1976
14. FIRL Test Report F-C40333

Notes:

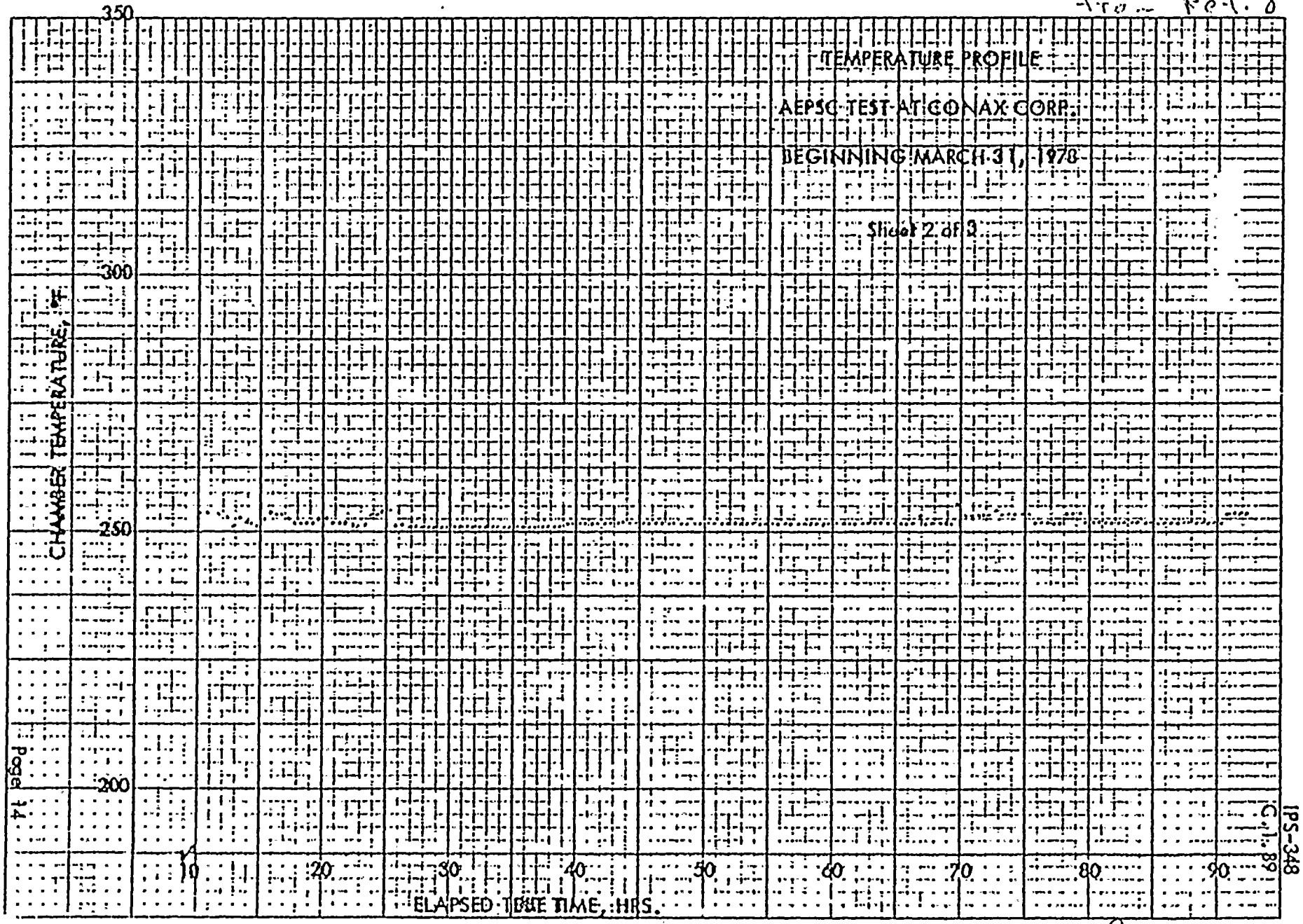
From Ref. 8



IPS-348

C.1.88

From Pg. 8



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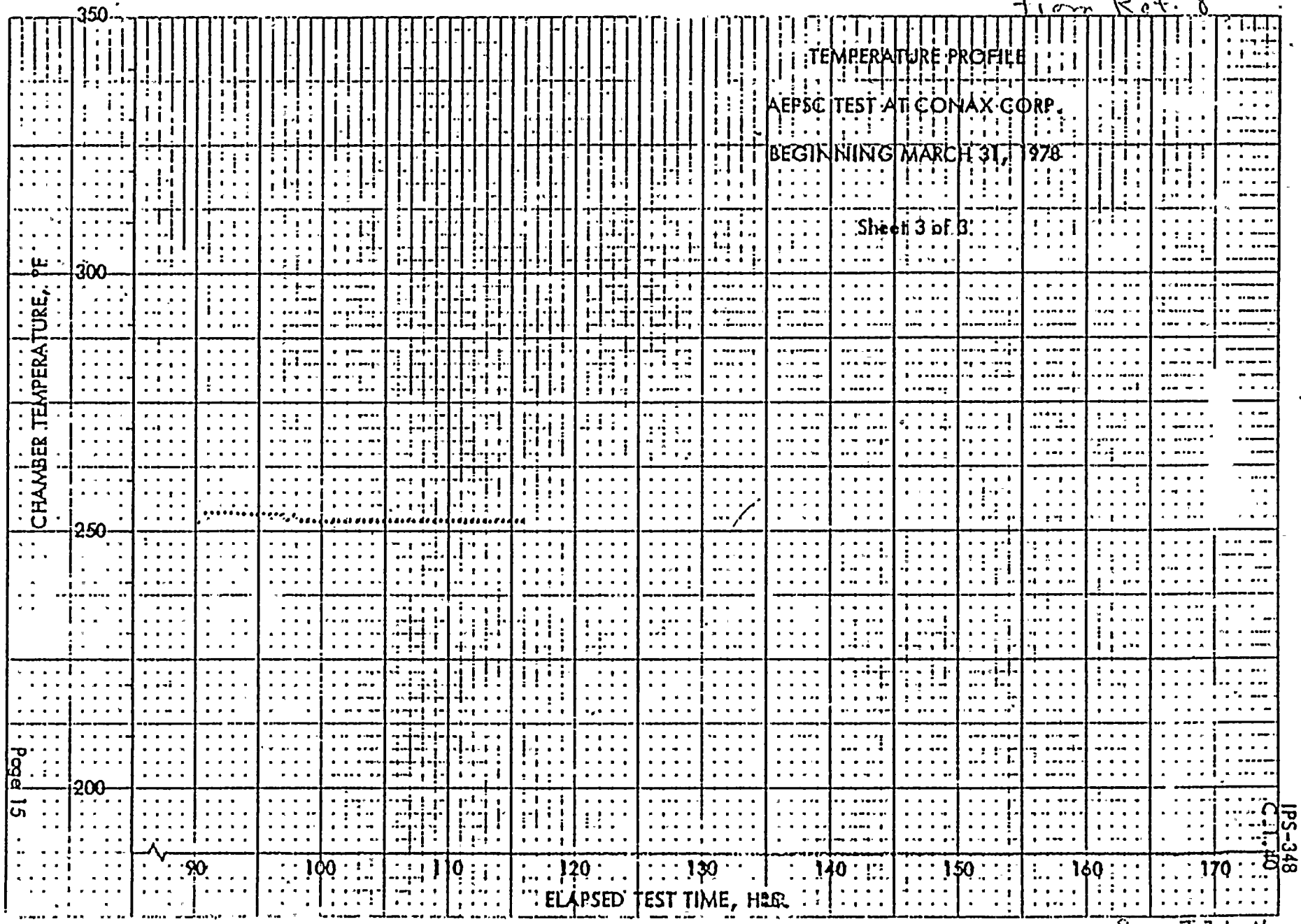
Page 14

Page TI1-3

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

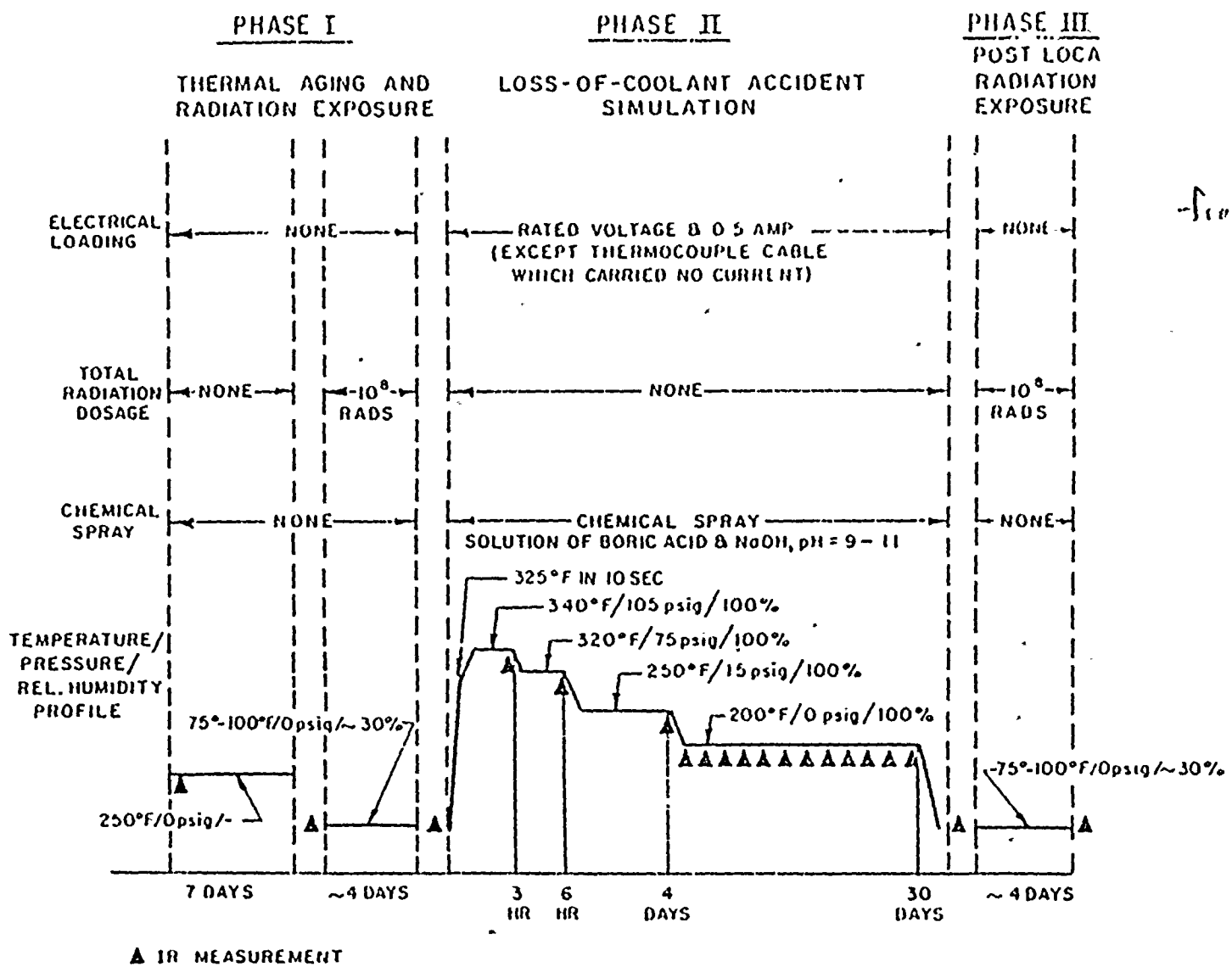
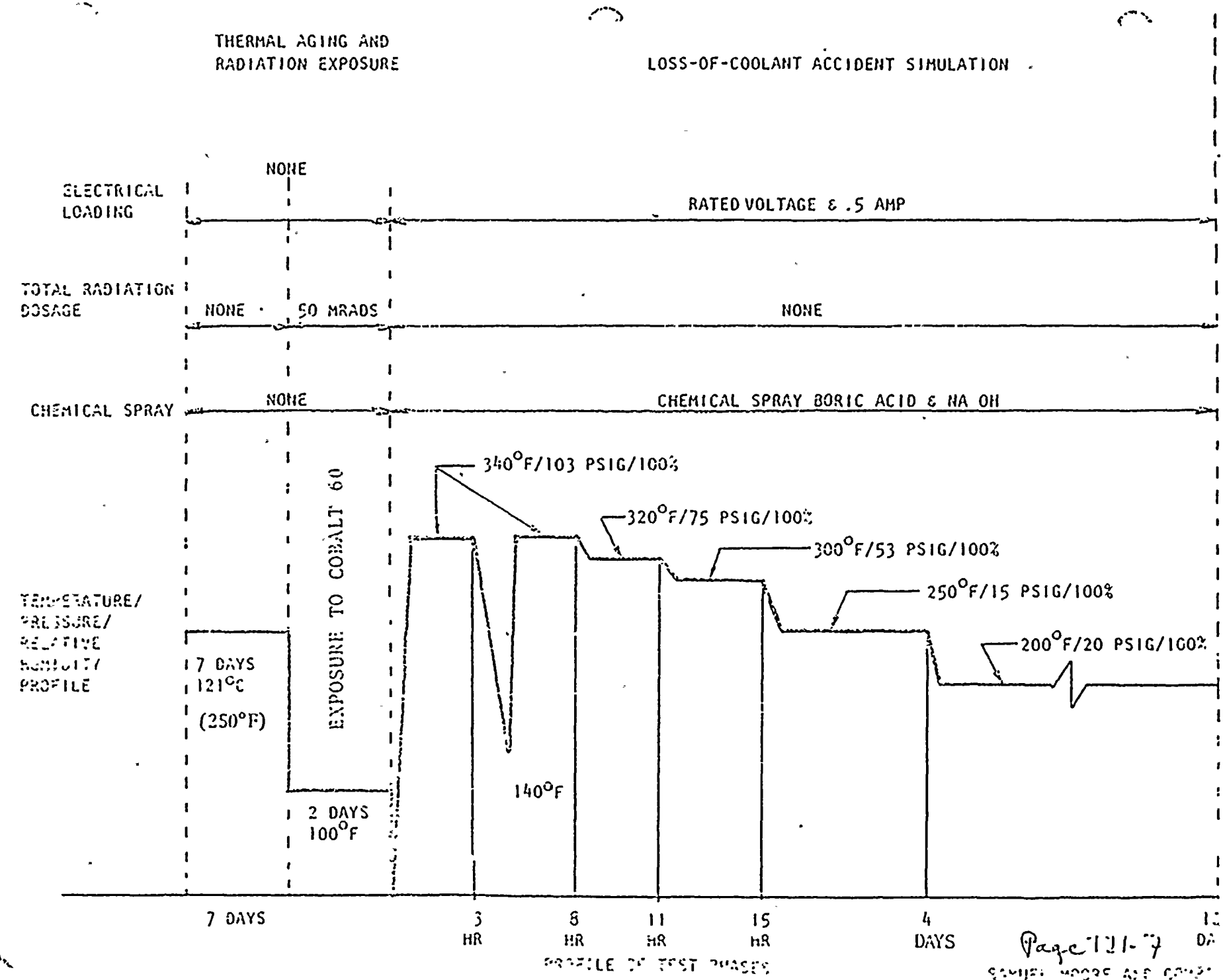


Figure 2. Profile of Test Phases

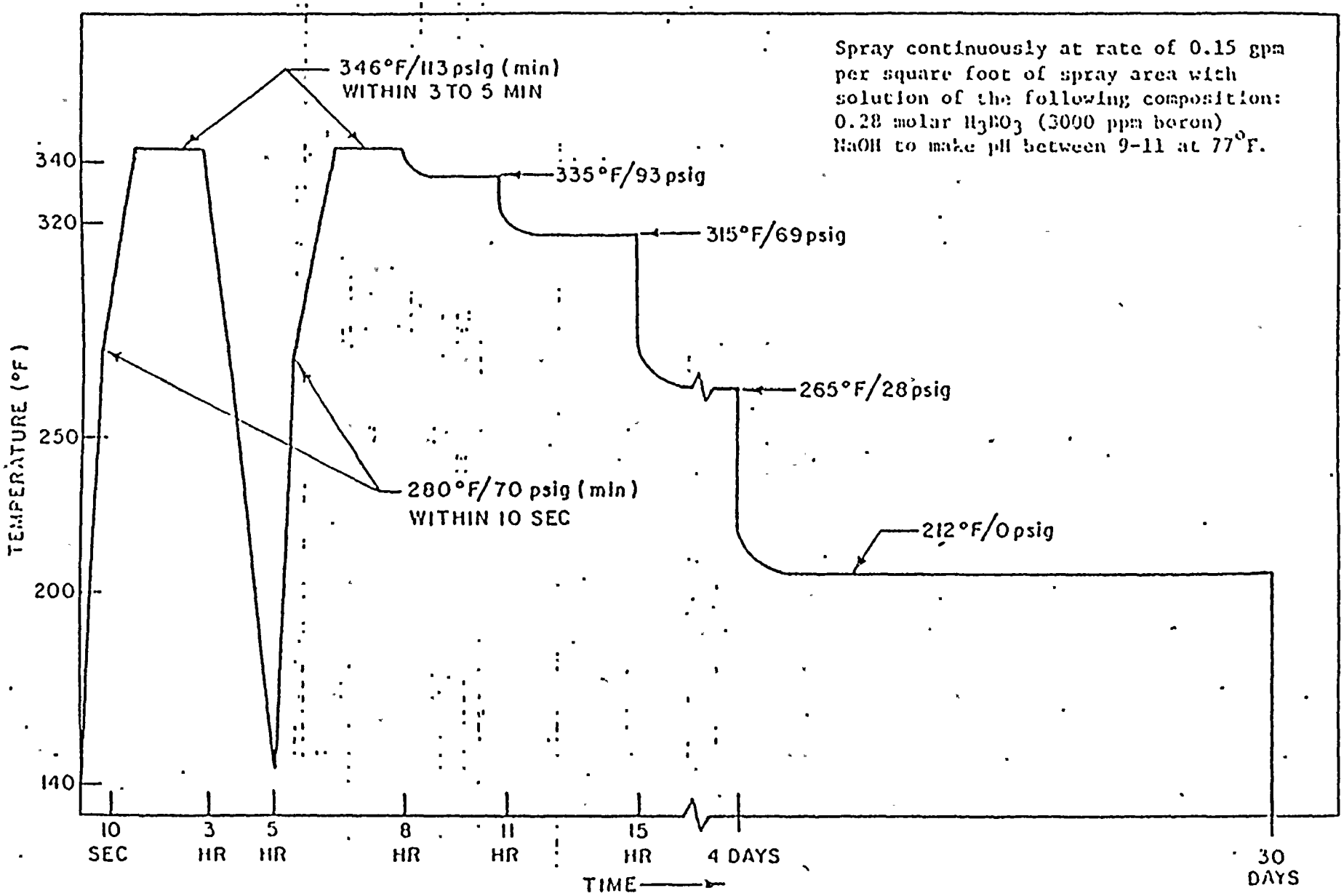
from Ref. 10

F-C3683

Page T11-6


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
NONE
ELECTRICAL LOADING
RATED VOLTAGE & .5 AMP
TOTAL RADIATION DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/ PRESSURE/ RELATIVE HUMIDITY PROFILE
7 DAYS
121°C
(250°F)
EXPOSURE TO COBALT 60
2 DAYS
100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3 HR
8 HR
11 HR
15 HR
4 DAYS

LOCA Profile



from Ref. 14. Type of Test (F-C4033-3): Simultaneous Radiation/chem. spray/steam.

Test Profile:

.2-.3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical spray: 3000 ppm boron as boric acid, .054 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

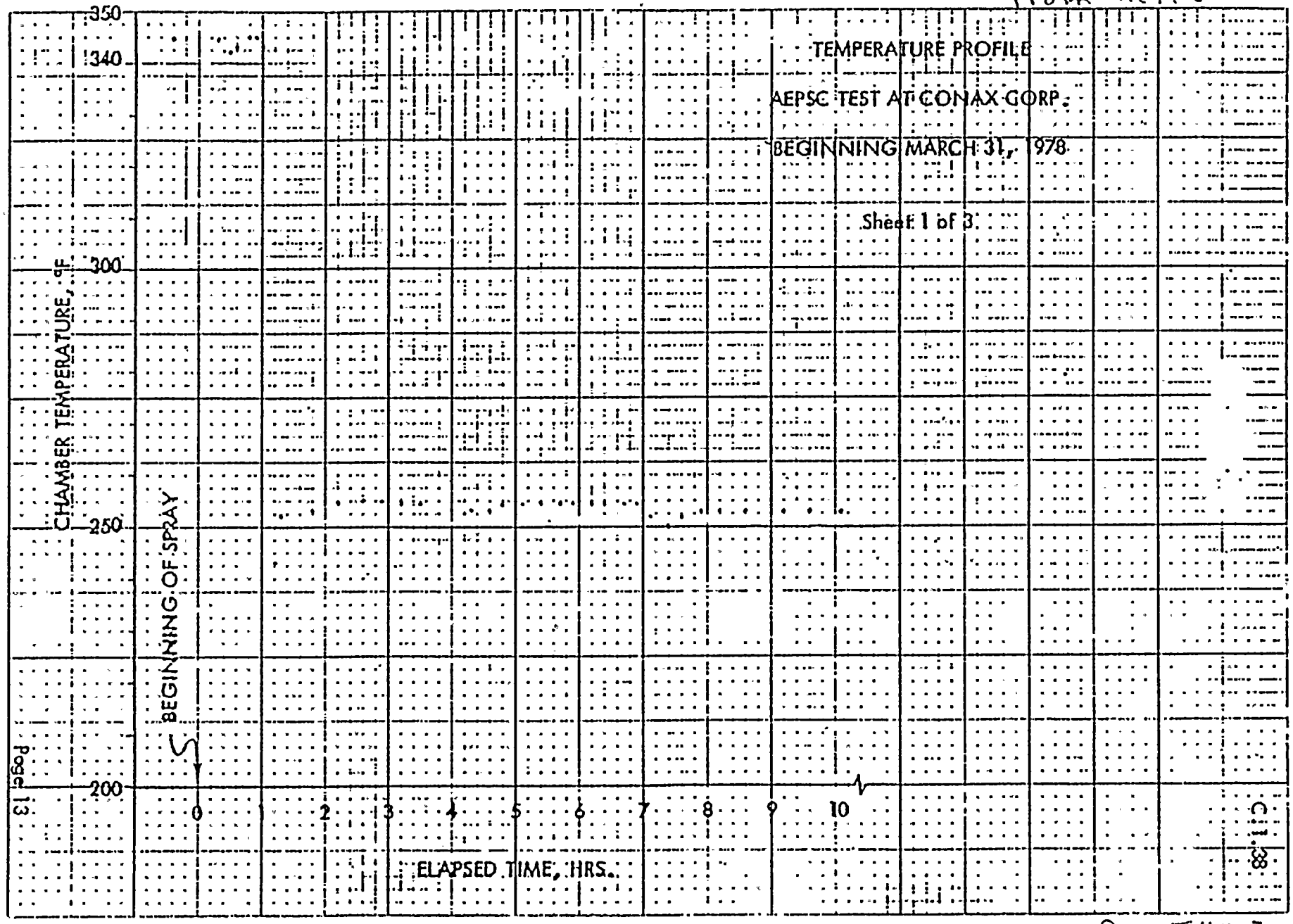
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Termination	Table 7.5-2	8, 9,	10, 11, 12, 14 Separate	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.9-1,-2	340	FSAR App Q	8, 9,	10, 11, 12, 14 Separate	
COMPONENT: RTD TERMINATIONS	Pressure (PSIA)	FIG 1 FIG 2	119.7	AEW 6504	8, 9,	10, 11, 12, 14 Separate	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		8, 9	10, 11, 12, 14 Separate	
MODEL NUMBER: RTD TERMINATIONS	Chemical Spray	~~2000~~ ppm B	2000 ppm B	T.S. 3/4.5 3/4.5.6	8, 9,	10, 11, 12, 14 Separate	
FUNCTION: ACCURACY: SPEC: N/A DEMON: N/A	Radiation (10^6 rads)	FIG 4	150	WCAP 7410-L Vol 1	8, 9,	10, 11, 12, 14 Separate	
SERVICE: VARIOUS	Aging (years)		250°F, 7 days Yes		8, 9,	10, 11, 12, 14 Separate	
LOCATION: Inside Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		Yes		8, 9,	10, 11, 12, 14 Separate	

*Documentation References:

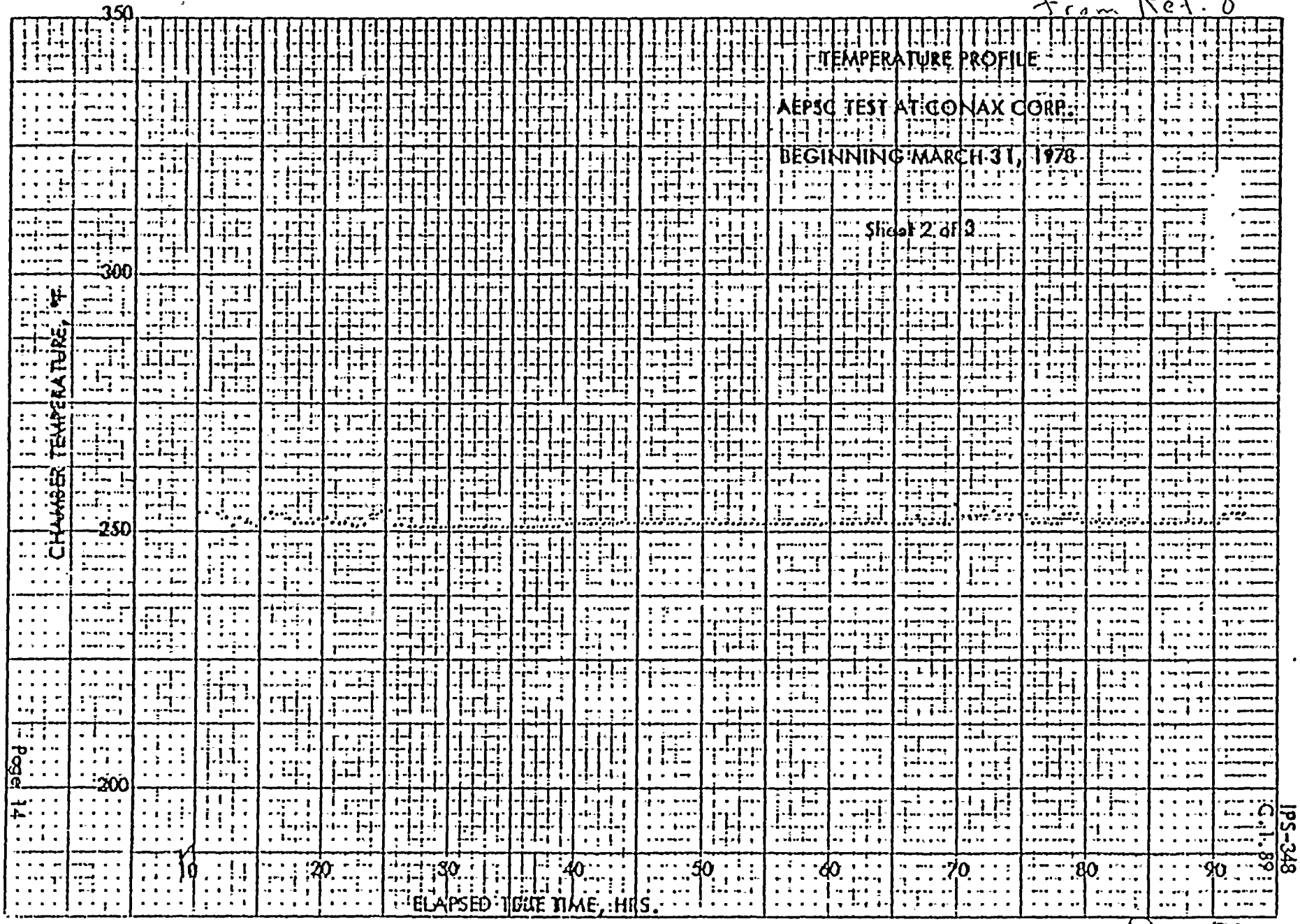
8. Conax Corp Test Report IPS-348
9. FIRL Test Report F-C4033-1
10. FIRL Test Report F-C3683
11. Isomedix Corp Test Report of May 1976
12. Cerro Wire + Cable Test Report of May 1976
14. FIRL Test Report F-C4033-3

Notes:

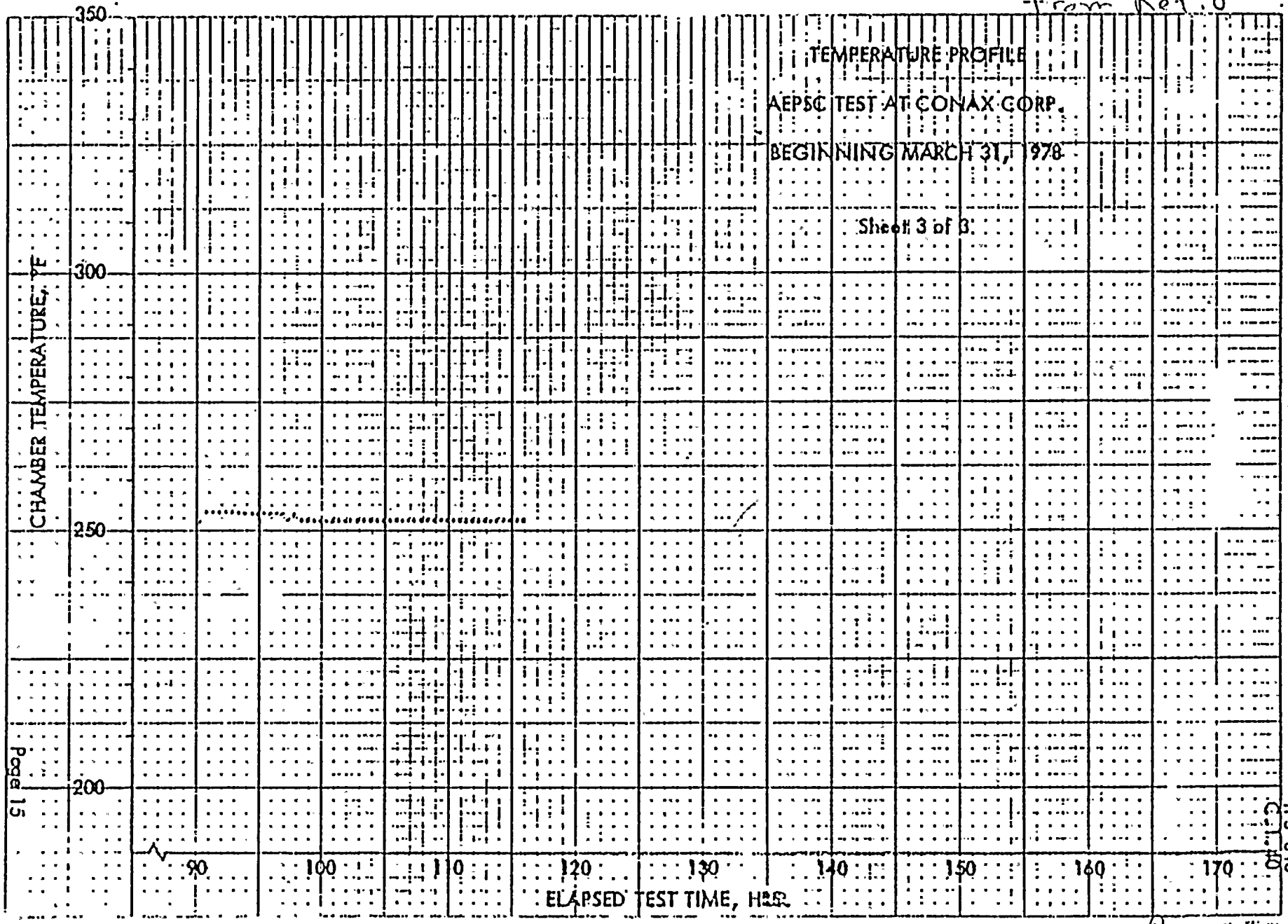
from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

From Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTAL TIME, HRS.

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

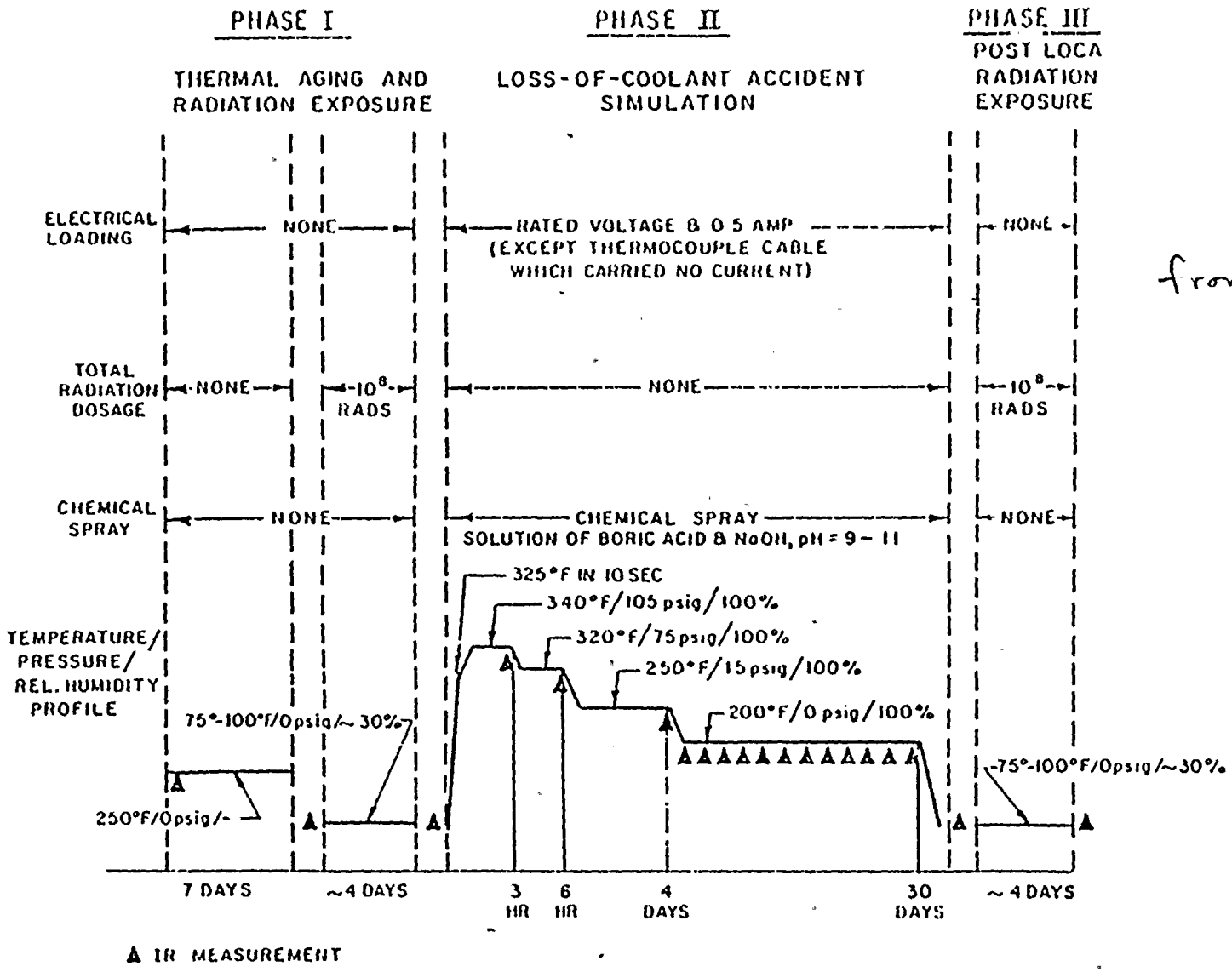
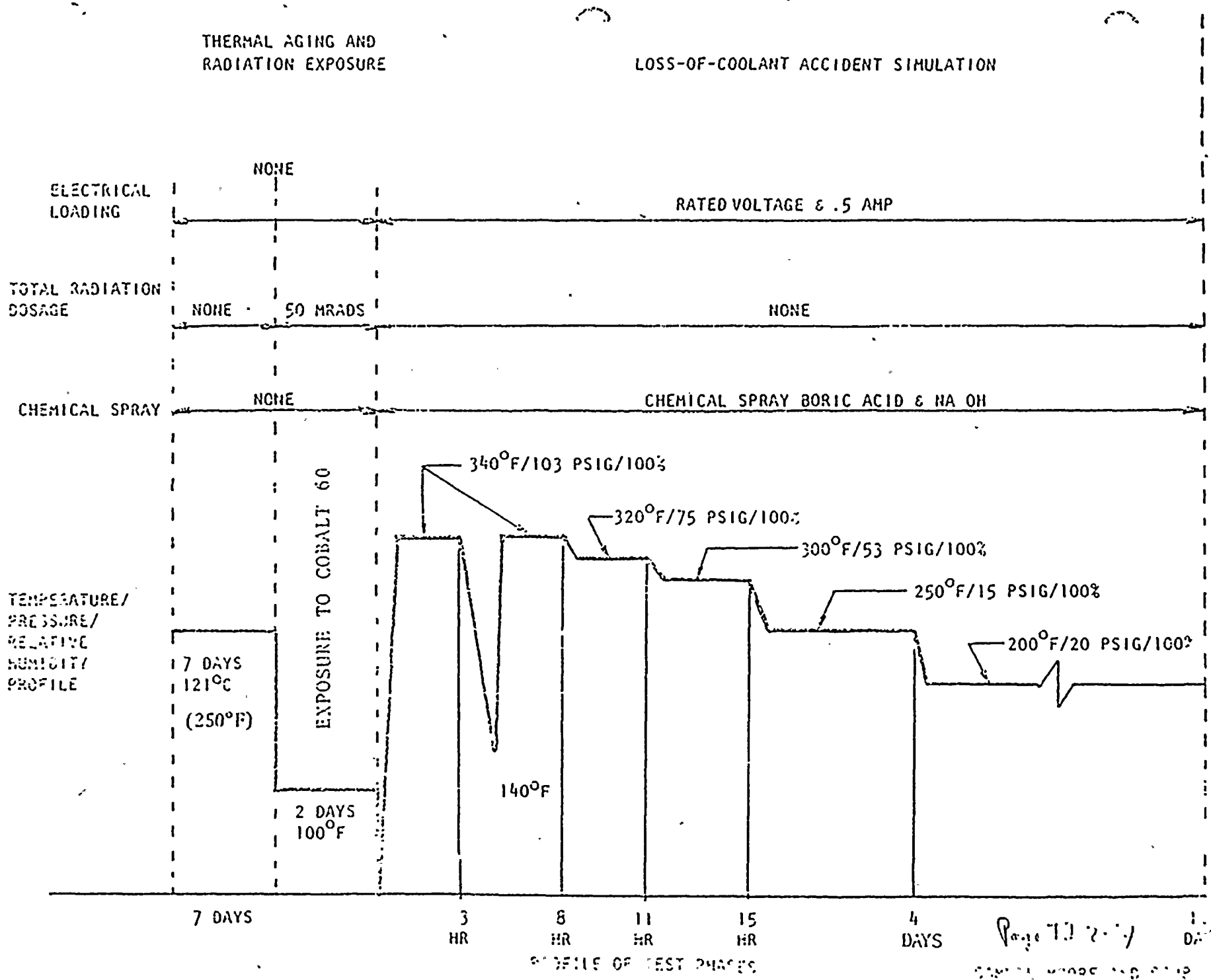


Figure 2. Profile of Test Phases

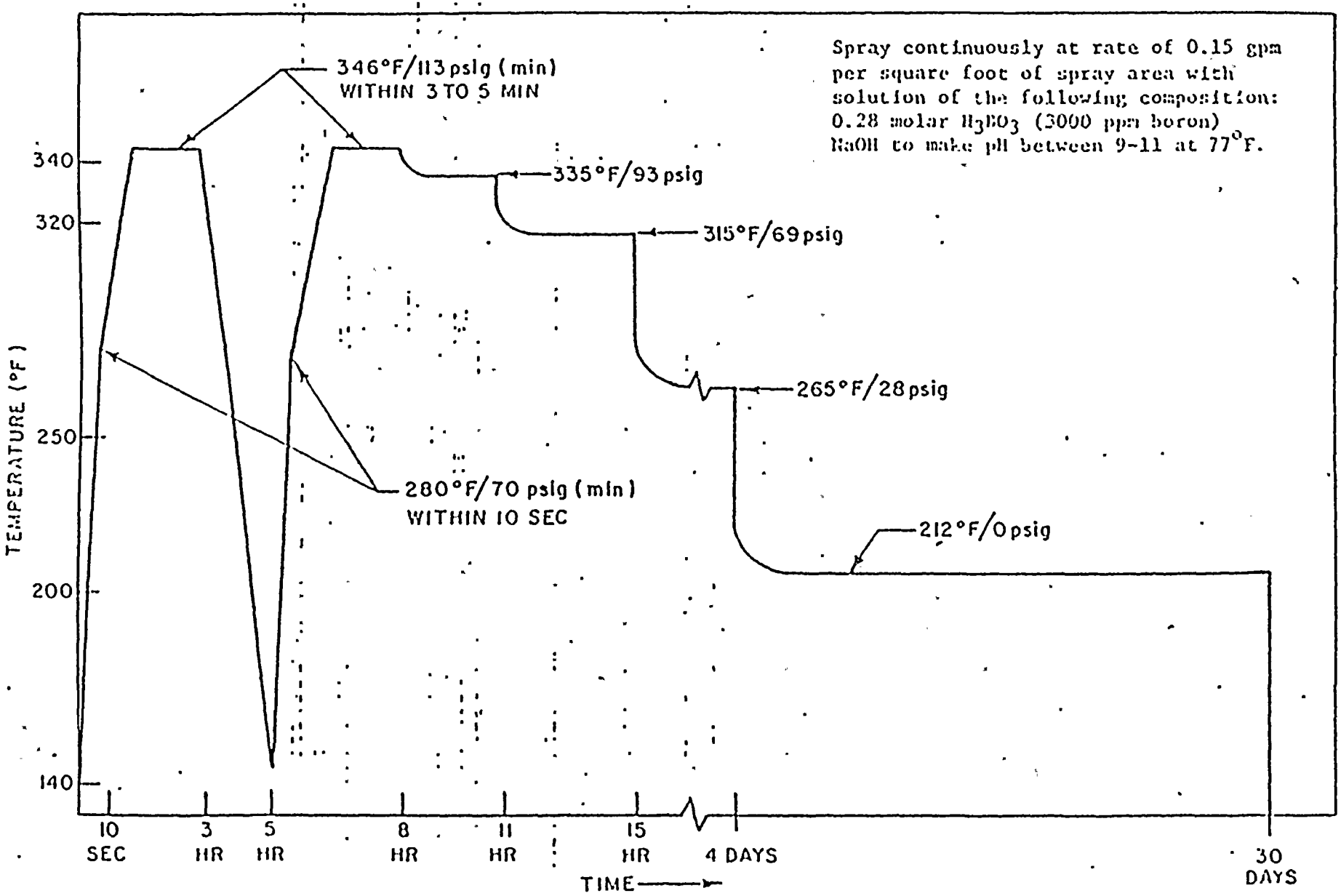
from Ref. 10

F-C3683

Page II 2-6


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
ELECTRICAL
LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION
DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/
PRESSURE/
RELATIVE
HUMIDITY/
PROFILE
7 DAYS
121°C
(250°F)
EXPOSURE TO COBALT 60
2 DAYS
100°F
340°F/103 PSIG/100%
140°F
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
7 DAYS
3
HR
8
HR
11
HR
15
HR
4
DAYS

LOCA Profile



from Ref. 14. Type of Test (F-C4033-3): Simultaneous Radiation/chem. spray/steam.

Test Profile:

.2-.3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical spray: 3000 ppm boron as boric acid, .004 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Terminal.	Table 7.5-2	13	Seq.	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.9-1,-2	340	FSAR App 9	13	Seq.	
COMPONENT: PENETRATION TERMINATIONS MANUFACTURER: N/A	Pressure (PSIA)	FIG 2 FIG 1	118	AEW 6504	13	Seq.	
MODEL NUMBER: PENETRATION TERMINATIONS FUNCTION:	Relative Humidity (%)	100	100		13	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	Not Req'd	2500 ppmB	T.S. 3/4.5 3/4.5.6	13	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	60	150	AEW 779	13	Seq.	
LOCATION: Inside Containment	Aging (years)						
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		FLOOD UP Tube.				

*Documentation References:

13. Westinghouse - CANADA Test Report CWAPD-332

Notes:

FIGURE 2 TEST PROFILE

From Ref. 12

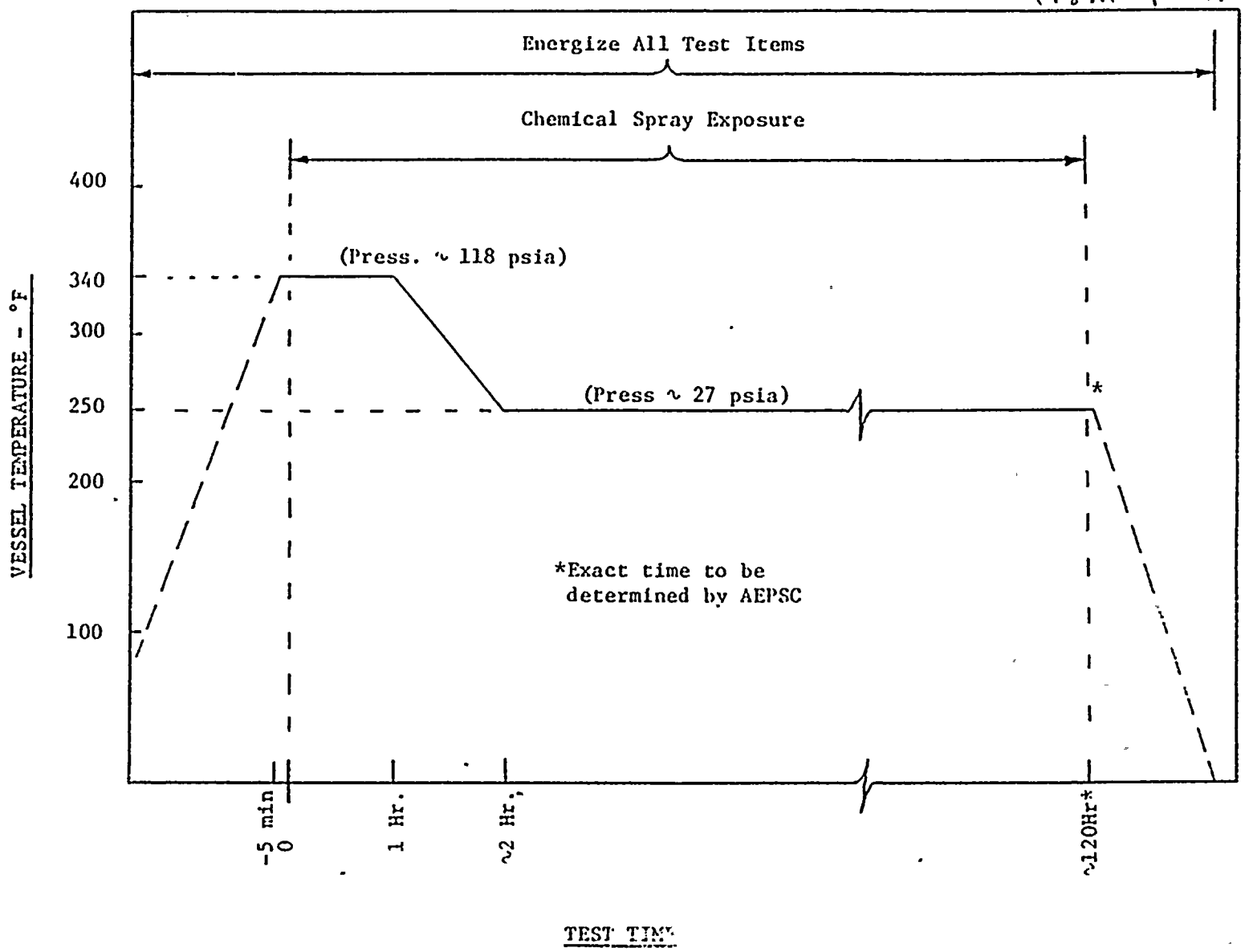
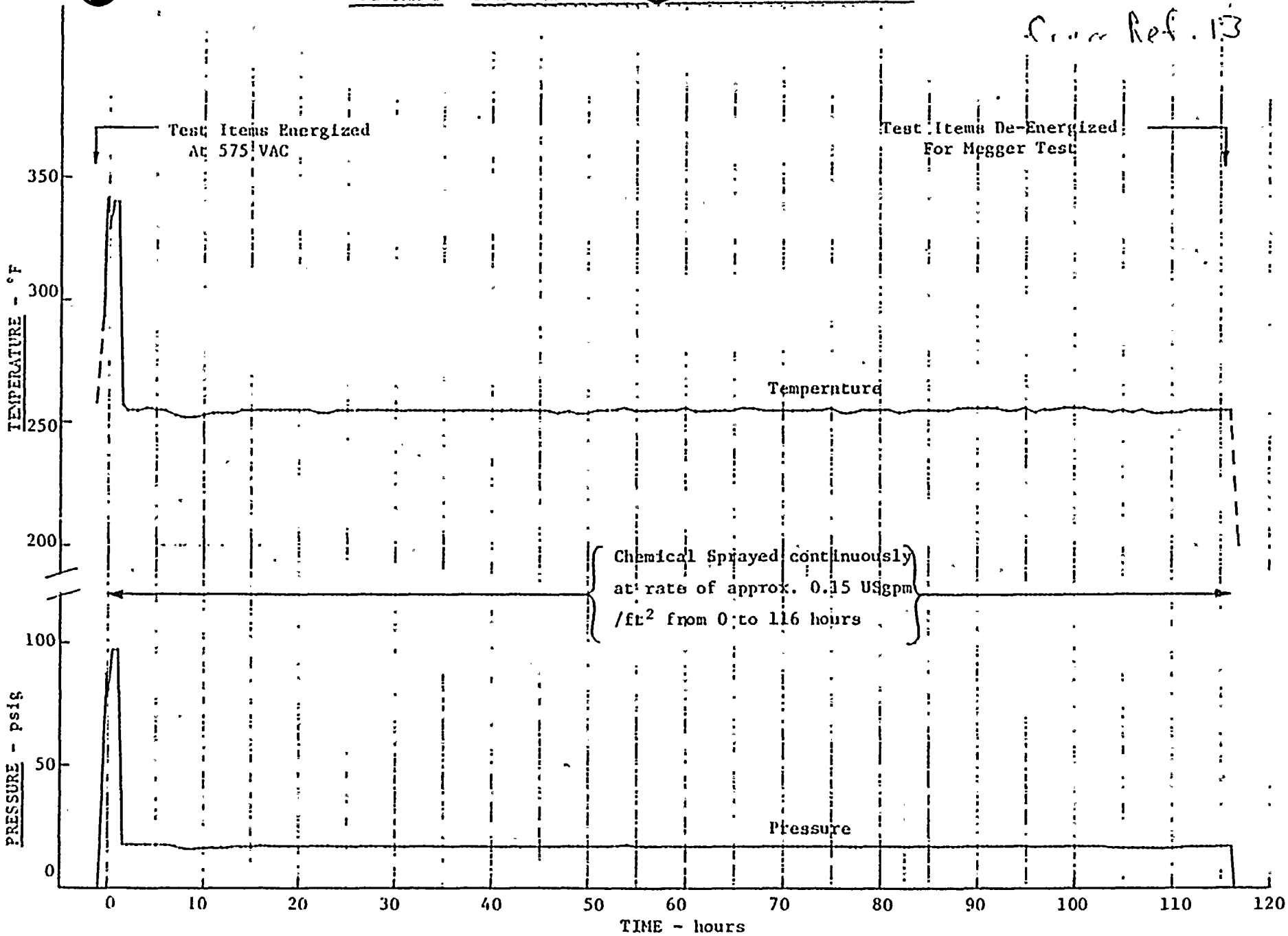


FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

Cross Ref. 13



DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

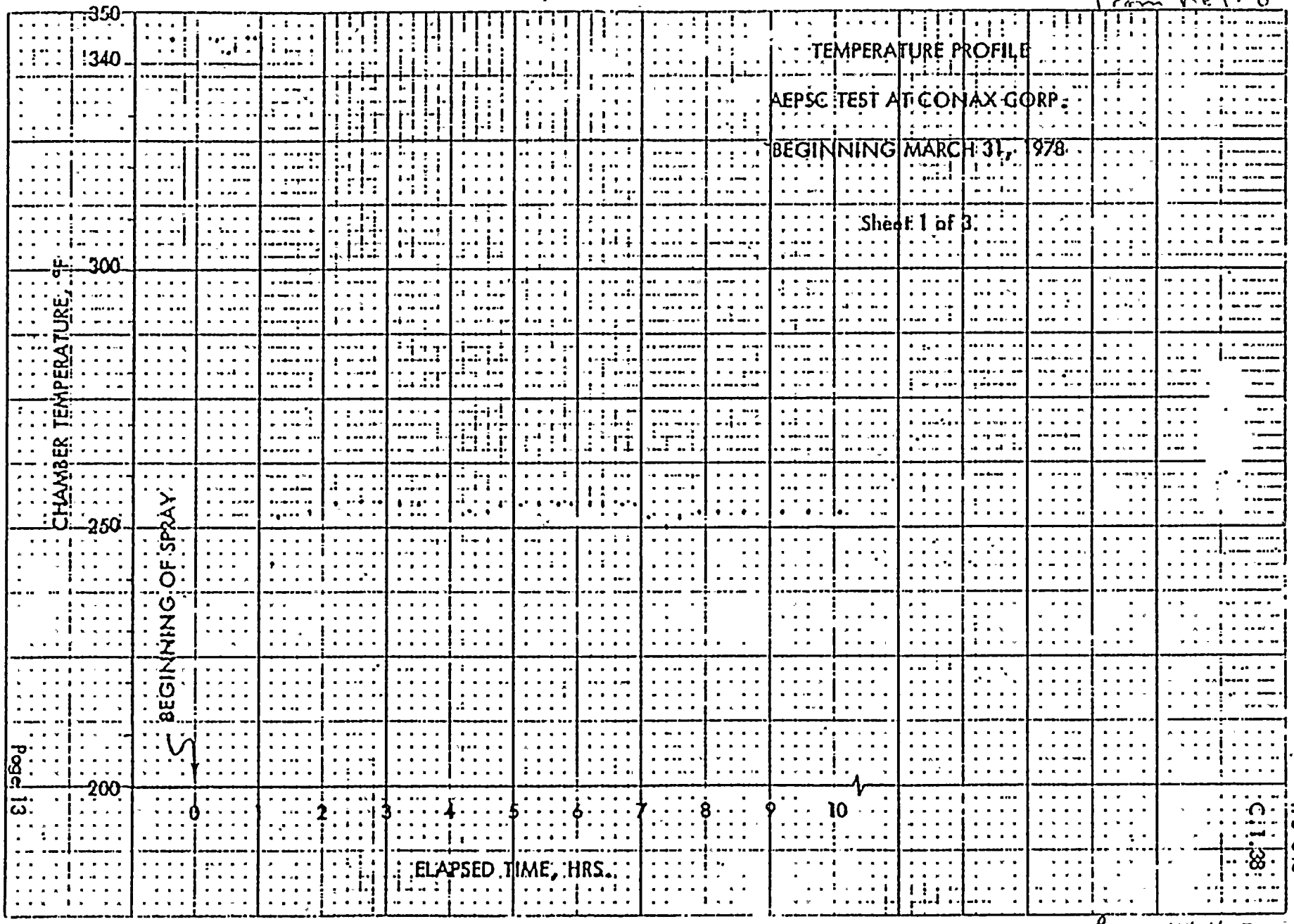
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Termination	Table 7.5-2	8,9,10	11,12,14,18,19 Separate	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.9-1,-2	340	FSAR APP Q	8,9,10	11,12,14,18,19 Separate	
COMPONENT: INSTRUMENT CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG 1 FIG 2	119.7	AEW 6504	8,9,10	11,12,14,18,19 Separate	
MODEL NUMBER: INSTRUMENT CABLE SPLICE AT PENETRATION	Relative Humidity (%)	100	100		8,9,10	11,12,14,18,19 Separate	
FUNCTION: VARIOUS	Chemical Spray	2000 ppmB	2000 ppmB	T.S. 3/4.5 3/4.5.6	8,9,10	11,12,14,18,19 Separate	
ACCURACY: SPEC: N/A DEMON: N/A	Radiation (10^6 rads)	150	150	WCAP 7410-L VOL1	8,9,10	11,12,14,18,19 Separate	
SERVICE: VARIOUS	Aging (years)		250°F 7 days Yes		8,9,10	11,12,14,18,19 Separate	
LOCATION: In Containment							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No	Submergence		Yes		8,9,10	11,12,14,18,19 Separate	

*Documentation References:

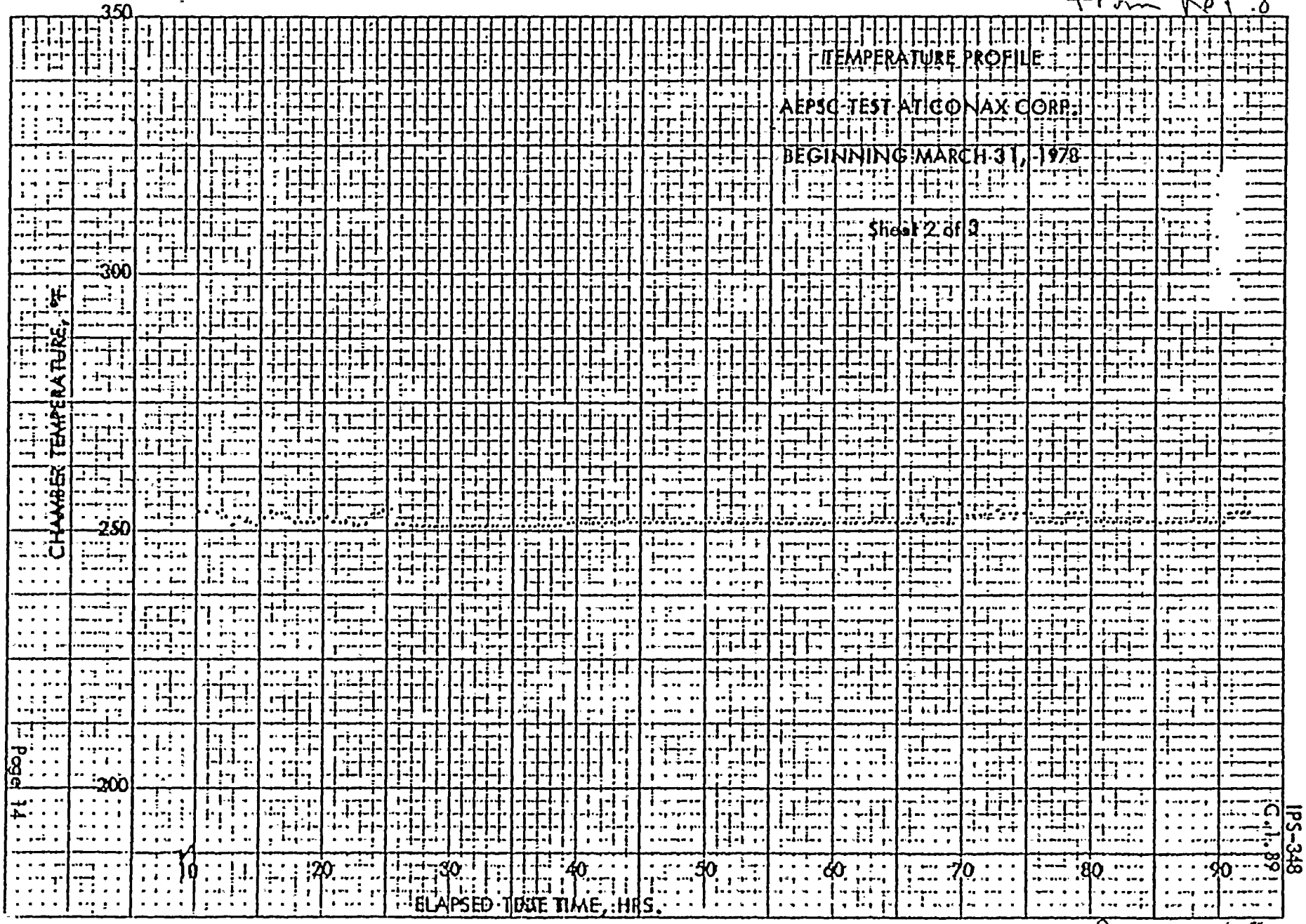
8. Conax Corp Test Report IPS-348
9. FIRL Test Report F-C 4033-1
10. FIRL Test Report F-C 3683
11. Isomedix Corp Test Report of May 1976
12. Cerro Wire + Cable Test Report of May 1976
14. FIRL Test Report F-C 4033-3
18. Conax Corp. Test Report IPS-327
19. Conax Corp. Test Report IPS-329

Notes:

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

from Ref. 8



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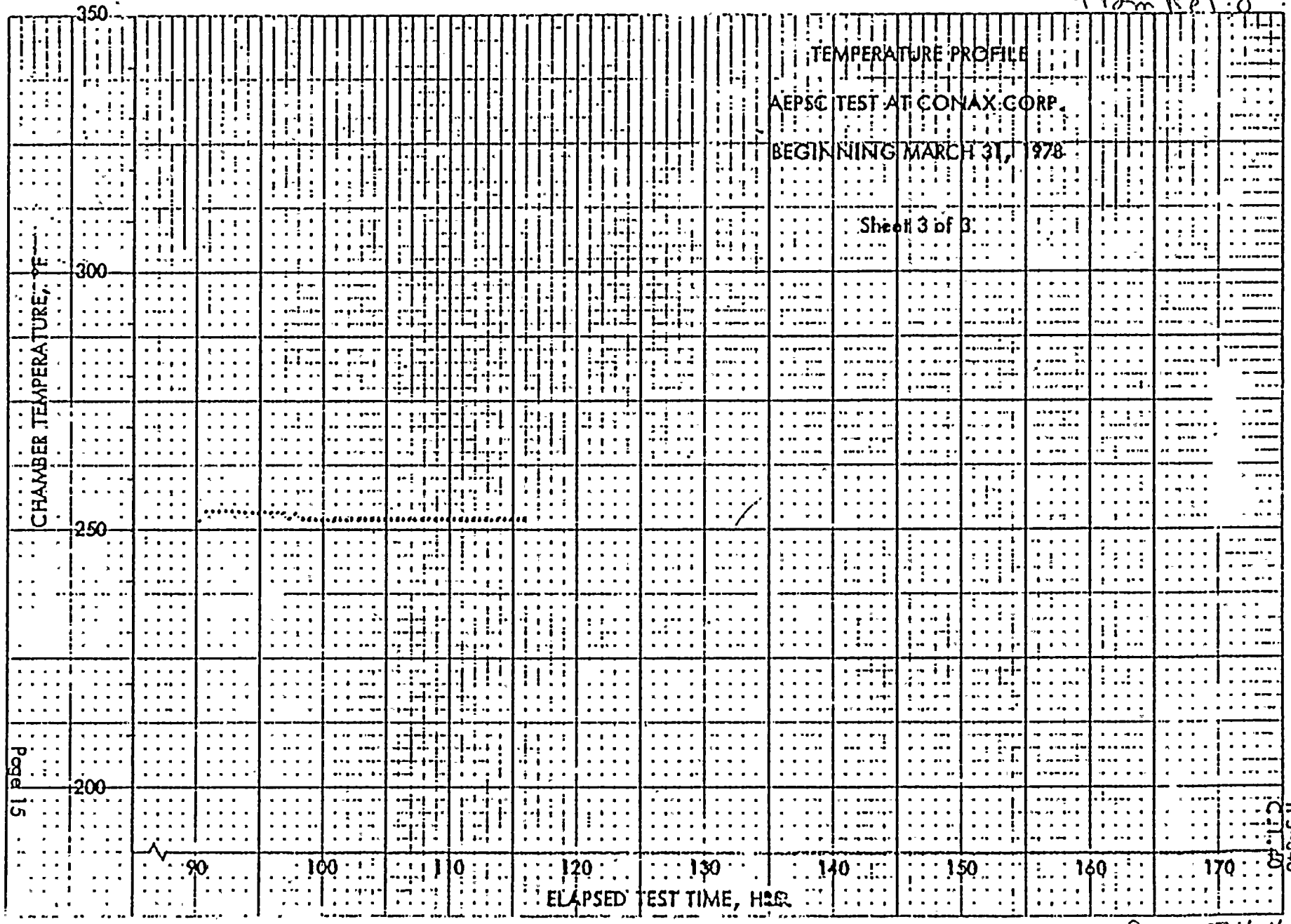
Oct. 89

Page 14

Page T 1 4-3

from Ref. 8



IPS-348

Page TJ 4-4

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

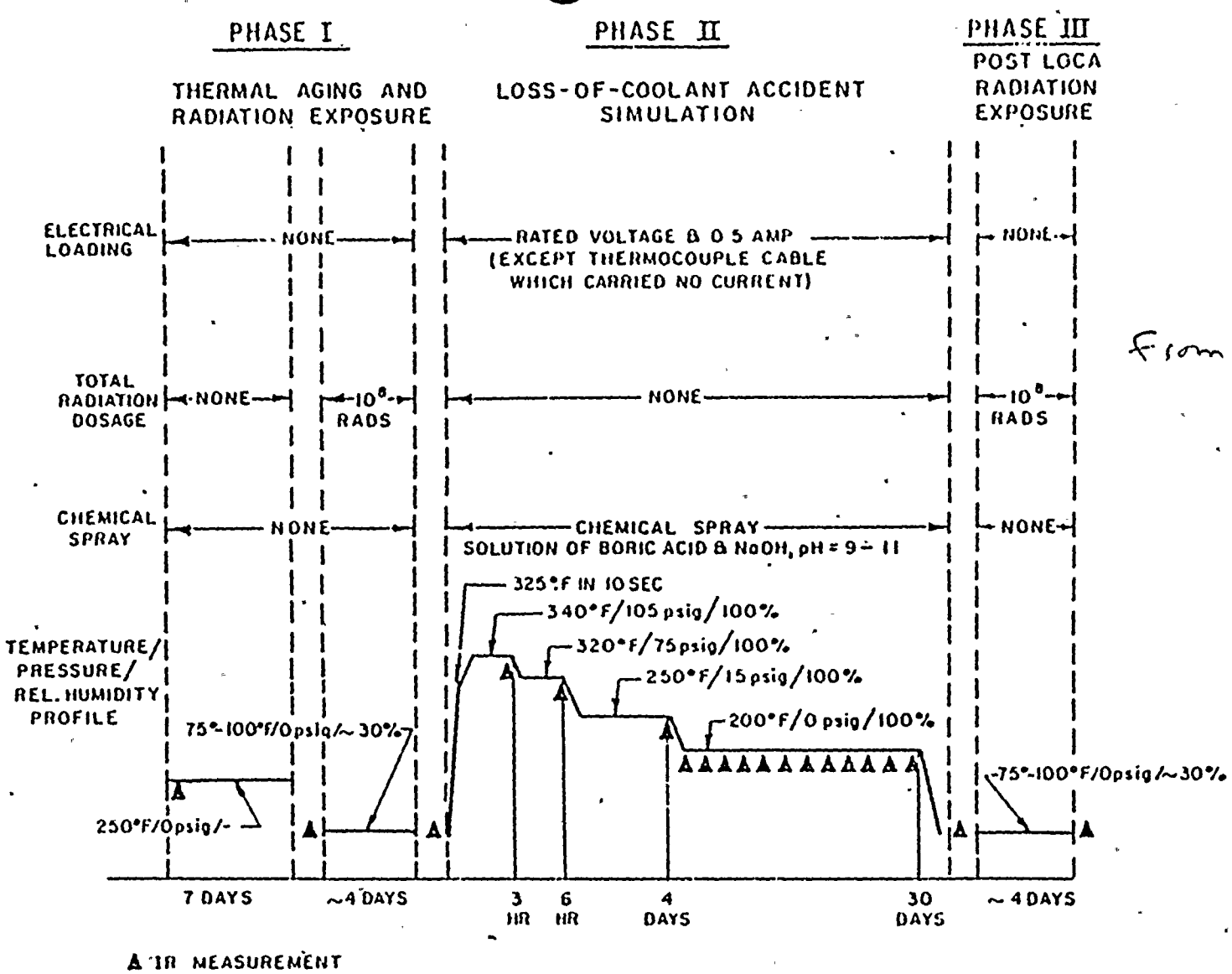
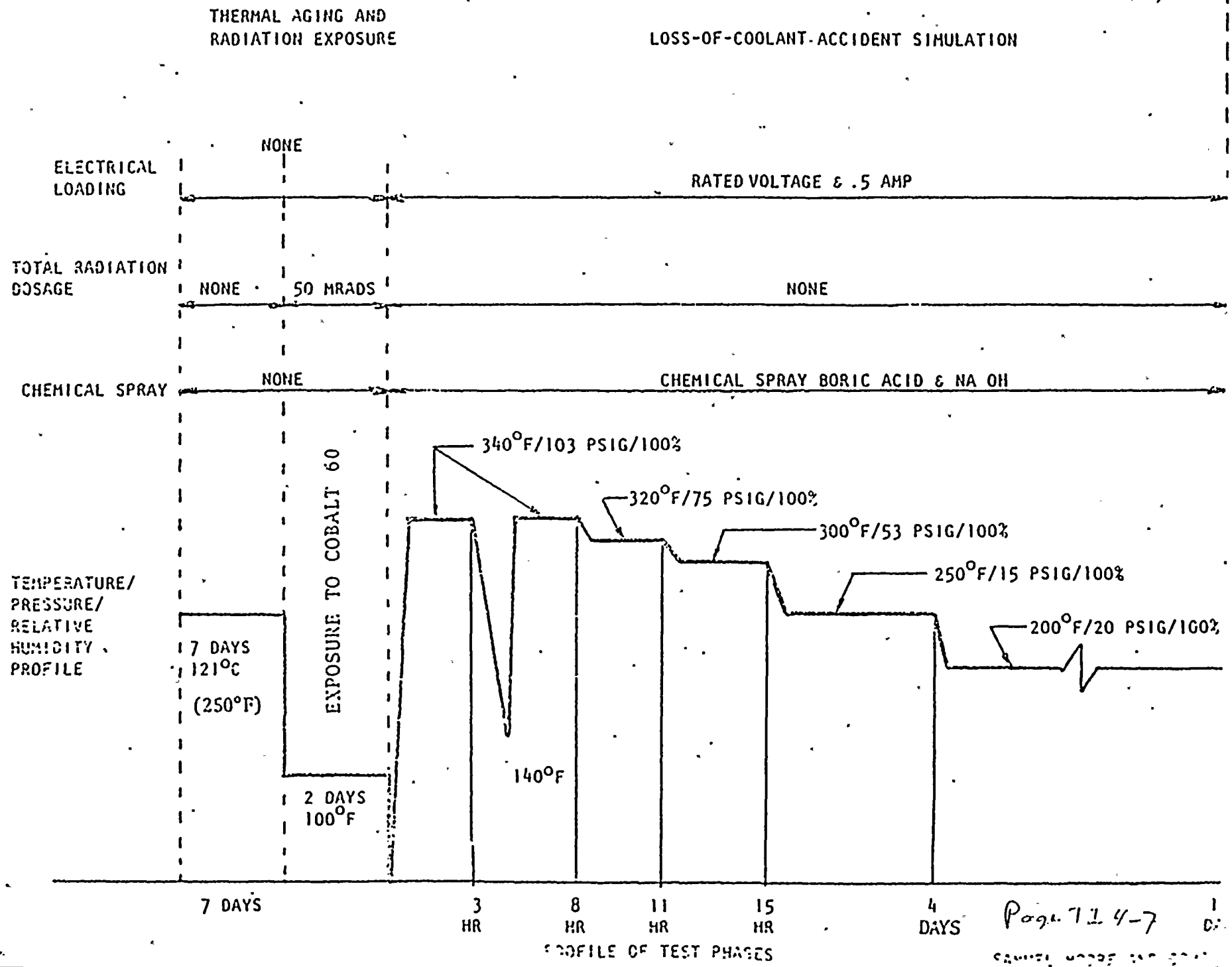


Figure 2. Profile of Test Phases

From Ref. 10

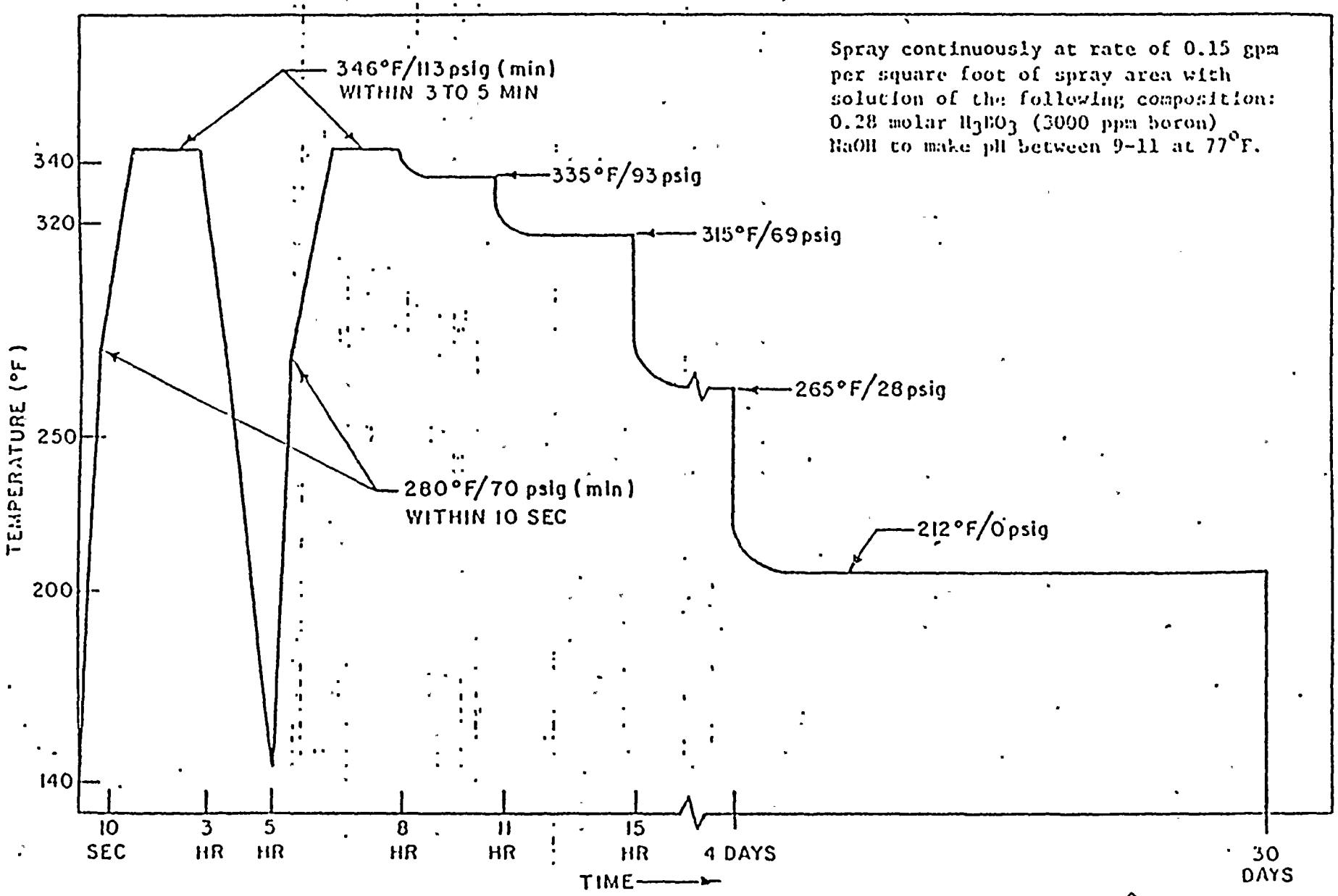
F-C3683

Page 17.4-6


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT-ACCIDENT SIMULATION
ELECTRICAL LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/ PRESSURE/ RELATIVE HUMIDITY PROFILE
7 DAYS
121°C
(250°F)
EXPOSURE TO COBALT 60
2 DAYS
100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3 HR
8 HR
11 HR
15 HR
4 DAYS
PROFILE OF TEST PHASES

Page 7.1.4-7

LOCA Profile



Page T.J. 4-8

from Ref. 14. Type of Test (F-C4033-3): Simultaneous Radiation/chem. spray/steam.

Test Profile:

.2-.3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical spray: 3000 ppm boron as boric acid, .004 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5.

from Ref. 18.

Qualified by Conax Corp. Test Report IPS-327 of Jan. 1978.

Type of Test: Sequential, steam floodup with borated water.

Test Profile:

340°F, 12 psig for 1 hr
250°F, 12 psig for 6 hrs
190°F, 12 psig for 24 hrs

Floodup borated water

from Ref. 19.

Qualified by Conax Corp. Test Report IPS-329 of Jan. 1978.

Type of Test: Sequential, steam floodup with borated water.

Test Profile:

340°F, 12 psig for 2 hr
250°F, 12 psig for 6 hrs
190°F, 12 psig for 24 hrs

Floodup borated water.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 hr.	See Note 1 on Cable Termination.	Table 7.5-2	27	Seq	
PLANT ID NO: N/A	Temperature (°F)	FIG 13.13-1	320	FSAR APP N	27	Seq.	
COMPONENT: Instrument Termination at MANUFACTURER: Foxboro	Pressure (PSIA)	FIG1 FIG2	89.7	AEW 6504	27	Seq.	
MODEL NUMBER: N/A	Relative Humidity (%)	100	100		26	Seq.	
FUNCTION: VARIOUS ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppmB	2000 PPMB	T.S. 3/4.5 3/4.5.6	27	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	3.9	18	WCAP 7410-L VOL1	27	Seq.	
LOCATION: In Containment	Aging (years)						
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		FLOODP Tubes				

*Documentation References:

26. Foxboro Test Report TE-1013
27. Westinghouse Corp. Communication NS-PLC-5023 dated 4/26/78 from T.M. Anderson. Westinghouse to E.G. Case NRC.

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFLECTED BY EMERGENCY OPERATING PROCEDURES.

from Ref. 27.

Qualified by Westinghouse Electric Corp. letter of 4/26/78 (NS-PLC-5023).

From: T. M. Anderson - Westinghouse
To: E. G. Case - NRC

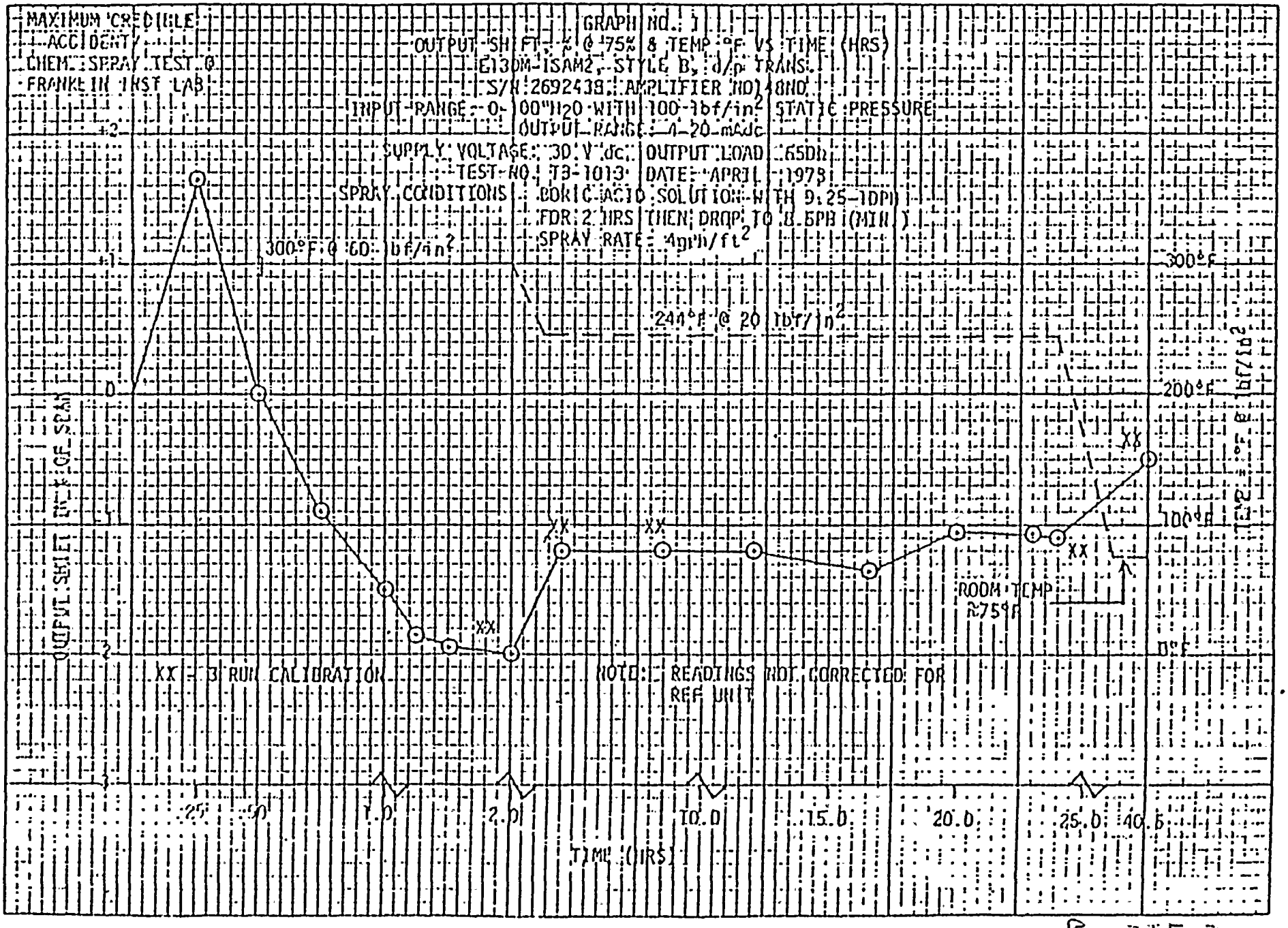
Test Type: Sequential

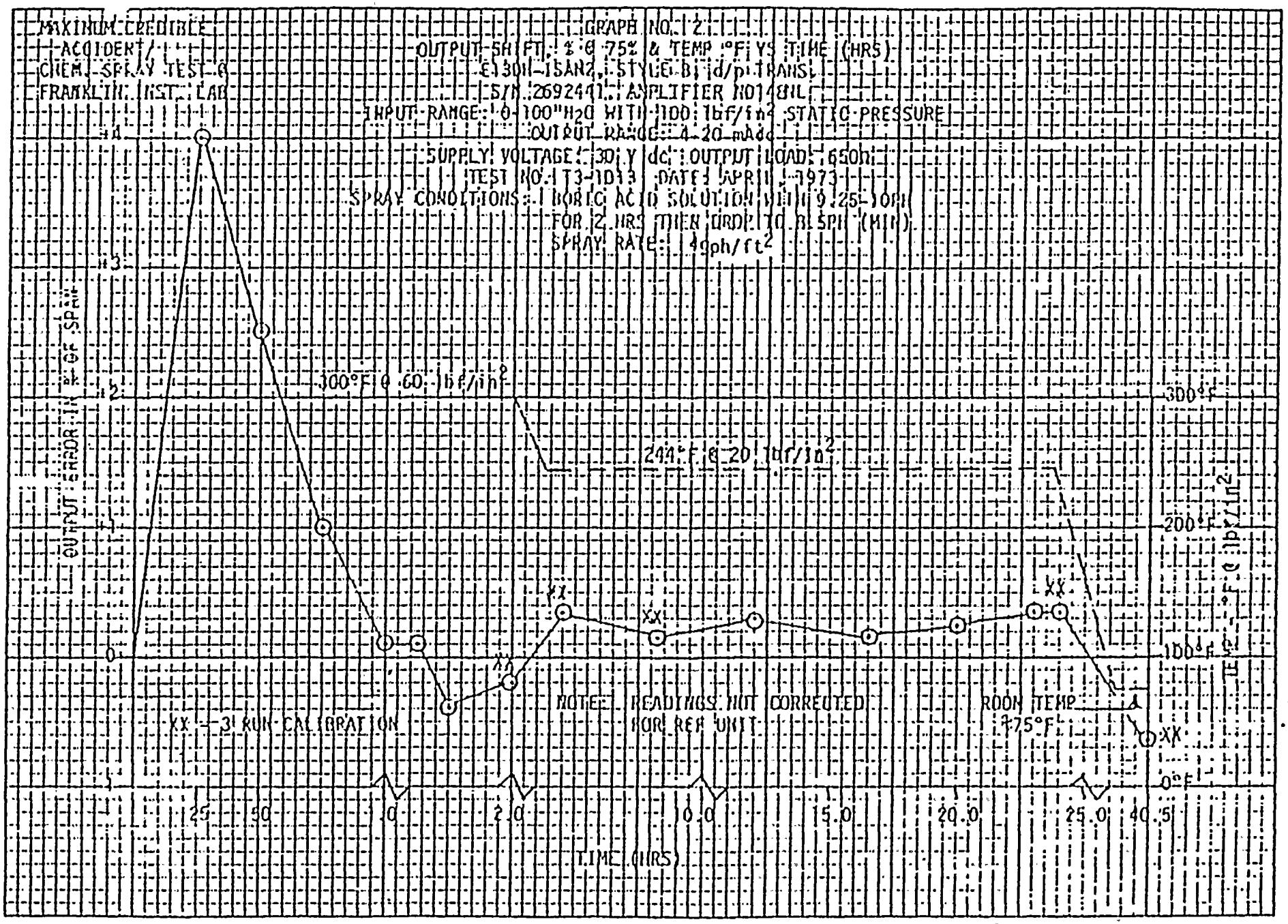
Steam/chemical spray/radiation

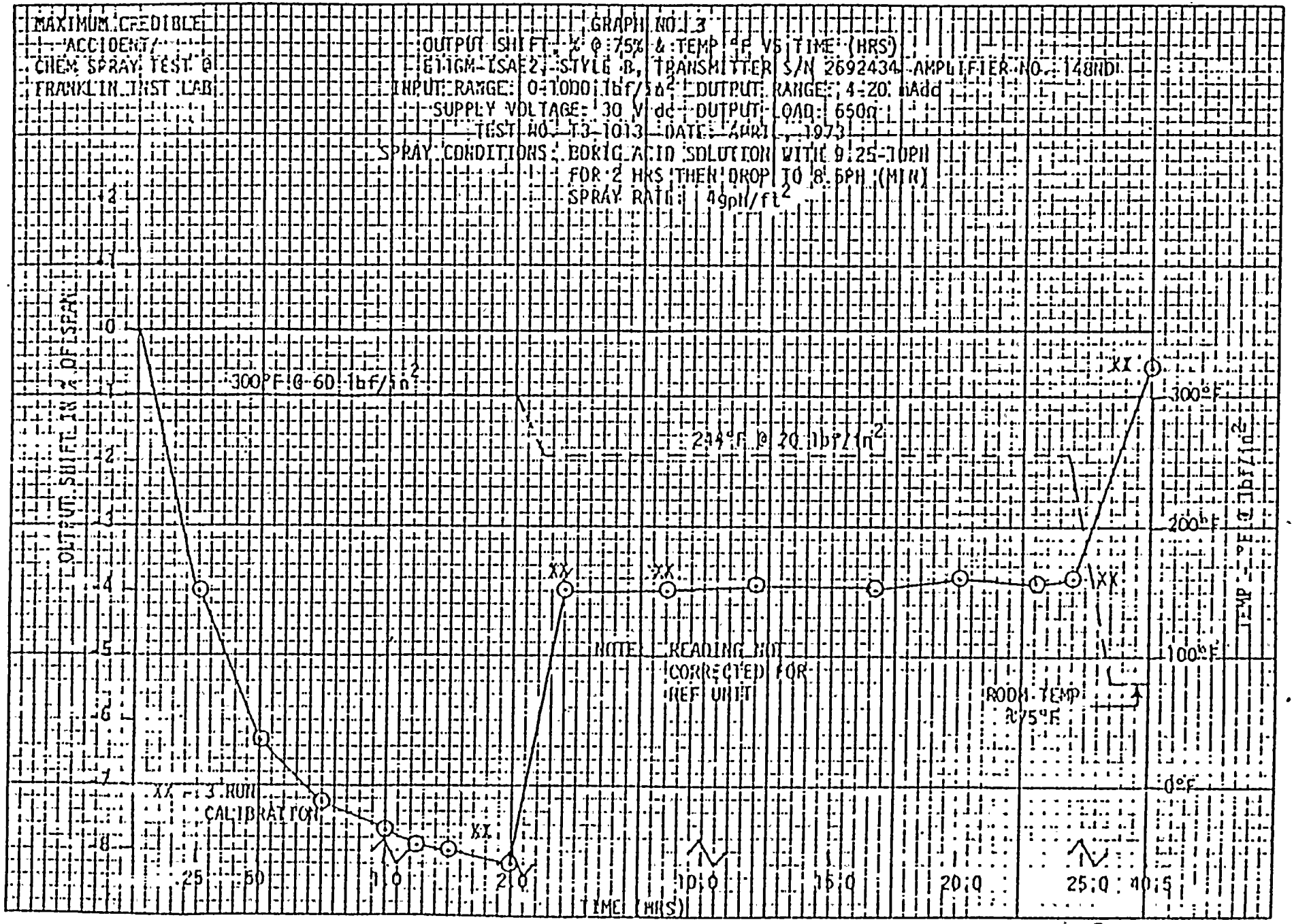
Test Profile:

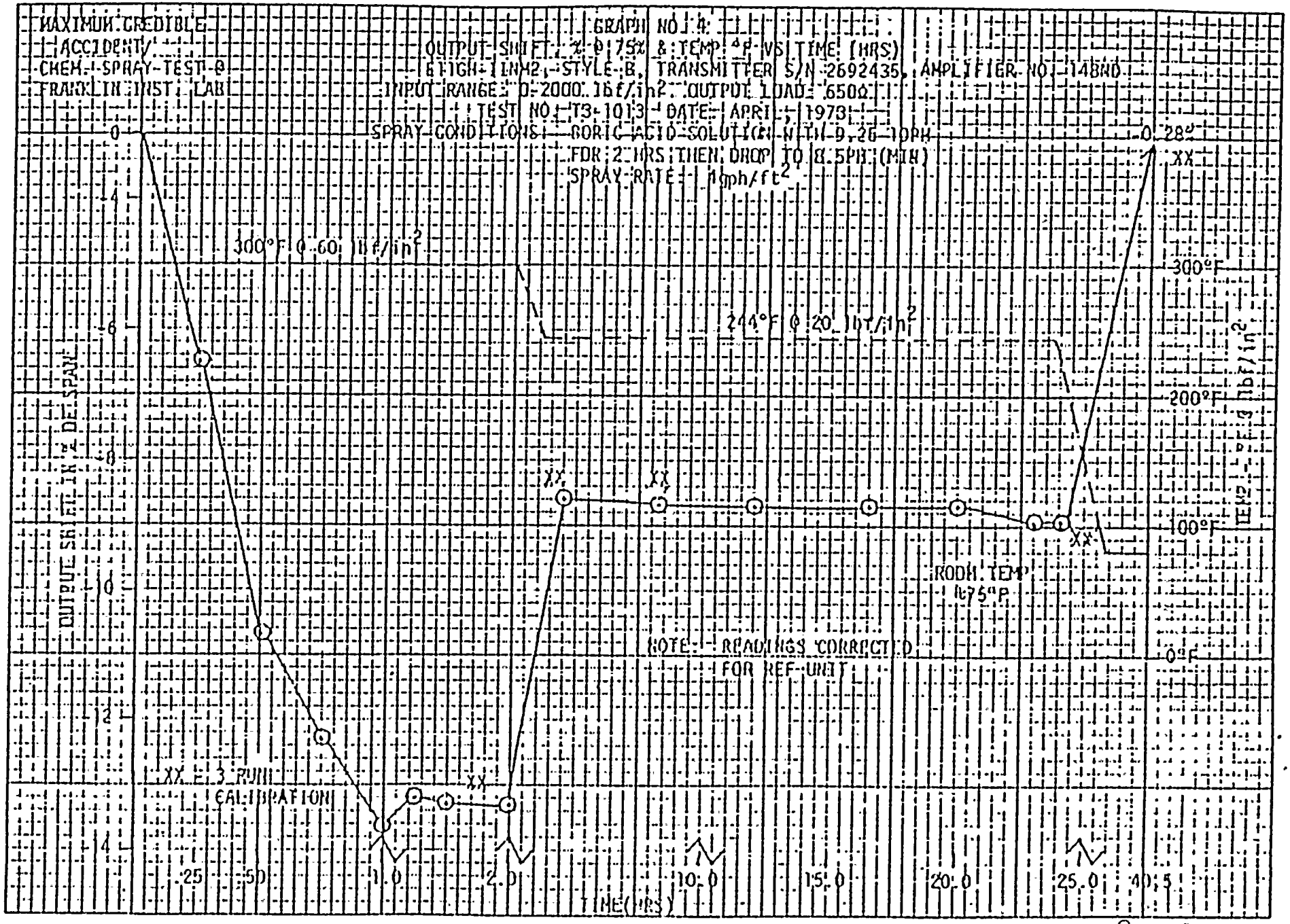
18 Mrads, 1.94 Mrads/hr.
320°F, 75 psig for 20 minutes
From 320°F to 220°F in 24 hrs. (saturated conditions)
220°F, 15 psia for 5.5 days.

Chemical Spray: 1.14% boric acid
.17% Na OH


MAXIMUM CREDIBLE ACCIDENT
CHEM SPRAY TEST @ FRANKLIN INST LAB
GRAPH NO. 1
OUTPUT SHIFT % @ 75% & TEMP °F VS TIME (HRS)
ISAM2, STYLE B, d/p TRANS.
S/N 2692438 AMPLIFIER NO. 8NO.
INPUT RANGE 0-100"H2O WITH 100 lbf/in2 STATIC PRESSURE
OUTPUT RANGE 4-20 mADC
SUPPLY VOLTAGE 30 V dc OUTPUT LOAD 650Ω
TEST NO. T3-1013 DATE APRIL 1978
SPRAY CONDITIONS BORIC ACID SOLUTION WITH 9.25-10PH
FOR 2 HRS THEN DROP TO 8.5PH (MIN.)
SPRAY RATE 4gph/ft2
300°F @ 60 lbf/in2
244°F @ 20 lbf/in2
ROOM TEMP ≈75°F
XX = 3 RUN CALIBRATION
NOTE: READINGS NOT CORRECTED FOR REF UNIT
OUTPUT SHIFT IN % OF SPAN
TEMP °F & lbf/in2
300°F
200°F
100°F
0°F
+2
+1
0
-1
-2
-3
.25
.50
1.0
2.0
10.0
15.0
20.0
25.0
40.0
TIME (HRS)


MAXIMUM CREDIBLE
ACCIDENT/
CHEM. SPRAY TEST @
FRANKLIN INST. LAB
GRAPH NO. 12
OUTPUT SHIFT: % @ 75% & TEMP °F VS TIME (HRS)
E130H-15AN2, STYLE B; d/p TRANS.
S/N 2692441 AMPLIFIER NO 4BIL
INPUT RANGE: 0-100"H2O WITH 100 lbf/in2 STATIC PRESSURE
OUTPUT RANGE: 4-20 mAdc
SUPPLY VOLTAGE: 30 V dc; OUTPUT LOAD: 650Ω
TEST NO. T3-1013 DATE: APRIL 1973
SPRAY CONDITIONS: BORIC ACID SOLUTION WITH 9.25-10Ω
FOR 2 HRS THEN ORDER TO BE SPH (MIN)
SPRAY RATE: 4gph/ft2
300°F @ 60 lbf/in2
240°F @ 20 lbf/in2
OUTPUT ERROR IN % OF SPAN
TEMP °F @ lbf/in2
300°F
200°F
100°F
0°F
NOTE: READINGS NOT CORRECTED FOR REF UNIT
ROOM TEMP 75°F
XX - 3 RUN CALIBRATION
TIME (HRS)
25
50
10
20
10.0
15.0
20.0
25.0
40.5


MAXIMUM CREDIBLE
ACCIDENT
CHEM SPRAY TEST 0
FRANKLIN INST LAB
GRAPH NO 13
OUTPUT SHIFT % @ 75% & TEMP °F VS TIME (HRS)
GTIGM-ISAE2 STYLE B, TRANSMITTER S/N 2692434 AMPLIFIER NO. 148NDI
INPUT RANGE: 0-1000 lbf/in² OUTPUT RANGE: 4-20 mAdc
SUPPLY VOLTAGE: 30 V dc OUTPUT LOAD: 650Ω
TEST NO. T3-1013 DATE: APRIL, 1973
SPRAY CONDITIONS: BORIC ACID SOLUTION WITH 9.25-10PH
FOR 2 HRS THEN DROP TO 8.6PH (MIN)
SPRAY RATE: 4gpM/ft²
OUTPUT SHIFT % OF SPAN
300PF @ 60 lbf/in²
294°F @ 20 lbf/in²
XX
NOTE: READING NOT CORRECTED FOR REF UNIT
ROOM TEMP ≈75°F
XX FT 3 RUN CALIBRATION
TIME (HRS)
300°F
200°F
100°F
0°F
TEMP °F
PRESSURE lbf/in²


MAXIMUM CREDIBLE
ACCIDENT
CHEM-SPRAY-TEST-8
FRANKLIN INST LAB
GRAPH NO 4
OUTPUT SHIFT % 0.75% & TEMP °F VS TIME (HRS)
6 HIGH 1 IN H2 STYLE B, TRANSMITTER S/N 2692435, AMPLIFIER NO 148ND
INPUT RANGE 0-2000 lbf/in2 OUTPUT LOAD 650Ω
TEST NO T3-1013 DATE APRIL 1973
SPRAY CONDITIONS BORIC ACID SOLUTION WITH 0.26 IDPH
FOR 2 HRS THEN DROP TO 0.5PH (MIN)
SPRAY RATE 1gph/ft2
300°F @ 60 lbf/in2
244°F @ 20 lbf/in2
0.28°
300°F
200°F
100°F
0°F
TEMP °F
lbf/in2
OUTPUT SHIFT % FULL SCALE
ROOM TEMP
75°F
NOTE: READINGS CORRECTED
FOR REF UNIT
XX E3 RUN
CALIBRATION
.25
.50
1.0
2.0
10.0
15.0
20.0
25.0
40.5
TIME (HRS)

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time		NA				
PLANT ID NO: NA	Temperature (°F)	Fig 0-27	NA	FSAR APP O			
COMPONENT: INSTR. Termination	Pressure (PSIA)	Fig 0-27	NA	FSAR APP O			
MANUFACTURER: NA							
MODEL NUMBER: Termination at Mercoid Instr.	Relative Humidity (%)	NA	NA	NA	NA	NA	
FUNCTION:							
ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	NA	NA	NA	NA	NA	
LOCATION: Outside Containment	Aging (years)		NA				
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

Notes: INCLUDED IN FIRST 79-01B SUBMITTAL DUE TO POSSIBLE SOURCE/TARGET INTERACTION. SUBSEQUENT REVIEW USING ACCEPTANCE CRITERIA OF FSAR APPENDIX O FOR PROTECTION OF ELECTRICAL EQUIPMENT SHOWS NO SOURCE/TARGET INTERACTION.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Table on Cable Termin.	Table 7.5-2	13	Seq.	
PLANT ID NO: NA	Temperature (°F)	FIG 022.9-1,-2	340	FSAR App Q	13	SEQ.	
COMPONENT: Power CABLE TERMINATION	Pressure (PSIA)	FIG 1 FIG 2	118	AEW 6504	13	SEQ.	
MANUFACTURER: NA	Relative Humidity (%)	100	100		13	SEQ.	
MODEL NUMBER: SOLID KAPTON SPLICED TO STRANDED KAPTON	Chemical Spray	Not Req'd	2500 ppmB	T.S. 3/4.5 3/4.5.6	13	SEQ.	
FUNCTION: CABLE Connection	Radiation (10^6 rads)	60	60	AEW 729	13	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)						
SERVICE: VARIOUS	Submergence		FLOODUP TUBES				
LOCATION: IN Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

13. Westinghouse-Canada Test Report CWAPD-332

Notes:

FIGURE 2 TEST PROFILE

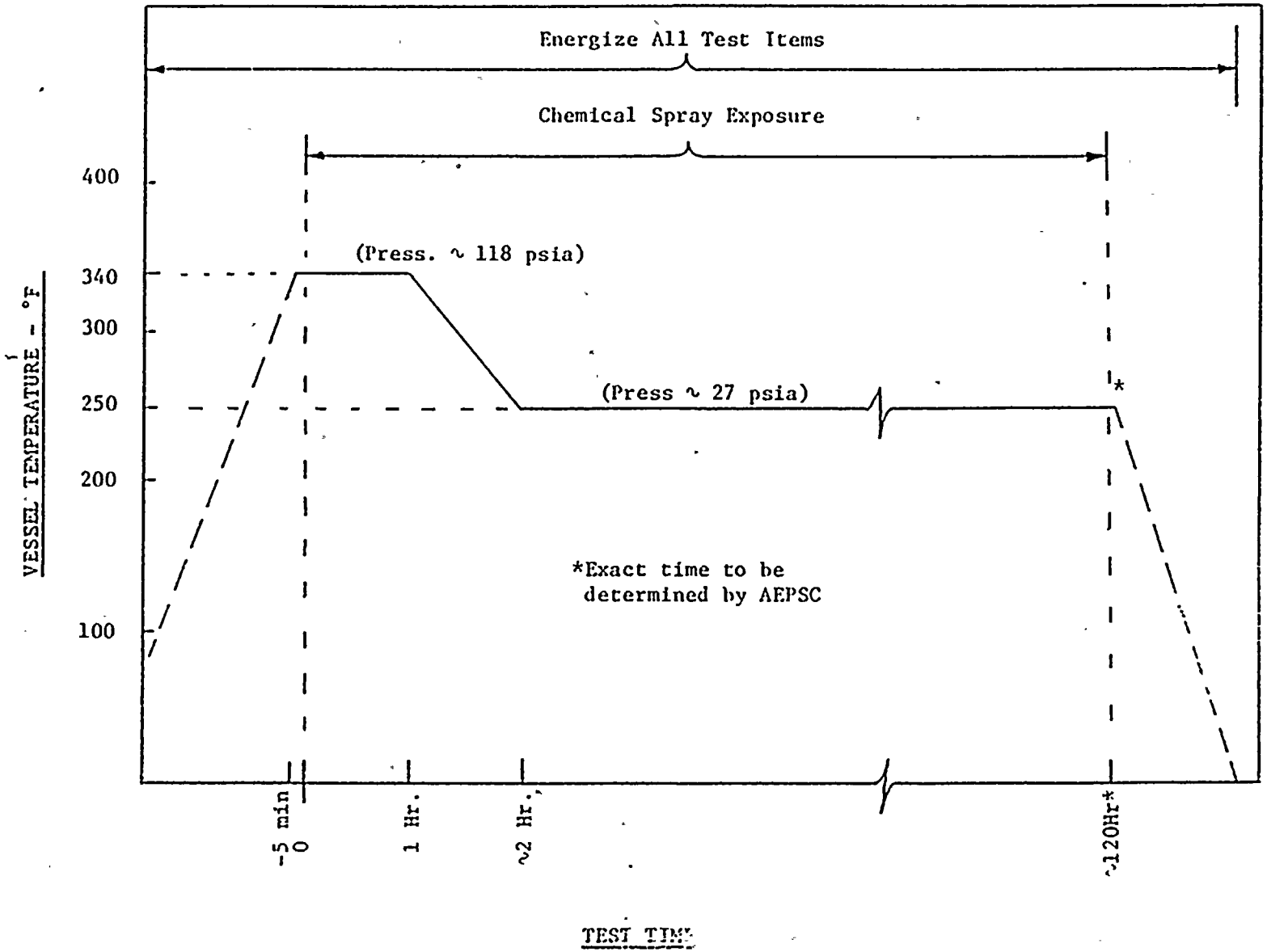
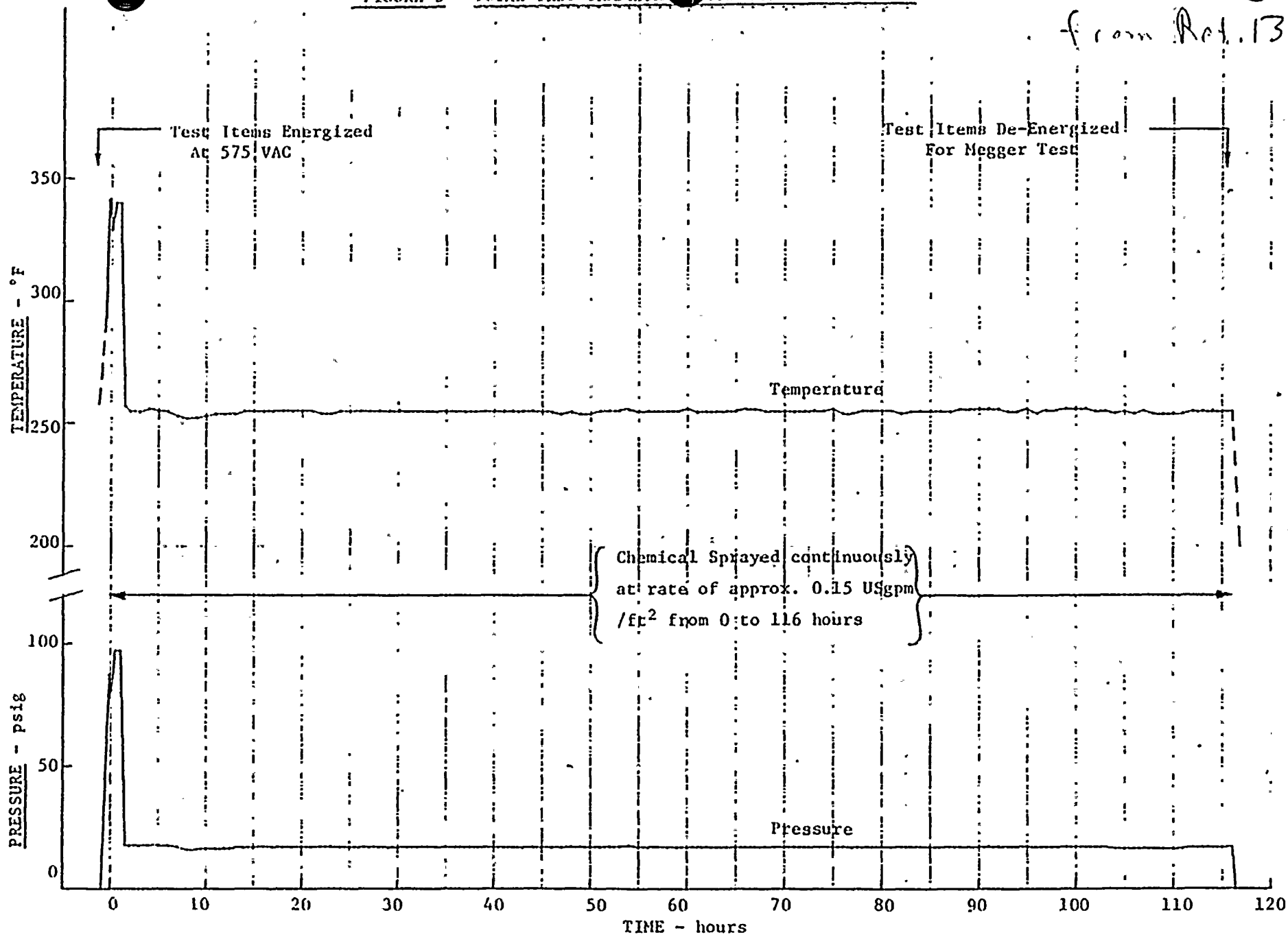


FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

from Ref. 13



DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Term.	Table 7.5-2	13	Seq.	
PLANT ID NO: NA	Temperature (°F)	FIG 022.9-1,-2	340	FSAR App Q	13	Seq.	
COMPONENT: TERMINATION	Pressure (PSIA)	FIG 2 FIG 1	118	AEW 6504	13	Seq.	
MANUFACTURER: NA							
MODEL NUMBER: STRANDED KAPTON SPLICED TO STRANDED KAPTON	Relative Humidity (%)	100	100		13	Seq.	
FUNCTION: CABLE CONNECTION	Chemical Spray	Not Req'd	2500 PPM B	T.S. 3/4.5 3/4.5.6	13	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	13	Seq.	
SERVICE: VARIOUS	Aging (years)						
LOCATION: IN CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: yes	Submergence	NA	NA	NA	NA	NA	

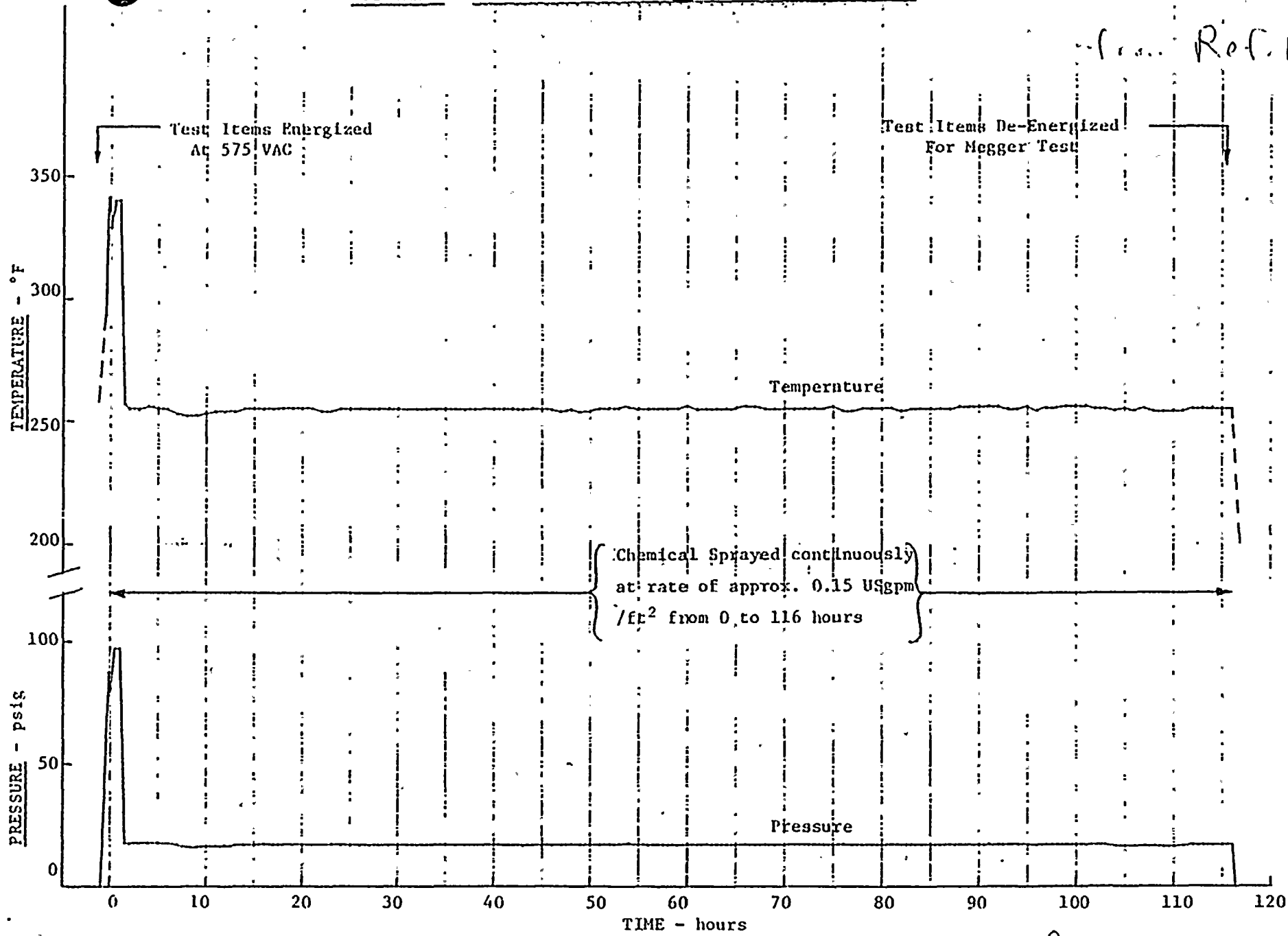
*Documentation References:

13. Westinghouse-Canada Test Report CWAPD-332

Notes:

FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

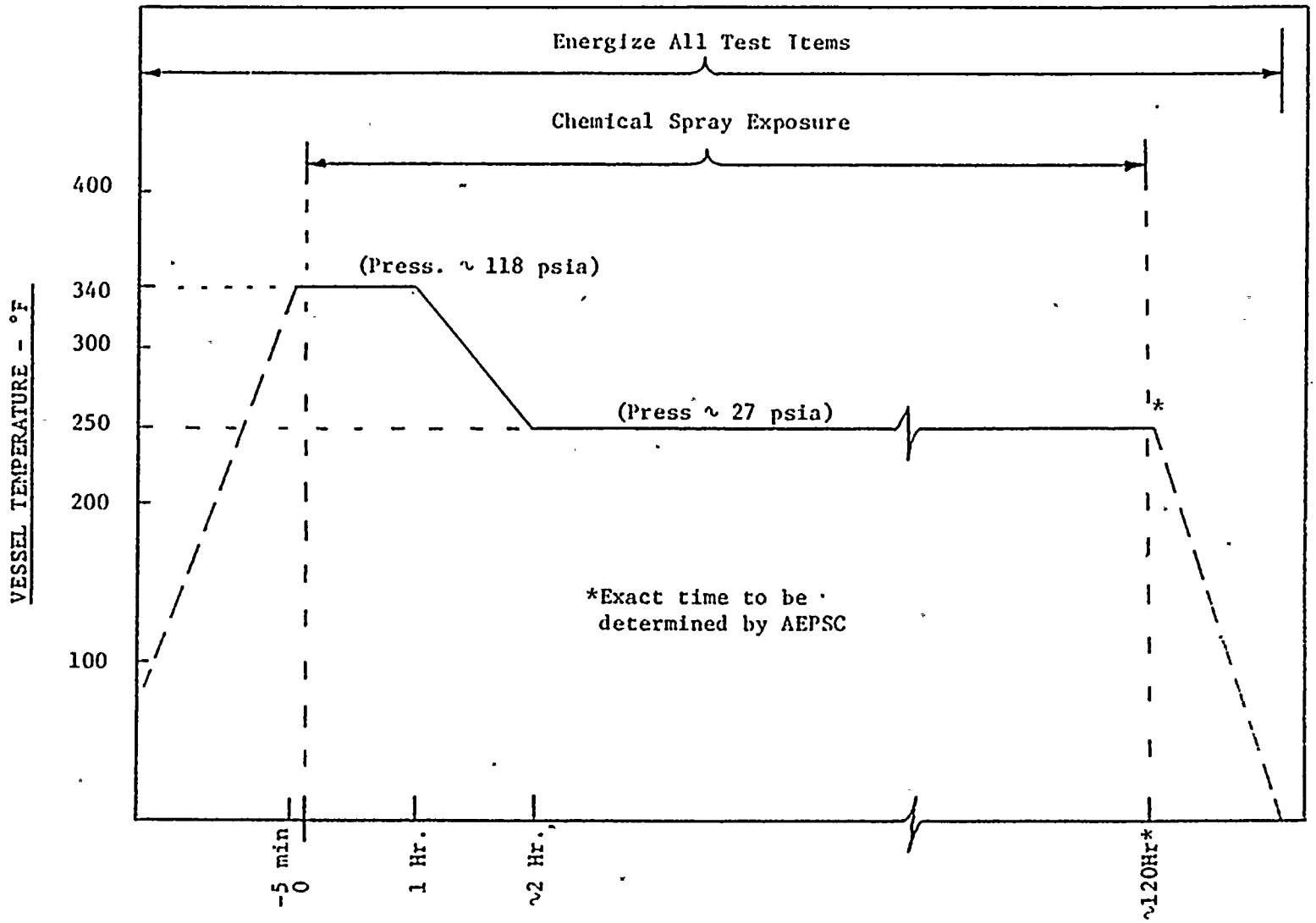
From Ref. 13



Page TP2-2

FIGURE 2 TEST PROFILE

from Ref. 13



Page 1P2-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Term.	Table 7.5-2	13	Seq.	
PLANT ID NO: NA	Temperature (°F)	FIG 022.9-1,-2	340	FSAR App Q	13	SEQ.	
COMPONENT: TERMINATION	Pressure (PSIA)	FIG 2 FIG 1	118	AEW 6504	13	SEQ.	
MANUFACTURER: NA	Relative Humidity (%)	100	100		13	SEQ.	
MODEL NUMBER: TERMINATION AT VALVE MOTOR OPERATORS, Hydrogen Recombiner, FAN Motors	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.6	13	SEQ.	
FUNCTION: CABLE Connection	Radiation (10^6 rads)	150	150	WCAP 7410-L VOL1	13	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)						
SERVICE: VARIOUS	Submergence		See note below.				
LOCATION: IN + Out of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

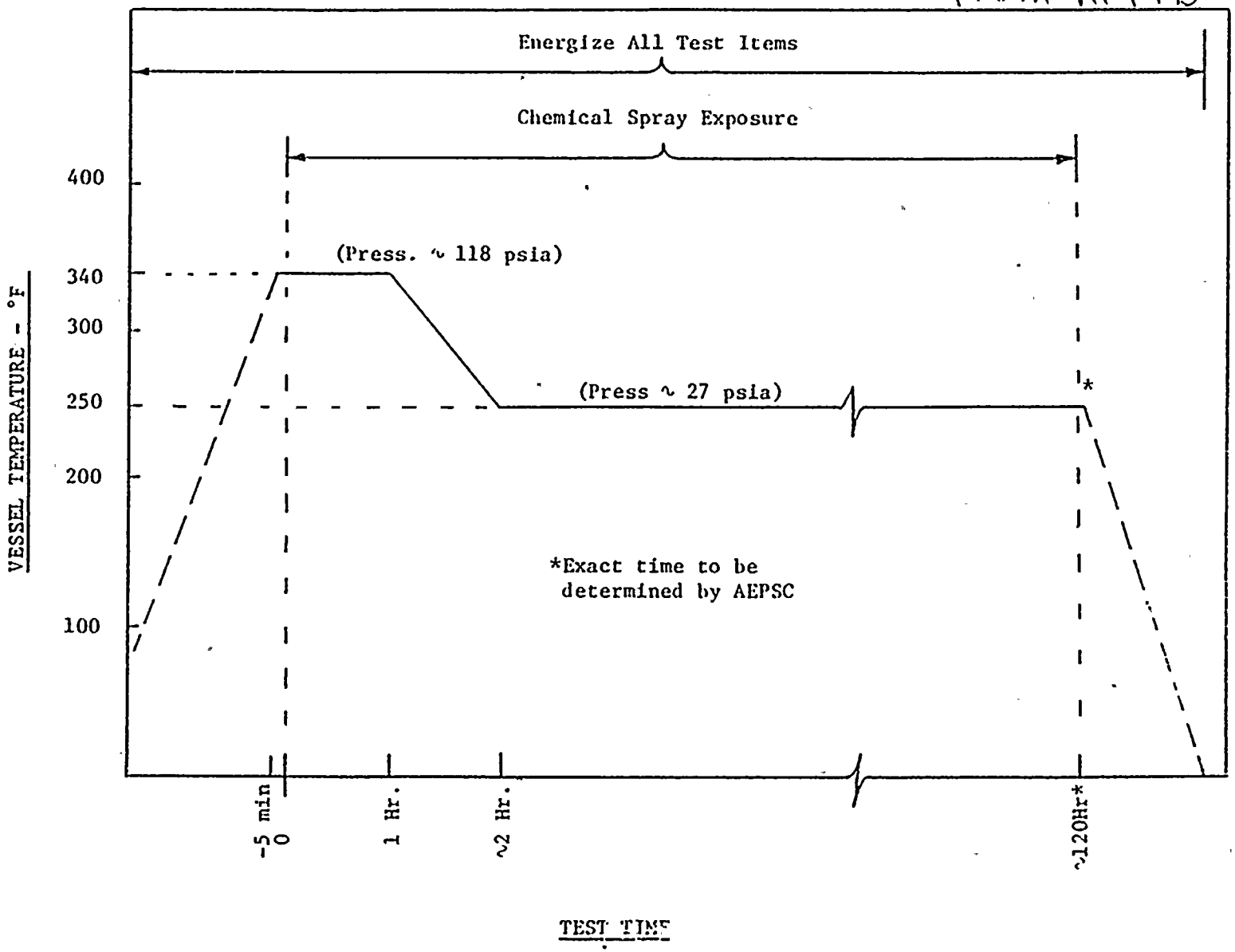
*Documentation References:

13. WESTINGHOUSE - CANADA TEST REPORT CWAPD-332

Notes: Those power cable terminations inside containment which may be submerged after a LOCA serve certain valve motor operators. The safety significance of this submergence is discussed in FSAR, App. Q, response to question 40.10 and in Item 4 of letter from J. Tillinghast (AEP) K. Kniel (NRC) of 9-29-75. Page TP 3-1

FIGURE 2 TEST PROFILE

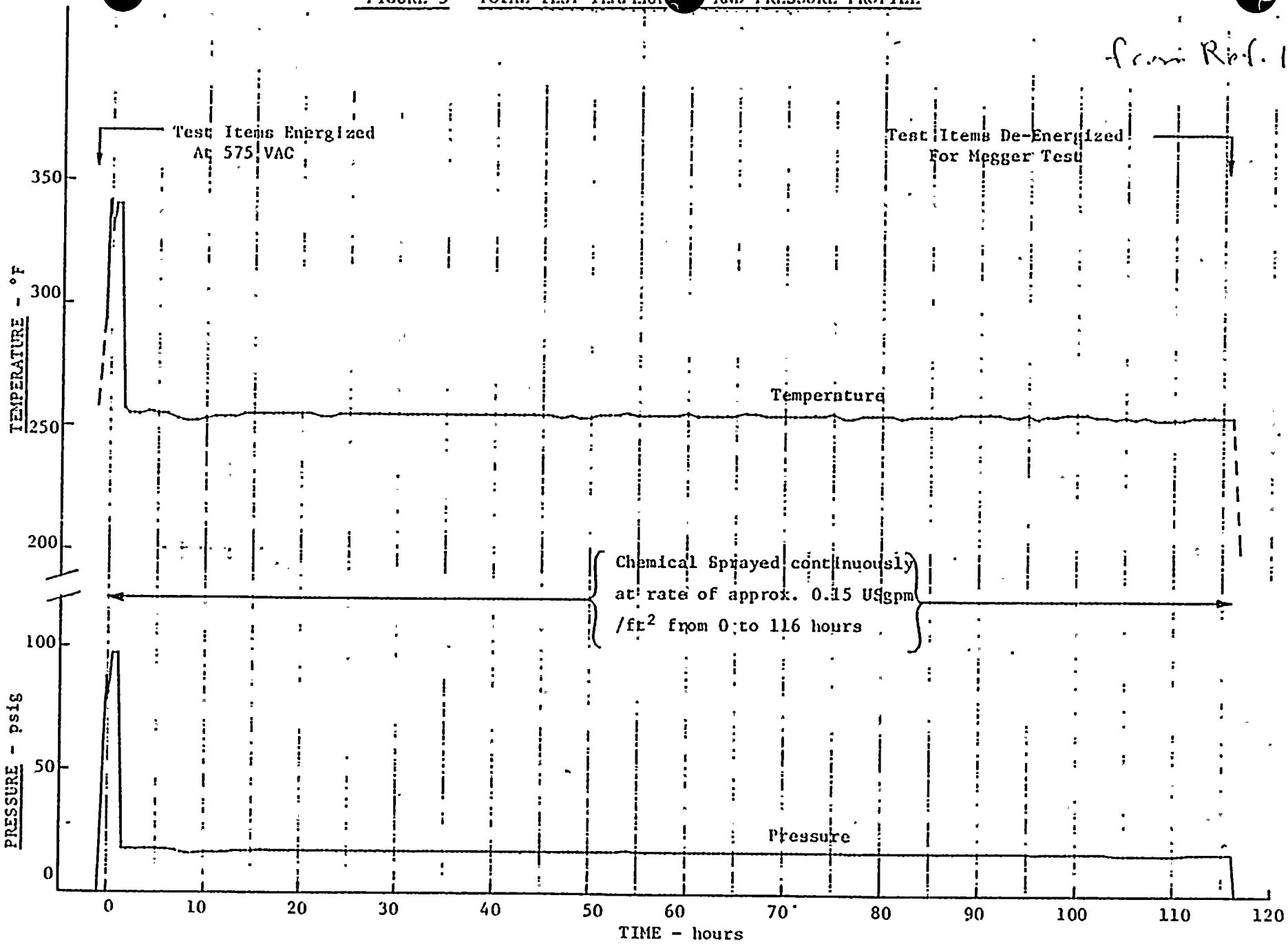
from Ref. 13



Page TP3-1

FIGURE 3 TOTAL TEST TEMPERA[illegible] AND PRESSURE PROFILE

from Ref. 13



Page TI 3-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 year	See Note 2 on Cable Terminal		13	Seq	
PLANT ID NO: NA	Temperature (°F)	NA	NA	NA	NA	NA	
COMPONENT: Cable Term	Pressure (PSIA)	NA	NA	NA	NA	NA	
MANUFACTURER: NA							
MODEL NUMBER: Power Cable Term at Pump Motor	Relative Humidity (%)	NA	NA	NA	NA	NA	
FUNCTION: Various	Chemical Spray	NA	NA	NA	NA	NA	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: Various	Radiation (10^6 rads)	16.6	150	See Note A	13	Seq	
LOCATION: Outside Containment	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

13. Westinghouse Canada Test Report CWAPD-332

Notes:

A) NS&L calculation DC-N-6420-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

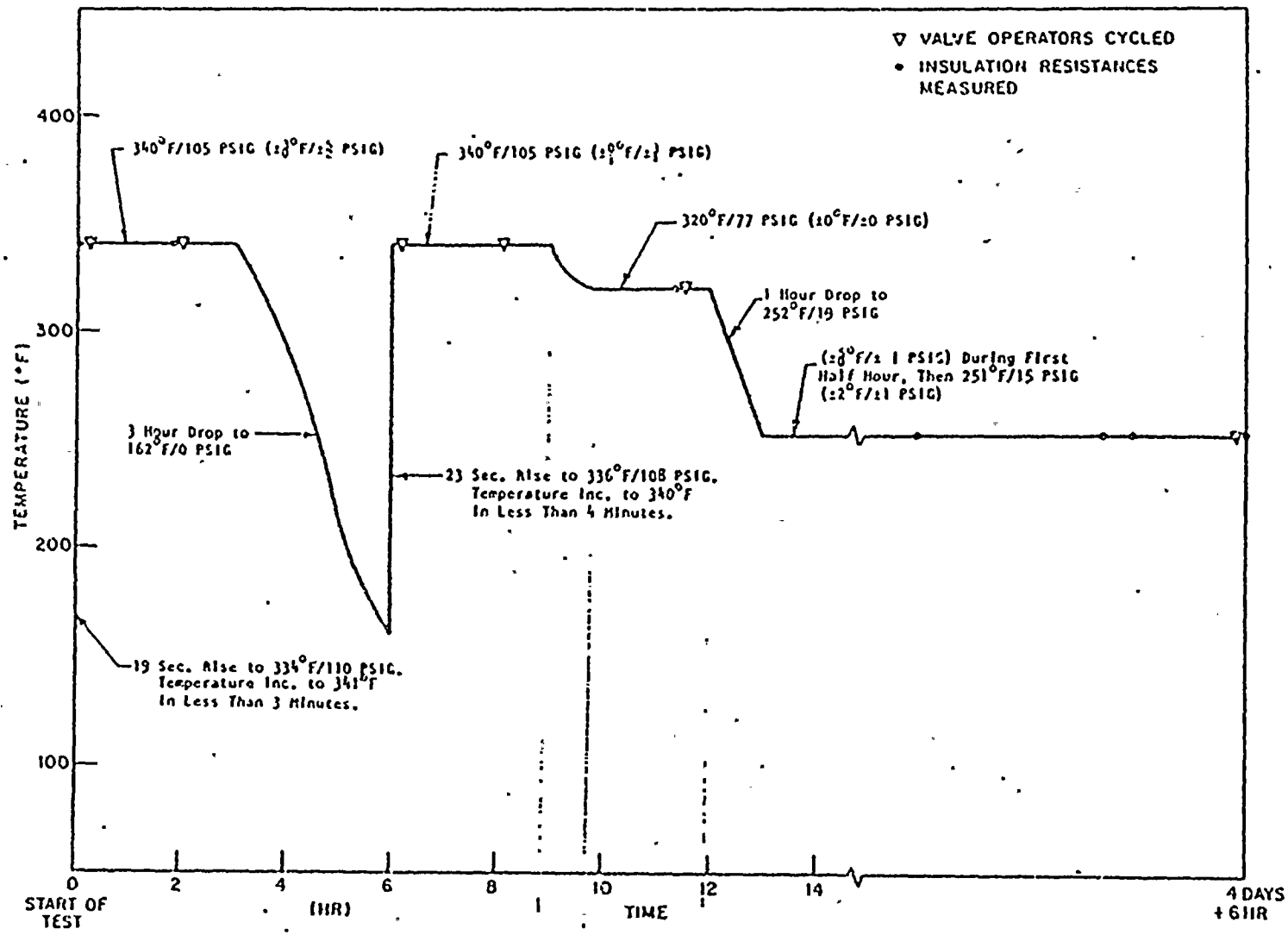
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS, RHR	Operating Time	½ hr	6 DAYS	Table 7.5-2	23	Sep	
PLANT ID NO: 1 Mo-51, 52, 53, 54, 128; ICM-111, -129	Temperature (°F)	Fig 022.9-1, -2	340	FSAR App Q	23	SEP.	
COMPONENT: VALVE MOTOR OPERATOR	Pressure (PSIA)	FIG. 2 Fig 1.	119.7	AEW 6504	23	SEP.	
MANUFACTURER: LIMITORQUE	Relative Humidity (%)	100	100		23	SEP.	
MODEL NUMBER: SMB-1 SMB-00 SMB-2	Chemical Spray	2000 ppmB	2600 ppmB	T.S. 3/4.5 3/4.5.6	22	SIMUL.	
FUNCTION: Core Cooling and Containment Isolation	Radiation (10^6 rads)	2.2	204	WCAP 7410-L Vol 1	23	SEP.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		180°C/100hrs Yes		23	Sep.	
SERVICE: ECCS injection and RHR normal cooling	Submergence		Yes*		23	Sep.	
LOCATION: INSIDE Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

22. Limitorque Corp Test Report #600198
23. Limitorque Corp. Test Report #600376A

Notes: *See also FSAR App. Q response to question 40.10 and letter from J. Tillinghast (AEP) to K. Kniel (NRC) dated 9-29-75 (Item 4).

from Ref. 23



F-C3441

Figure 3. Actual Steam Exposure Profile

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DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Safety Injection	Operating Time	1 DAY	30 DAYS	Note A below	16	SEQ	
PLANT ID NO: 1MO-315, 316, 325, 326	Temperature (°F)	Fig 13.13-1 2	315	FSAR App D	16	SEQ.	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	Fig 1 FIG 2	84.7	AEW 6504	16	SEQ.	
MODEL NUMBER: SMB-1	Relative Humidity (%)	100	100		16	SEQ.	
FUNCTION: Switchover to hot leg injection ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	IEEE 382 1972 (3000 ppmB)	T.S. 3/4.5 3/4.5.6			
SERVICE: ECCS Safety Injection	Radiation (10^6 rads)	Fig 4 26	204	WCAP 7410-L Vol 1	16	SEQ.	
LOCATION: INSIDE Containment	Aging (years)		180°C/100hrs Yes		16	SEQ.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

16. Limitorque Corp. Test Report # 600456

Notes:

A) letters J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

from Ref. 16

ACTUAL ACCIDENT PROFILE

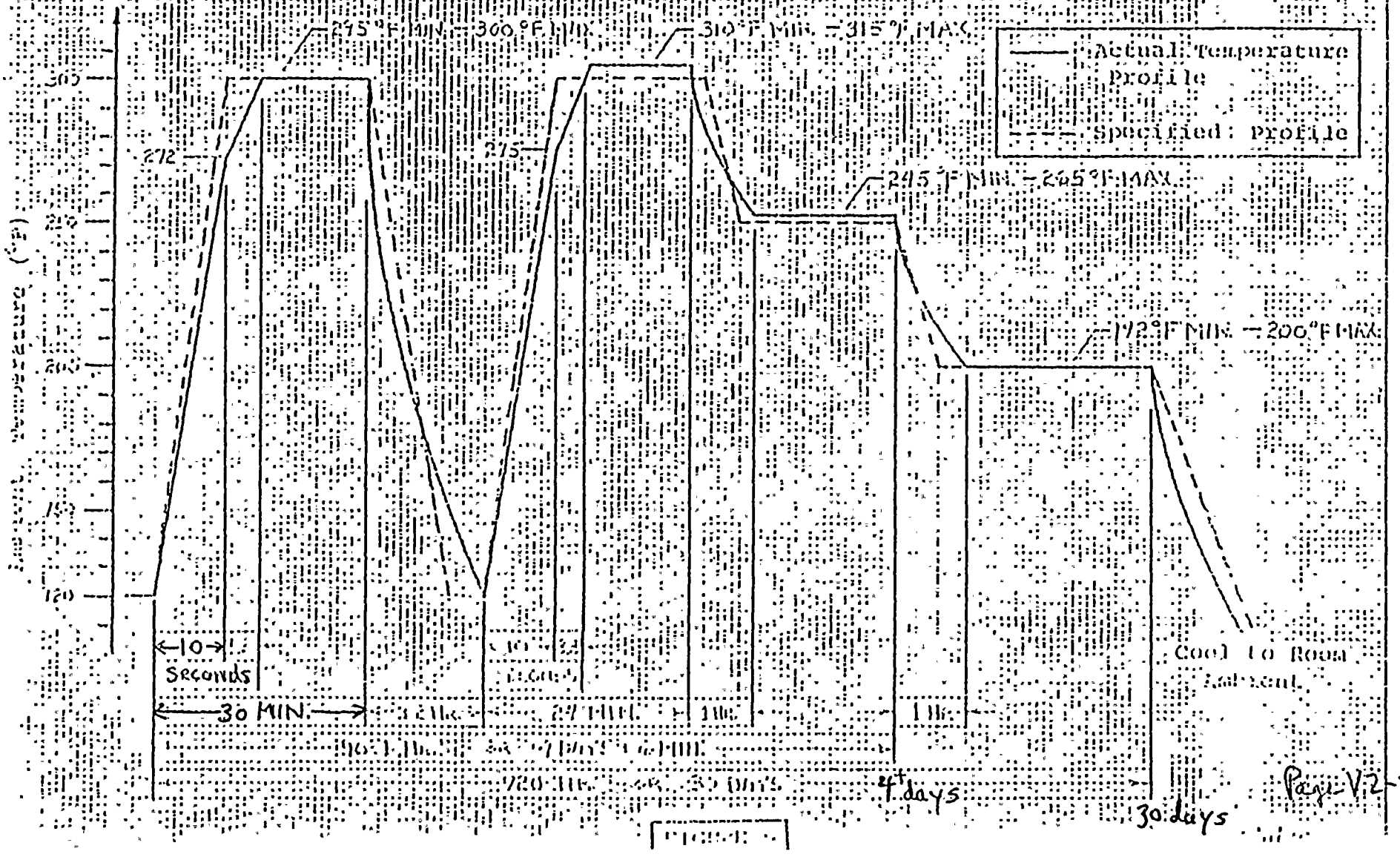


FIGURE 2

Page V2-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Air Recirculation	Operating Time	1/2 hr	16 DAYS	FSAR Table 7.5-2	24	Seq.	
PLANT ID NO: VMO-101,102	Temperature (°F)	Fig 13.13-1	250	FSAR APP N	24	SEQ.	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	FIG 2 Fig 1	39.7	AEW 6504	24	SEQ.	
MODEL NUMBER: SMB-000	Relative Humidity (%)	100	100		24	SEQ.	
FUNCTION: CT air recirc. backdraft dampers ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	See Note A	NA	See Note B	NA	NA	
SERVICE: CT air recirc. backdraft dampers	Radiation (10^6 rads)	Fig 4 2.2	224	WCAP 7410-L Vol 1	24	SEQ.	
LOCATION: Inside Containment	Aging (years)		165°F/200hrs Yes		24	SEQ.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:
24. Limitorque Corp. Test Report #600461

Notes:
A) Valve location is not subject to direct caustic spray impingement.
B) mech. installation drawings 1-5427

TEMPERATURE PROFILE

from Ref. 24

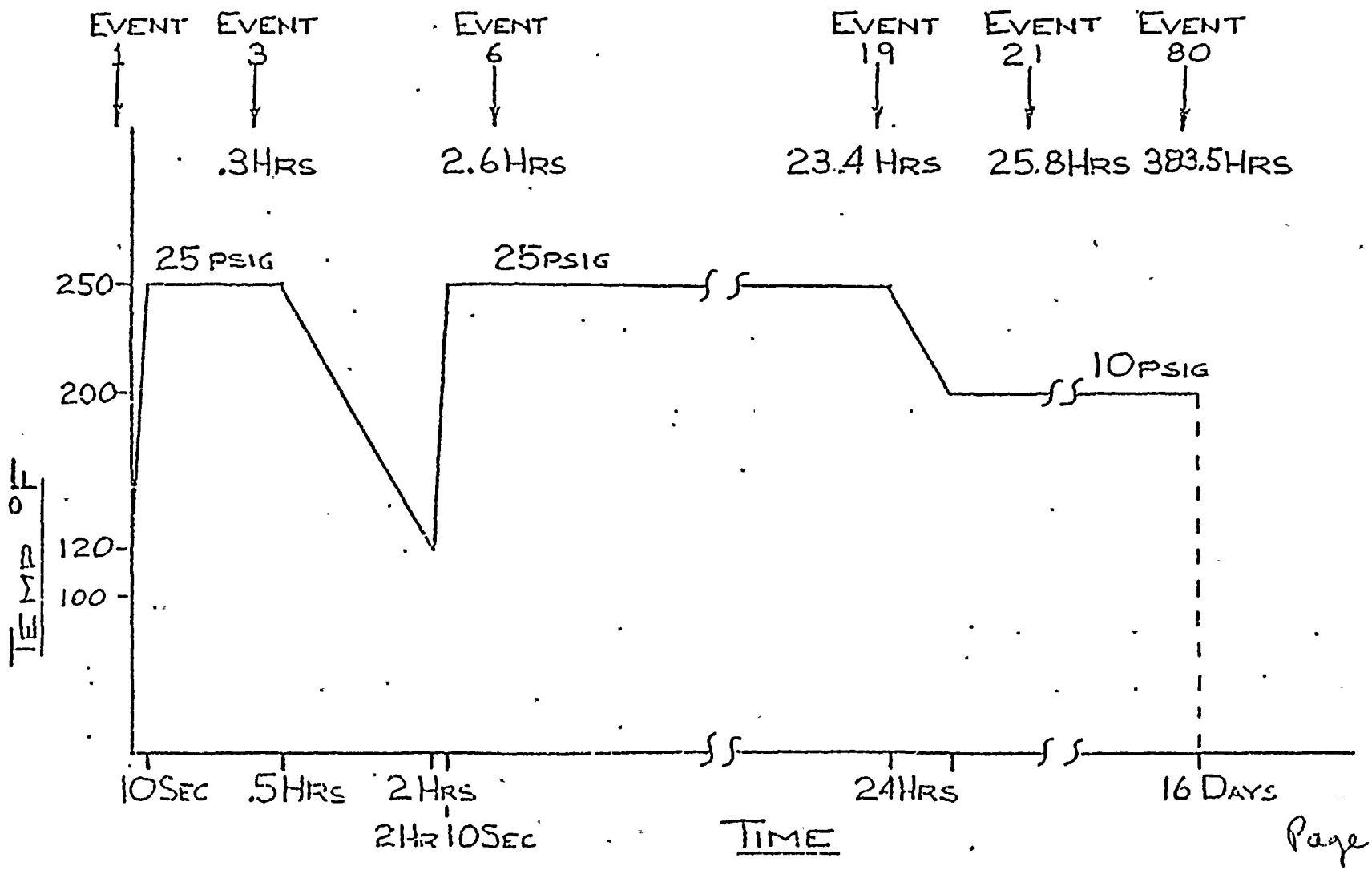


FIGURE 1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS	Operating Time	½ hr	6 DAYS	Table 7.5-2	22	Simul.	
PLANT ID NO: QCM-250	Temperature (°F)	Fig 13.13-1	330	FSAR App Q	22	SIMUL.	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	FIG 2 Fig 1	104.7	AEW 650Y	22	SIMUL.	
MODEL NUMBER: SMB-00	Relative Humidity (%)	100	100		22	SIMUL.	
FUNCTION: RCP seal water CT Isolation ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2600 ppmB	T.S. 3/4.5 3/4.5.6	22	SIMUL.	
SERVICE: RCP seal water discharge	Radiation (10^6 rads)	SEE NOTE B BELOW				NA	
LOCATION: Inside Containment	Aging (years)		180°C/100hrs Yes		22	Simul.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence	See Note A	NA		NA	NA	

*Documentation References:

22. Limitorque Corp Test Report # 600198

Notes:

A) Communication of 9-29-75 from J. Tillinghast (AEP) to K. Kniel (NRC). See also question 40.10, App. Q, FSAR.

B) This valve closes within 15 sec. (Tech. Spec. Table 3.6-1) of receiving a Phase A CT isolation signal, therefore is not exposed to a radiation dose significantly beyond its normal environment and page V5-1 does not require radiation qualification.

from Ref. 22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.67.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 day	16 DAYS	Note A below	24	Seq	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	250	FSAR App O	24	SEQ.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	Fig 0-27	39.7	FSAR App O	24	SEQ.	
MODEL NUMBER: Various	Relative Humidity (%)	NA	100	NA	24	SEQ.	
FUNCTION: Various ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: Various	Radiation (10^6 rads)	4.1	224	Note B below	24	SEQ.	
LOCATION: Outside Containment	Aging (years)		165°F/200hrs Yes		24	SEQ.	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. Limitorque Corp Test Report #600461

Notes:

A) letters J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

B) AEPSC NSRL calculation DC-N-6420-2.

TEMPERATURE PROFILE

from Ref. 24

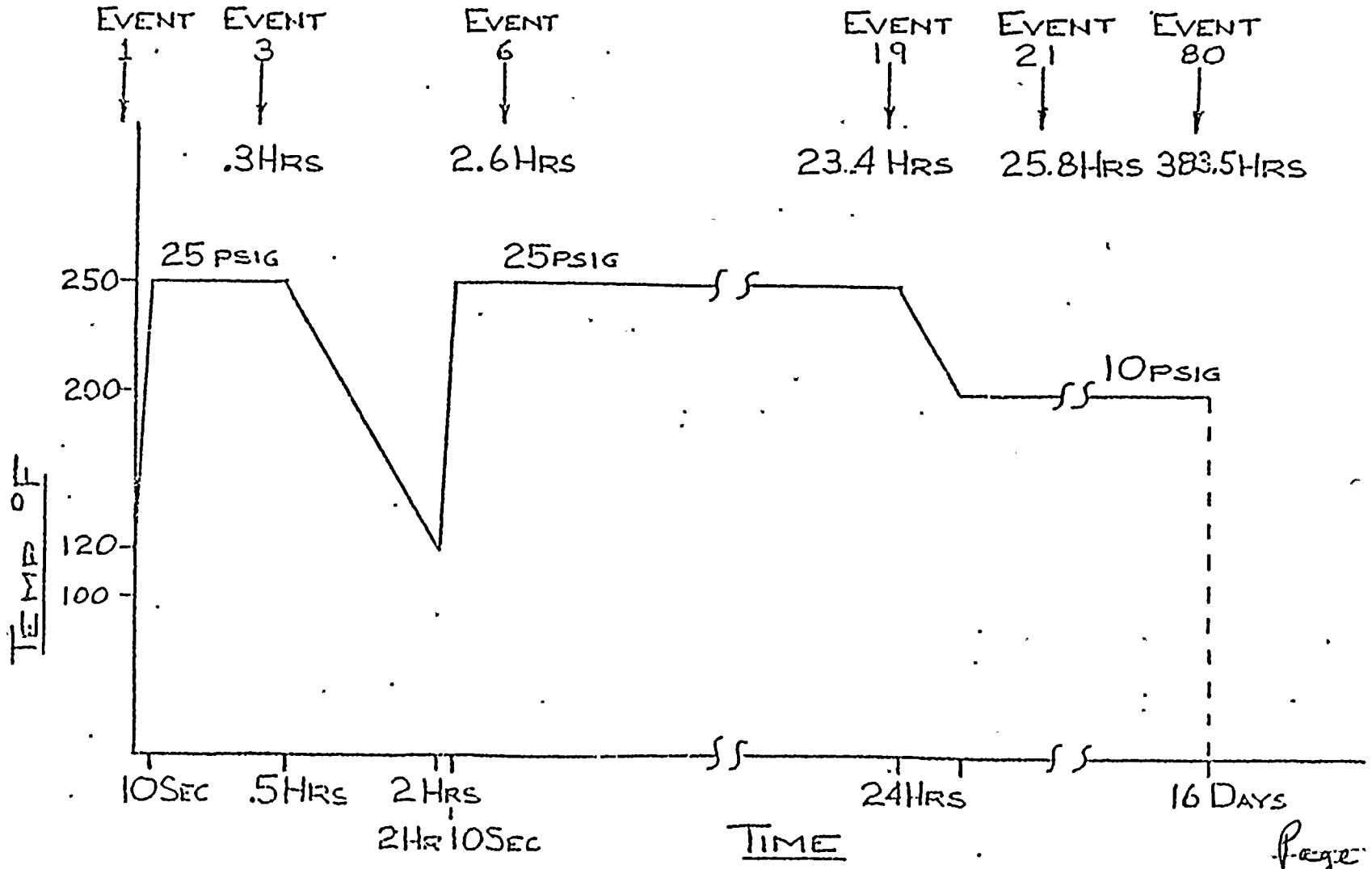


FIGURE 1

Page V6-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 day	6 DAYS	Note A	23	Sep	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	340	$F_{S_{A_R}}$	23	SEP.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	Fig 0-27	119.7	$F_{S_{A_R}}$	23	SEP.	
MODEL NUMBER: Various	Relative Humidity (%)	NA	100		23	SEP.	
FUNCTION: Various ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	2600 ppmB	NA	22	Simul.	
SERVICE: Various	Radiation (10^6 rads)	4.1	204	AEPSC NS&L calc. DC-N-6420-2	23	Sep.	
LOCATION: Outside Containment	Aging (years)		180°C/100hrs Yes		23	Sep.	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	Yes	NA	23	Sep.	

*Documentation References:

22. Limitorque Corp Test Report #600198
23. Limitorque Corp Test Report # 600376A

Notes:

A) letters J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

Ref. 23

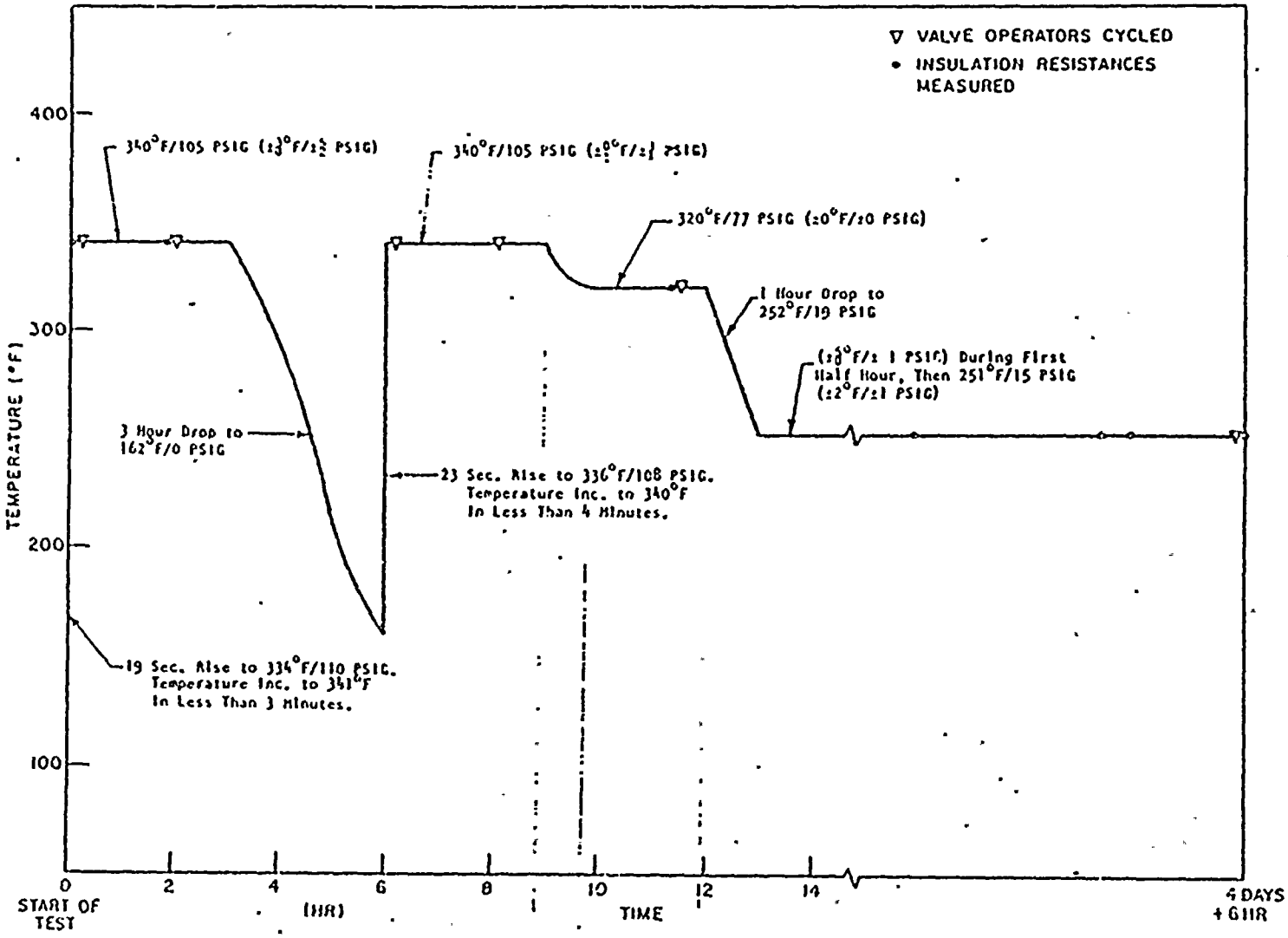


Figure 3. Actual Steam Exposure Profile

Page V7-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 day	28 hr	Note A Letters	44	SEQ	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	212	FSAR App R	44	SEQ.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	Fig 0-27	14.7	FSAR App O	44	SEQ	
MODEL NUMBER: Various	Relative Humidity (%)	NA	100		44	SEQ.	
FUNCTION: Various	Chemical Spray	NA	NA	NA	NA	NA	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	4.1	See Valve Motor Operator Note 1	AEPSC NSL CALC DC-81-6420-2			See Valve Motor Operators Note 1
SERVICE: Various	Aging (years)						
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

44. FIRL Test Report F-C3271

Notes:

A) Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

C.44. EXCERPT FROM FIRL F-C 2935

RADIATION : 10 MRAD @ .45 MRAD/HR
100% R.H.
151°F, , 6hr preconditioning
340°F, 100psig, 2hr
160°F, , 20hr

Type of Test: Sequential

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Pressurizer	Operating Time	see General Note 4	16 DAYS		24	Seq.	
PLANT ID NO: NMO-151, 152, 153	Temperature (°F)	FIG 022.9-1,-2	250	FSAR APP Q	24	Seq.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	FIG.2 FIG 1	39.7	AEW 6504	24	Seq.	
MODEL NUMBER: SMB-00	Relative Humidity (%)	100	100		24	Seq.	
FUNCTION: PZR PORV Block Valves ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	See Note A.	NA	see Note B	NA	NA	
SERVICE: PZR relief line	Radiation (10^6 rads)	<150	224	WCAP 7410-L Vol 1	24	Seq.	
LOCATION: IN Containment	Aging (years)		165°F/200hrs Yes		24	Seq.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. Limitorque Corp Test Report #600461

Notes:

A) Valve Location is not subjected to Direct Caustic Spray impingement.

B) Mech. Drawing Ref. 1-5435, 1-5435A, 1-5436
installation drawing.

TEMPERATURE PROFILE

from Ref. 24

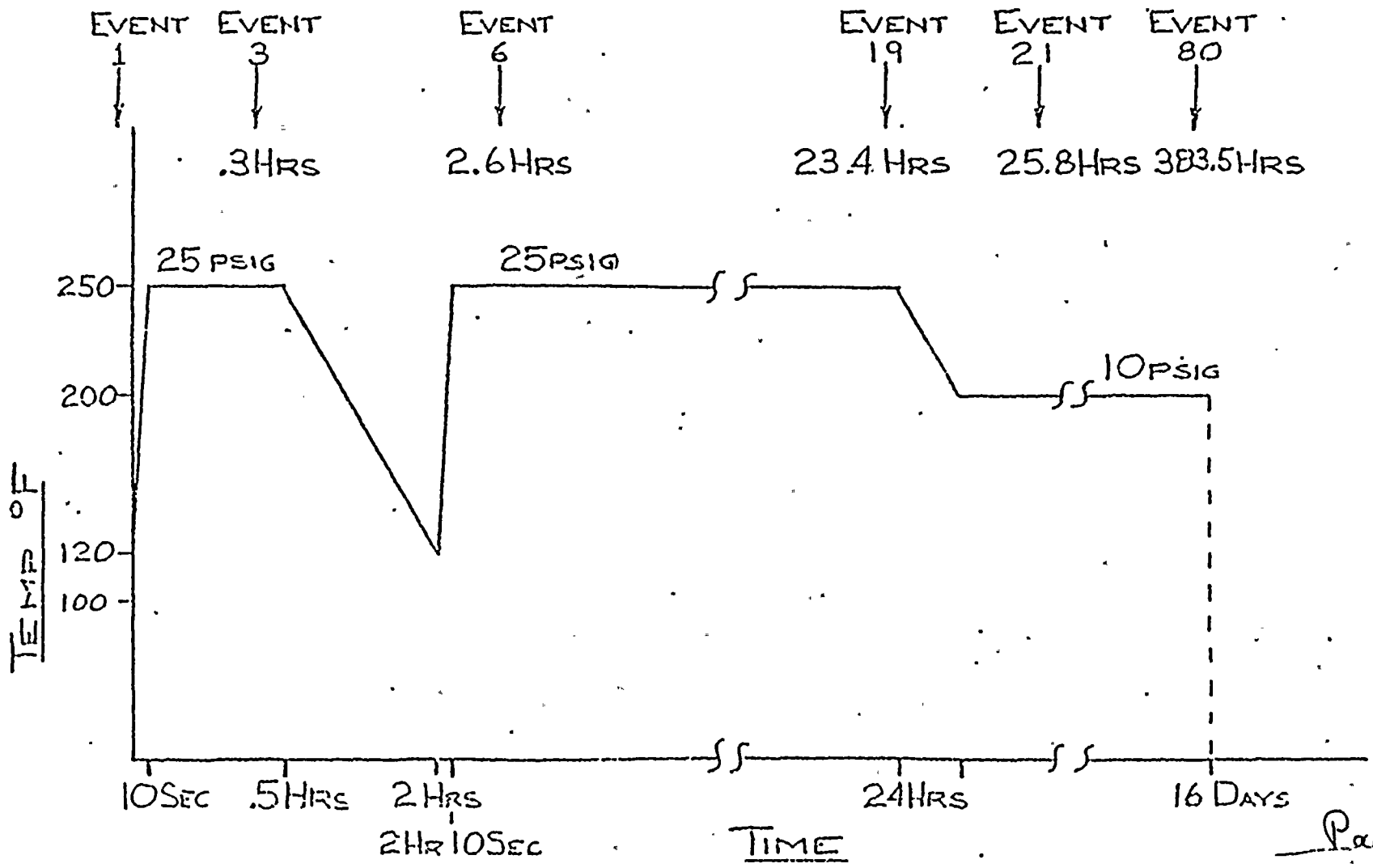


FIGURE 1

Page V9-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 1 DOCKET NO. 50-315 LICENSE NO. DPR-58

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Residual Heat Removal	Operating Time	1 day	6 DAYS	Note A below	22	Simul.	
PLANT ID NO: ICM-305, 306	Temperature (°F)	Fig 022.4-1,-2	330	FSAR App Q	22	Simul.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	Fig 2 Fig 1	104.7	Appx 6504	22	Simul.	
MODEL NUMBER: SMB-2	Relative Humidity (%)	100	100		22	Simul.	
FUNCTION: Long term post accident cooling ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	2600 ppmB	INSIDE CT - EXTENSIVE	22	Simul.	
SERVICE: RHR suction from CT sump	Radiation (10^6 rads)	<4.6	See note B.	AEPSC NSSL calc. DC-N-6420-2	See note B		OPEN (Note B) below
LOCATION: Inside Containment Ext.	Aging (years)		180°C/100hrs Yes		22	Simul.	
FLOOD LEVEL ELEV: 618' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

22. Limitorque Corp Test Report #600198.

Notes:

A) letters J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

B) These are Westinghouse supplied valves, insulation class H, specified for nuclear service inside CT. Limit switch material for these valves is white melamine (radiation resistant material). We are continuing to seek information.

Ref. 22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.67.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz

ATTACHMENT 6 TO AEP:NRC:00356A

RESPONSE TO IE BULLETIN 79-01B ACTION ITEMS 2-5

ENVIRONMENTAL EQUIPMENT QUALIFICATION CHARTS FOR UNIT 2

DONALD C. COOK NUCLEAR PLANT

ATTACHMENT 6 TO AEP:NRC:00356A

RESPONSE TO IE BULLETIN 79-01B ACTION ITEMS 2-5

ENVIRONMENTAL EQUIPMENT QUALIFICATION CHARTS FOR UNIT 2

DONALD C. COOK NUCLEAR PLANT

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	Table 7.5-2 FSAR	8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	345	FSAR APP Q	8	Seq.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	Fig 1 Fig 2	121.7	AEW 6504	8	Seq.	
MANUFACTURER: CONTINENTAL WIRE AND CABLE CO.							
MODEL NUMBER: Item # 3119	Relative Humidity (%)	100	100		8	Seq.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	Fig. 4 150	150	WCAP 7410-L VOL 1	8	Seq.	
LOCATION: IN AND OUT of CONTAINMENT	Aging (years)		See Note 2				
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Flood Dep. Tubes				

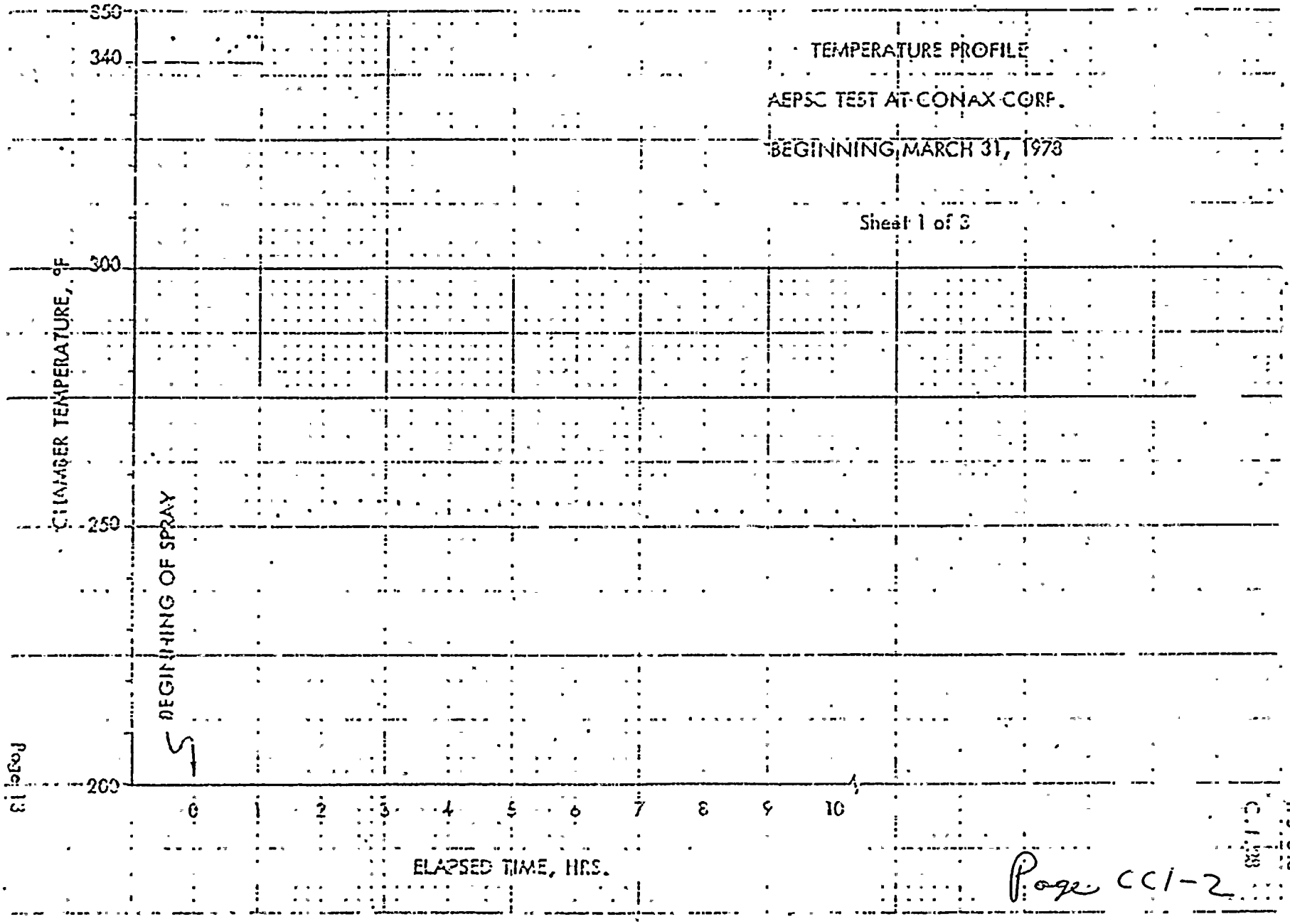
*Documentation References:

8. CONAX CORP. Test Report IPS-348

Notes:

1) containment temp 2,78 hrs after accident = 185°F (Fig 3, App N, FSAR). Cable temp rating 194°F.

2) XLPE/ASD. Braid 40 yrs as per Table C-1 App C of Enclosure 1 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
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ELAPSED TIME, HRS.

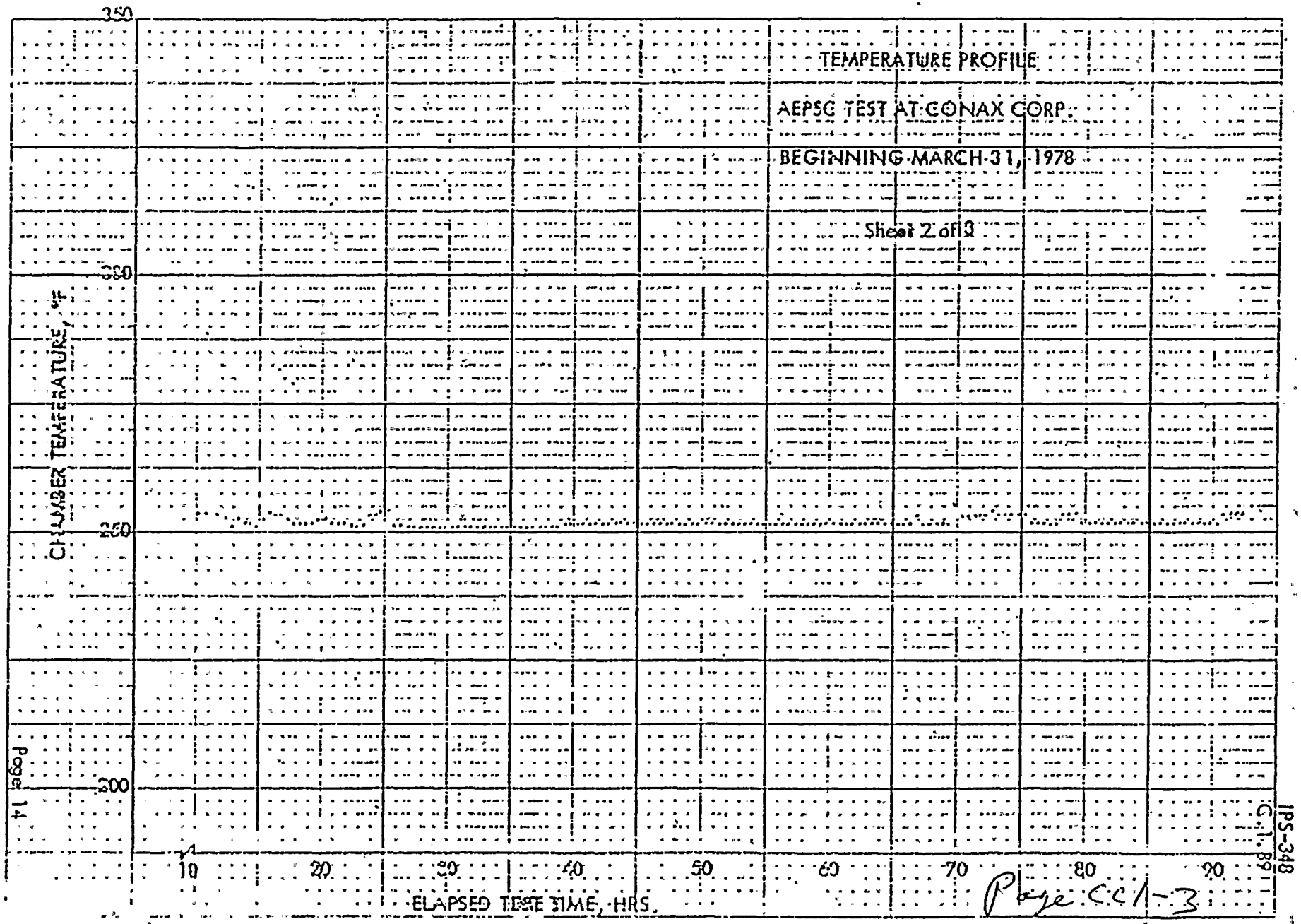
Page CC1-2

TEMPERATURE PROFILE

AEPSC TEST AT CONAX CORP.

BEGINNING MARCH 31, 1978

Sheet 2 of 3



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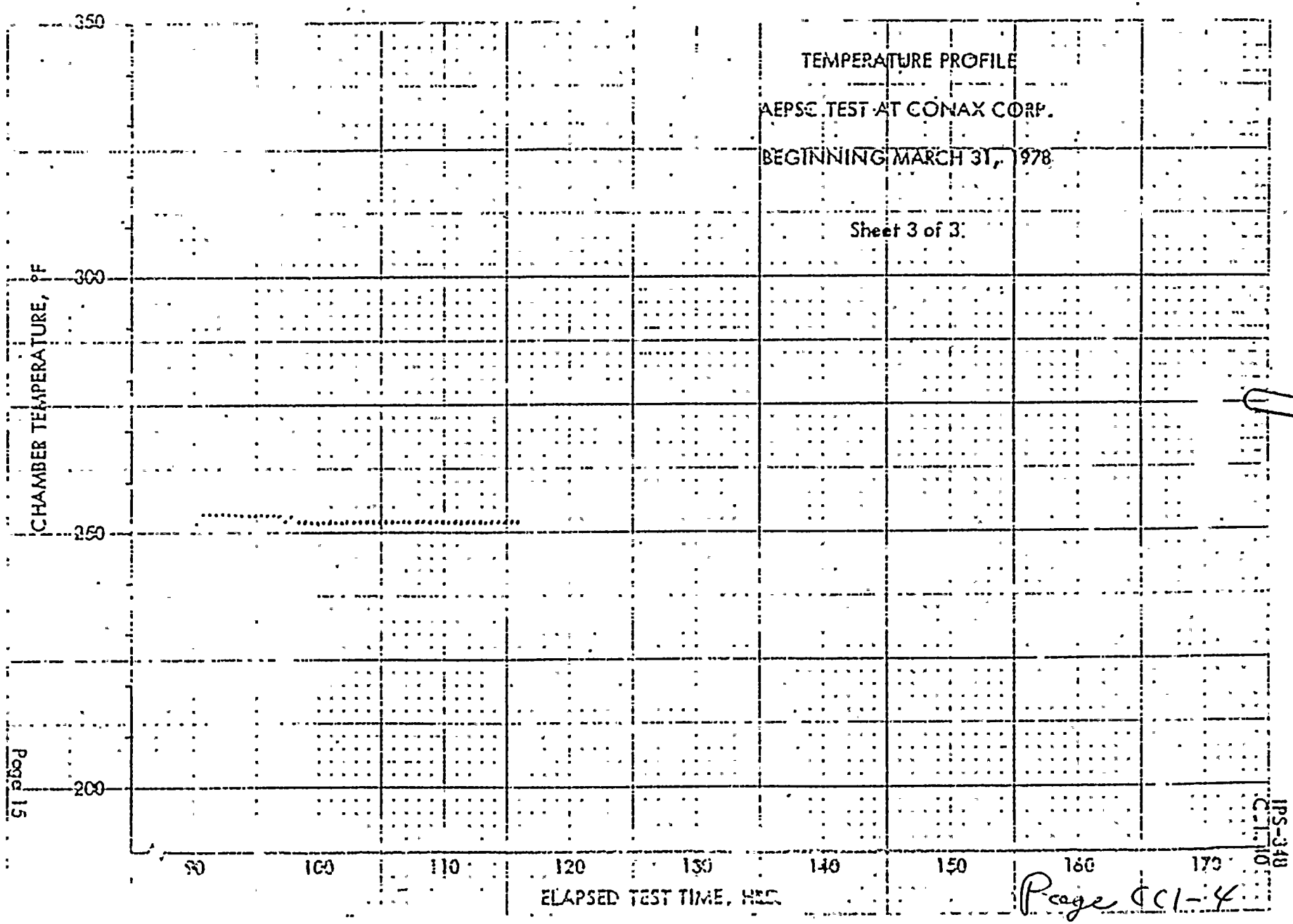


IPS-348
C-1-10

Page CC1-4

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	Table 7.5-2 FSAR	8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	345	FSAR App Q	8	Seq.	
COMPONENT: Control Cable	Pressure (PSIA)	Fig 1 Fig 2	121.7	AEW 6504	8	Seq.	
MANUFACTURER: Continental Wire + Cable Co.	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: Item # 3120	Chemical Spray	2000 ppm B	2500 ppm B	TS. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-0 Vol 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		FLOOD UP TUBES				
LOCATION: In and Out of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL. No							

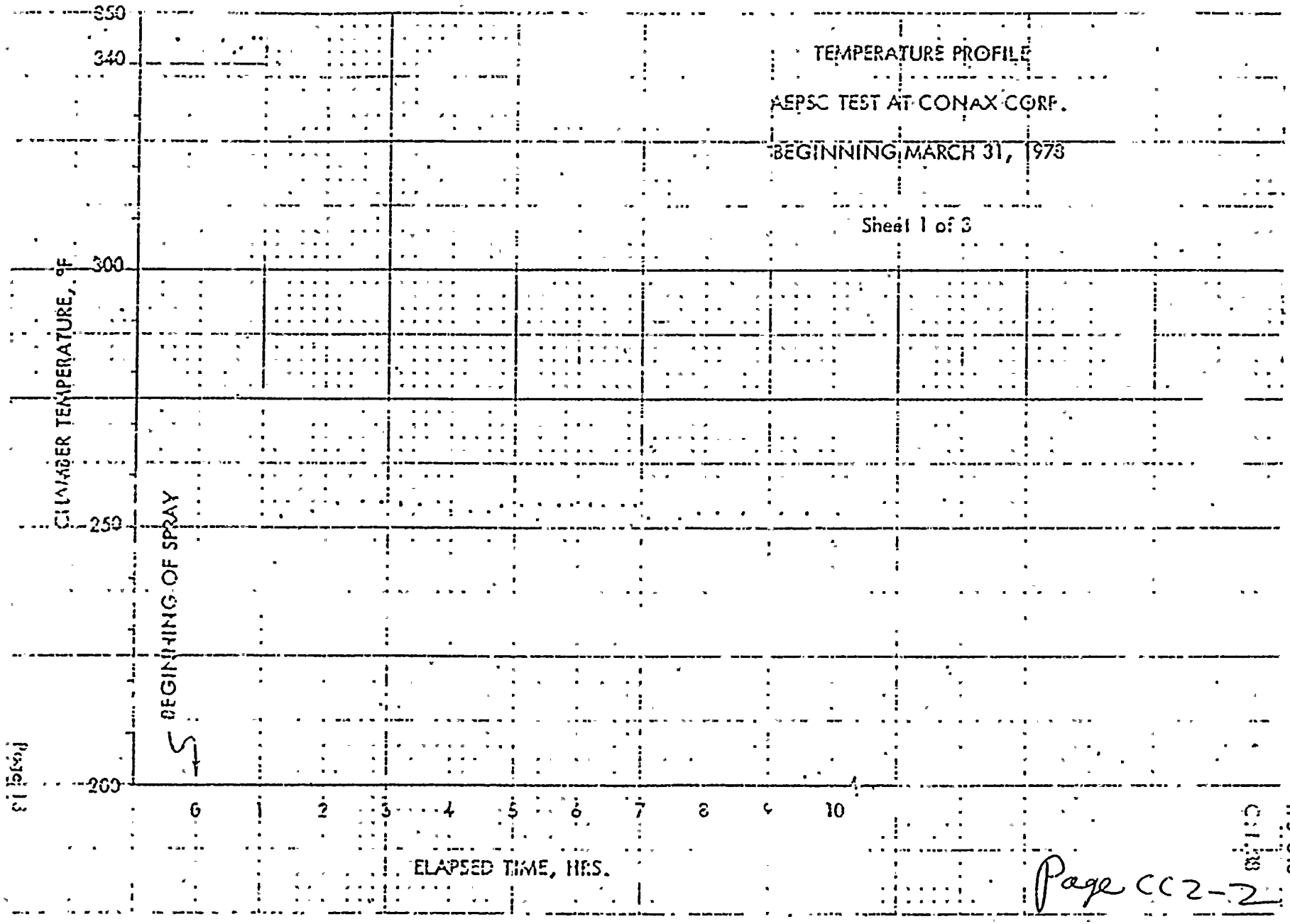
*Documentation References:

8. Conax Corp. Test Report IPS-348

Notes:

1) containment temp 2.78 hrs after accident 285°F (Fig 3, App N, FSAR) cable temp rating = 194°F

2) XLPE/ASB. Braid .40 yrs 00 per Table C-1 Opp C of Enclosure 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
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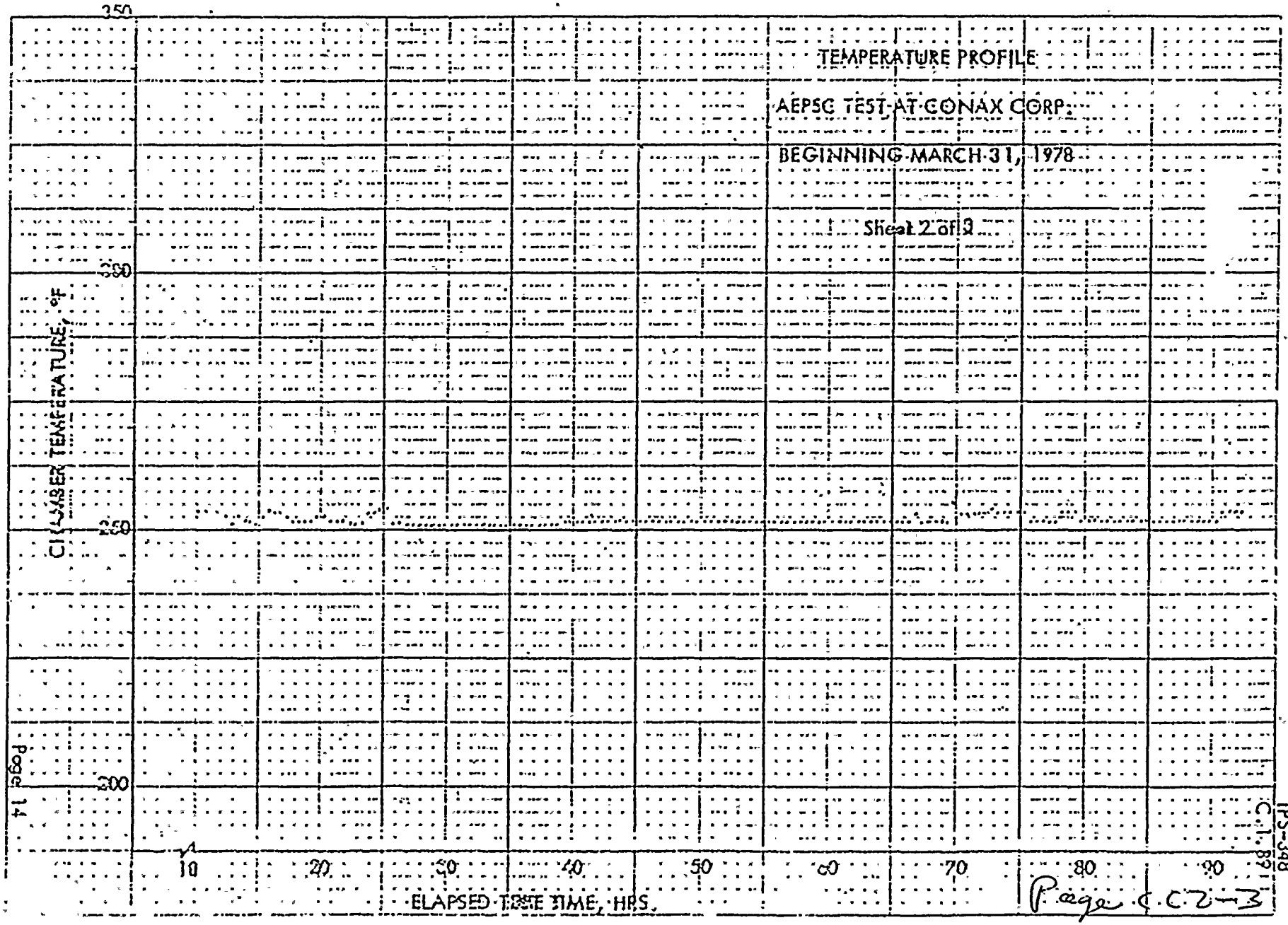
ELAPSED TIME, HRS.

Page CC2-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 9
CHAMBER TEMPERATURE, °F
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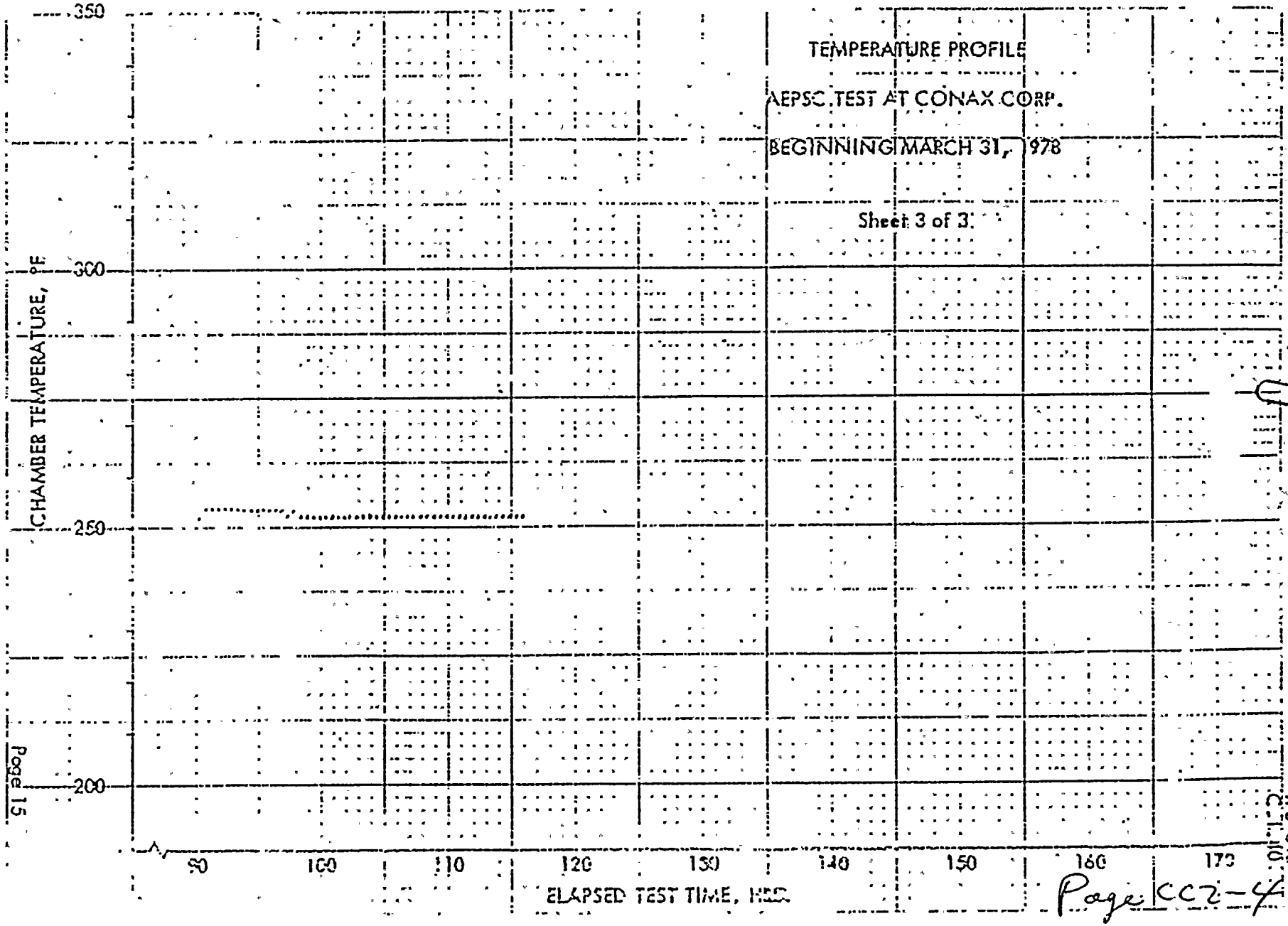
ELAPSED TEST TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
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300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	Table 7.5-2 FSAR	8	See	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	345	FSAR App Q	8	SEQ.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	FIG.1 FIG. 2	121.7	ACW 6504	8	SEQ.	
MANUFACTURER: GENERAL ELECTRIC	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: ITEM # 3120	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4. 150	150	WCAP 7410-L Vol 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		FLOODED Tubes				
LOCATION: IN AND OUT of CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

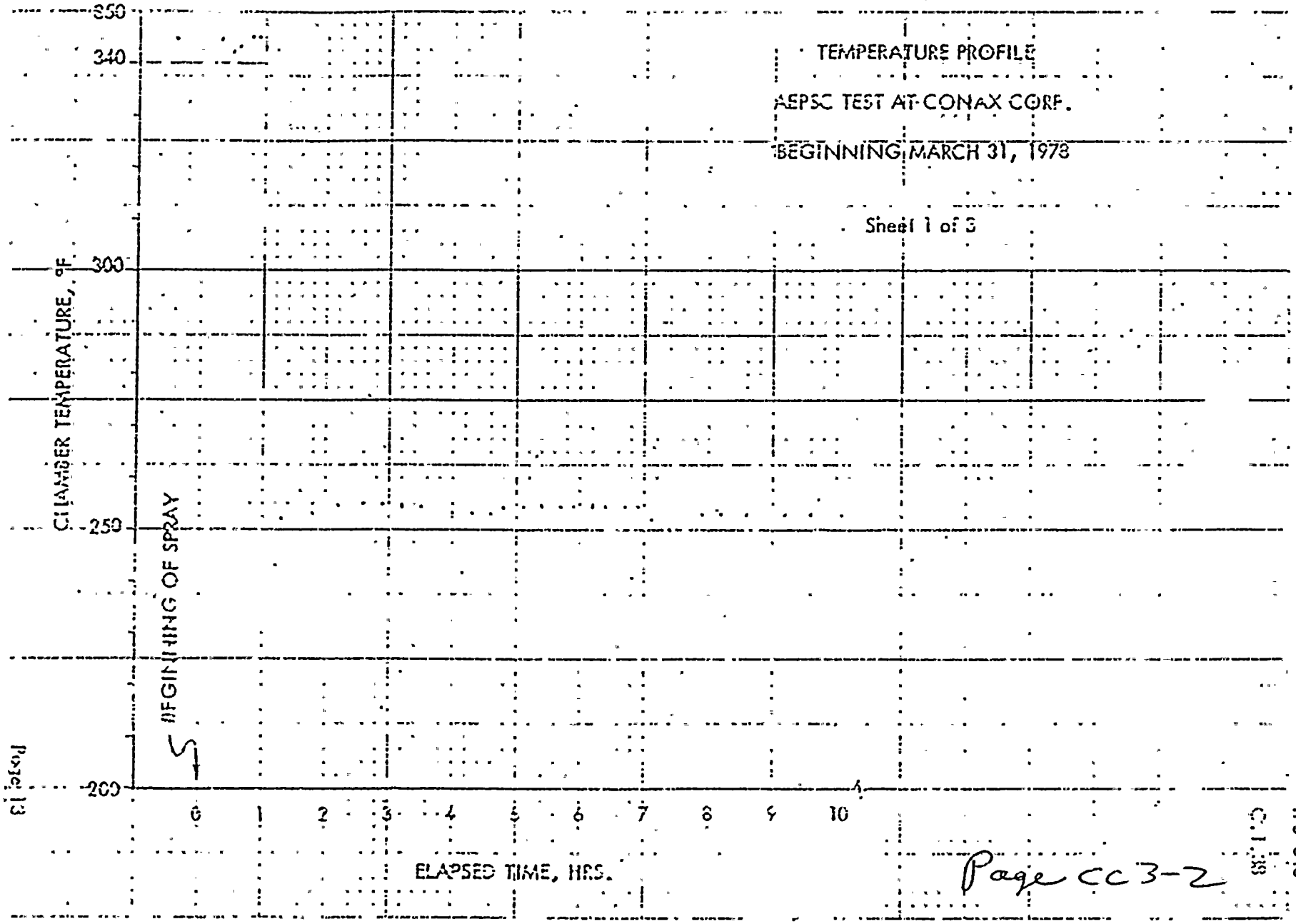
*Documentation References:

8. Coax Corp Test Report IPS-348

Notes:

1) containment temp 2.77 hrs after accident = 185°F (Fig 3, App P, FSAR). cable temp rating = 194°F

2) XLPE/ASB. Brand 40 yrs as per Table C-1 App C of Encl. 4 to NRC IE Bulletin 79-01B.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AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
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BEGINNING OF SPRAY
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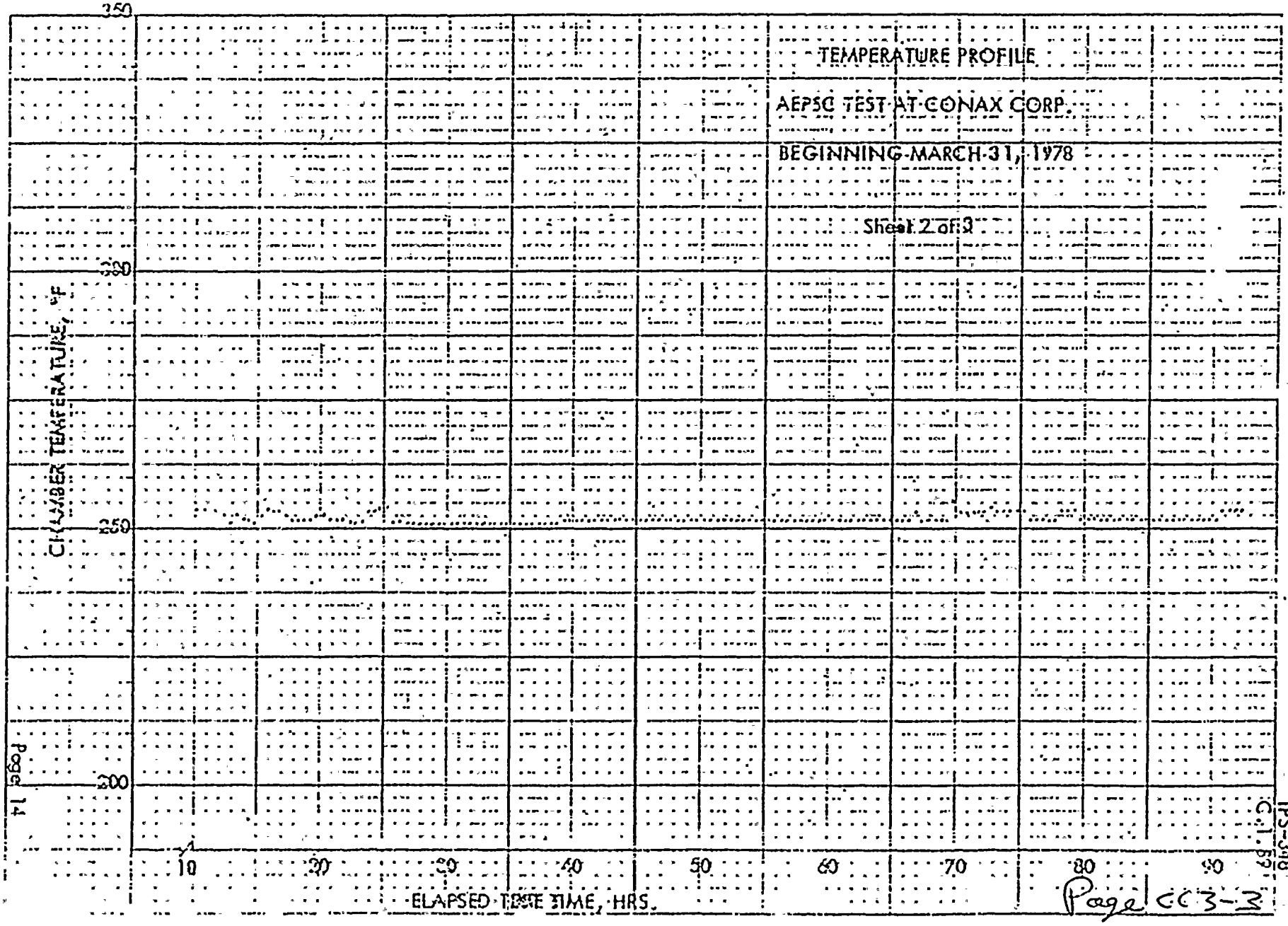
ELAPSED TIME, HRS.

Page CC3-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
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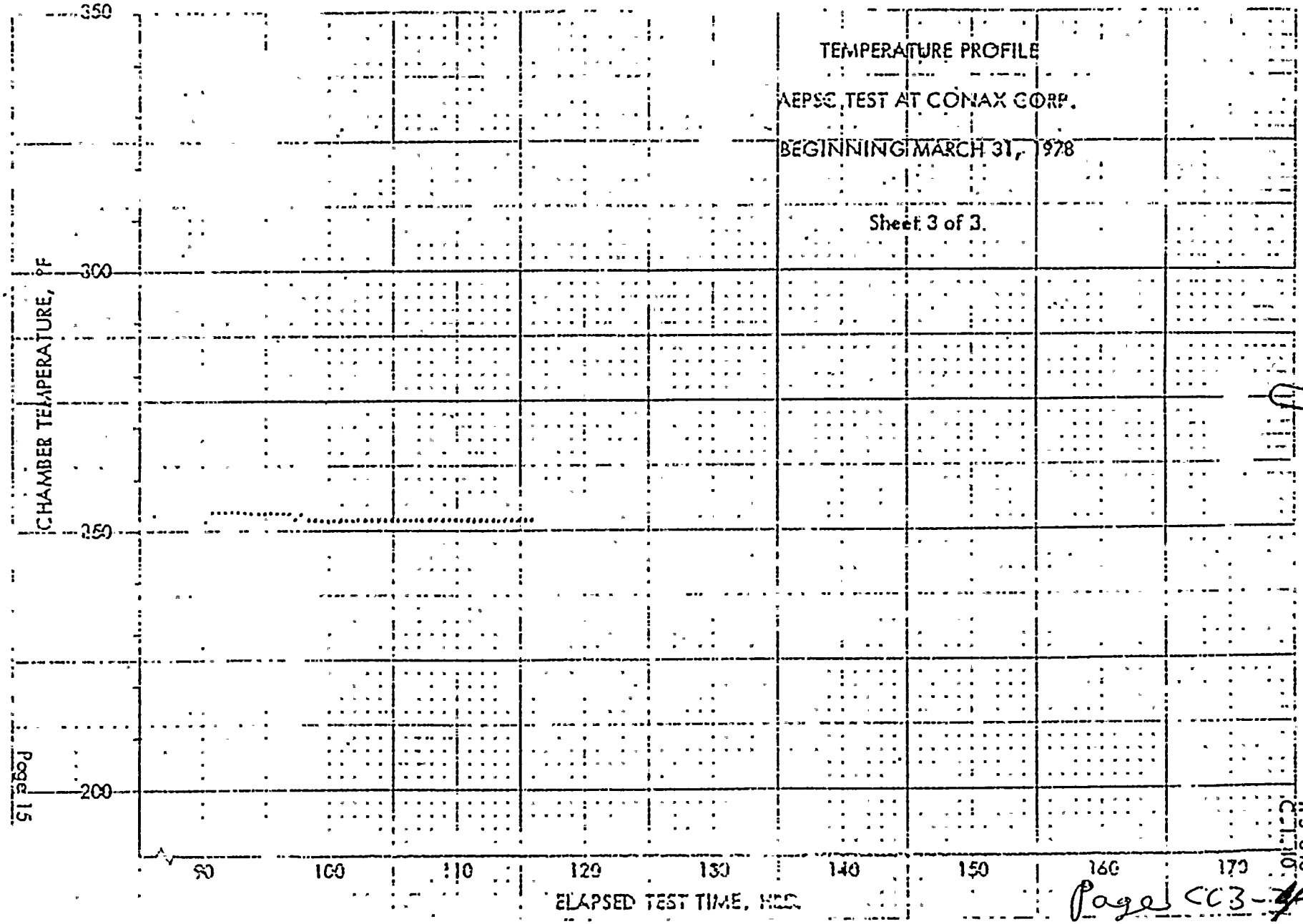
90
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3.
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	Table 7.5-2 FSAR	5	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	340	FSAR App Q	5	Simul.	
COMPONENT: Power Cable	Pressure (PSIA)	FIG 1 FIG. 2	119.7	AEW 6504	5	Simul.	
MANUFACTURER: Anaconda	Relative Humidity (%)	100	100		5	Simul.	
MODEL NUMBER: Item # 3120	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	5	Simul.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L VOL1	5	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		250°F/7DAYS Yes		5	Simul	
SERVICE: VARIOUS	Submergence		FLOODED Tubes				
LOCATION: IN AND OUT of CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

*Documentation References:

5. FIRL TEST REPORT F-C3341

Notes:

1) containment temp 2.77 hrs after accident = 185°F (Fig 3, App D, FSAR). cable Temp rating 194°F

5. Qualified by Franklin Institute Research Laboratory (FIRL) Test Report #F-C3341, Jan. 1973.

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.51 Mrads/hr, 200 Mrads
340°F, 105 psig for 3 hrs
320°F, 75 psig for 3 hrs
250°F, 15 psig for 4 days
210°F, 5 psig for 9 days

Chemical Spray: Solution of boric acid and Na OH , PH = 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	345	FSAR APP Q	8	Seq.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	FIG 1 FIG. 2	121.7	ACW 6504	8	Seq.	
MANUFACTURER: CONTINENTAL WIRE + CABLE CO.	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: Item # 3121	Chemical Spray	2000 ppm B	2500 ppm B	TIS 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	150	WCAP 7410-L VOL 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		FLOODED TUBES				
LOCATION: IN AND OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO							

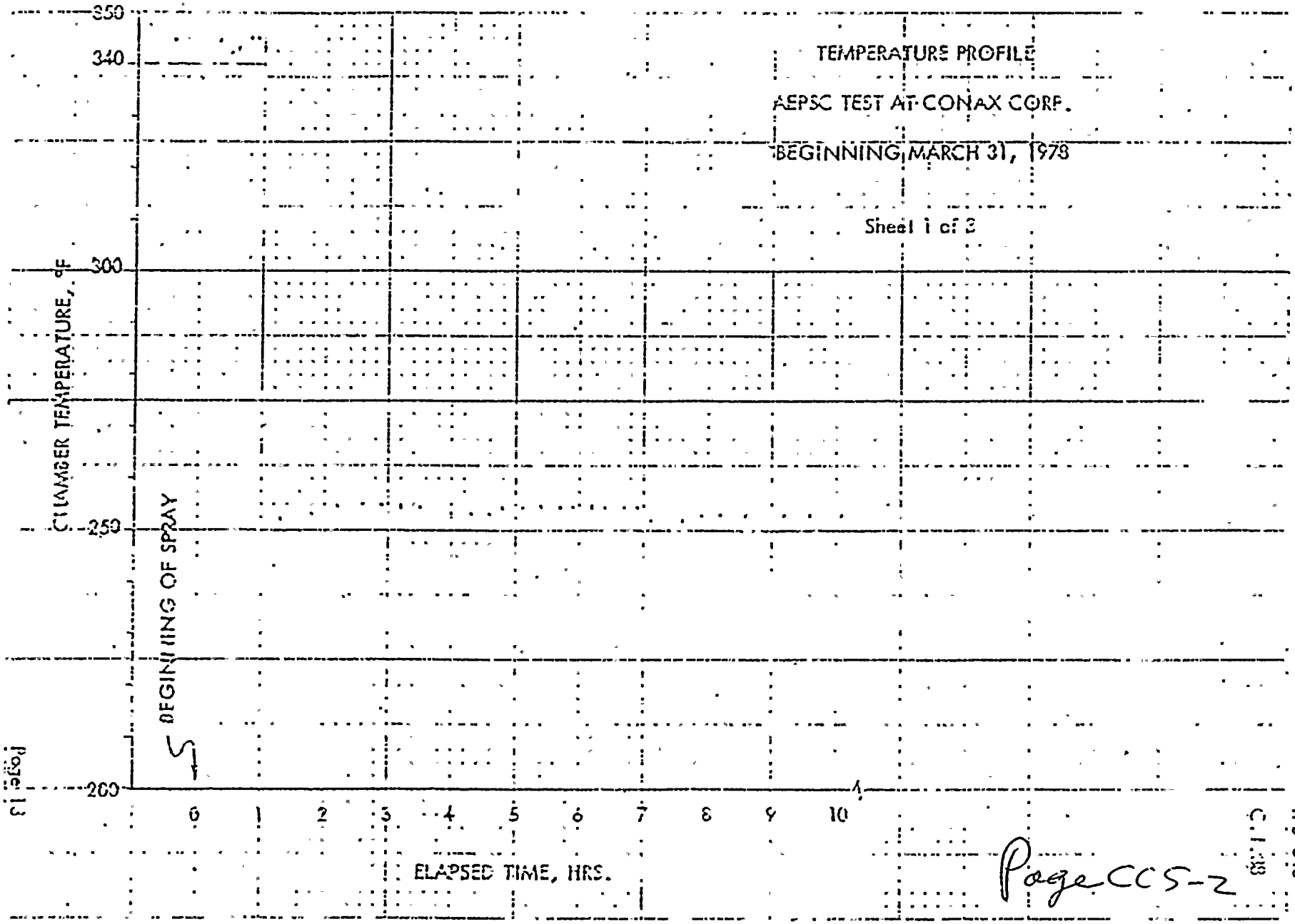
*Documentation References:

8. CONAX CORP. Test Report IPS-348

Notes:

1) Containment Temp 2.78 hrs after accident 185°F (Fig 3, App N, FSAR), cable temp rating 194°F

2) XLPE/ASB. Braid 40 yrs as per Table C-1 App C of Encl. 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
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BEGINNING OF SPRAY
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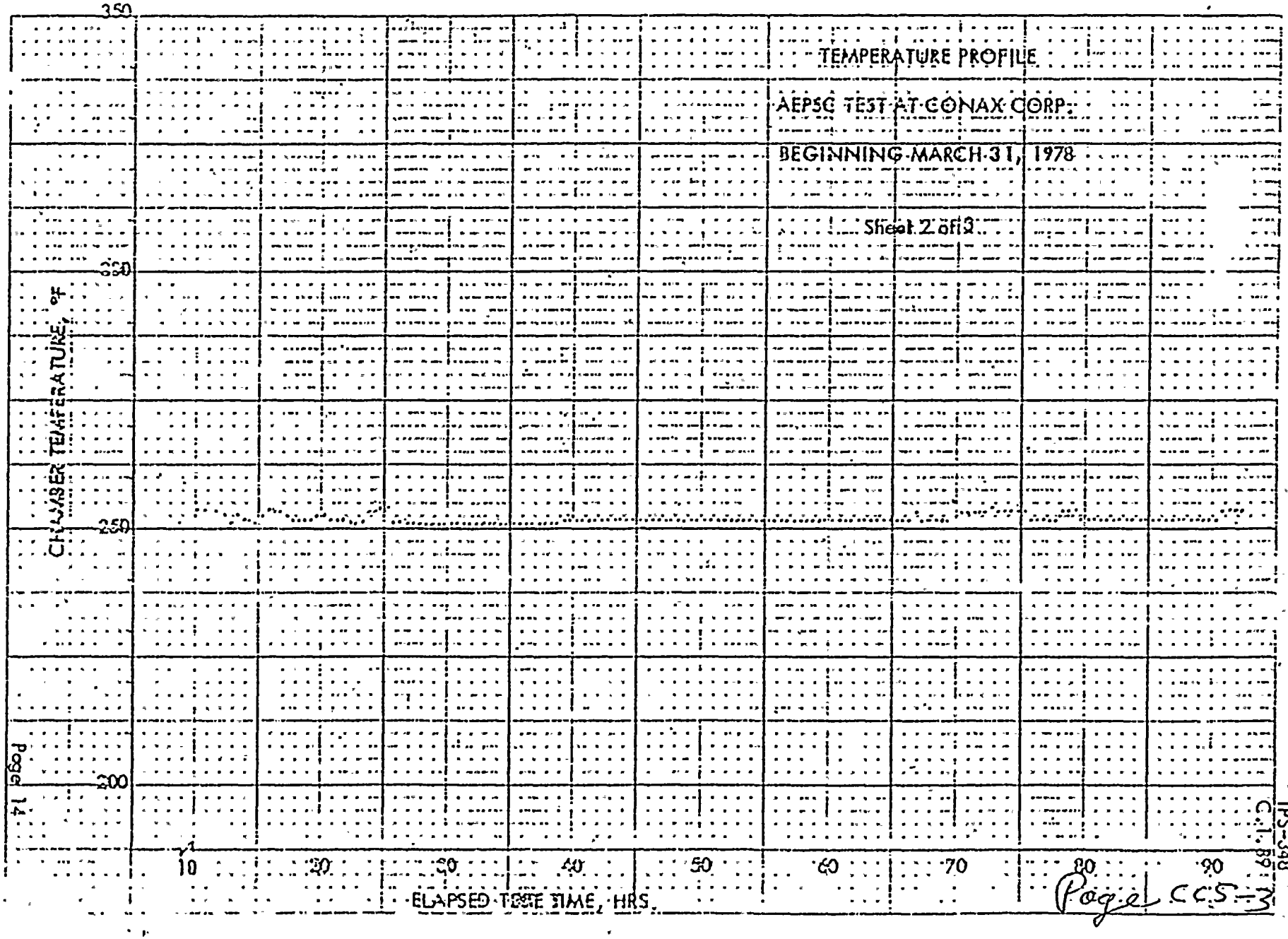
ELAPSED TIME, HRS.

Page CCS-2

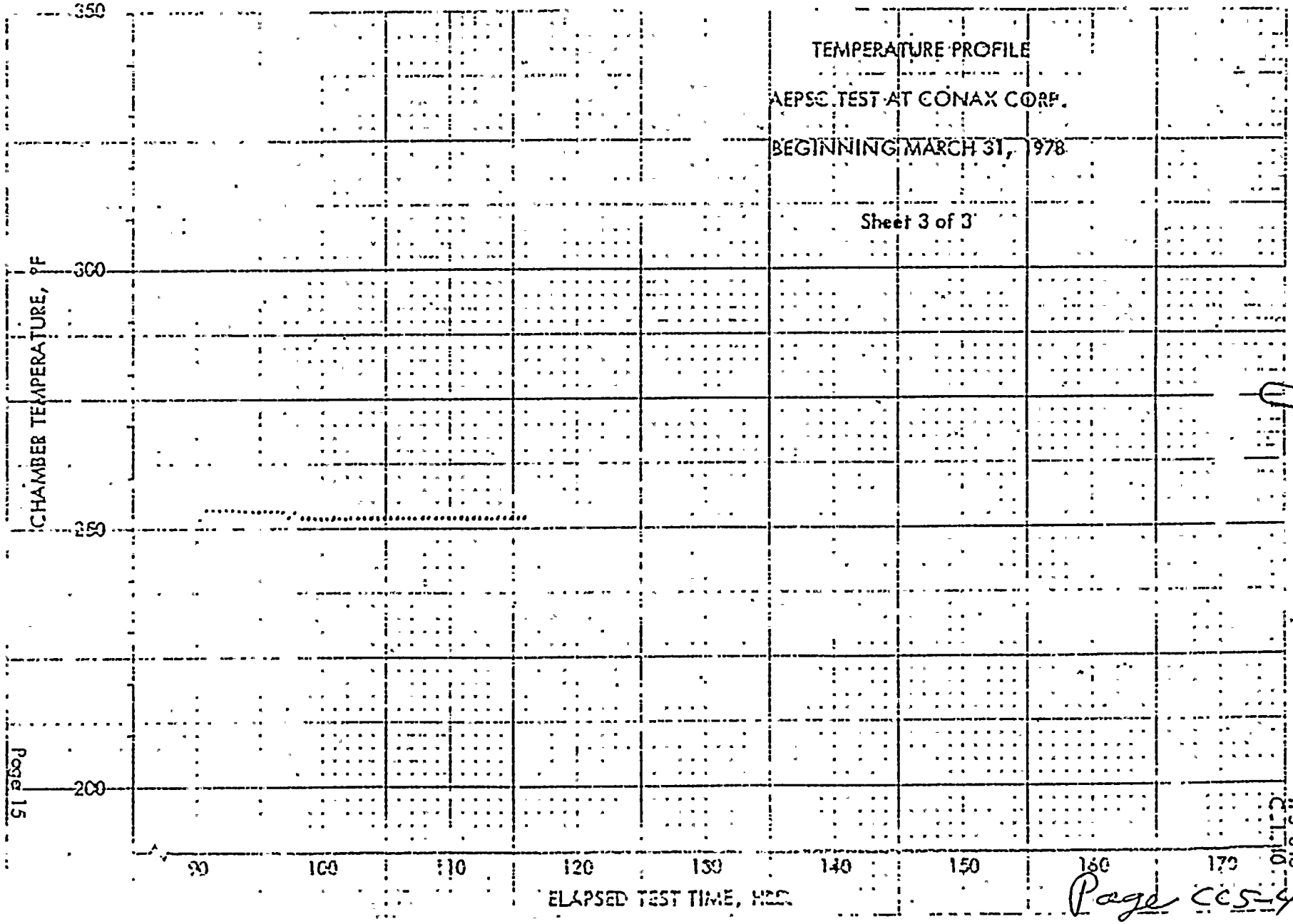

TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTE TIME, HRS.

TEMPERATURE PROFILE

AEPSC TEST AT CONAX CORP.

BEGINNING MARCH 31, 1978

Sheet 3 of 3



DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	8	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022-5-1-2 328.2 PEAK	345	FSAR APP Q	8	Seq.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	FIG. 1 FIG. 2	121.7	AEW 650 if	8	Seq.	
MANUFACTURER: GENERAL ELECTRIC	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: ITEM #3121	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	150	WCAP 7410-L Vol 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		FLOODUP TUBES				
LOCATION: IN AND OUT of CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

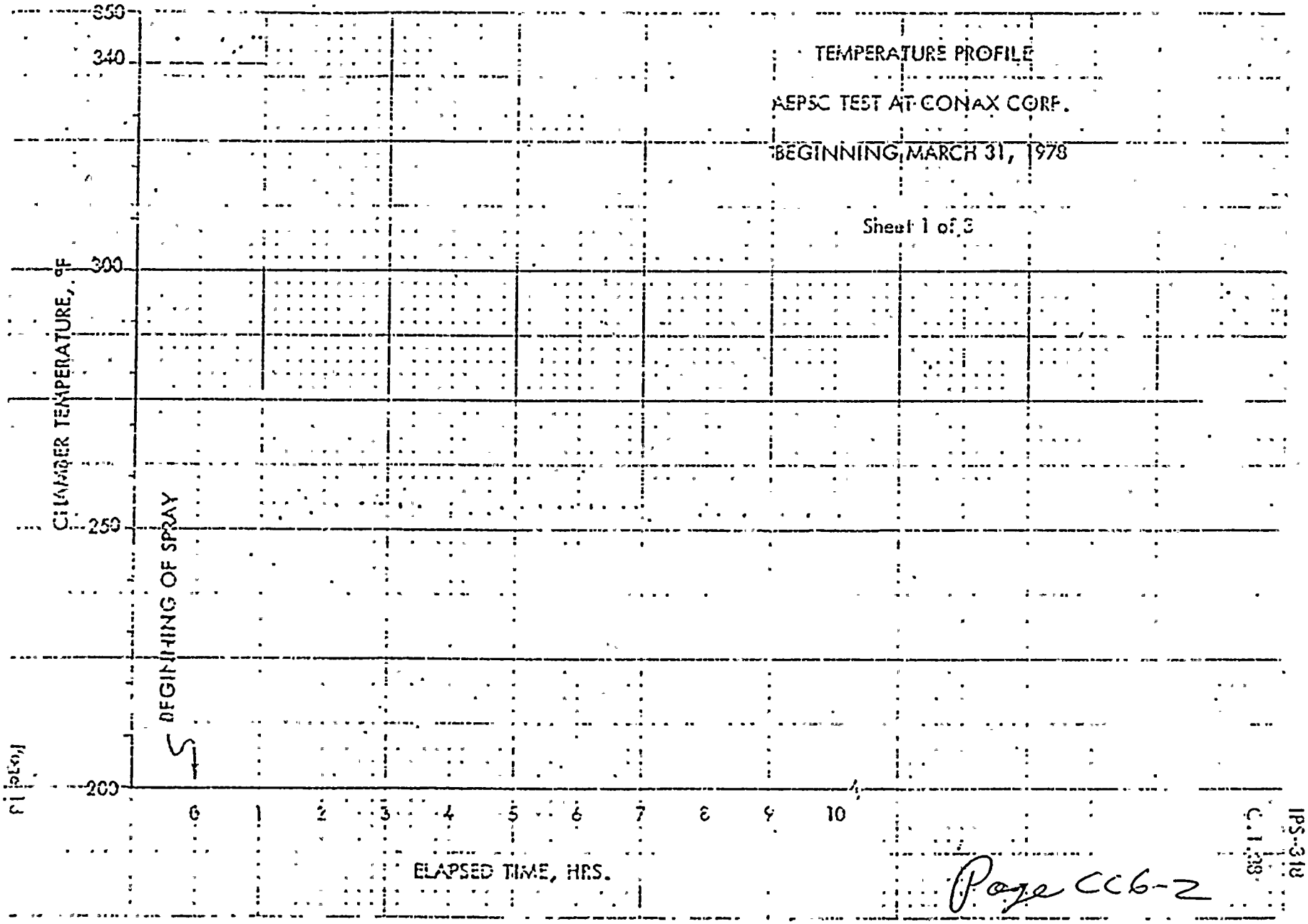
*Documentation References:

8. CONAX Corp Test Report IPS-348

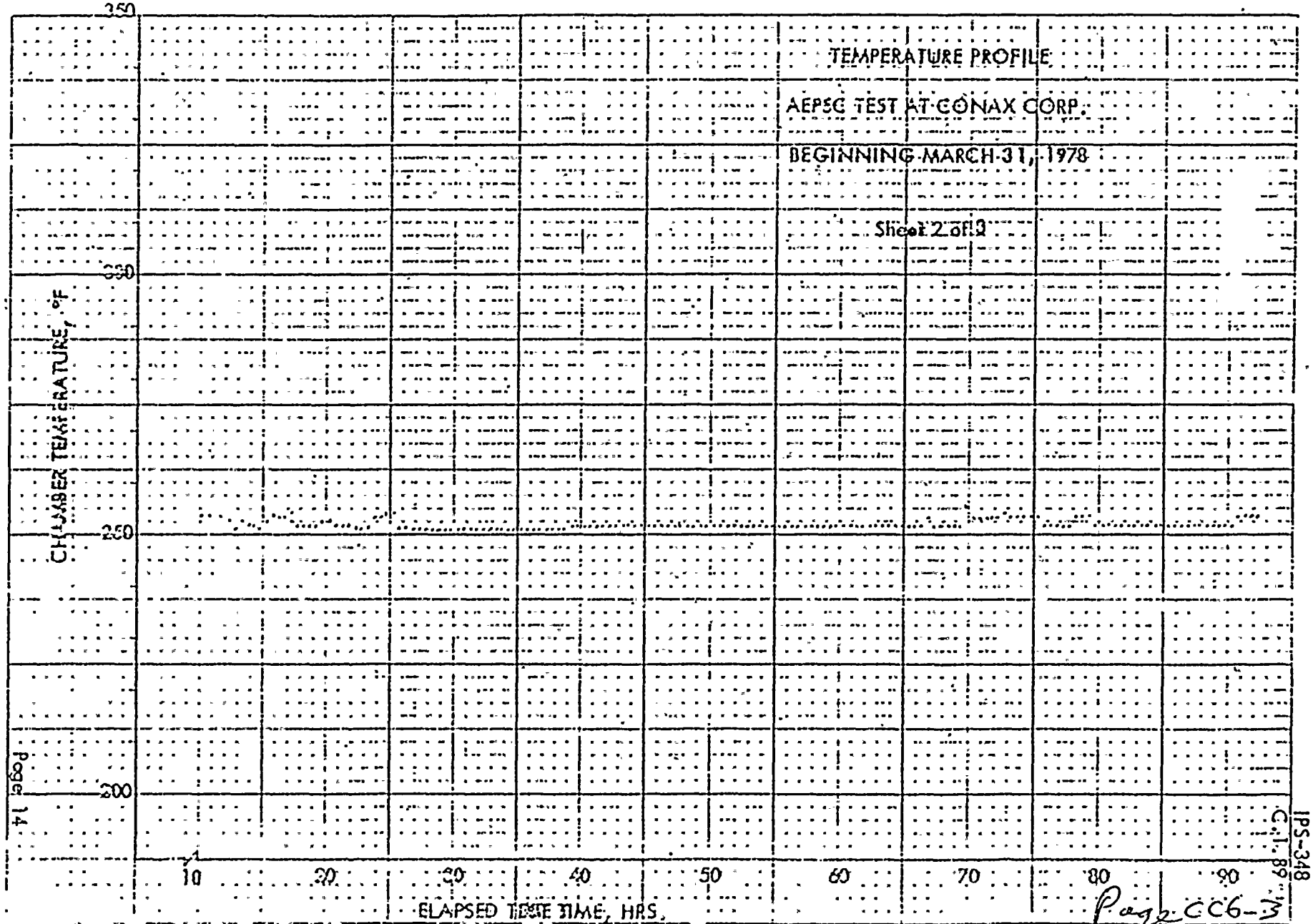
Notes:

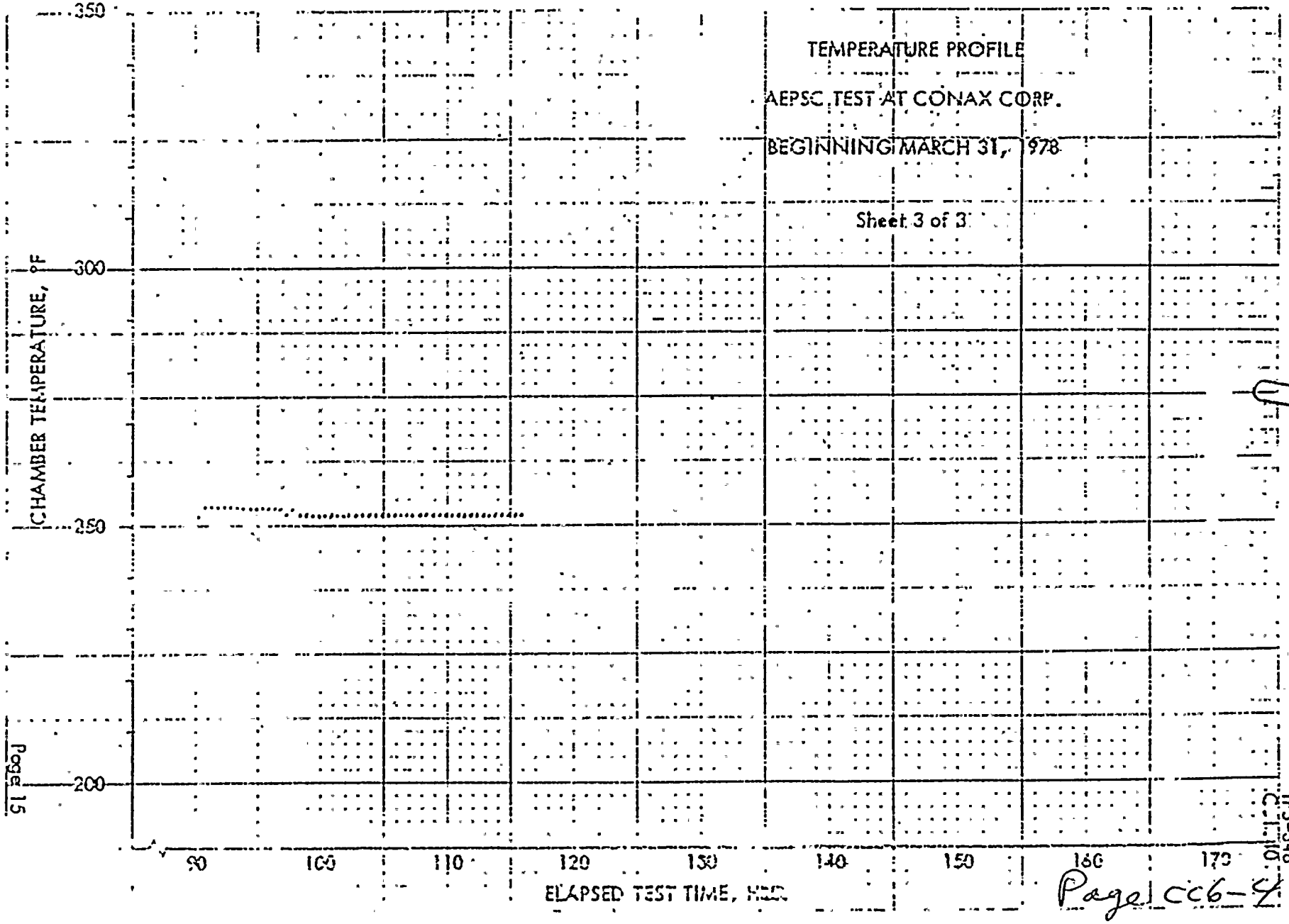
1) Containment temp 2.78 hrs after accident 185°F (Fig 3, App N, FSAR). cable Temp. rating 194.°F

2) XLPE/ASB. Braid 40 yrs 00 per Table C-1 App C of Encl. 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC6-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TEST TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0229-1,2 328.2 peak	345	FSAR APP Q	8	Seq.	
COMPONENT: CONTROL CABLE	Pressure (PSIA)	FIG. 1 FIG. 2	121.7	AEW 6507	8	Seq.	
MANUFACTURER: CONTINENTAL WIRE + CABLE CO	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: Item # 3122	Chemical Spray	2000 ppm B	2500 ppm B	T.S 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	150	WCAP 7410-L VOL 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		FLOODED Tubes				
LOCATION: IN AND OUT of CONTAINMENT							
FLOOD LEVEL ELEV: '614' ABOVE FLOOD LEVEL: No							

*Documentation References:

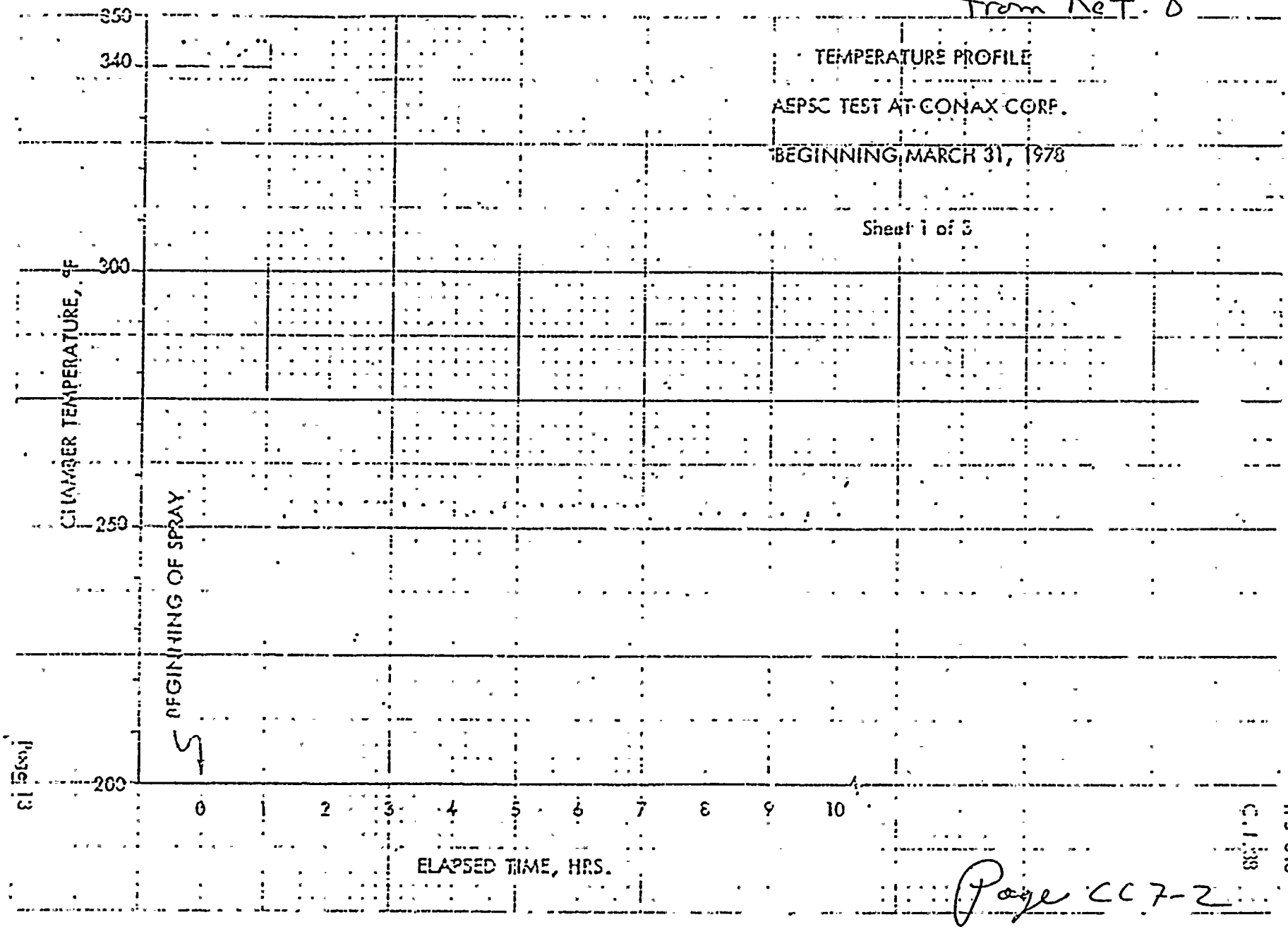
8. CONAX CORP. Test Report IPS-348

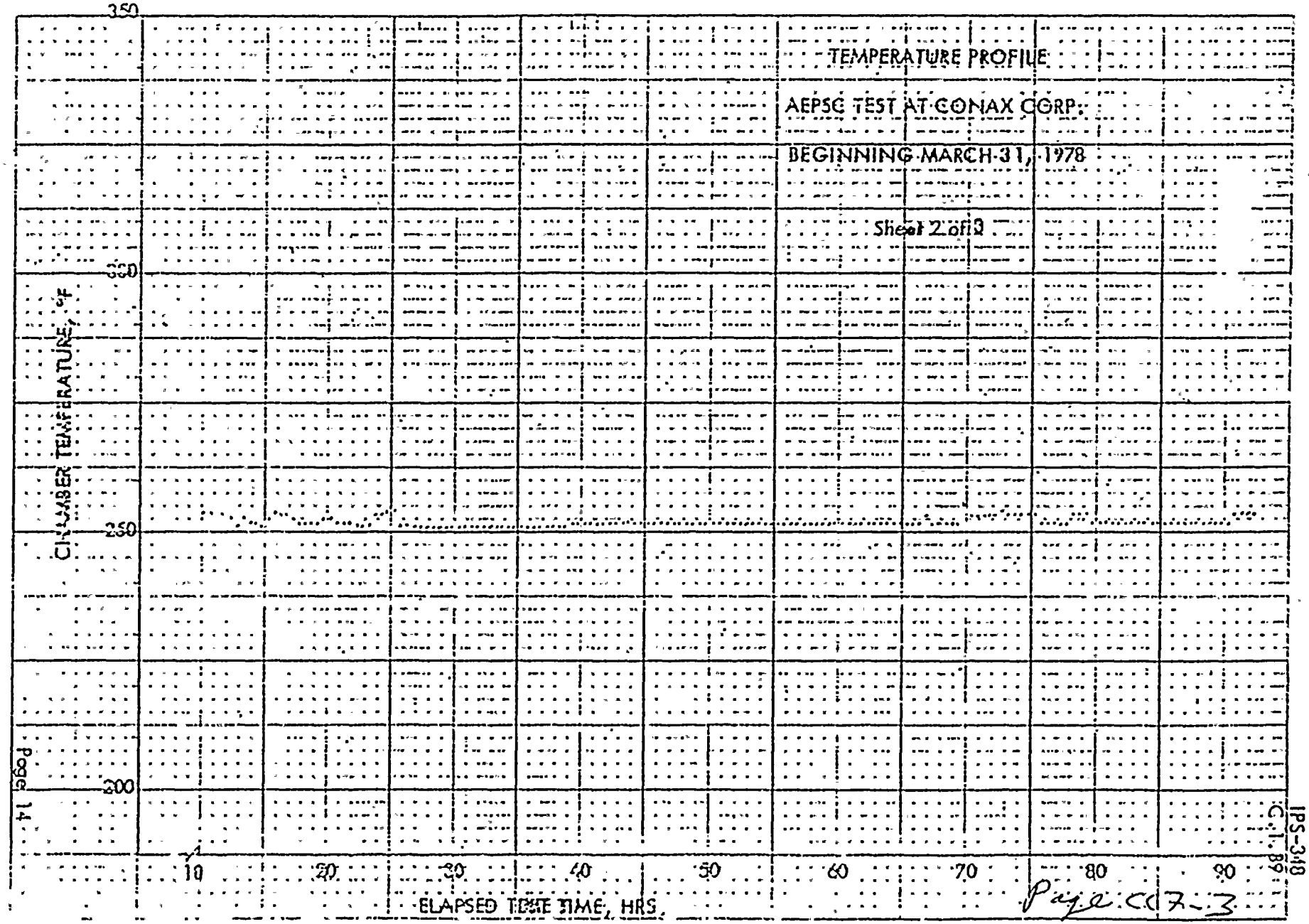
Notes:

1) containment temp 2.78 hrs after accident (185°F) (Fig 3, App N, FSAR). Cable temp rating 194°F

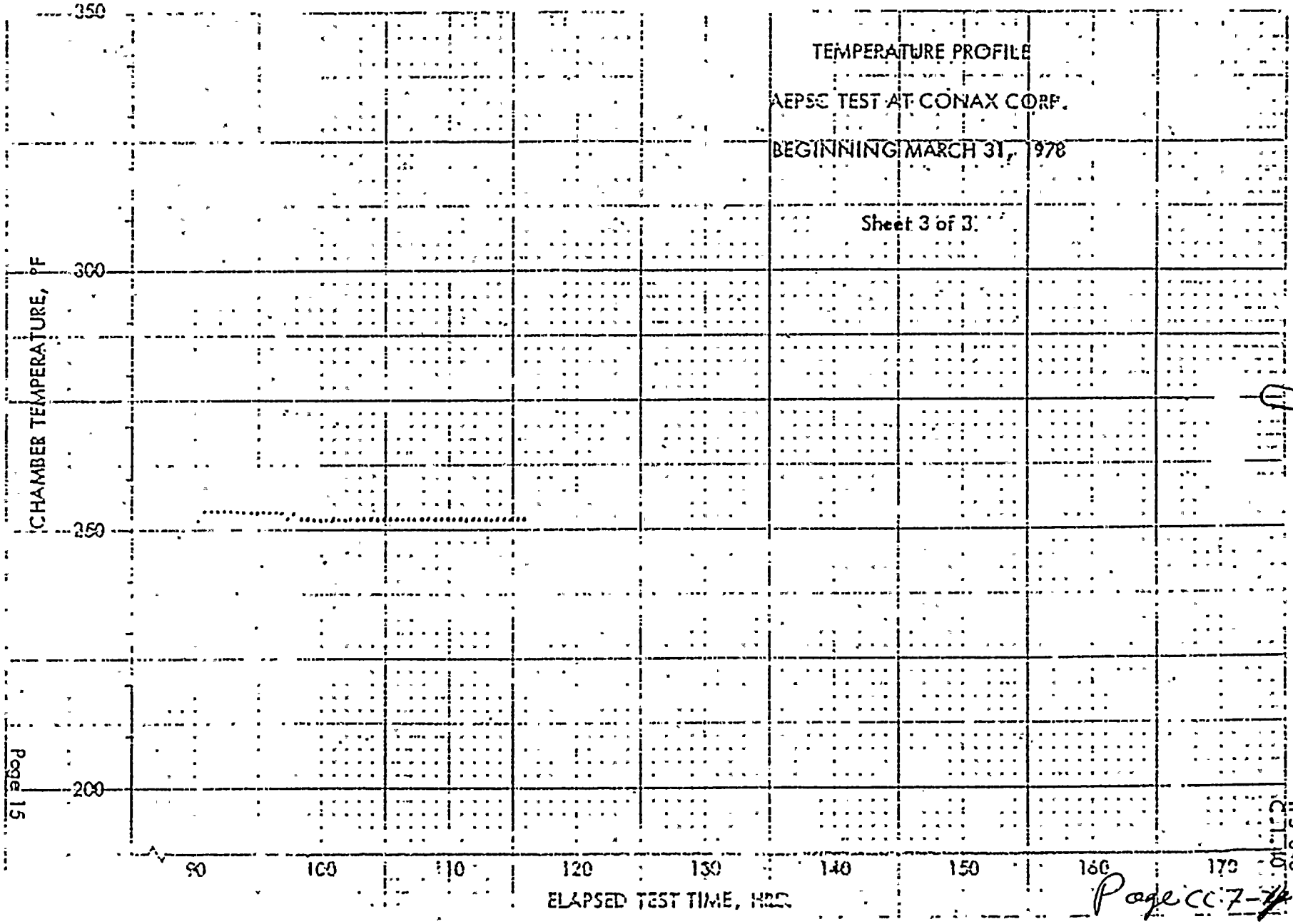
2) XLPE/ASB. Braid. 40 yrs as per Table C-1 Enp C, Encl. 4 to NRC IE Bulletin 79-01B.

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TEST TIME, HRS.

Page CC7-3


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.5-1,-2 328.2 peak	345	FSAR App Q	8	Seq.	
COMPONENT: Control Cable	Pressure (PSIA)	Fig 1 Fig. 2	121.7	AEW 6504	8	Seq.	
MANUFACTURER: General Electric	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: Item # 3122	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L Vol 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		Flood up Tubes				
LOCATION: In and Out of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

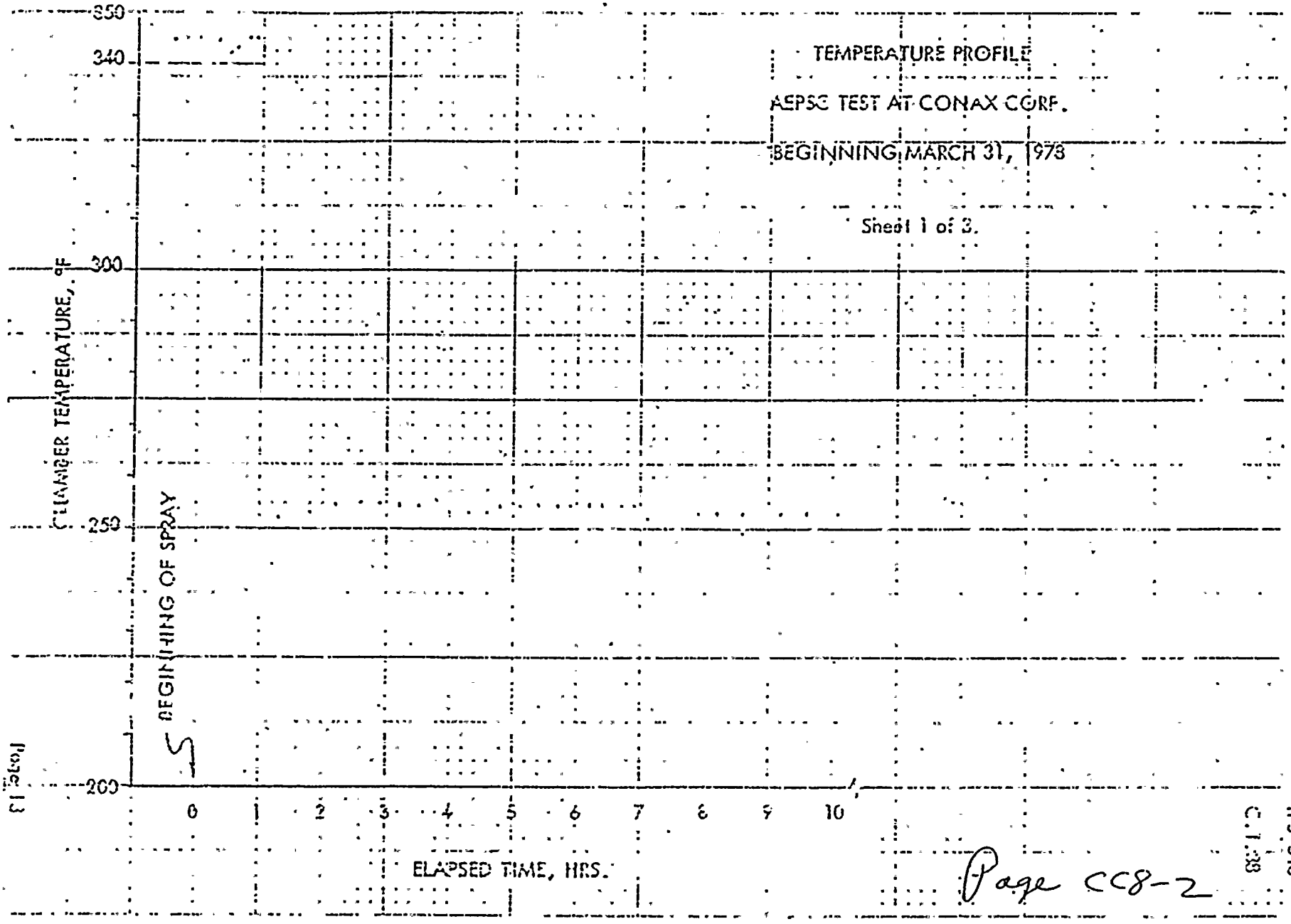
*Documentation References:

8. Conax Corp. Test Report IPS-348

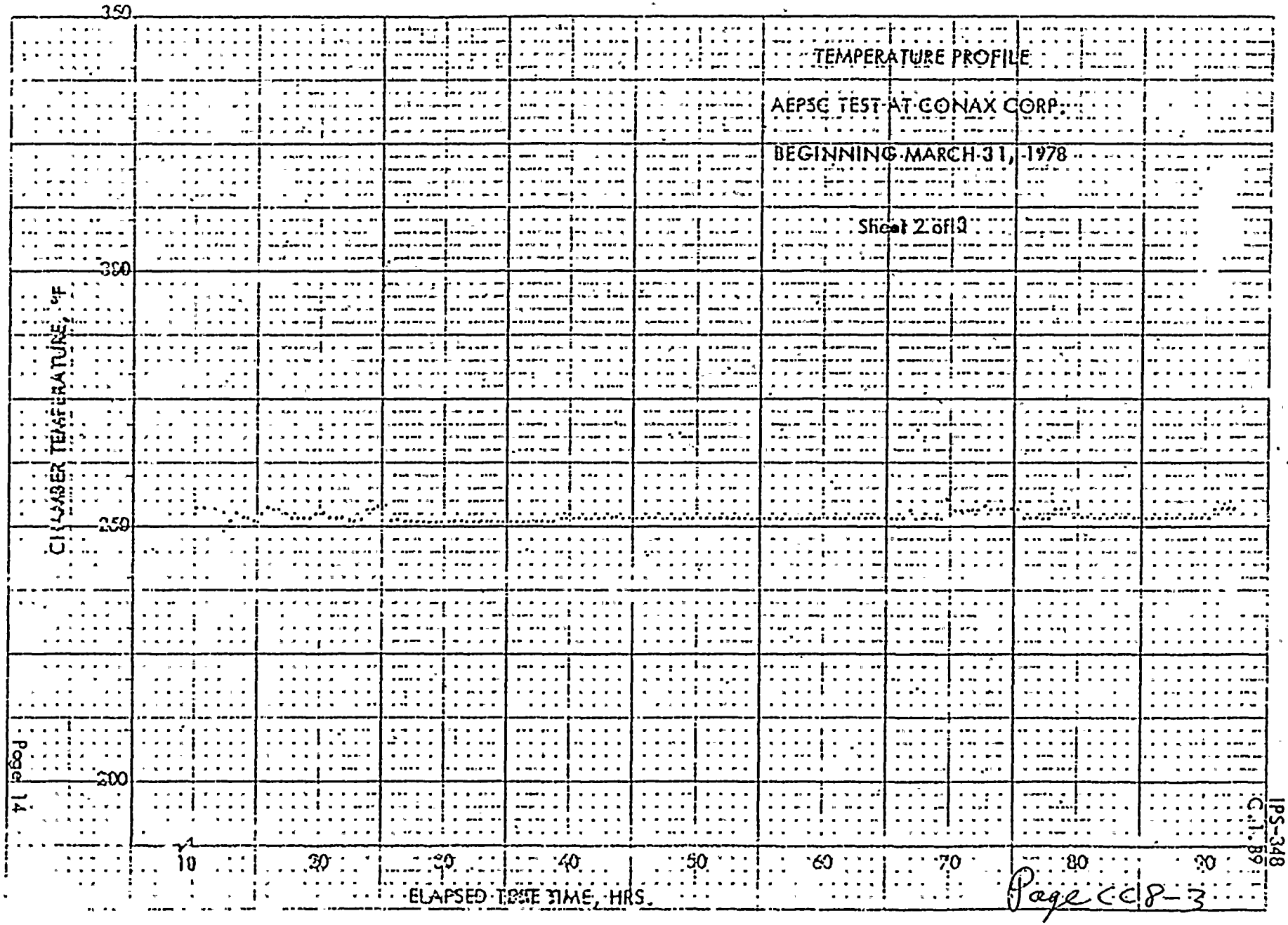
Notes:

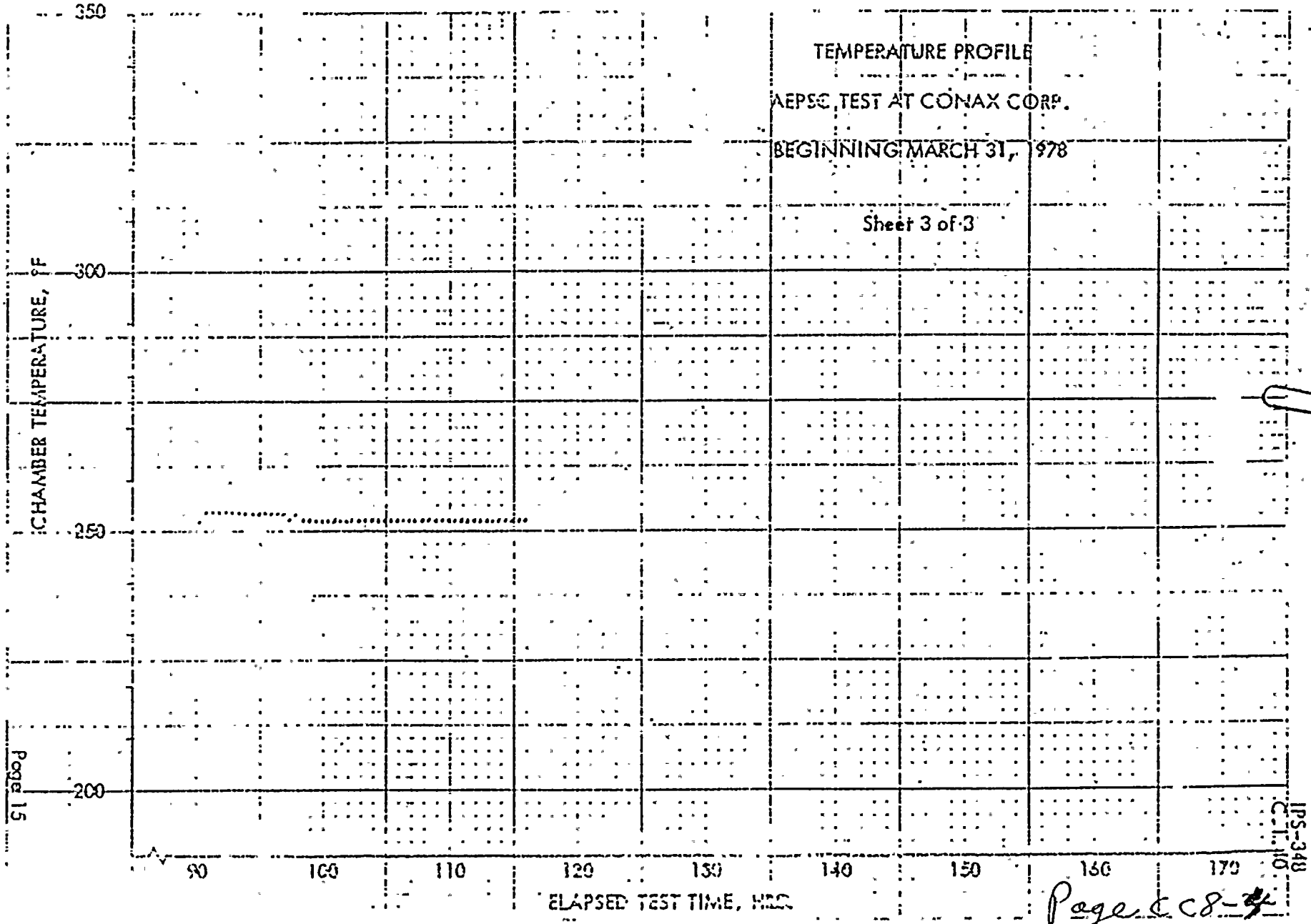
1) containment temp 2.78 hrs after accident 185°F (Fig 3, App N, FSAR). cable temp rating 194°F

2) XLPE/ASB Braid. 40 yrs as per Table C-1 App C, Encl. 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1973
Sheet 1 of 3.
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC8-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 12
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TEST TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	345	FSAR App Q	8	Seq.	
COMPONENT: Control Cable	Pressure (PSIA)	Fig 1 ..... Fig. 2	121.7	AEW 6304	8	Seq.	
MANUFACTURER: Continental Wire + Cable Co. MODEL NUMBER: Item # 3123	Relative Humidity (%)	100	100		8	Seq.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	2500 ppm B	T.S 3/4.5. 3/4.5.6	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L VOL 1	8	Seq.	
SERVICE: VARIOUS	Aging (years)		See Note 2				
LOCATION: Outside of Containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

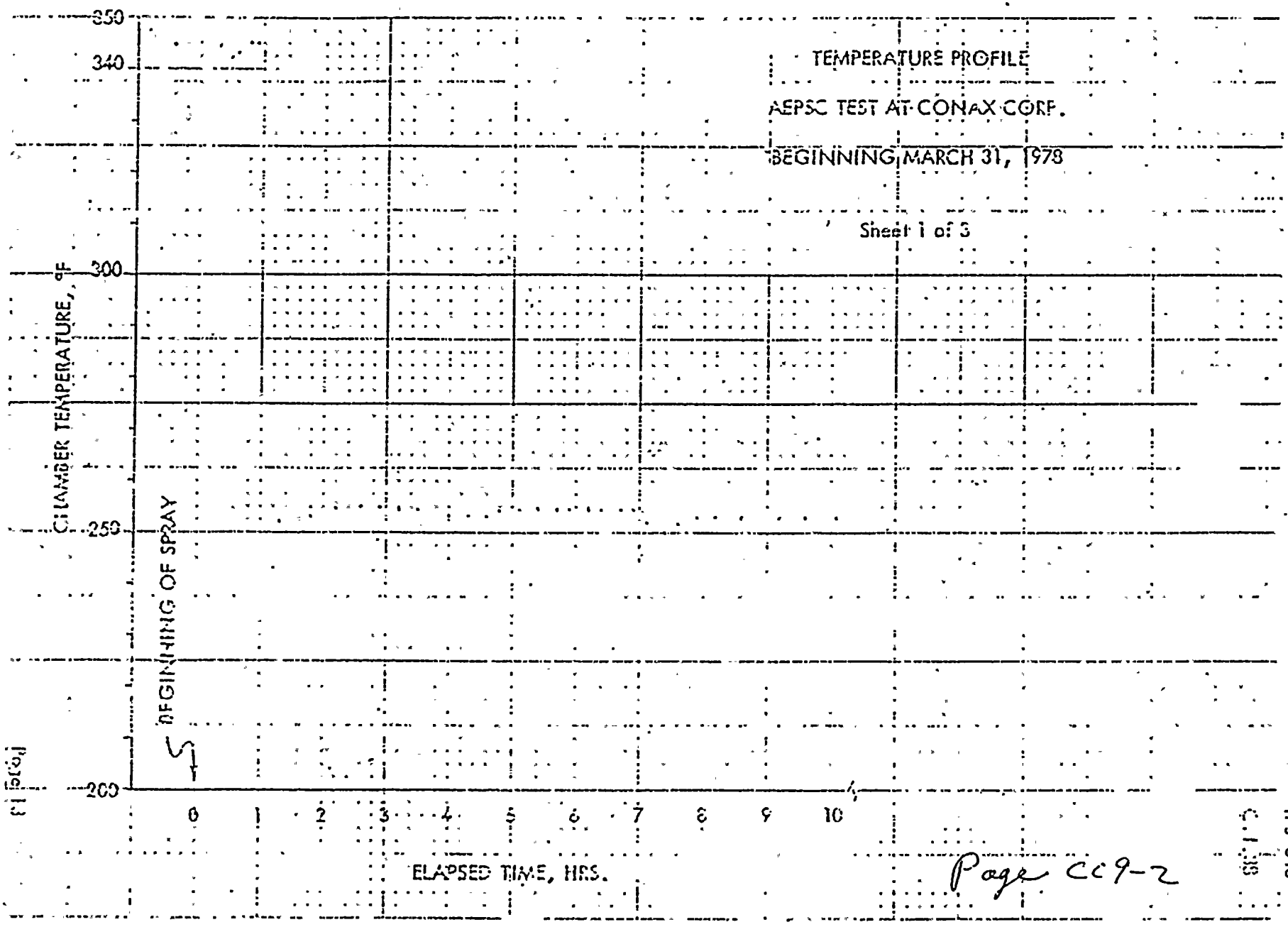
*Documentation References:

8. Conax Corp. Test Report IPS-348

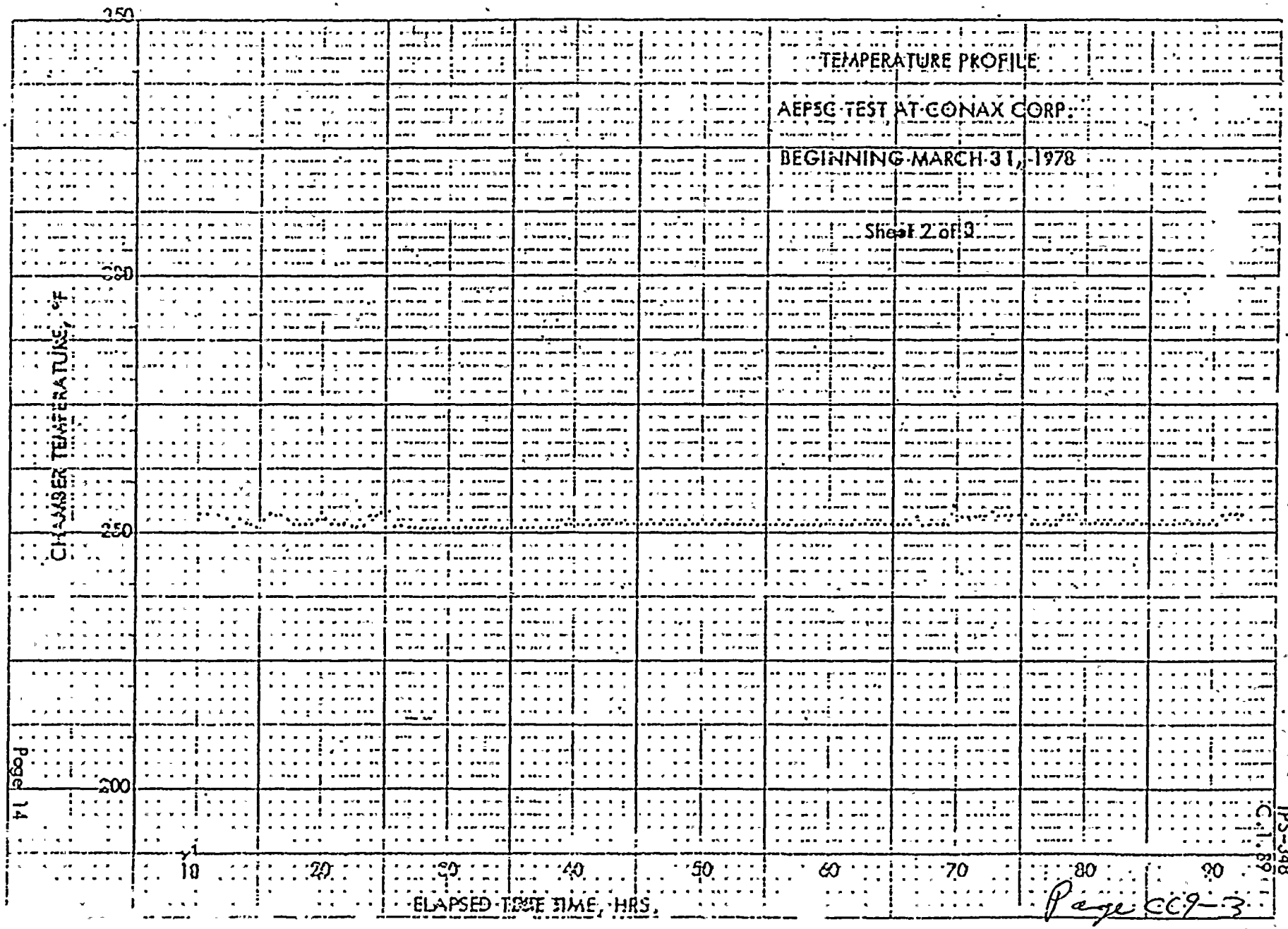
Notes:

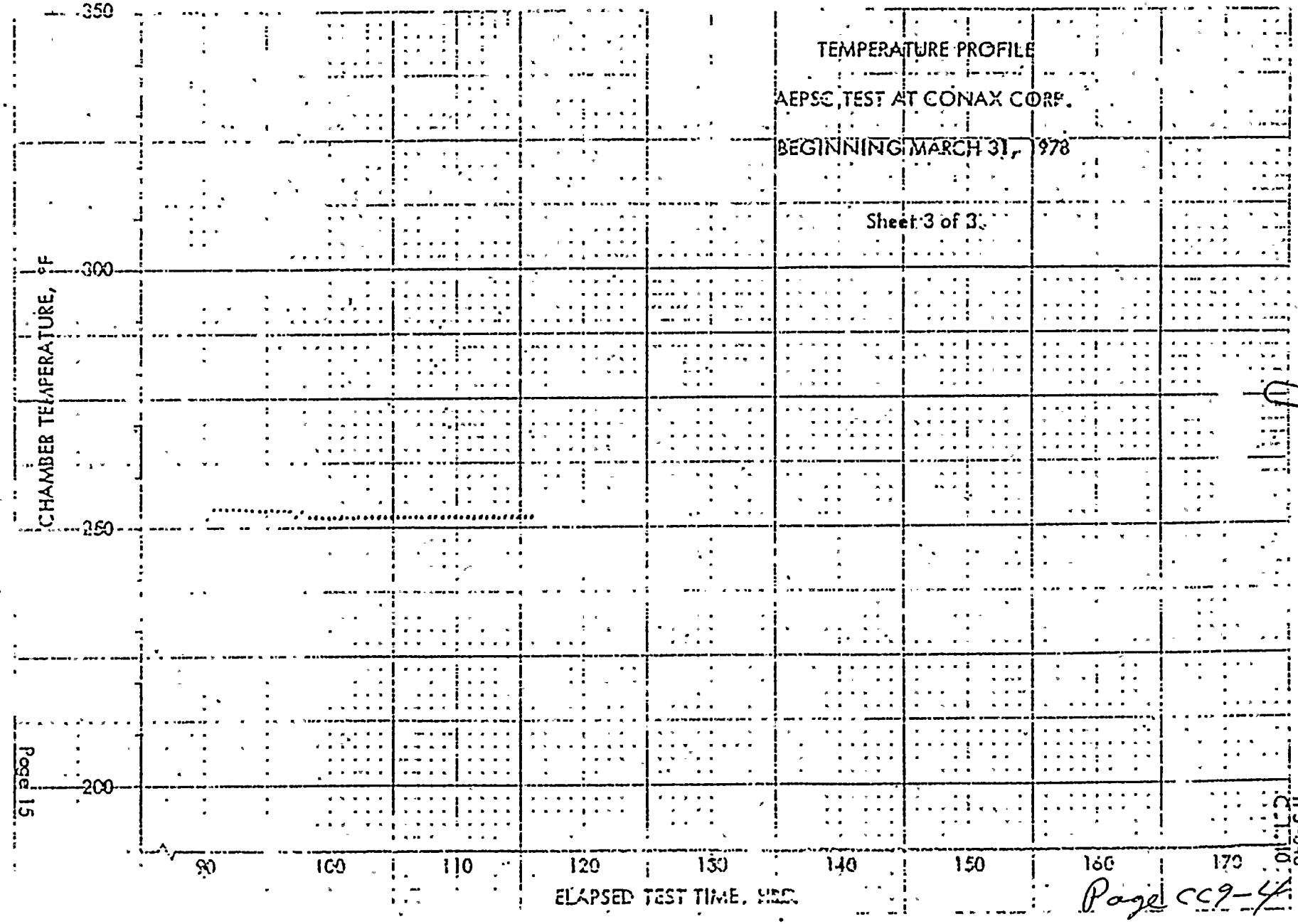
1) 230°F for 10 sec and 11.5 psig for .1 sec do not challenge the mech. and elect. quality of the cable, cable Temp rating 194°F

2) XLPE/ASB Braid. 40 yrs as per Table C-1 App C, Encl. 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

Page CC9-2


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME TIME, HRS.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, MIN.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	31	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 13.13-1	290	FSAR App D	31	SEQ.	
COMPONENT: Instrument Cable	Pressure (PSIA)	Fig 1 Fig 2	59.7	AERO 6504	31	SEQ.	
MANUFACTURER: Boston Insulated WIRE Co.	Relative Humidity (%)	100	100		31	SEQ.	
MODEL NUMBER: Item # 3064	Chemical Spray	2000 ppm B	2000 ppm B	T.S 3/4.5 3/4.5.6	32	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	150 Mrads Fig 4	200	WCAP 7410-L Vol 1	31 32	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		121°C for 168 hrs Yes XLPE/CSPE		31	SEQ	
SERVICE: VARIOUS	Submergence		Floodup Tubes				
LOCATION: In and Out of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

31. BIW Test Report 73C212
32. BIW Test Report 75C008

Notes:

1) Containment temp 2.78 hrs after accident 185°F (Fig 3, App D, FSAR). cable temp rating 194°F

from
Ref.
32. BOSTON INSULATED WIRE Co Item # 3064
TEST No. 75C008

Test type: Sequential
RADIATION: 200 MRADS
Profile:
290°, 53 psig, 15 min
300°, 53 psig, 15 min
252°, 16.5 psig, 10 DAYS
200°, 0 psig, 81 DAYS
Chem Spray: 2000 ppm B
ph 8-8.5 NAOH

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	34	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2	346	FSAR APP Q	34	SEQ.	
COMPONENT: Instrument Cable	Pressure (PSIA)	FIG 1 FIG 2	127.7	AEW 6504	34	SEQ.	
MANUFACTURER: Rockbestos	Relative Humidity (%)	100	100		34	SEQ.	
MODEL NUMBER: Item # 3064	Chemical Spray	2000 ppmB	3000 ppmB	T.S 3/4.5 3/4.5.6	34	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4	200	WCAP 7410-L Jul	34	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		150°C for 1300 hrs Yes		34	SEQ	
SERVICE: VARIOUS	Submergence		FLOODUP Tubes				
LOCATION: IN AND OUT of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

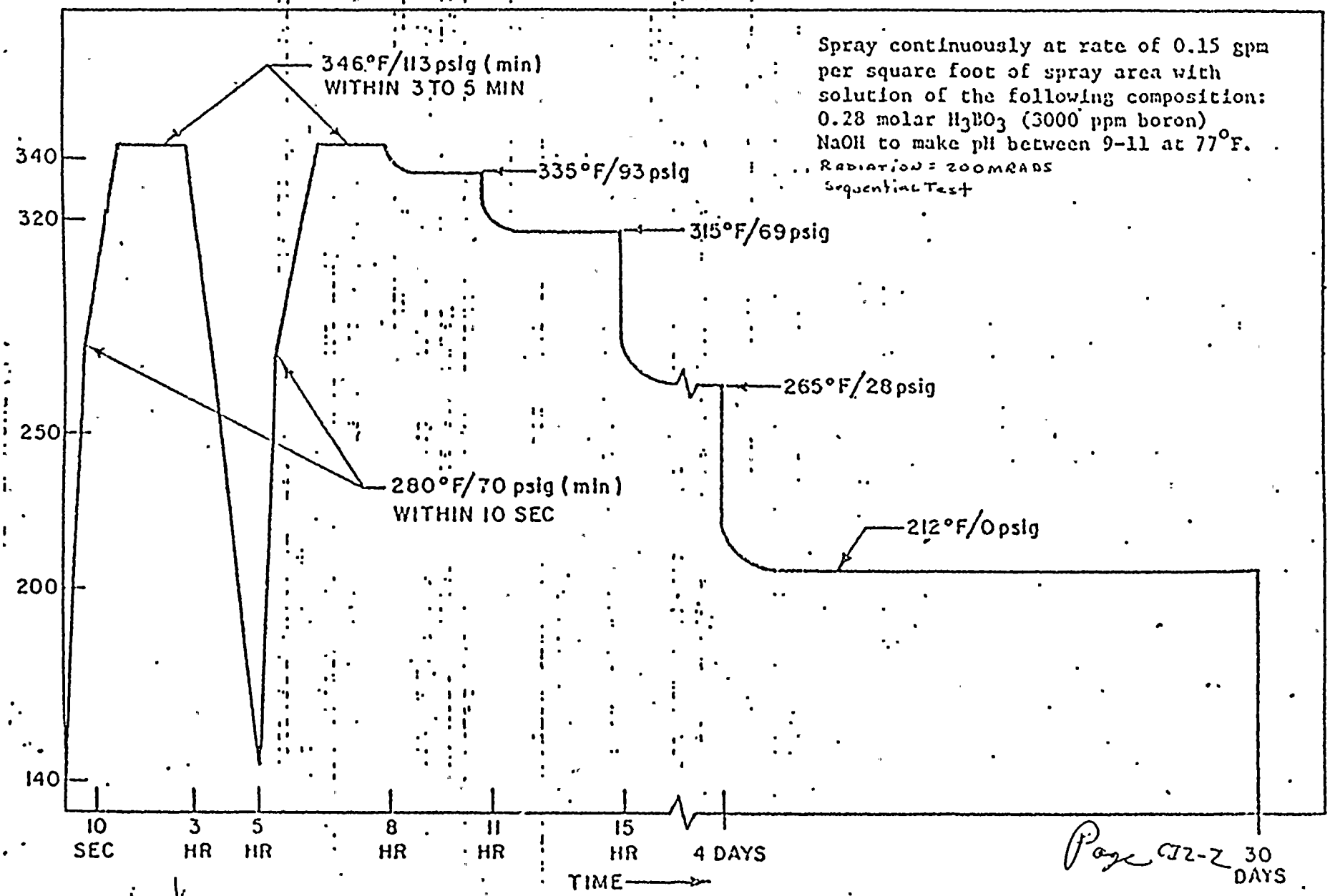
*Documentation References:

34. Rockbestos. Qual. of Firewall III Class 1E Electric Cable May 1976

Notes: 1) Containment temp ≈ 78 hrs after accident 185°F (Fig 3, App N, FSAR). Cable temp rating 194°F

34 Rockbestos Products: Qual. of Firewall III Class 1E Electric Cables

LOCA Profile



LOCA PROFILE

7.

Page 72-2

Pack

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	Table 7.5-2 FSAR	10	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	340	FSAR APP Q.	10	Seq.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	FIG 1. FIG. 2	119.7	AEW 6504	10	Seq.	
MANUFACTURER: Samuel Moore AND Co							
MODEL NUMBER: ITEM #3075	Relative Humidity (%)	100	100		10	Seq.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	11	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L VOL1	10	Seq.	
SERVICE: VARIOUS							
LOCATION: IN AND OUT of CONTAINMENT	Aging (years)		250°F/7 DAYS Yes		10	Seq.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		FLOOD PROOF Tubes				

*Documentation References:

10. FIRL TEST REPORT F-C3683
11. Isomedix CORP. Test Report of May 1976

Notes:

* Except for CABLES on NPS-153, MFC # 110, 111, 120, 121, 130, 131, 140, 141 (See Cable Note 1.)

1) Containment temp 2.78 hrs after accident (185°F) (Fig 3, App D, FSAR)
- Cable temp rating 194°F

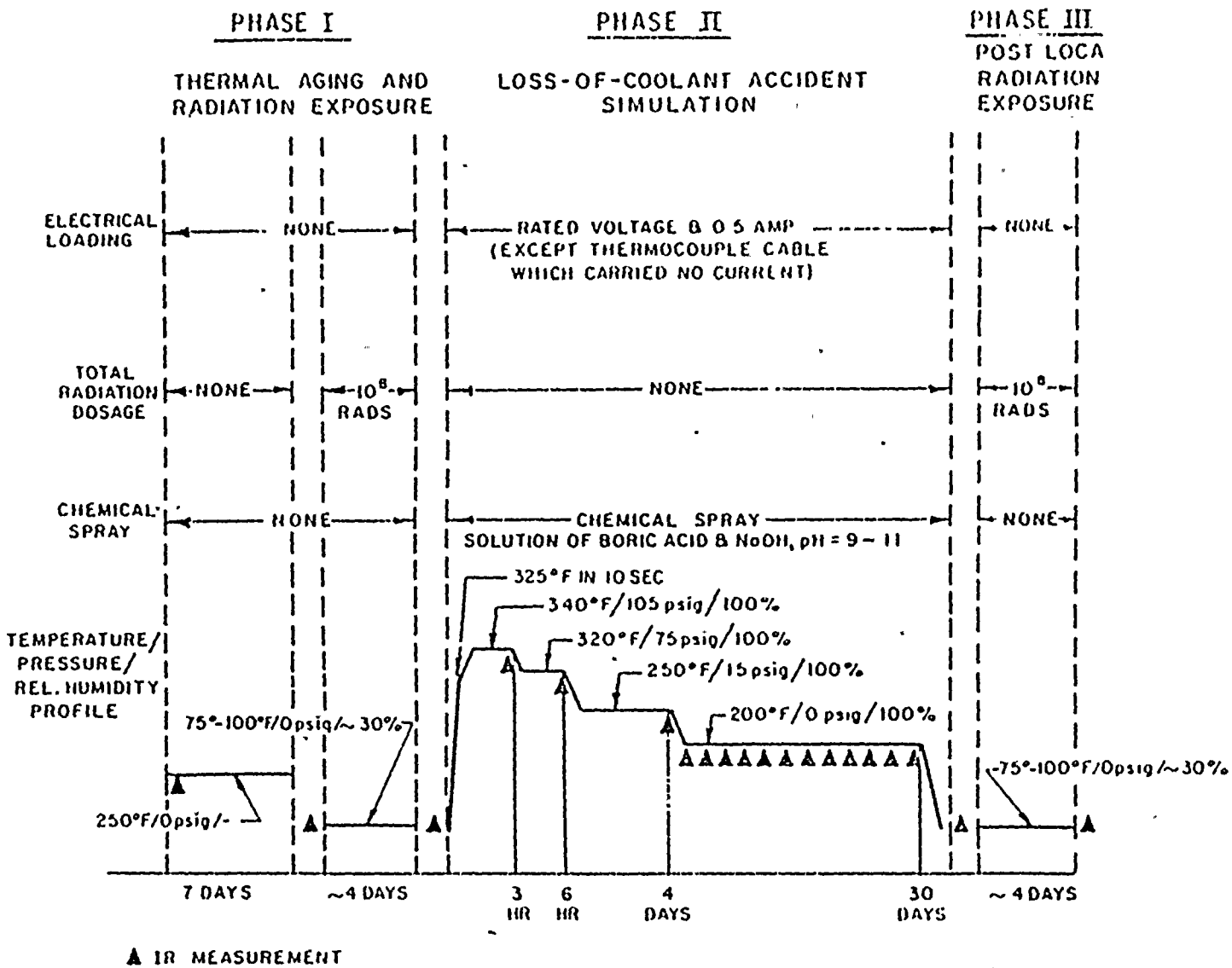
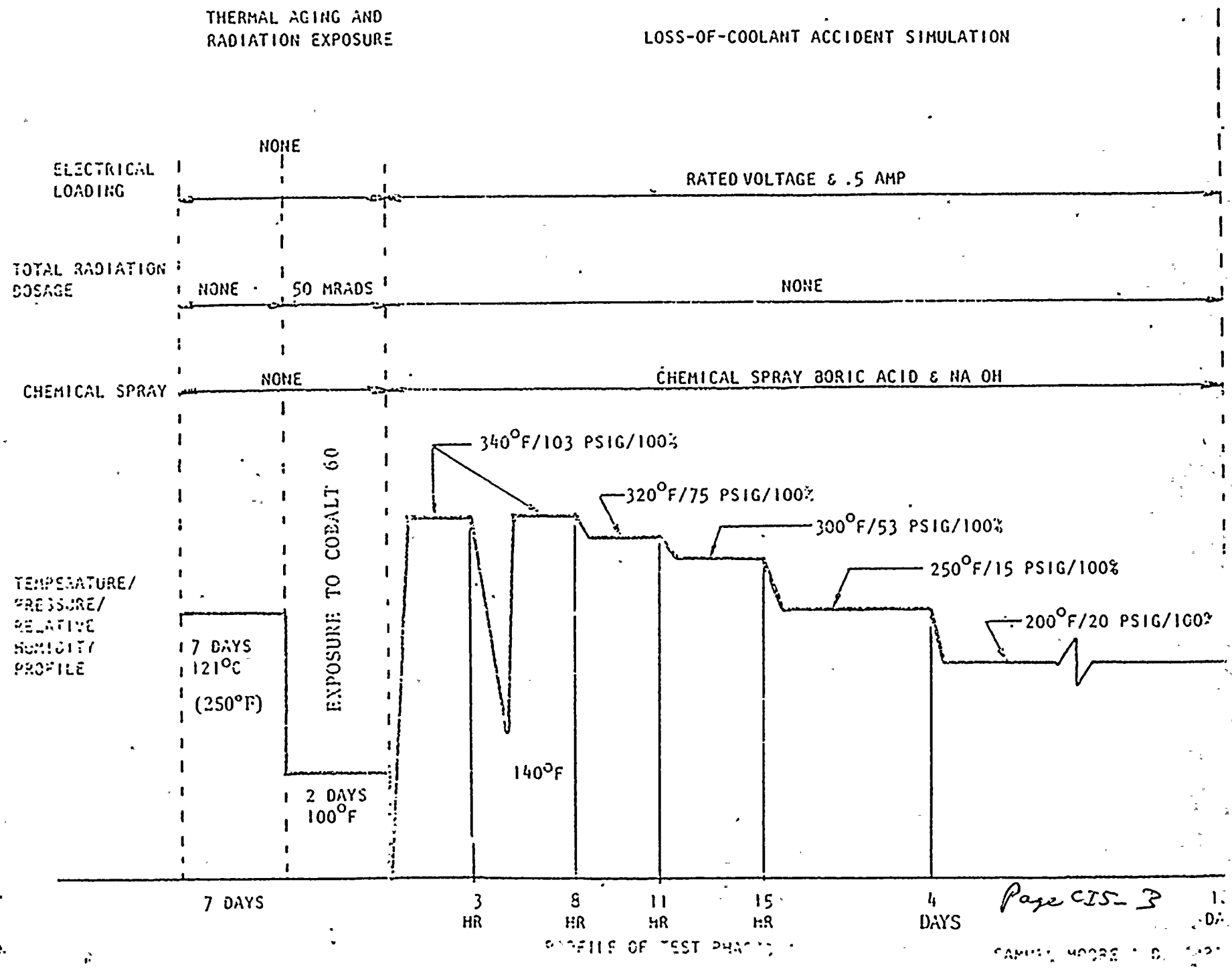


Figure 2. Profile of Test Phases

Page CI 5-2

F-C3683


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
NONE
ELECTRICAL
LOADING
RATED VOLTAGE & .5 AMP
TOTAL RADIATION
DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
EXPOSURE TO COBALT 60
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
TEMPERATURE/
PRESSURE/
RELATIVE
HUMIDITY
PROFILE
7 DAYS
121°C
(250°F)
2 DAYS
100°F
140°F
7 DAYS
3
HR
8
HR
11
HR
15
HR
4
DAYS

Page CIS-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Note 1		33	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0.27	340	FSAR APP O	33	SEQ.	
COMPONENT: INSTRUMENT CABLE MANUFACTURER: Continental	Pressure (PSIA)	FIG 0-27	114.7	FSAR APP O	33	SEQ.	
MODEL NUMBER: Item #3075	Relative Humidity (%)	NA	100	NA	33	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA		
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	10	See Note 2	33	SEQ.	
LOCATION: Out of Containment	Aging (years)		See Note 3				
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

33. FIRL TEST REPORT F-C3935, EXCERPT FROM.

Notes:

1) 230°F for 10 Sec and 11.5 psig for 1 sec does not challenge the cable mech. and elect. quality. (cable temp rating 194°F)

2) AEPSC NSUL Calculation DC-N 6420-2

3) XLPE/HYPALON. 40 yrs As per Table C-1 App C of Encl. 4 to NRC IE Bulletin 79-01B.

from Ref.

33. FIRL TEST REPORT F-C 2935, EXCERPT FROM

Type of test: Sequential
Gamma Radiation
Steam/

.45 MRAD/hr ; 10 MRAD
340°F, 100 psig, 2hrs
160°F, , 20hrs

Item # 3075, 3077 CONTINENTAL WIRE + CABLE Co.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	8	See	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	345	FSAR APP Q	8	Seq.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	Fig 1 Fig. 2	121.7	AEW 6504	8	Seq.	
MANUFACTURER: Boston Insulated Wire Co	Relative Humidity (%)	100	100		8	Seq.	
MODEL NUMBER: Item # 3075	Chemical Spray	2000 ppmB	2500 ppmB	T.S. 3/4.5 3/4.5.6	8	Seq.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig 4 150	150	WCAP 7410-L Vol 1	8	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note 2				
SERVICE: VARIOUS	Submergence		Flooded* Tubes				
LOCATION: IN AND OUT of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

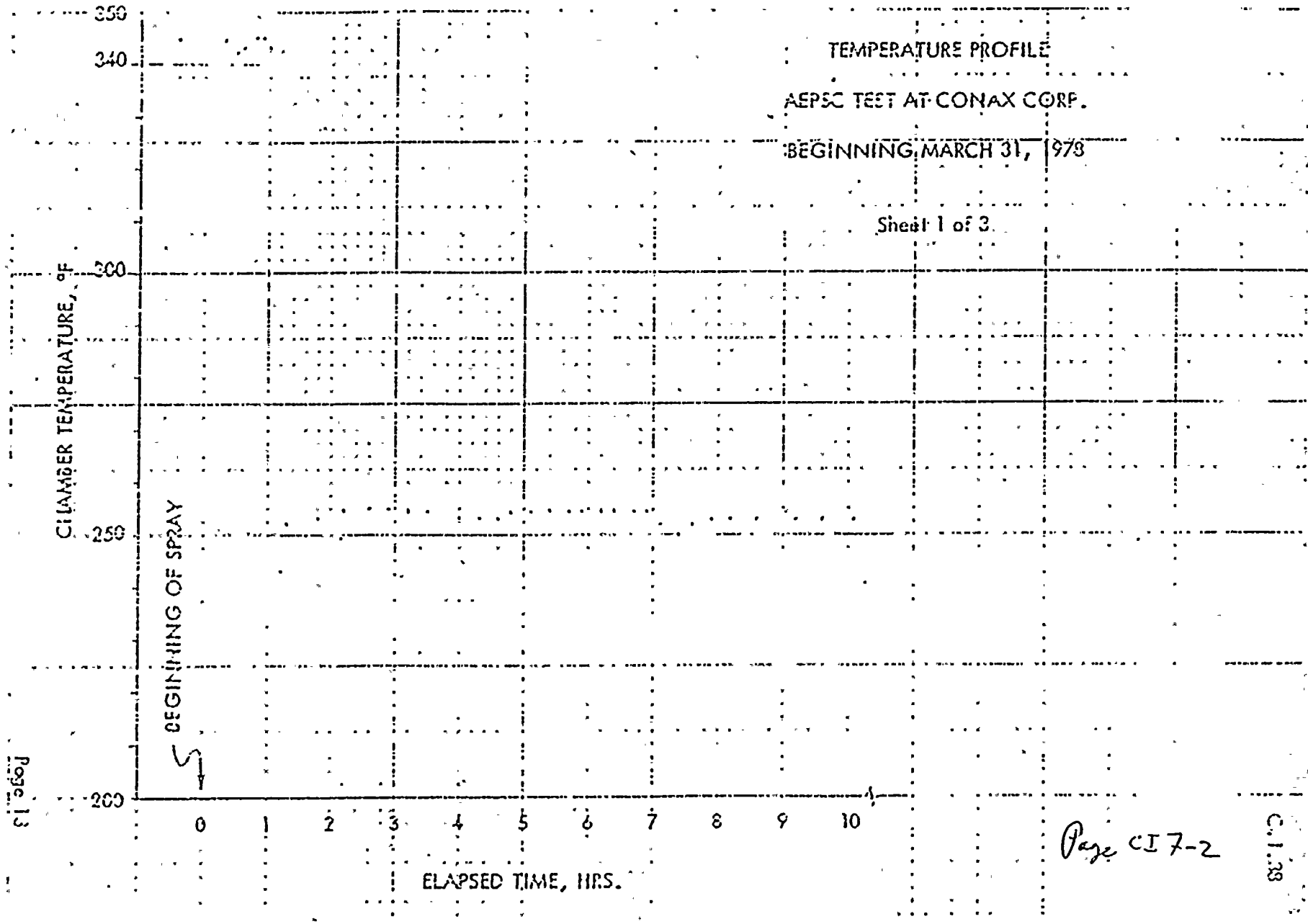
8. Conax Corp Test Report IPS-348

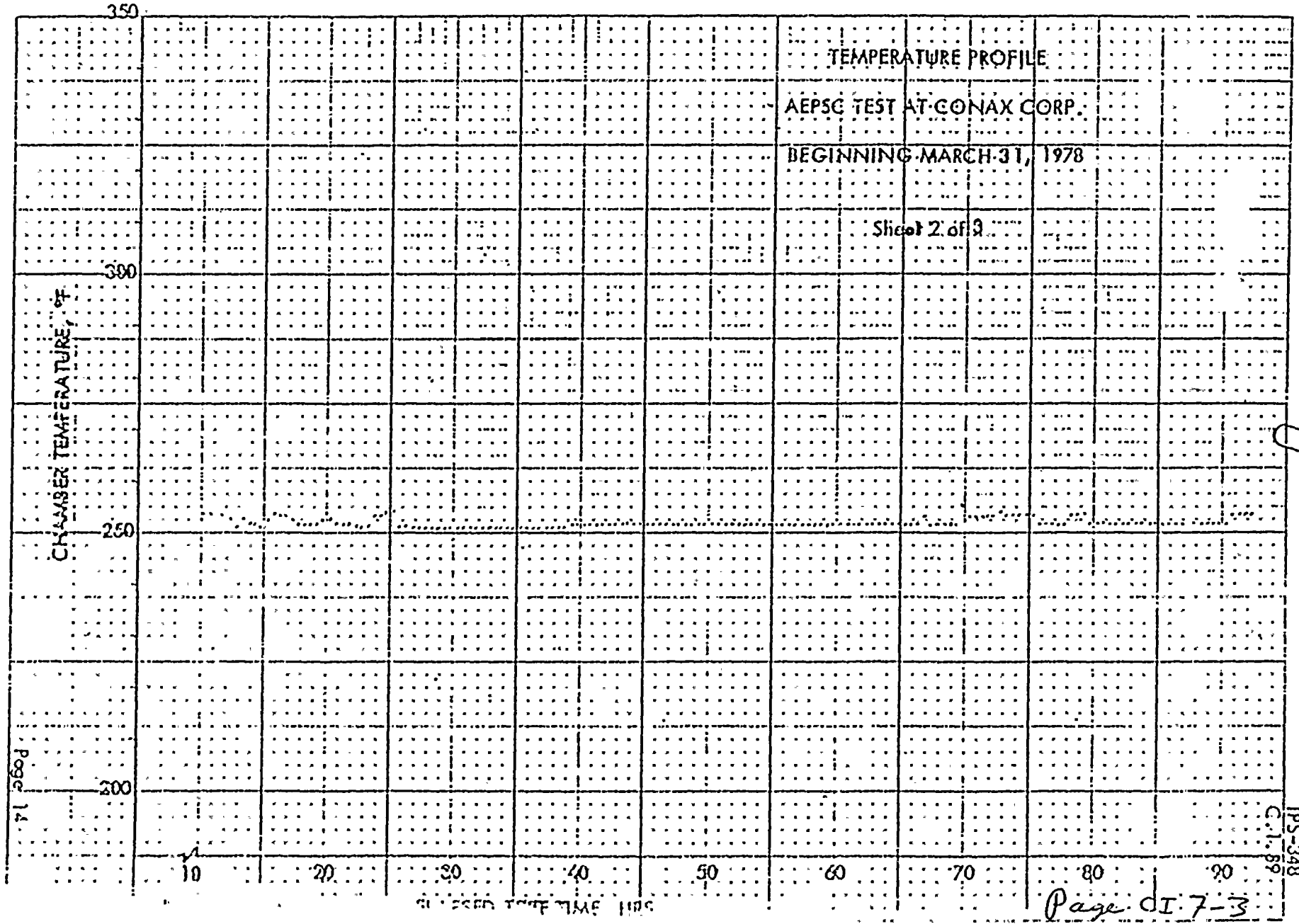
Notes:

* EXCEPT for CABLES on NPS 153, MFC 110, 111, 120, 121, 130, 131, 140, 141 (see Cable Note 1.)

1) containment temp 2.78 hrs after accident = 185°F (Fig 3, App Q, FSAR), cable Term rating = 194°F

2) Hypalon/Hypalon 40 yrs as per Table C-1 App C of Enclosure 4 to NRC IE Bulletin 79-01B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

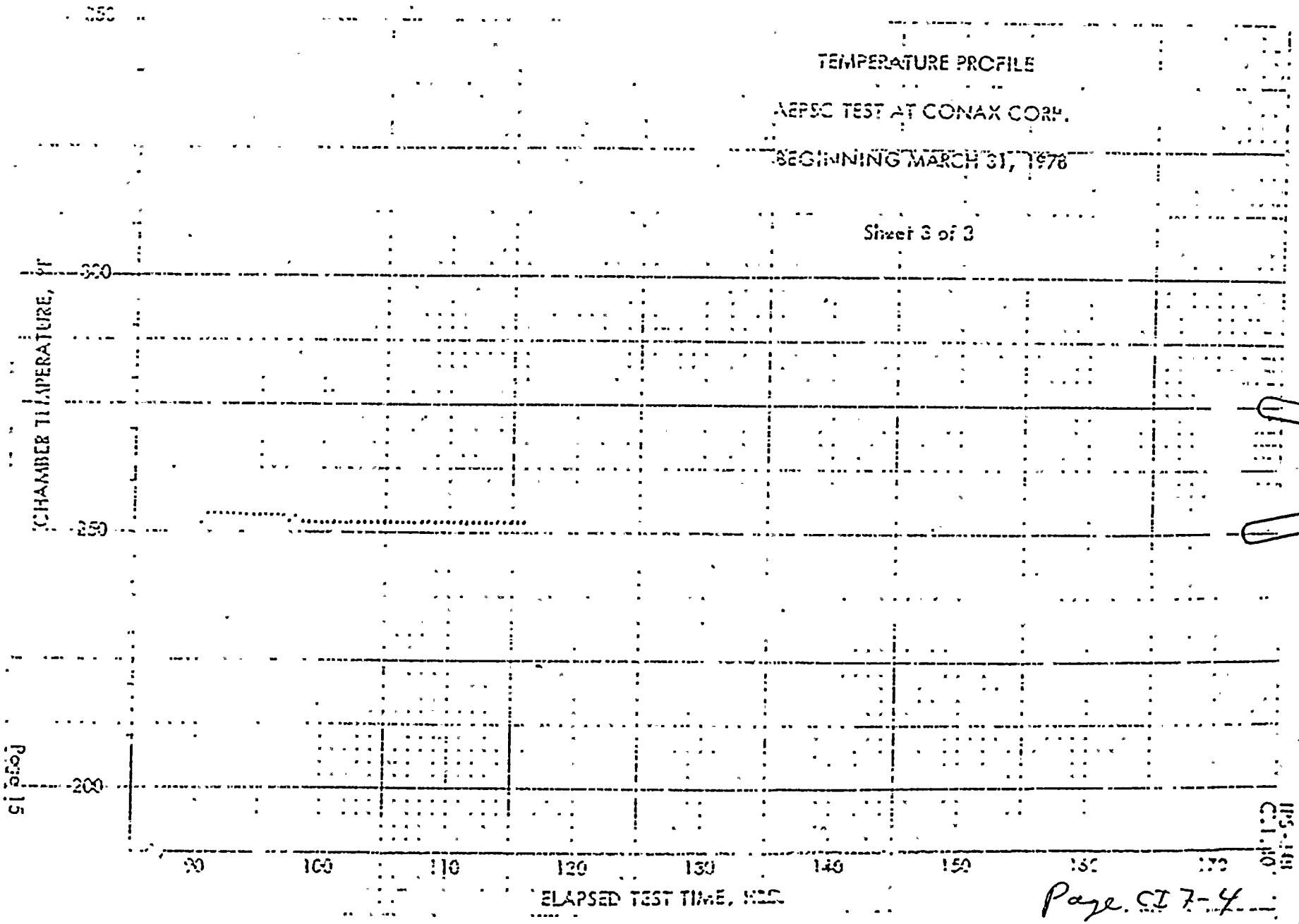

TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TOTAL TIME, HRS

TEMPERATURE PROFILE

AEPSC TEST AT CONAX CORP.

BEGINNING MARCH 31, 1978

Sheet 3 of 3



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DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	12	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	346	FSAR APP Q	12	Seq.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	FIG 1 FIG 2	127.7	AEW 6504	12	Seq.	
MANUFACTURER: CERRO WIRE + CABLE CO.							
MODEL NUMBER: Item # 3077	Relative Humidity (%)	100	100		12	Seq.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	12	Seq.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L Vol 1	12	Seq.	
LOCATION: IN AND OUT of CONTAINMENT	Aging (years)		150°C/ 1300 hrs Yes				
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		FLOODUP* Tubes				

*Documentation References:

12. Cerro Wire and Cable Test Report of May, 1976

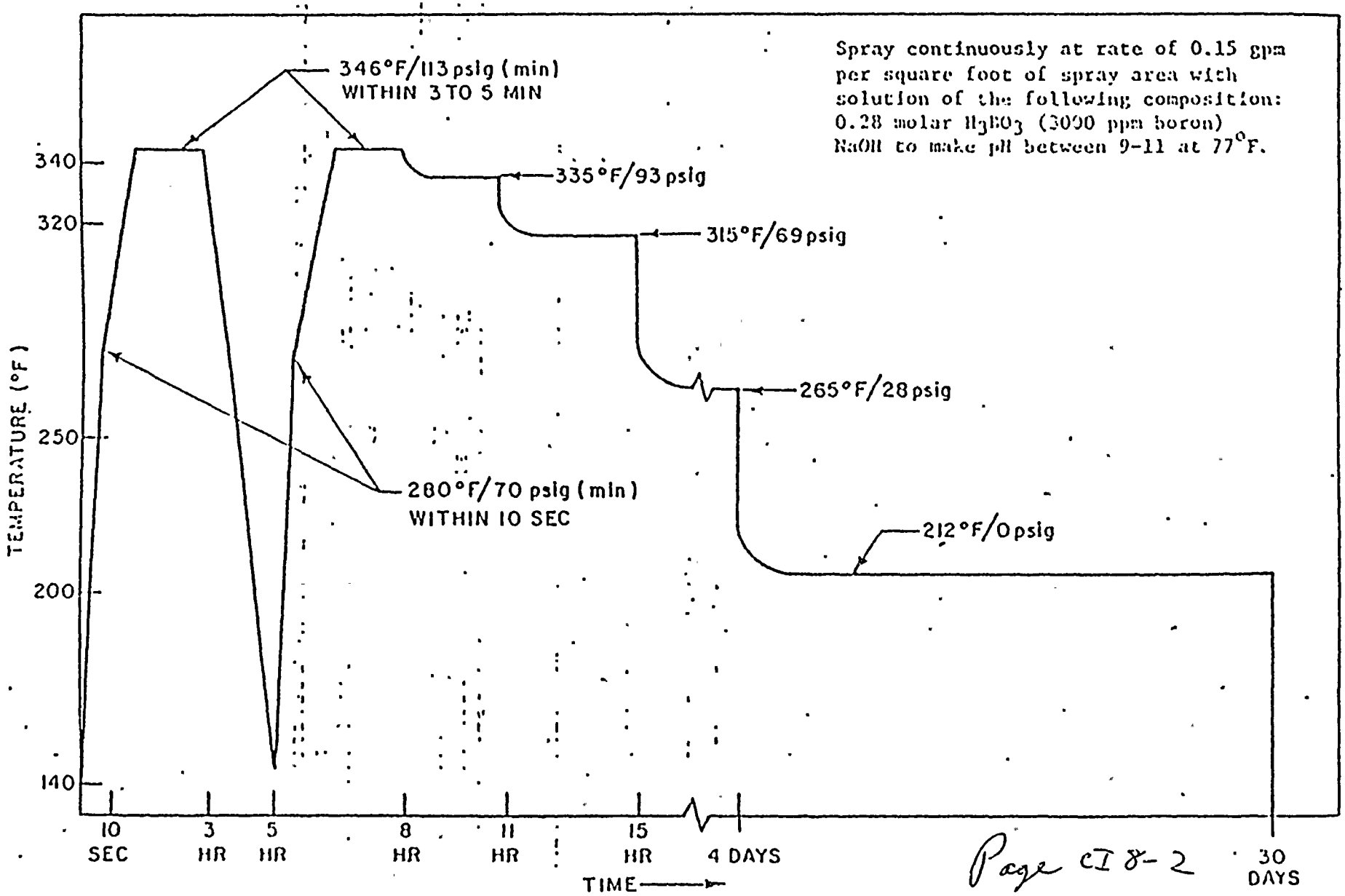
Notes:

* EXCEPT for CABLES on NTP's 5, 15 see Cable Note 1c.

1) containment temp 2.78 hrs after accident 185°F (Fig 3, App N, FSAR)

cable temp rating 194°F

LOCA Profile



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LOCA PROFILE

7.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	10	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	340	FSAR APP Q	10	Seq.	
COMPONENT: INSTRUMENT CABLE	Pressure (PSIA)	Fig 1 Fig. 2	119.7	REW 6504	10	Seq.	
MANUFACTURER: Samuel Moore and Co.							
MODEL NUMBER: ITEM # 3077	Relative Humidity (%)	100	100		10	Seq.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	11	Seq.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	Fig 4 150	200	WCAP 7410-L Vol 1	10	Seq.	
LOCATION: IN AND OUT of CONTAINMENT	Aging (years)		250°F/7 DAYS Yes		10	Seq.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		FLOODED Tubes *				

*Documentation References:

10. FIRL Test Report F-C 3683
11. Isomedix Corp. Test Report of May 1976

Notes:

* Except for Cables on NTP's, See Cable, Note 1c.
1) Containment temp 278 hrs after accident = 185°F (Fig 3, App N, FSAR) cable temp rating 194°F

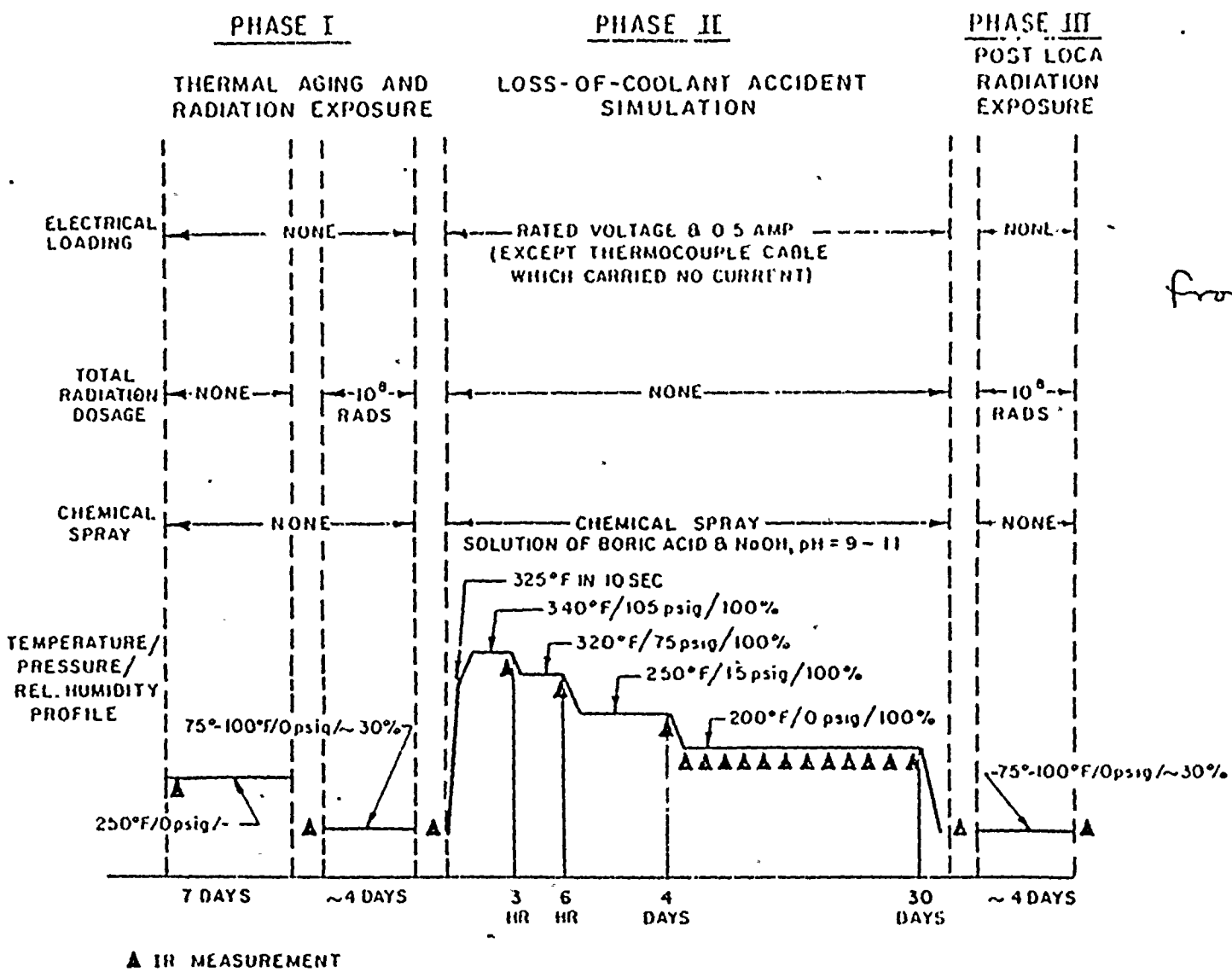
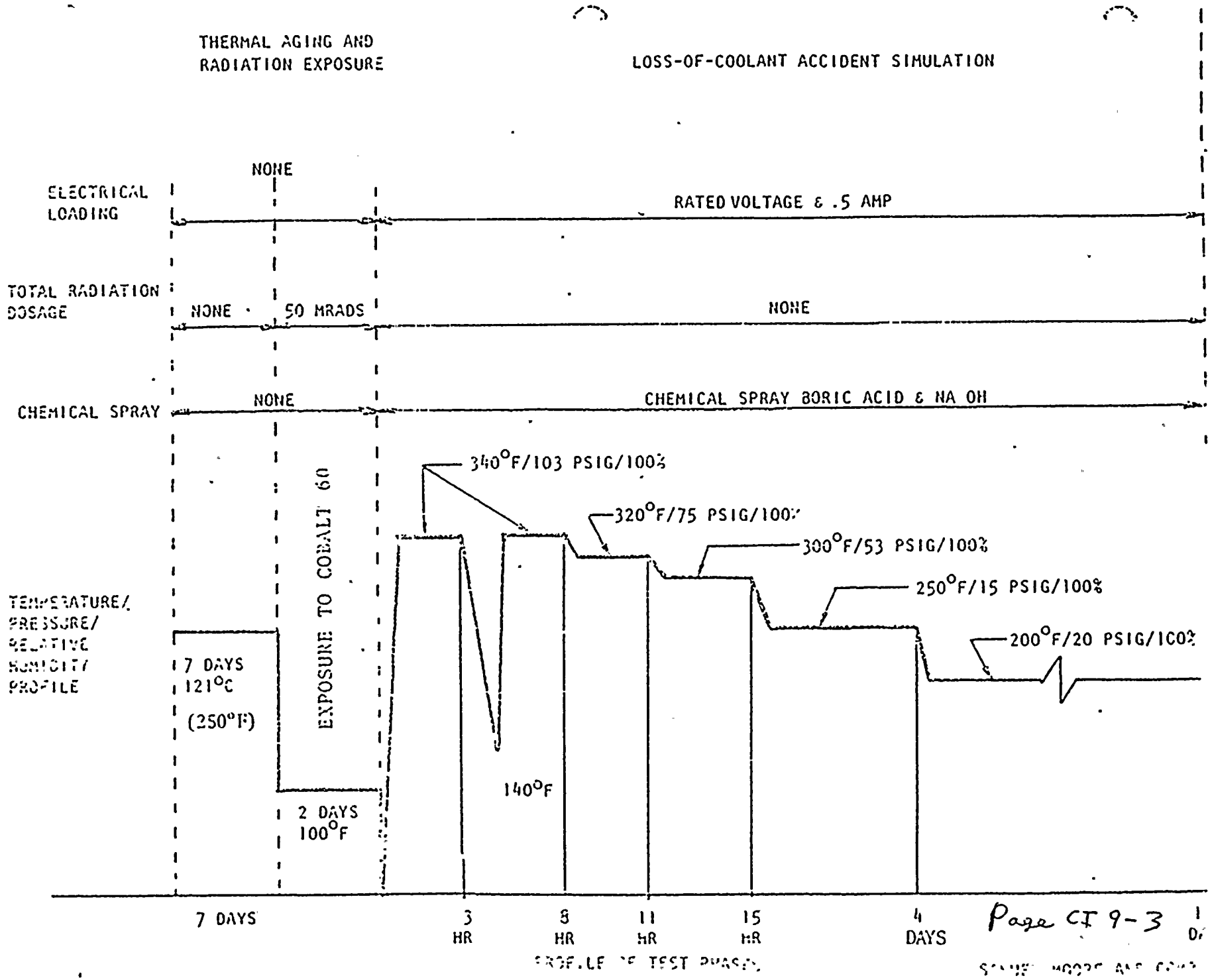


Figure 2. Profile of Test Phases

from Ref. 10.

F-C3683

Page CI9-2


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
NONE
ELECTRICAL
LOADING
RATED VOLTAGE & .5 AMP
TOTAL RADIATION
DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
EXPOSURE TO COBALT 60
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
TEMPERATURE/
PRESSURE/
RELATIVE
HUMIDITY/
PROFILE
7 DAYS
121°C
(250°F)
2 DAYS
100°F
140°F
7 DAYS
3
HR
8
HR
11
HR
15
HR
4
DAYS

Page CT 9-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Note 1		33	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	340	FSAR APP Q	33	SEQ.	
COMPONENT: INSTRUMENT CABLE MANUFACTURER: Continental	Pressure (PSIA)	FIG 0-27	114.7	FSAR APP Q	33	SEQ.	
MODEL NUMBER: Item #3077	Relative Humidity (%)	NA	100	NA	33	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	10	See Note 2	33	SEQ.	
LOCATION: Out of Containment	Aging (years)		See Note 3				
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

33. FIRL TEST REPORT F-C 2935, EXCERPT FROM.

Notes:

1) 230°F for 10 sec and 115 psig for 0.1 sec, does not represent a challenge to the mech. and elect. quality of the cable. Cable temp rating 194°F

2) AEPSC NS&L calculation DC-N-6420-2

3) XLPE/HYPALON 40yrs as per Table C-1 App C of Encl. 4 to NRC IE Bulletin 79-01B.

from
Ref.
33. FIRL TEST REPORT F-C 2935, EXCERPT FROM

Type of test: Sequential
Gamma Radiation
Steam/

.45 MRAD/hr ; 10 MRAD
340°F, 100 psig, 2hrs
160°F, , 20hrs

Item # 3075, 3077 CONTINENTAL WIRE + CABLE Co.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	8	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,2 328.2 PEAK	345	FSAR APP Q	8	Seq.	
COMPONENT: INSTRUMENT CABLE MANUFACTURER: BOSTON INSULATED WIRE Co. MODEL NUMBER: Item #3077	Pressure (PSIA)	FIG 1 FIG. 2	121.7	AEW 6504	8	Seq.	
	Relative Humidity (%)	100	100		8	Seq.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	FIG 4 150	150	WCAP 7410-L Vol 1	8	Seq.	
LOCATION: IN AND OUT of CONTAINMENT	Aging (years)		See Note 2		8	Seq	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		FLOODING TUBES *				

*Documentation References:

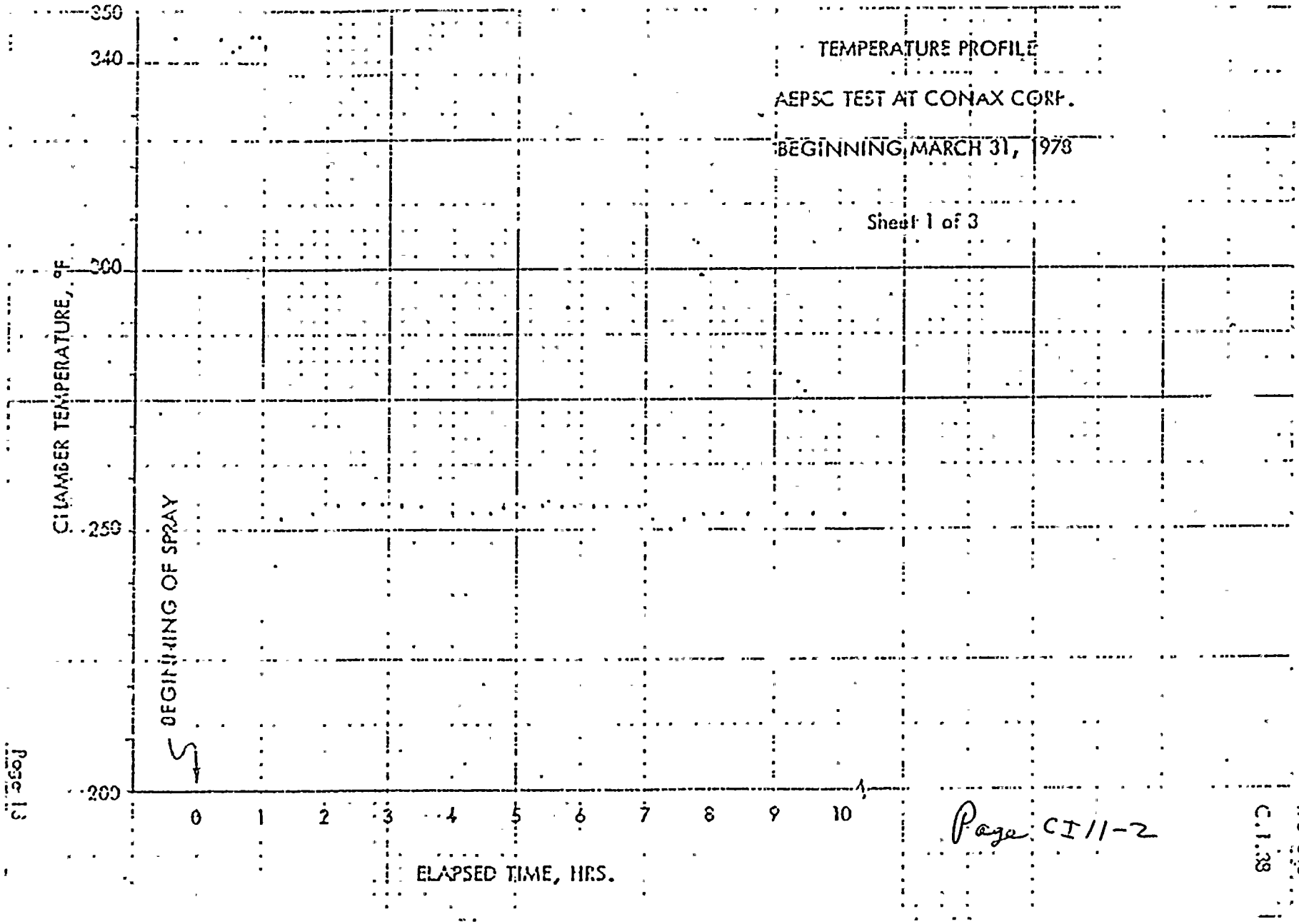
8. CONAX Corp. Test Report TPS-818

Notes:

* Except for CABLES on NTP's. See Cable Note 1c.

1) containment temp 2.78 hrs after accident* = 185°F (Fig 3, App N, FSAR). cable temp rating = 194°F

2) Hypalon/Hypalon 40 yrs as per Table C-1 App C, Encl. 4 to NRC IE Bulletin 79-01 B.


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

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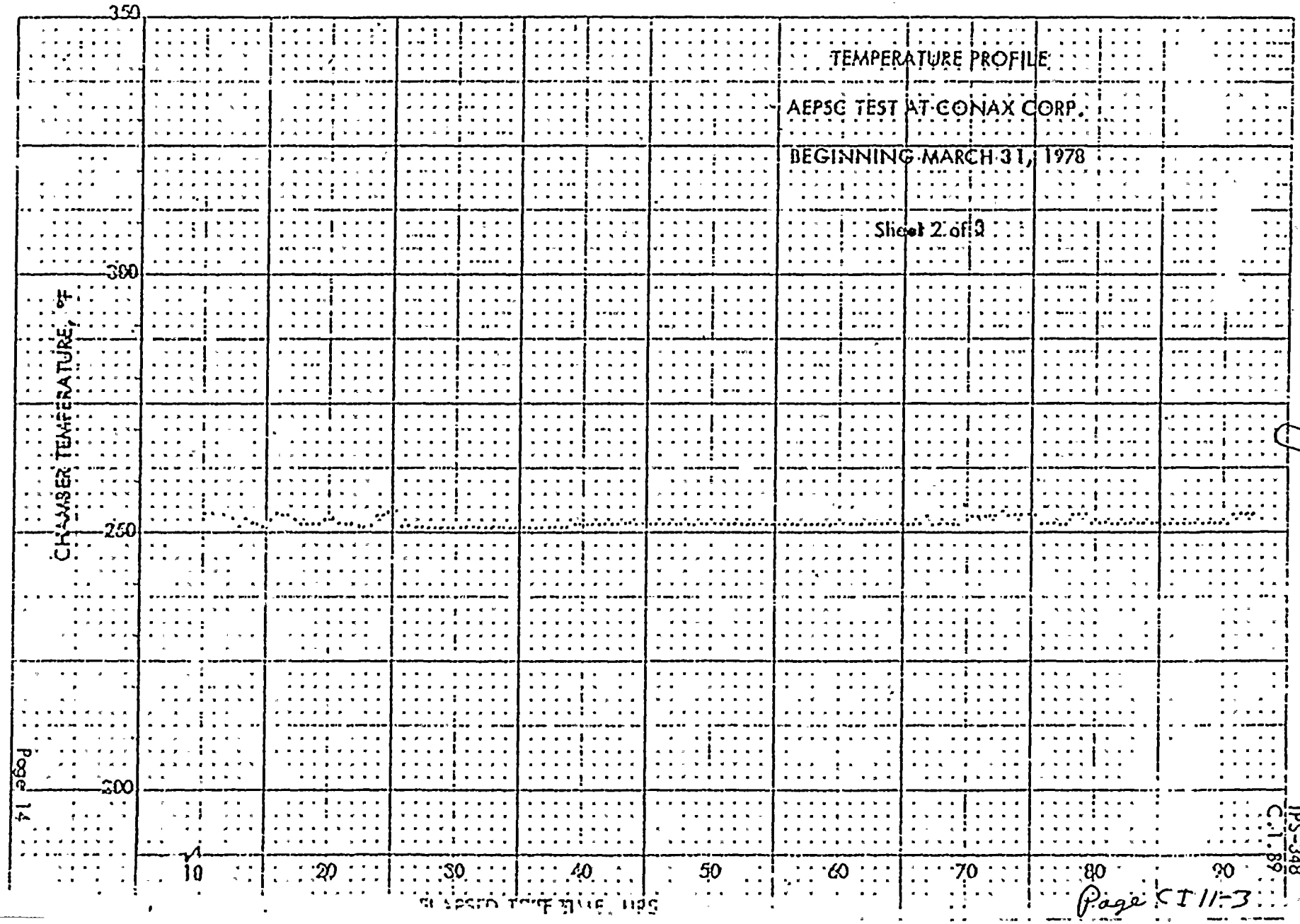
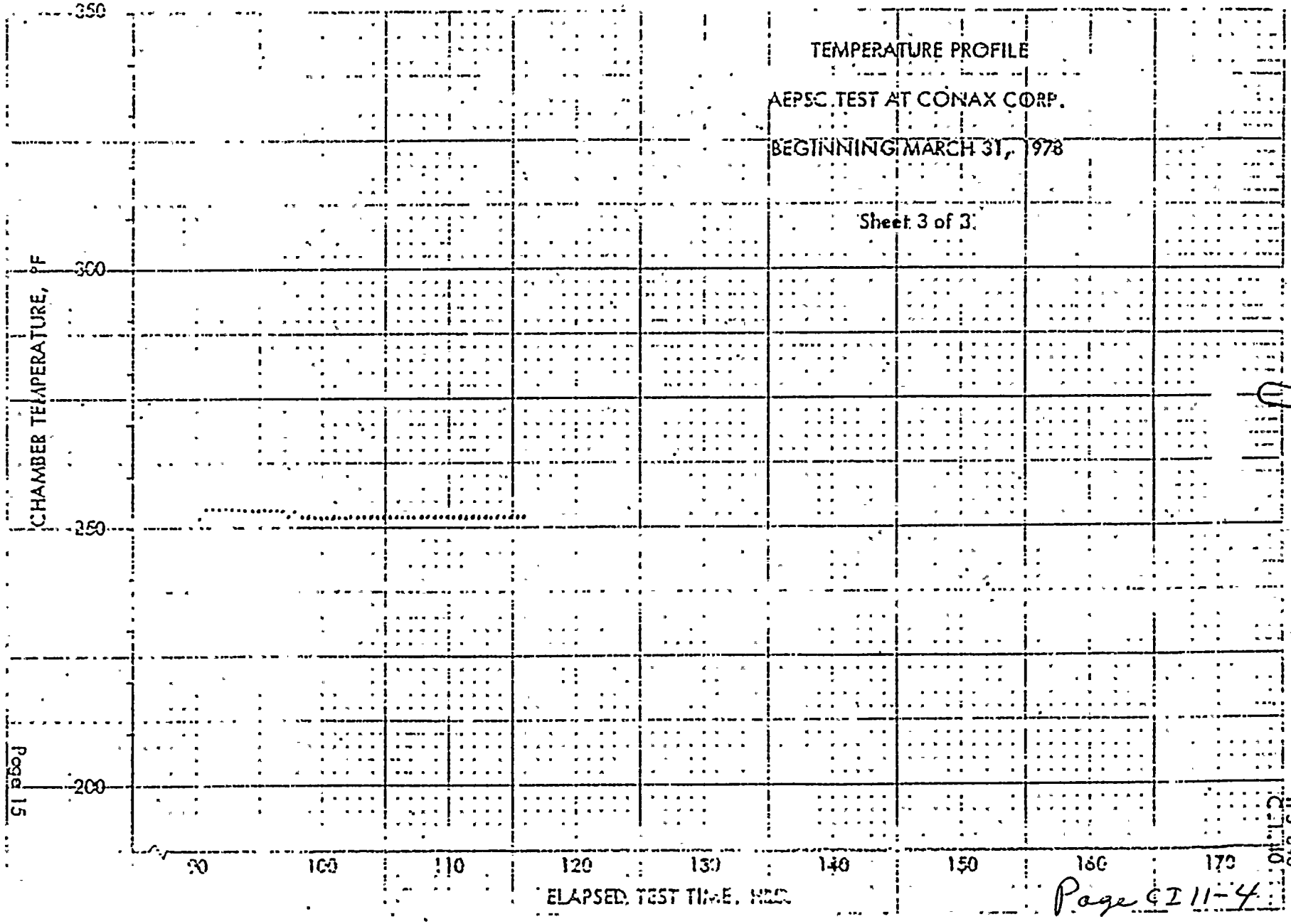

TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	9	Simul	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	357	FSAR App O	9	Simul.	
COMPONENT: Instrument Cable	Pressure (PSIA)	Fig 0-27	84.7	FSAR App O	9	Simul.	
MANUFACTURER: Raychem Corp.	Relative Humidity (%)	100	100		9	Simul.	
MODEL NUMBER: Item # 3111	Chemical Spray	2000 ppmB	3000 ppm B	T.S. 3/4.5 3/4.6.5	9	Simul.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	150	200	WCAP 7410-L Vol 1	9	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		302°F/7 Days Yes		9	Simul.	
SERVICE: VARIOUS	Submergence		Yes		9	Simul.	
LOCATION: In and Out of Containment							
FLOOD LEVEL ELEV: 641' ABOVE FLOOD LEVEL: No							

*Documentation References:

9. Fire Test Report F-C4033-1

Notes:

1) containment temp 2.78 hrs after accident 185°F (Fig 3, App N, FSAR). cable temp rating 194°F

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	9	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	357	FSAR APP Q	9	Simul.	
COMPONENT: Instrument Cable	Pressure (PSIA)	Fig 1 Fig. 2	84.7	AEW 650Y	9	Simul.	
MANUFACTURER: Raychem Corp.							
MODEL NUMBER: Item # 3112	Relative Humidity (%)	100	100		9	Simul.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	9	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	Fig 4 150	200	WCAP 7410-L 5011	9	Simul.	
SERVICE: VARIOUS							
LOCATION: In and Out of Containment	Aging (years)		302°F/70 days Yes		9	Simul.	
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No.	Submergence		Yes		9	Simul.	

*Documentation References:

9. FIRL Test Report F-C4033-1

Notes:

1) containment temp 2.78 hrs after accident 185°F (Fig 7, App N, FSAR). cable temp rating 194°F.

From Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 DAY	See Notes 1&2	Note c	Notes 1+2	Eng'g Review	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	See Note 2	FSAR App 0	Note 2	Eng'g Review	
COMPONENT: Instrument CABLE	Pressure (PSIA)	Fig 0-27	See Note 2	FSAR App 0	Note 2	Eng'g Review	
MANUFACTURER: Continental	Relative Humidity (%)	NA	NA	NA	NA		
MODEL NUMBER: Item # 3069	Chemical Spray	NA	NA	NA	NA		
FUNCTION: Various	Radiation (10^6 rads)	4.1	10	See Note A	Note 1	Eng'g Review	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		See Note B		Note B	Eng'g Review	
SERVICE: Various	Submergence	NA	NA	NA	NA		
LOCATION: Outside containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA							

*Documentation References:

Notes:

Note 1) As per TABLE C-1 App. C to NRC IE Bulletin 79-01B, CABLE insulation material (XLPE is good for 10 MRADS)

2) CABLE Temp rating: equals 90°C (194°F). 230°F for 10 secs and 11.5 psig for .1 sec does not represent a challenge to the cable mechanical or electrical quality.

A) AEPSC NS+L CALCULATION DC-10-6420-2

B) XLPE 40yrs as per Table C-1 App C of Enclosure 4 to NRC IE Bulletin 79-01B.

C) Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 + 9-29-75.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Notes 1&2	Note 4 below	Notes 1+2	Eng'g Review	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	See Note 2	FSAR App O	Note 2	Engineering Review	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 0-27	See Note 2	FSAR App O	Note 2	Engineering Review	
MANUFACTURER: Essex							
MODEL NUMBER: Item # 324	Relative Humidity (%)	NA	NA	NA	NA		
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA		
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	10	See Note 3.	See Note 1	Engineering Review	
LOCATION: Outside Containment	Aging (years)		See Notes 1&2		Notes 1+2	Eng'g Review	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA		

*Documentation References:

Notes:

Note 1:) As per TABLE C-1 App C of Enclosure 4 to NRC IE Bulletin 79-01B, CABLE insulation material (EPR-Neoprene) is good for 10 MRADS) AND ≥ 10yrs AGING

2) Cable temp rating: equals 90°C (194°F). 230°F for 10 sec and 11.5 psig for .1 sec does not represent a challenge to the cable mechanical or electrical quality.

3) AEPSC NS&L CALCULATION DC-N 6420-2

4) Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 & 9-29-75.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 year	See Note 1		40	Sep	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	250	FSAR App.	40.	Sep.	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 0-27	14.7.	FSAR App.	40	Sep	
MANUFACTURER: Cyprus	Relative Humidity (%)	NA	NA	NA	NA	NA	
MODEL NUMBER: Item #324	Chemical Spray	NA	NA	NA	NA	NA	
FUNCTION: Various	Radiation (10^6 rads)	16.6	200	See Note 2	38	Sep.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		IEEE 383-1974 Yes PARA 2.3.3		38	Sep.	
SERVICE: Various	Submergence	NA	NA	NA	NA	NA	
LOCATION: Out of Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA							

*Documentation References:

38. Cyprus Statement of 6-16-76
40. Cyprus Report No. 3525.

Notes:

1) 230°F for 10 sec and 11.5 psig for .1 sec does not challenge the mech. or elect. quality of the cable. cable temp rating 194°F
2) AEPSC NS+L Calculation SC-N 6420-2

from
Ref.
40. Cypeus Report No. 3525 Item #324,325

Air Oven Test: 168hrs at 250°F

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		40	Sep.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	250	FSAR APP. O	40	Sep.	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 0-27	14.7	FSAR APP O.	40	Sep	
MANUFACTURER: Cyprus	Relative Humidity (%)	NA	NA	NA	NA	NA	
MODEL NUMBER: Item #325	Chemical Spray	NA	NA	NA	NA	NA	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	200	See note 2	42	Sep.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		IEEE 383/1974 Yes PARA 2.3.3		42	Sep.	
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA		
LOCATION: Out of Containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA							

*Documentation References:

40. Cyprus Report No. 3525
42. Cyprus Statement of 6-21-76

Notes:

1) 230°F for 10 second 11.5 psig for .1 sec do not challenge the cable mat. or elect quality. cable temp rating = 192°F.
2) AEPSC NS+L CALCULATION DC-N-6420-2.

from Ref. 40. Cyprus Report No. 3525 Item #324,325

: Air Oven Test: 168hrs at 250°F

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	FSAR Table 7.5-2	35	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 13.13-1	303	FSAR APP N	35	SEQ.	
COMPONENT: POWER CABLE MANUFACTURER: CYPRUS	Pressure (PSIA)	FIG 1 FIG 2	80.7	AEW 6504	35	SEQ.	
MODEL NUMBER: Item # 347	Relative Humidity (%)	100	100		35	SEQ.	
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	2000 ppm B	T.S 3/4.5 3/4.5.6	35	SEQ.	
SERVICE: VARIOUS	Radiation (10^6 rads)	FIG 4 150	300	WCAP 7410-L VOL 1	35	SEQ.	
LOCATION: IN CONTAINMENT	Aging (years)		IEEE 383-1974 PARA 2.3.3				
FLOOD LEVEL ELEV: 611 ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

35. FIRL TEST REPORT FC 3016

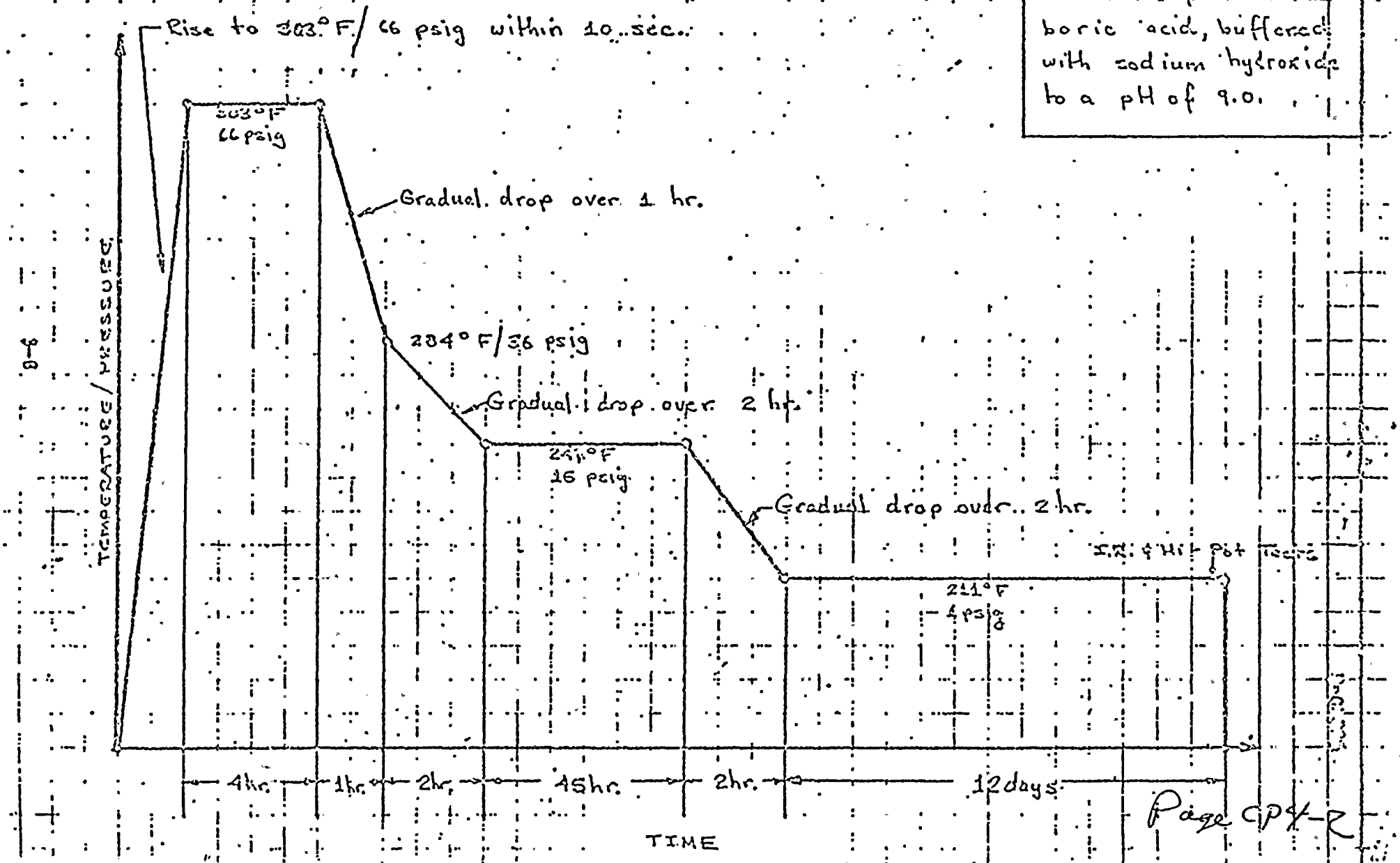
Notes:

1) containment temp rating 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR), cable temp rating 199°F

from Ref. 35.

FIRL TEST REPORT. F-C 3016
Sequential Test
RADIATION: 300 MRAD

Chemical spray maintained during entire test: 2000 ppm solution of borenics boric acid, buffered with sodium hydroxide to a pH of 9.0.



EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1	7.5-2 TABLE FSAR	5	Simul	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	340	FSAR APP Q.	5	Simul.	
COMPONENT: Power CABLE	Pressure (PSIA)	FIG. 1 FIG. 2	119.7	AEW 6504	5	Simul.	
MANUFACTURER: ANACONDA WIRE + CABLE CO	Relative Humidity (%)	100	100		5	Simul.	
MODEL NUMBER: Item # 347	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 3/4.5 3/4.5.6	5	Simul.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L VOL 1	5	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		Yes 250°F LONG TERM 70 DAYS		5	Simul.	
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	
LOCATION: IN AND OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: yes							

*Documentation References:

5. FIRL TEST REPORT F-C 3341

Notes:

1) containment temp 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR). cable temp rating 194°F

from Ref. 5. Qualified by Franklin Institute Research Laboratory (FIRL) Test Report #F-C3341, Jan. 1973.

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.51 Mrads/hr, 200 Mrads
340°F, 105 psig for 3 hrs
320°F, 75 psig for 3 hrs
250°F, 15 psig for 4 days
210°F, 5 psig for 9 days

Chemical Spray: Solution of boric acid and Na OH , PH = 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	6	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 22.9-1,-2 328.2 PEAK	346	FSAR APP Q	6	Simul.	
COMPONENT: Power CABLE	Pressure (PSIA)	FIG 1 FIG. 2	127.7	AEC 6504	6	Simul.	
MANUFACTURER: OKONITE							
MODEL NUMBER: ITEM # 399	Relative Humidity (%)	100	100		6	Simul.	
FUNCTION: VARIOUS	Chemical Spray	2000 PPM B	2000 PPM B	T.S 3/4.5 3/4.5.6	6	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L Vol 1	6	Simul.	
SERVICE: VARIOUS							
LOCATION: IN AND OUT of CONTAINMENT	Aging (years)		240°F/7DAYS Yes				
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	NA	NA	

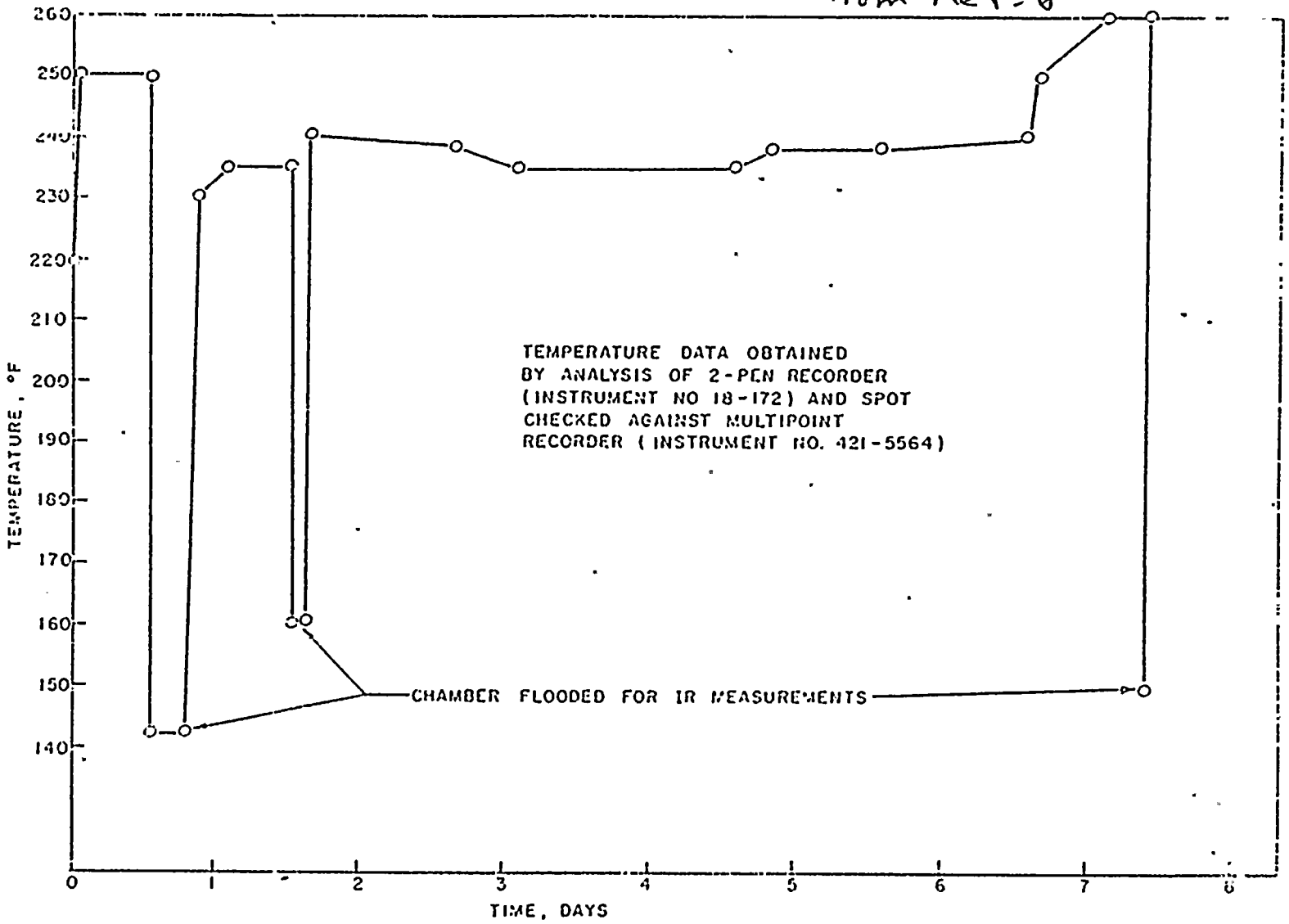
*Documentation References:

6. FIRL Test Report F-C 3694

Notes:

1) Containment temp 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR). Cable temp rating = 194°F

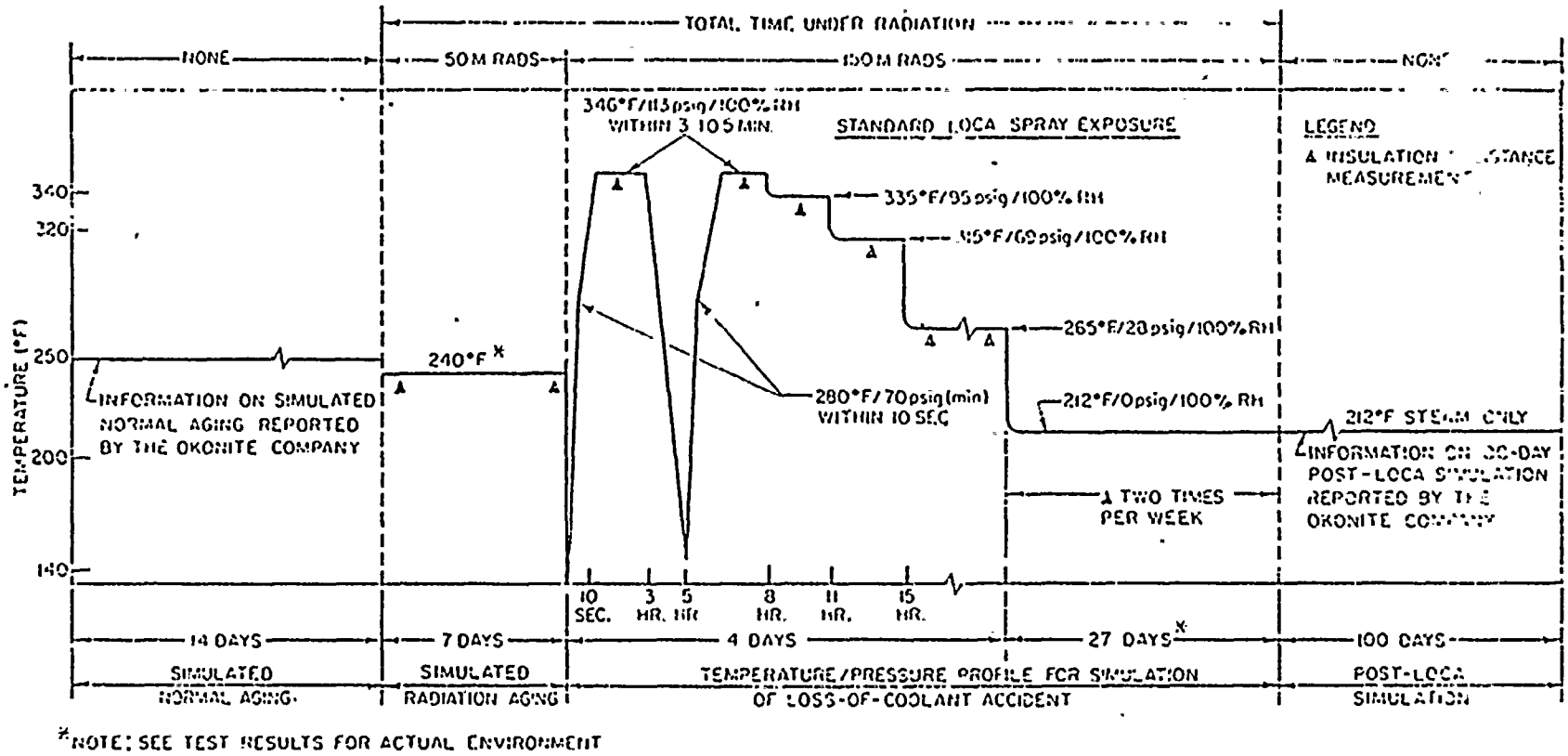
from Ref. 6



F-C3691

Figure 6. Actual Temperature Profile for Simultaneous Thermal Aging with Radiation . Page CP6-2

from Ref. 6



*NOTE: SEE TEST RESULTS FOR ACTUAL ENVIRONMENT

Figure 1. Cable Qualification Test Profile for Life, LOCA and Post-LOCA Simulation

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F-C3694

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		41	Sep	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	250	FSAR APP Q	41	Sep.	
COMPONENT: Power + CABLE	Pressure (PSIA)	FIG 0-27	14.7	FSAR APP Q	41	Sep.	
MANUFACTURER: Cypros							
MODEL NUMBER: Item #3102	Relative Humidity (%)	NA	NA	NA	NA	NA	
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA	NA	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: VARIOUS	Radiation (10^6 rads)	16.6	200	see Note 2	39	Sep.	
LOCATION: Outside Containment	Aging (years)		IEEE-383 1974 paragraph 2.3.3		39	Sep.	
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

39. Statement from Cypros 8-14-76

41. Cypros Report No. 3658

Notes:

1) 230°F for 10 sec and 11.5 psig for .1 sec do not challenge the cable mech. or elect. quality. Cable temp rating 194°F

2) AEPSC NS&L Calculation DC-N-6420-2.

from Ref. 41. Cypeus Report No. 3658 Item # 3102

Air Oven Test: 168 hrs at 250°F

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1		37	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	346	FSAR App Q	37	SEQ.	
COMPONENT: Power CABLE	Pressure (PSIA)	Fig 0-27	127.7	FSAR App Q	37	SEQ.	
MANUFACTURER: OKONITE	Relative Humidity (%)	NA	100		37	SEQ.	
MODEL NUMBER: Item* 3102	Chemical Spray	NA	IEEE 323 1974		37	SEQ.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	200	See Note 2	37	SEQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		IEEE 383-1974				
SERVICE: VARIOUS							
LOCATION: Out of Containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

37. OKONITE. QUAL. of OKOGUARD Ethylene-Propylene Rubber Insulation for Nuclear Plant Service.

Notes:

1) 230°F for 10 sec and 11.5 psig for 1 sec do not challenge the cable mech. or elect. quality. cable temp rating = 194°F

2) AEPSC NS+L calculation DC-N-6420-2

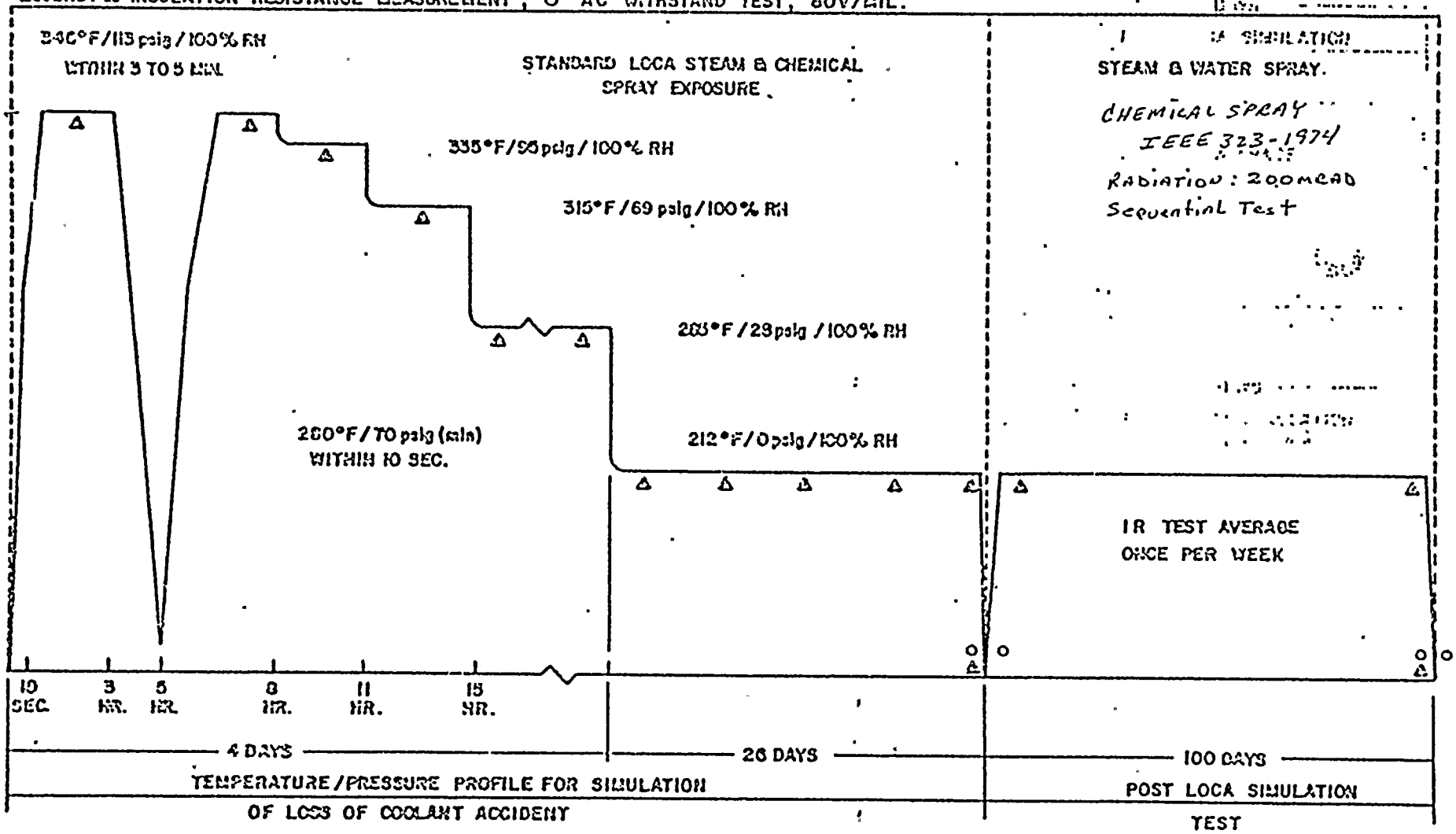
37

OKONITE Co. QUAL. of OKOGUARD Ethylene-Propylene Rubber INSULATION FOR NUCLEAR PLANT SERVICE

FIGURE 11 CABLE QUALIFICATION TEST PROFILE FOR LIFE & LOCA CONDITIONS

from Ref. 37

LEGEND: Δ INSULATION RESISTANCE MEASUREMENT ; O AC WITHSTAND TEST, 80V/MIL.



Page CP8-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	5	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIGDZZ.9-1,-2 328.2 PEAK	340	FSAR APP Q	5	Simul.	
COMPONENT: Power Cable	Pressure (PSIA)	FIG. 1 FIG. 2	119.7	AEW 6504	5	Simul.	
MANUFACTURER: ANACONDA							
MODEL NUMBER: ITEM #3116	Relative Humidity (%)	100	100		5	Simul.	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	3000 ppm B	T.S. 3/4.5 3/4.5.6	5	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	FIG 4 150	200	WCAP 7410-L VOL 1	5	Simul.	
SERVICE: VARIOUS							
LOCATION: IN AND OUT OF CONTAINMENT	Aging (years)		250°F/7 days Yes		5	Simul.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence		Yes		5	Simul	

*Documentation References:

5. FIRL TEST REPORT F-C 3341.

Notes:
1/containment temp 2.77 hrs after accident = 185°F (FIG 3, App N, FSAR). cable temp rating 194°F)

From Ref. 5. Qualified by Franklin Institute Research Laboratory (FIRL) Test Report #F-C3341, Jan. 1973.

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.51 Mrads/hr, 200 Mrads
340°F, 105 psig for 3 hrs
320°F, 75 psig for 3 hrs
250°F, 15 psig for 4 days
210°F, 5 psig for 9 days

Chemical Spray: Solution of boric acid and Na OH , PH = 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1	FSAR Table 7.5-2	25	Simul.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	346	FSAR App Q	25	Simul.	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 1 Fig. 2	127.7	AEW 6504	25	Simul.	
MANUFACTURER: Essex International	Relative Humidity (%)	100	100		25	Simul.	
MODEL NUMBER: Item #3116	Chemical Spray	2000 PPM B	3000 PPM B	T.S. 3/4.5 3/4.5.6	25	Simul.	
FUNCTION: VARIOUS	Radiation (10^6 rads)	Fig. 4 150	200	WCAP 7410-L Vol 1	25	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		250°F/7 days Yes		25	Simul.	
SERVICE: VARIOUS	Submergence		Flood up Tubes				
LOCATION: In and Out of Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

25. Isomedix Corp. Test Report of Nov, 1975

Notes:

1) Containment temp 2.78 hrs after accident = 185°F (Fig 3, App N, FSAR). cable temp rating 194°F

from Ref. 25. Qualified by Isomedix Corp. Test Report of November 1975

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
346°F, 113 psig for 5 hrs
265°F, 28 psig for 4 days
215°F, 2 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid in solution with .064 molar sodium thiosulfate buffered with sodium hydroxide to a PH of 9 to 11.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	6 MO.	See Note 1		7	Seq.	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	325	FSAR APP Q	7	Seq.	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 1 Fig. 2	96.7	AEW 6504	7	Seq.	
MANUFACTURER: KERITE Co.							
MODEL NUMBER: Item # 3116	Relative Humidity (%)	100	100		7	Seq.	
FUNCTION: VARIOUS	Chemical Spray	2000 PPM B	2600 PPM B	T.S. 3/4.5 3/4 5.6	7	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	120	120	WCAP 7410 L Vol. II	7	Seq.	
SERVICE: VARIOUS							
LOCATION: In and Out of Containment	Aging (years)		No Details Yes		See Note 2		
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No.	Submergence		FLOOD UP Tubes				

*Documentation References:

7. KERITE Co. REPORT ON the EFFECTS OF GAMMA RAD. AND Autoclaving on KERITE Power + Control CABLES.

Notes:

1. containment Temp 2.78 hrs after accident = 185°F (Fig 3, App P, FSAR) cable temp rating 194°F

2) Kerite Co. Statement of 7-27-79

from Ref. 7. Qualified by Kerite Co. Report on the effects of Gamma Radiation and Autoclaving on Kerite Power & Control Cables
April 30, 1970.

Type of Test: Sequential, gamma radiation
steam
chemical spray

Test Profile:

.8 Mrads/hr, 120 Mrads
325°F, 82 psig for 13 hrs
228°F, 5 psig for 7 days

Chemical Spray: Borated water, 1-1/2% solution of boric acid and distilled water buffered at a PH of 9.5

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 year	See Note 2		Note 2	Engineering Review	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	See Note 2	FSAR App. O	Note 2	Engineering Review	
COMPONENT: Power Cable	Pressure (PSIA)	Fig 0-27	See Note 2	FSAR App. O	Note 2	Engineering Review	
MANUFACTURER: Anaconda							
MODEL NUMBER: Item #8102	Relative Humidity (%)	NA	NA	NA	NA		
FUNCTION: Various	Chemical Spray	NA	NA	NA	NA		
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: Various	Radiation (10^6 rads)	1.6/SI pump 4.5/RHR pump	10	See Note A	Note 1	Engineering Review	
LOCATION: Outside Containment	Aging (years)		See Notes 1+2		Notes 1+2	Engineering Review	
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence	NA	NA	NA	NA		

*Documentation References:

Notes:

Note 1) As per TABLE C-1 App C of Enclosure 4 to NRC IE Bulletin 79-01B, Cable insulation material (EPR-Hypalon) is good for 10 MRADS) AND ≥ 10 yrs AGING

2) Cable Temp rating equals 90°C (194°C) 230°F for 10 secs and 11.5 psig for 1 sec does not represent a challenge to the cable mechanical or electrical quality.

A) AEPSC NS+L Calculation DC-N 6420-2, with distance taken into account.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 2		Note 2	Engineering Review	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	See Note 2	FSAR App O	Note 2	Engineering Review.	
COMPONENT: Power CABLE MANUFACTURER: ANACONDA	Pressure (PSIA)	Fig 0-27	See Note 2	FSAR App O	Note 2	Engineering Review	
MODEL NUMBER: Item #3103	Relative Humidity (%)	NA	NA	NA	NA		
FUNCTION: VARIOUS ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA		
SERVICE: VARIOUS	Radiation (10^6 rads)	0.6/cc pump 3.1/CTS pump	10	See Note A	Note 1	Engineering Review.	
LOCATION: Outside Containment	Aging (years)		See Notes 1+2		Notes 1+2	Engineering Review	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA		

*Documentation References:

Notes:

Note 1) As per Table C-1 App C of Enclosure 4 to NRC IE Bulletin 79-01B, Cable insulation material (EPR-Hypalon) is good for 10 MRADS) AND ≥ 10 yr AGING

2) Cable temp rating equals 90°C (194°C), 230°F for 10 secs and 11.5 psig for 1 sec does not represent a challenge to the cable mech. or elect. quality.

A) AEPSC NS&L Calculation SC-N-6420-2, with distance taken into account.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

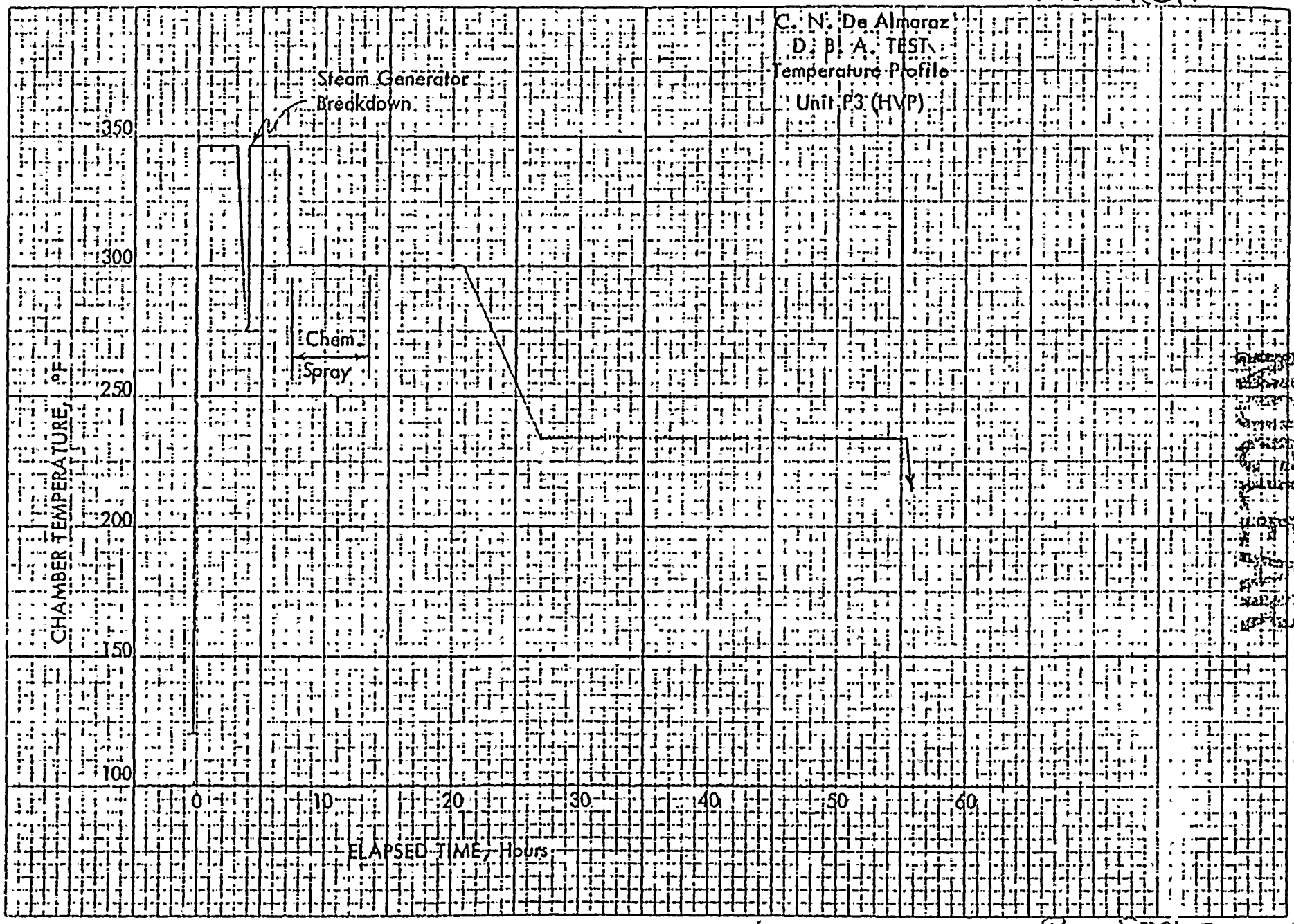
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: NA	Operating Time	1 YEAR	3 DAYS *	TABLE 7.5-2 FSAR	3	SeQ.	
PLANT ID NO: VARIOUS	Temperature (°F)	FIGS. 022.9-1,2 328.2 PEAK	346	FSAR APP. Q.	3	SeQ.	
COMPONENT: 4KV ELECTRICAL PENETRATIONS	Pressure (PSIA)	FIG. 1 FIG. 2	122	AEW 6504	3	SeQ.	
MANUFACTURER: CONAX CORP.	Relative Humidity (%)	100	100		3	SeQ.	
MODEL NUMBER: EP-1	Chemical Spray	2000 ppmB	2098 ppmB	Tech Spec 3/4.5 3/4.6.5	3	SeQ.	
FUNCTION: Containment Isolation	Radiation (10^6 rads)	60	100	LETTER W→AEP AEW-7X	3	SeQ.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)					-	
SERVICE: Isolate Containment							
LOCATION: Inside Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Yes		17,18	Sequential	

*Documentation References:

3. CONAX Corp. Test Report IPS-137
17. CONAX Corp Test Report IPS-326
18. CONAX Corp Test Report IPS-327

Notes: *See note page EP01-1, Unit 1.

from Ref. 3



DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: NA	Operating Time	1 YEAR	6 hrs *	TABLE 7.5-2 FSAR	1	Seq	
PLANT ID NO: VARIOUS	Temperature (°F)	FIGS. 022.9-1-2 328.2 peak	340	FSAR APP. Q	1	Seq	
COMPONENT: 600V AND BELOW ELECTRICAL PENETRATIONS MANUFACTURER: CONAX Corp.	Pressure (PSIA)	FIG 1 FIG 2	116	AEC 6504	1	Seq	
MODEL NUMBER: EP-2 through EP-14	Relative Humidity (%)	100.	100		1	Seq	
FUNCTION: Containment Isolation ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	2098 ppm B	T.S. 3/4.5 3/4.6.5	3	Seq	
SERVICE: Isolate Containment	Radiation (10^6 rads)	60	100	WCAP 7410-L Vol 2	1	Seq	
LOCATION: Inside Containment	Aging (years)						
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Yes		17,18	Sequential	

*Documentation References:

1. CONAX Corp. Test Report IPS-234
3. CONAX Corp. Test Report IPS-137
17. CONAX Corp. Test Report IPS-326
18. CONAX Corp. Test Report IPS-327

Notes: * See note page EP01-1, Unit 1.

1. Qualified by Conax Corp. Test Report IPS-234

June 9 1977

Type of Test: Sequential Irradiation/steam

Test Profile

1.0 – 1.1 Mrads/hr for 100 hrs.

100 – 110 Mrads total dose

340°F, 116 psia for 3 hrs

Perform leakage test and repeat steam test

340°F, 116 psia for 3 hrs.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR		Table 7.5-2	21	Seq.	
PLANT ID NO: HV-CEQ-1 HV-CEQ-2	Temperature (°F)	Fig 13.13-1	320	FSAR App N	21	SEQ	
COMPONENT: FAN MOTORS	Pressure (PSIA)	Fig 1 Fig 2	89.7	ADD 6604	21	SEQ	
MANUFACTURER: WESTINGHOUSE CORP. MODEL NUMBER: BDP	Relative Humidity (%)	100	100		21	SEQ	
FUNCTION: CIRCULATE AIR	Chemical Spray	2000 ppm B	2500 PPM B	T.S. 3/4.5 3/4.5.6	21	SEQ	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	150	200	WCAP 7410-L Vol 1	21	SEQ	
SERVICE: VARIOUS	Aging (years)		200°C/500hrs Yes		21	SEQ	
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence	NA	NA		NA	NA	

*Documentation References:

21. WESTINGHOUSE CORP. TEST REPORT WCAP-7829

Notes:

from Ref. 21.

Qualified by Westinghouse Corp. Test Report$:
WCAP-7829, April, 1972.

Type of Test: Sequential: Irradiation
Steam
Chemical Spray

Test Profile (for motor without heat exchanger)

324°F, 80 psig for 4 hrs.
250°F, 16 psig for 7 days

Test Profile (for motor with heat exchanger)

320°F, 75 psig for 24 hrs.
250°F, 16 psig for 168 hrs.

Chemical Spray: 1.43 weight percent boric acid
PH=9.5 with Na OH

Irradiation: .5 Mrad/hr., 200 Mrads.

See page 33 of WCAP-7829 for Test Profile summary.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	> 1 yr.	See Note C	Ref. 47	TEST	
PLANT ID NO: MOBILUX EP-2	Temperature (°F)	Fig Occ. 9-1,-2	250 Cont. Service 350 drop pt.	FSAR APP Q	Ref. 48	Tech Description sheet	
COMPONENT: GREASE	Pressure (PSIA)	Fig 1 Fig 2	See Note A	AEW 6504	Ref. 48	"	
MANUFACTURER: MOBIL							
MODEL NUMBER:	Relative Humidity (%)	100	100		Ref. 48	"	
FUNCTION: VARIOUS	Chemical Spray	2000 ppm B	See Note B	T.S. 3/4.5 3/4.6.5	NA	NA	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	26	240	WCAP 7410-L Vol. 1	Ref. 47	TEST	
SERVICE: VARIOUS—Valve OPERATOR MOTORS	Aging (years)						
LOCATION: In + Out Containment							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence	NA	NA				

*Documentation References:

47. QUAL. by Letter of 6-2-71
FROM: WF Hergrueter - Customer Service LAB BKLYN, NY
TO: AH. Statton - Boston Edison Co.

48. Letter of 4-11-80 from J. M. Allen (Mobil Oil Corp) to Allen Feibelman (AEP).

Notes:

A. Refer to Tech. Description sheet.

B. Grease enclosed in a container will not be subjected to direct caustic spray impingement

C. Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

Mobilux® EP 0, 1, 2

Extreme Pressure Industrial Greases

Mobilux EP 0, 1, and 2 are unleaded multiservice, extreme pressure greases designed for normal through heavy-duty industrial applications. They are formulated to resist the effects of both the extremely heavy loads and shock loads to which plant equipment is commonly exposed. Heavy loads tend to squeeze lubricant from mating surfaces, and shock loads rupture the lubricant film, thus creating a condition of metal-to-metal contact and causing parts wear, shortening equipment life. Equipment experiencing these loading extremes may also be exposed to conditions where extremes of temperature, moisture, or water washing are present. Greases for these applications must provide good extreme pressure characteristics and cling strongly to resist the pressures and pounding to which they are exposed. They must also provide good protection against rust and corrosion, resist water washing and dispense and lubricate satisfactorily over a broad range of temperature. The Mobilux EP greases fulfill these requirements.

PRODUCT DESCRIPTION

The Mobilux EP greases are lithium 12 hydroxystearate soap based greases which contain an unleaded EP additive and oxidation, rust and corrosion inhibitors. They are smooth textured, brown colored greases in the NLGI No. 0, 1, or 2 consistency classification.

The use of lithium 12 hydroxystearate as the soap base for these greases ensures good resistance to softening under severe working, good water resistance and a consistency which will remain relatively constant over the recommended operating temperature range.

The extreme pressure characteristic of the Mobilux EP greases is supplied by an unleaded additive which provides them with exceptional wear protection, also improving their ecological acceptability. Other formulation improvements provide good water wash resistance, low temperature dispensing, and long service life in bearings operating at elevated temperatures.

The petroleum oil used in the greases meets the lubrication requirements of most heavy-duty industrial operations. It also provides low temperature pumpability and enhances the greases' high temperature oxidation resistance.

The Mobilux EP greases pass the ASTM Rust Test (D 1743) and are noncorrosive to steel and copper. The latter is of importance because of the use of bronze cages in many anti-friction bearings. The greases show good resistance to bleeding and superior resistance to water washout. Their load carrying and antiwear characteristics are illustrated by their Timken OK load of 40 lbs., 18.2 Kg.

Characteristic	Mobilux EP 0	Mobilux EP 1	Mobilux EP 2
NLGI No.	0	1	2
Structure	smooth	smooth	smooth
Soap Type	Unleaded Lithium 12 Hydroxystearate		
Color	brown	brown	brown
Penetration at 77°F (25°C)			
Unworked, min-max	350-390	305-345	260-300
Worked 60 strokes, min-max	355-385	310-340	265-295
Dropping Point, min. F (C)	340 (171)	340 (171)	350 (177)
Mineral Oil %	92	89	87
Viscosity			
SUS at 100°F	750	750	750
SUS at 210°F	75	75	75
cSt at 40°C	143	143	143
cSt at 100°C	13.8	13.8	13.8
Timken OK Load, min. lb (kg)	40 (18)	40 (18)	40 (18)
Rust Test ASTM D 1743	Pass	Pass	Pass
Bomb Oxidation Stability			
ASTM D942			
PSI Drop, max	10	10	10

Mobilux EP 0, 1, 2

Extreme Pressure Greases

TYPICAL CHARACTERISTICS

Physical and chemical characteristics of the Mobilux EP greases are shown in the data sheet table. Values not shown as maximums or minimums are typical characteristics and may vary slightly.

APPLICATION

Mobilux EP greases are recommended for the lubrication of plain and rolling element bearings in normal through heavy-duty industrial applications. They are particularly recommended where loads are high or shock loads are present, or where severe vibration is a problem. They are also suitable for the lubrication of geared couplings. The softer grade may be considered for the lubrication of gear sets that do not have oil-tight cases.

Mobilux EP 0 and 1 greases have excellent handling and dispensing properties at low temperature. The lowest recommended ambient temperature for operating bearings lubricated with Mobilux EP 0 or 1 is about -20°F (-29°C); and for Mobilux EP 2, a stiffer grease, about -10°F (-23°C).

All three Mobilux EP greases are recommended for the lubrication of plain bearings. The highest operating temperature recommended for these greases is 250°F (121°C). For continuous service at temperatures above 200°F, proper purging and relubrication frequencies are critical to maintenance of correct bearing protection.

The excellent water resistance and rust and corrosion protection afforded by the Mobilux EP greases makes them particularly applicable for equipment such as the wet ends of paper machines, steel mill hot strip rolling operations, underground mining equipment, tunneling projects and ore crushing plants where moisture or wet conditions are common. Their excellent dispensing characteristics will also be advantageous in many of these applications because of the exposed nature of the operations.

Mobilux EP greases are compatible with some other greases, particularly those made with lithium soap. However, the best procedure is not to mix greases of different soap types. When replacing another grease with a Mobilux EP grease, the previously used grease should be completely cleaned or flushed from the system.

In plants where human or animal foods are being processed, Mobilux EP greases, despite their unleaded extreme pressure formulation, are not recommended for applications where contamination of food could result. Mobilux EP greases have U.S. Department of Agriculture (USDA) Category BB approval.

ADVANTAGES

When used as recommended, the Mobilux EP greases will provide the following outstanding benefits and advantages:

- Superior lubrication under heavy or shock loading
- Good load carrying ability
- Longer service life in bearings at temperatures up to 250°F
- Good low temperature dispensing characteristics
- Excellent resistance to water washing
- Good rust protection and corrosion resistance
- Extreme pressure protection with an unleaded formulation
- Reduction of plant inventories through multipurpose capabilities

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Essential Service Water	Operating Time	500 hours for Pump	N/A	Mfgr Lit.	—	Tests + Consultation With Mobil	None
PLANT ID NO: PP-007	Temperature (°F)	110 Ambient	250 cont. Service 350 drop pt.	FSAR Sect 9.9.2	#48		
COMPONENT: Pump Grease	Pressure (PSIA)	1500	No effect	Mfgr Lit	—		
MANUFACTURER: Mobil							
MODEL NUMBER: Mobilux #2	Relative Humidity (%)	N/A	No effect	—	—		
FUNCTION: Lubrication							
ACCURACY: SPEC: DEMON: N/A	Chemical Spray	N/A	N/A	—	—		
SERVICE: ESW Pump	Radiation (10^6 rads)	N/A	100	—	#48		
LOCATION: Aux Bldg. 591'-0"	Aging (years)	N/A	N/A	—	—		
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A	—	—		

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feilelman (AEP).

Notes:

Pump manufacturer recommends the following greases:

Shell Oil Co. – Darina EP #2
Mobil Oil Co – Mobilux EP #2
Phillips Petroleum Co. – Philube EP #2
Std. Oil of Co. – Chevron Industrial Grease – Heavy
Union Oil Co – Royal Unoba #2
Texaco Inc – Multifak #2
Atlantic Richfield Oil Co – Recolube #2 MP

AEP uses Mobilux No. 2 grease.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Spray	Operating Time	N/A	N/A	—	—	Tests + Consultation with Mobil	None
PLANT ID NO: PP-009	Temperature (°F)	Ambient 110	250 cont. service 400 flash pt.	FSAR Sect. 9.9.2	#48		
COMPONENT: Motor Oil	Pressure (PSIA)	N/A	No Effect	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No Effect	—	—		
MODEL NUMBER: D.T.E. Oil Medium	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	17	100	AEPSC NS&L calc. DC-N-6470-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: CTS Pump Motor	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg El. 573'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References:

48. Letter of 4-17-80 from J.M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Spray	Operating Time	N/A	N/A	—	—	Tests + Consultation With Mobil	None
PLANT ID NO: PP-009	Temperature (°F)	Ambient 110	250 cont. service 350 drop pt.	FSAR Sect. 9.9.2	#48		
COMPONENT: Motor Grease	Pressure (PSIA)	N/A	No effect	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No effect	—	—		
MODEL NUMBER: Mobilux #2	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	17	100	AEPSC NS&L calc. DC-N-6470-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: CTS Pump Motor	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg El 573'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References:

48. Letter dated 4-17-80 from J. M. Allen (Mobil) to A. Feilelman (AEP).

Notes:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Component Cooling Water	Operating Time	N/A	N/A	—	—	Tests + Consultation with Mobil	NONE
PLANT ID NO: PP-010	Temperature (°F)	AMBIENT 110	Flash Pt. 410	FSAR Sect 9.7.2	# 48		
COMPONENT: Pump Oil	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: Mobil							
MODEL NUMBER: DTE 797 0.1	Relative Humidity (%)	N/A	NO EFFECT	—	—		
FUNCTION: Lubrication							
ACCURACY: SPEC: DEMON: N/A	Chemical Spray	N/A	N/A	—	—		
SERVICE: CCW Pump	Radiation (10^6 rads)	N/A	100	—	# 48		
LOCATION: Aux Bldg El. 609'-6"	Aging (years)	N/A	N/A	—	—		
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A	—	—		

*Documentation References: 48. Letter of 4-17-80 from J.M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Pump Manufacturer recommends oil with characteristics:

Oil Characteristic	Napthene Base	Paraffin Base
Flash Point	300°F, min	360°F, min
Saybolt Viscosity 100°F	150 sec, min 200 sec, max	140 sec, min 185 sec, max
Pour Point	50°F max	30°F, max

AEP uses Mobil D.T.E 797 0.1, a paraffinic oil which meets mfgr specifications.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Component Cooling Water	Operating Time	N/A	N/A	—	—	Tests + Consultation With Mobil	NONE.
PLANT ID NO: PP-DID	Temperature (°F)	AMBIENT 110	250 cont. service 350 drop pt.	FSAR Sect 9.9.2	#48		
COMPONENT: Coupling Grease	Pressure (PSIA)	N/A	No Effect	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	No Effect	—	—		
MODEL NUMBER: Coupling Grease	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	N/A	100	—	#48		
ACCURACY: SPEC: N/A DEMON:	Aging (years)	N/A	N/A	—	—		
SERVICE: CCW Pump Coupling	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg El 609'-6"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from J.M. Allen (Mobil) to A. Fejfelman (AEP).

Notes:

Coupling manufacturer recommends grease with NGLI No. 2 with worked penetration value of 250 to 300.

AEP uses Mobilux No. 2 grease which meets mfgr specs.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: SAFETY INJECTION	Operating Time	N/A	N/A	—	—	TESTS + CONSULTATION WITH MOBIL	NONE
PLANT ID NO: PP-026	Temperature (°F)	AMBIENT 110	Flash pt. 410	FSAR Sect 9.9.2	#48		
COMPONENT: PUMP OIL	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: MOBIL	Relative Humidity (%)	N/A	NO EFFECT	—	—		
MODEL NUMBER: DTE 797 0.1	Chemical Spray	N/A	N/A	—			
FUNCTION: Lubrication	Radiation (10^6 rads)	.17	100	AEPSC NS&L calc. DC-N-8470-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: SI Pump	Submergence	N/A	N/A	—	—		
LOCATION: AUX BLDG El 587'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 From J. M. Allen (Mobil) to A. Feikelman (AEP).

Notes: Pump manufacturer recommends high grade turbine oil with a viscosity of 150 SSU @ 100°F. AEP uses Mobil DTE 797 oil which meets listed spec.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50-316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: SAFETY INJECTION	Operating Time	N/A	N/A	—	—	TESTS + CONSULTATION WITH MOBIL	NONE
PLANT ID NO: PP-026	Temperature (°F)	AMBIENT 110	250 cont. service 400 flash pt	FSAR Sect 9.7.2	#48		
COMPONENT: MOTOR OIL	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: MOBIL	Relative Humidity (%)	N/A	NO EFFECT	—	—		
MODEL NUMBER: DTE OIL Heavy Medium	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	17	100	AEPSC NS&L calc. DC-N-6420-2	#48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: SI Pump Motor	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg EL. 587'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes: Motor manufacturer recommends oil with viscosity of 180 to 220 SSU @ 100°F. AEP uses Mobil D.T.E. Oil Heavy Medium.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Residual Heat Removal PLANT ID NO: PP-035 COMPONENT: Pump + Motor Grease MANUFACTURER: Mobil MODEL NUMBER: Mobilux #2 FUNCTION: Lubrication ACCURACY: SPEC: N/A DEMON: SERVICE: RHR Pump RHR Pump Motor LOCATION: Aux Bldg. El. 573'-0"	Operating Time	N/A	N/A	—	—	Tests + Consultation with Mobil	NONE
	Temperature (°F)	110 Ambient	250 cont. Service 350 drop pt.	FSAR Sect 9.9.2	# 48		
	Pressure (PSIA)	N/A	No effect	—	—		
	Relative Humidity (%)	N/A	No effect	—	—		
	Chemical Spray	N/A	N/A	—	—		
	Radiation (10^6 rads)	17	100	AEPSC NSRL calc. DC-N-6470-2	#48		
	Aging (years)	N/A	N/A	—	—		
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A	—	—		

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Motor Manufacturer recommends Westinghouse Grease #55272-BA } AEP uses Mobilux No. 2 Grease, recommended by Mobil as a suitable substitute.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS/ECCS	Operating Time	N/A	N/A	—	—	TESTS + CONSULTATION WITH MOBIL	NONE
PLANT ID NO: PP-050	Temperature (°F)	AMBIENT 110	250 cont. service 400 flash pt.	FSAR Sect 7.7.2	# 48		
COMPONENT: Pump + Motor Oil	Pressure (PSIA)	N/A	NO EFFECT	—	—		
MANUFACTURER: Mobil	Relative Humidity (%)	N/A	NO EFFECT	—	—		
MODEL NUMBER: D.T.E Oil Heavy Medium	Chemical Spray	N/A	N/A	—	—		
FUNCTION: Lubrication	Radiation (10^6 rads)	.17	100	AEPSC NS&L calc. DC-N-6470-2	# 48		
ACCURACY: SPEC: DEMON: N/A	Aging (years)	N/A	N/A	—	—		
SERVICE: CCW_4 Pump	Submergence	N/A	N/A	—	—		
LOCATION: Aux Bldg El 587'-0"							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References: 48. Letter of 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes:

Pump manufacturer recommends using high grade mineral oil of the turbine type, having viscosity of 150-250 SSU @ 100°F.

Motor manufacturer recommends bearing oil with a viscosity of 200 SSU @ 100°F

Gear case manufacturer recommends oil with viscosity of 180-240 SSU @ 100°F

AEP uses Mobil D.T.E Oil Heavy Medium.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS/ECCS	Operating Time	N/A	N/A	—	—	Tests, Consultation With Mobil	None
PLANT ID NO: PP-050	Temperature (°F)	Ambient 110	drop pt. 400°	FSAR Sect 9.9.2	A 48		
COMPONENT: Coupling Grease	Pressure (PSIA)	N/A	No Effect	—	—		
MANUFACTURER: Mobil							
MODEL NUMBER: Sovarex L-0	Relative Humidity (%)	N/A	No Effect	—	—		
FUNCTION: Lubrication							
ACCURACY: SPEC: DEMON: N/A	Chemical Spray	N/A	N/A	—	—		
SERVICE: Cont. Charging Pump Coupling	Radiation (10^6 rads)	17	100	AEPSC NS&L calc. DC-N-6470-2	# 48		
LOCATION: Aux Bldg El 587'-0"	Aging (years)	N/A	N/A	—	—		
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A	—	—		

*Documentation References: 48. Letter dt 4-17-80 from J. M. Allen (Mobil) to A. Feibelman (AEP).

Notes: Coupling manufacturer recommends the following greases:

LANTIC REFINING COMPANY	ATLANTIC LUBRICANT #17
IERICAN OIL COMPANY	AMOBAR S
OOKS OIL COMPANY	LEADOLENE 375 LIGHT
ES SERVICE PETROLEUM, Inc.	TROJAN GREASE A-1
NTINENTAL OIL COMPANY	CONOCO SUPER LUBE
E BROTHERS REFINING COMPANY	LUBRIPLATE #630 AA
F OIL CORPORATION	CROWN #1
BLE OIL AND REFINING COMPANY	FIBRAX 370 OR NEBULA EP 0
TONE LUBRICATING COMPANY	KEYSTONE #15 EP XX LIGHT
STER LUBRICANTS COMPANY	LUBRIKO GREASE M-54
LLIPS PETROLEUM COMPANY	PHILUBE #1 STOCK 401
E OIL COMPANY	POCO FIBRE GREASE #1
RICHFIELD OIL CORPORATION	ROCOLUBE RR
SHELL OIL COMPANY	SHELL ALVANIA GREASE #2 SIMNIA 012
SINCLAIR REFINING COMPANY	SINCOLUBE #1, OR LITHOLINE MULTI-PURPOSE GREASE #2
SOCONY-MOBIL OIL CO., Inc.	SOVAREX L-0 MOBILPLEX EP #0
STANDARD OIL CO. OF CALIFORNIA	CALOL SA #1
STANDARD OIL CO. OF OHIO	SOHIO #77
SUN OIL COMPANY	N 751 AND 741 EP
TEXAS COMPANY	MARFAK #1
TIDEWATER ASSOCIATED OIL CO.	TYCOL ALITHO #10
UNION OIL CO. OF CALIFORNIA	BALL ROLL #1 OR ELNOBA #1

AEP uses Mobil Sovarex L-0 grease

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Hydrogen Recombiner	Operating Time	3 months		Table 7.5-2	20	Sep.	
PLANT ID NO: HR-1 HR-2	Temperature (°F)	Fig 13.13-1	310	FSAR App D	20	SEP	
COMPONENT: HYDROGEN RECOMBINERS MANUFACTURER: westinghouse	Pressure (PSIA)	FIG 1 FIG. 2	77	AEW 6504	20	SEP	
MODEL NUMBER: NA	Relative Humidity (%)	100	100		20	SEP	
FUNCTION: Hydrogen Recombiner ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2500 PPM B	FIG. 3/4.5 3/4.5.6	20	SEP	
SERVICE: Hydrogen Recombiner	Radiation (10^6 rads)	— 85	200	WCAP 7410-L Vol 1	20	SEP	
LOCATION: INSIDE CONTAINMENT	Aging (years)		See Note Yes		20	SEP.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence	NA	NA		NA	NA	

*Documentation References:

20. WESTINGHOUSE CORP. TEST REPORT WCAP-7709-L, SUPPL. 2.

Notes: 20 heatup + Cooldown.

from Ref. 20. Qualified by Westinghouse report WCAP-7709-L, supplement 2 of Sept. 1973.

Type of Test: Separate, seismic steam/chem. spray gamma radiation.

Test Profile:

Horizontal (side-to-side) force = 2g
(back-to-back) force = 2g
Vertical force = 1.33g
Frequencies = 1 through 35 Hz

.33 to .80 Mrads/hr
200-220 Mrads

Assumed saturated steam. (310°F, 77 psia for 4 hrs
) 259°F, 35 psia for 20 hrs
(228°F, 20 psia for 1 hr

Chemical Spray: Sodium thiosulfate 2500 ppm boron as boric acid with Na OH added for a PH = 10.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST H PLANT ID NO: BLP-110,111,112; 120,121,122,130,131,132, 140, 141 & 142 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 764 FUNCTION: ACTUATION ACCURACY: SPEC: +10% DEMON: -25% SERVICE: STEAM GENERATOR LEVEL LOCATION: INSIDE CONTAINMENT	Operating Time	22.1 SEC	≤1.5 SEC	TABLE 14.2.8-1	TECH. SPEC 3.3-2	RESPONSE TIME TESTING	NONE
	Temperature (°F)	328.2	360	Q FIG 022.9-1 & -2	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	22	89.7 & 14.7	N13.7-3	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	1.14% BORIC ACID & .17% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	0.6	50		REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT.	75 PSIG	DRWG 5570E	ENGRG JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
REF 30 = WESTINGHOUSE ELECTRIC CORP COMMUNICATION: NS-TMA-1950

Notes: 14.2.8 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST H PLANT ID NO: BLP-110,111,112,120,121,122,130,131,132,140,141 & 141 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 764 LONG TERM FUNCTION: POST ACCIDENT & NORMAL MONITORING ACCURACY: SPEC: ±25% DEMON: -5% SERVICE: STEAM GENERATOR LEVEL LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTH	4 MONTH	(B) Q 030.1	REF. 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Temperature (°F)	160	160	FIG 14.3.4-2	REF. 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	22	89.7 & 14.7	N 13.7-3	REF. 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF. 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID & 0.15% NAOH	1.14% BORIC ACID & 0.17% NAOH	N 5.3.6	REF. 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	0.6	50		REF. 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT.	75 PSIG	DRWG 5570E	ENGRG JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
REF. 30 = WESTINGHOUSE ELECTRIC CORP COMMUNICATION; NS-TMA-1950

Notes: 14.2.8 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.
(B) REQUIREMENTS ADDRESSED IN REF. 30 WHICH WAS SUBMITTED IN RESPONSE TO QUESTION Q30.1

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: AUXILIARY FEEDWATER PLANT ID NO: CLR 110 & 111 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: TAYLOR INSTRUMENT MODEL NUMBER: 304TD00212 FUNCTION: MONITORING ACCURACY: SPEC: DEMON: SERVICE: CONDENSATE STORAGE TANK LEVEL LOCATION: OUTSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence						

NOT APPLICABLE

*Documentation References:

Notes:

THE TRANSMITTER IS LOCATED SUCH THAT NO SOURCE-TARGET INTERACTION OR ADVERSE ENVIRONMENT WILL EFFECT IT. THE SIGNAL LINES ARE SUBJECT TO MSLB AND MFWLB ENVIRONMENT. HOWEVER, FAILURE OF THE SIGNAL LINE (PNEUMATIC) CAUSES THE SIGNAL TO GO TO ZERO THEREBY CAUSING THE OPERATOR TO SWITCH TO AUXILIARY FEEDWATER BACKUP SOURCE.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN FEEDWATER & REACTOR TRIP ACTUATION PLANT ID NO: FCC 210,211, 220,221, 230,231, 240 & 241 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DM-HSMH1 (MCA) FUNCTION: NORMAL MONITOR & ACTUATION ACCURACY: SPEC: ± 16% DEMON: -11.75% SERVICE: MAIN FEEDWATER FLOW LOCATION: OUTSIDE CONTAINMENT	Operating Time	1.5 & 25 SEC	≤ 1.5	TABLE 0-27 & 0-28	TECH. SPEC. 3.3-2	RESPONSE TIME TESTING FOR STM. GEN WATER LEVEL	NONE
	Temperature (°F)	223	290	FIG 0-26	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	5.8	74.7	FIG 0-26	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	NA	NA	NA	NA		NONE
	Radiation (10^6 rads)	NA	NA	NA	NA		NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA	NA	NA	NA		NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
WCAP 8541 - WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: 0.4.2 & 14.2.8 ARE THE ADVERSE ENVIROMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: AUXILIARY FEEDWATER PLANT ID NO: FFI 210 220 230 & 240 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 368 FUNCTION: MONITORING ACCURACY: SPEC: DEMON: SERVICE: AUXILARY FEEDWATER FLOW LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	NOTE(L)	14.2.8	NOTE(L)	NOTE (L)	NONE
	Temperature (°F)	230		FIG 0.27			NONE
	Pressure (PSIA)	26.2		FIG 0.27			NONE
	Relative Humidity (%)	100		7.5			NONE
	Chemical Spray	NA					NONE
	Radiation (10^6 rads)	NA					NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA					NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

Notes: (L) PRESENTLY INSTALLED DEVICES ARE CONTROL GRADE DEVICES WHICH ARE TO BE REPLACED TO MEET THE REQUIREMENTS ON NUREG 0578 ITEM 2.1.7.b. SEE REF: NRC: 00253 DATED OCT. 24 1979.

THESE DEVICES ARE NOT EXPOSED TO LOCA LONG TERM RECIRCULATION RADIATION EXPOSURE DOSES.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFC 315 & 325 COMPONENT: DIFFERENTIAL PRESSURE SWITCH MANUFACTURER: ITT BARTON MODEL NUMBER: 289 A/199 FUNCTION: PUMP PROTECTION ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: RHR PUMP MINIMUM FLOW CONTROLLER LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	EMRGY RRDLS	ENGRG JDGMT	ENGINEERING REVIEW	NONE
	Temperature (°F)	110	200	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	90°F DRY BULB 76°F WET BULB	WEATHER-PROOF CASE	9.9	MNFTR LIT	ENGINEERING REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NOTE (M)	NA	NOTE (A)	NOTE (M)	ENGINEERING REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:	Submergence	NA	NA				NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE TO FSAR SECTIONS MNFTR LIT ITT BARTON PRODUCT / BULLETIN 288A/289A -2 AND TECHNICAL MANUAL 505-4(A)

Notes: (M) LOCATION OF PRESSURE SWITCH IS OUTSIDE ROOM CONTAINING RADIATION SOURCE AND IS THEREFORE SHIELDED FROM EFFECT.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 51, 52, 53 & 54 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DH-HSAHI MCA FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: BORON INJECTION TANK DISCHARGE FLOW LOCATION: INSIDE CONTAINMENT	Operating Time	< 60 MIN	90 MIN	TABLE 7.5-2	WCAP 8541	SEPARATE EFFECTS	NONE
	Temperature (°F)	250	290	NO.3.1-3 & FIG 3.13-1	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	29.1	74.7	14.3.4	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	1.19% BORIC ACIDE .15% NHOH	1.5% BORIC ACID @ 77.5°C 10PH NAOH	N 5.3.6	WCAP 8541	SEQUENTIAL	NONE
	Radiation (10^6 rads)	3.9	76	WCAP 7410-L Vol. I	WCAP 8541	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: ND	Submergence	11'-6"	60 PSIG	DRWG 5570B & DEE	ENGRG JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS
AEW-8541 WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 51, 52, 53 & 54 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DH-HSA41 MCA FUNCTION: LONG TERM MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: BORON INJECTION TANK DISCHARGE FLOW LOCATION: INSIDE CONTAINMENT	Operating Time	< 60 MIN	90 MIN	TABLE 7.5-2	WCAP 8541	SEPARATE EFFECTS	NONE
	Temperature (°F)	160	290	FIG 14.3.4-2	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	27.2	74.7	AEW 6504	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID, .15% NAOH	1.5% BORIC ACID @ 92.5TO 10pH NAOH	N 5.3.6	WCAP 8541	SEQUENTIAL	NONE
	Radiation (10^6 rads)	40	76	REF 30	WCAP 8541	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: ND	Submergence	11'-6"	60 PSIG	DRWG 5570B CDSE	ENGRG JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS

AEW-8541 WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 51, 52, 53 & 54 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DH-HSAHI-MCA FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: BORON INJECTION TANK DISCHARGE FLOW LOCATION: INSIDE CONTAINMENT	Operating Time	< 60 MIN	90 MIN	TABLE 7.5-2	WCAP 8541	SEPARATE EFFECTS	NONE
	Temperature (°F)	328.2	290	FIG 022.9-1E-2	WCAP 8541	SEQUENTIAL	NONE
	Pressure (PSIA)	22	74.7	N13.7-3	WCAP 8541	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	WCAP 8541	SEQUENTIAL	NONE
	Chemical Spray	1.19% BORIC ACIDE .15% NAOH	1.5% BORIC ACID @ 92570 10PH NAOH	N 5.3.6	WCAP 8541	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.6	76	REF 30	WCAP 8541	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: ND	Submergence	11'-6"	60 PSIG	DRWG 5570B CDEE	ENGRG JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS

AEW-8541 WESTINGHOUSE ELECTRIC CORP TOPICAL REPORT FOR ENVIRONMENTAL TESTING OF FOXBORO TRANSMITTERS

Notes: ND SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES. INDICATIONS FROM OTHER, DIVERSE INSTRUMENTS CAN SERVE OR CORROBORATE THE INTENDED FUNCTION.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI-260 & 266 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 332 FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: SIS PUMP DISCHARGE FLOW LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	EMRGY PROCS	ENGRG JDGMT	ENG'G REVIEW	NONE
	Temperature (°F)	110	160	9.9	MNFTR LIT.	ENG'G REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT.	ENG'G REVIEW	NONE
	Relative Humidity (%)	90°F DRY BULB 76°F WET BULB	EXPLOSION PROOF CASE	9.9	MNFTR LIT.	ENG'G REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA(M)	NA (M)	NA (M)	NOTE (M)	ENG'G REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA	NA				NONE

*Documentation References:
ALL REFS ARE TO FSAR SECTIONS UNLESS OTHERWISE NOTED

MNFTR LIT: ITT BARTON PRODUCT/BULLETIN G1-23-3

Notes: (M) TRANSMITTER IS LOCATED OUTSIDE ROOM CONTAINING RADIATION SOURCE & IS THUS SHIELDED FROM EFFECT.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 310 & 320 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: E13DM - HSAM1 FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: ± 6% SERVICE: RHR FLOW HEAT EXCHANGER OUTLET LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	ENRGY PROCS	MNFTR. LIT & WCAP8591	SEPARATE EFFECTS & ENGINEERING REVIEW	NONE
	Temperature (°F)	110	180	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	90°F DRY BULB 76°F WET BULB	NEMA 4 WATERTIGHT	9.9	MNFTR LIT	ENGINEERING REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA (M)	NA (M)	NA (M)	NOTE (M)	ENGINEERING REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:	Submergence	NA	NA				NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
MNFTR-LIT - FOXBORO GENERAL SPECIFICATION GS-2A-1C1E

Notes: (M) LOCATION OF TRANSMITTER IS OUTSIDE ROOM FOR WHICH RADIATION SOURCE IS GENERATED THEREFORE SHIELDED FROM EFFECT

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: EMERGENCY CORE COOLING PLANT ID NO: IFI 311 & 321 COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 332 FUNCTION: MONITORING ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: RHR FLOW HEAT EXCHANGER OUTLET LOCATION: OUTSIDE CONTAINMENT	Operating Time	CONTINUOUS	CONTINUOUS	EMRGY PROC.	ENGRG JDGMT	ENGINEERING REVIEW	NONE
	Temperature (°F)	110	160	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	14.7	14.7	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	90°F DRY BULB 76°F WET BULB	EXPLOSION PROOF CASE	9.9	MNFTR LIT.	ENGINEERING REVIEW	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA (M)	NA (M)	NA	NOTE (M)	ENGINEERING REVIEW	NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	NA	NA				NONE

*Documentation References: ALL REFERENCES ARE FSAR SECTIONS UNLESS OTHERWISE NOTED
MNFTR LIT. ITT BARTON PRODUCT / BULLETIN 61-23-3

Notes: (M) LOCATION OF TRANSMITTER IS OUTSIDE ROOM FOR WHICH RADIATION SOURCE IS GENERATED THEREFORE SHIELDED FROM EFFECT.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST A	Operating Time	1.5 SEC	≤ 1 SEC	Q 022.9-3	TECH SPEC 3.3-2	RESPONSE TIME TESTING	NONE
PLANT ID NO: MFC-110, 111, 120, 121, 130, 131, 140 & 141	Temperature (°F)	328.2	360 + 250	Q FIG. 022.9-1 & -2	REF. 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 764	Pressure (PSIA)	22	89.7 + 14.7	N 13.7-3	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
FUNCTION: ACTUATION + NORMAL MONITORING ACCURACY: SPEC: -10 % DEMON: +5 %	Chemical Spray	1.14% BORIC ACID + .15% NAOH	1.14% BORIC ACID + .17% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE.
SERVICE: MAIN STEAM FLOW	Radiation (10^6 rads)	.04	50 @ 2.5/HR		REF 30	SEPARATE EFFECTS	NONE
LOCATION: IN CONTAINMENT	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	18 FT	75 PSIG	DRWG 5570D	ENGR JDGMT	ENGINEERING REVIEW	

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES ARE 14.2.5 AND UNIT 2 14.2.8

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN STEAM & REACTOR TRIP ACTUATION	Operating Time						
PLANT ID NO: MPC 253 & 254	Temperature (°F)						
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)						
MANUFACTURER: FOXBORO	Relative Humidity (%)						
MODEL NUMBER: E11GM-HSAD1	Chemical Spray						
FUNCTION: NORMAL MONITOR & ACTUATION	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON:	Aging (years)						
SERVICE: FIRST STAGE TURBINE PRESSURE	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

NOT APPLICABLE

*Documentation References:

Notes:

THESE DEVICES WERE INCLUDED IN THE FIRST SUBMITTAL OF IEB 79-01B TO ACCOUNT FOR DEVICES REFERENCED BY 14.2.5 ACCIDENT ANALYSIS. THESE DEVICES ARE NOT REQUIRED EQUIPMENT DUE TO THE Q 022.16 EXCLUSION OF THE NEUTRON DETECTORS. THE DETECTORS AND THESE DEVICES FORMED A COINCIDENCE LOGIC FOR REACTOR TRIP. THEREFORE EXCLUSION OF THE DETECTORS CAUSES EXCLUSION OF THESE DEVICES.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST B PLANT ID NO: MPP 210, 211 220, 221, 230, 231, 240 & 241 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: EHGM-11SAE1 (MCA) FUNCTION: POST ACCIDENT & NORMAL MONITOR & ACTUATION ACCURACY: SPEC: + 10% DEMON: - 12.5% SERVICE: MAIN STEAM PRESSURE LOCATION: OUTSIDE CONTAINMENT	Operating Time	5 SEC & LONG TERM	≤ 3 SEC	N13.7-1	TECH. SPEC 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	230	318	FIG. 0-27	NS-PLC-5023	SEQUENTIAL	NONE
	Pressure (PSIA)	26.2	90	FIG. 0-27	NS-PLC-5023	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	7.5	NS-PLC-5023	SEQUENTIAL	NONE
	Chemical Spray	NONE	NONE	N/A	N/A	N/A	NONE
	Radiation (10^6 rads)	N/A	50	N/A	NS-PLC-5023	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: N/A ABOVE FLOOD LEVEL:	Submergence	N/A	N/A				

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE TO FSAR SECTIONS

NS-PLC-5023 WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE WITH AS NOTED IDENTITY.

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES IS 14.2.5

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST C PLANT ID NO: MPP-212, 222, 232 & 242 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: FOXBORO MODEL NUMBER: EIIGM-HSAE1 FUNCTION: POST ACCIDENT & NORMAL MONITOR & ACTUATION ACCURACY: SPEC: +10 % DEMON: ± 2.5 % SERVICE: MAIN STEAM PRESSURE LOCATION: OUTSIDE CONTAINMENT	Operating Time	5 SEC & LONG TERM	≤ 3 SEC	NB3.7	TECH. SPEC. 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	230	180	FIG. 0-27	MANFTR LIT.	ENGINEERING REVIEW	NONE
	Pressure (PSIA)	26.2	14.7	FIG. 0-27	NONE	ENGINEERING REVIEW	NONE
	Relative Humidity (%)	100	NEMA 4 WATER-TIGHT	7.5	MANFTR LIT.	ENGINEERING REVIEW	NONE
	Chemical Spray	NONE	NONE	N/A	N/A	N/A	NONE
	Radiation (10^6 rads)	N/A	N/A	N/A	N/A	N/A	NONE
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence	N/A	N/A				

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE TO FSAR SECTIONS.
MANFTR LIT FOXBORO PRODUCT SPECIFICATION PSS 7A-1B3 A

Notes: THE ARRANGEMENT OF THE DIFFERENTIAL PRESSURE BETWEEN STEAMLINES LOGIC IS SUCH THAT FAILURE OF THESE DEVICES COUPLED WITH A SINGLE FAILURE WILL STILL GENERATE THE ACCIDENT ANALYSIS ASSUMED OPERATION. THEREFORE CONTROL GRADE HARDWARE IS ACCEPTABLE. ACCIDENT ANALYSIS SECTION IS 14.2.5.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR TRIP ACTUATION PLANT ID NO: N 35 & 36 COMPONENT: ION CHAMBER MANUFACTURER: WESTINGHOUSE MODEL NUMBER: WL 23690 FUNCTION: NORMAL MONITORING & ACTUATION (D) ACCURACY: SPEC: DEMON: SERVICE: INTERMEDIATE RANGE NEUTRON FLUX LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence						

NOT APPLICABLE

*Documentation References:

Notes: (D) ACTUATION REQUIREMENTS ARE FOR NON-ADVERSE ENVIRONMENT ACCIDENT ANALYSIS. CREDIT FOR FUNCTION OF DEVICE REFERENCED BY P.1, 14.3.1, 14.2.5 & 14.2.8 ANALYSIS. AS PER CONTROL, OPERATION IS NOT ASSUMED IN LOCA OR HELB ANALYSIS.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR TRIP ACTUATION PLANT ID NO: N 41A, 41B, 42A, 42B, 43A, 43B, 44A & 44B COMPONENT: ION CHAMBER MANUFACTURER: WESTINGHOUSE MODEL NUMBER: WL 23686 FUNCTION: NORMAL MONITORING & ACTUATION (D) ACCURACY: SPEC: DEMON: SERVICE: POWER RANGE NEUTRON FLUX LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:	Submergence						

NOT APPLICABLE

*Documentation References:

Notes: (D) ACTUATION REQUIREMENTS ARE FOR NON-ADVERSE ENVIRONMENT ACCIDENT ANALYSIS. CREDIT FOR FUNCTION OF DEVICE REFERENCED BY P.1, 14.3.1, 14.2.5 & 14.2.8 ANALYSES. AS. PER [illegible] OPERATION IS NOT ASSUMED IN LOCA OR MSLB ANALYSIS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST J	Operating Time	4 MONTHS	4 MONTHS	Q(B) 030.1	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
PLANT ID NO: NLP-151 NLP-152 NLP-153	Temperature (°F)	160	160	FIG. 14.3.4-2	"	"	"
COMPONENT: DIFFERENTIAL PRESSURE TRANSMITTER	Pressure (PSIA)	27.2	89.7 & 14.7	AEW 6504	"	"	"
MANUFACTURER: ITT BARTON	Relative Humidity (%)	100	100	7.5	"	"	"
MODEL NUMBER: 764	Chemical Spray	1.14% BORIC ACID & 0.15% NAOH	1.14% BORIC ACID & 0.17% NAOH	N 5.3.6	"	SEQUENTIAL	"
FUNCTION: LONG TERM POST ACCIDENT & NORMAL MONITORING *	Radiation (10^6 rads)	40	50 AT 2.5 /HR.	Q(B) 030.1	"	SEPARATE EFFECTS	"
ACCURACY: SPEC: +25% DEMON: −5%	Aging (years)						
SERVICE: PRESSURIZER LEVEL	Submergence	NA	NA	DRWG 5581B	NA	NA	NONE
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 611'-0" ABOVE FLOOD LEVEL: YES							

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
REF. 30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1957

Notes: (B): REQUIREMENTS ADDRESSED IN REF. 30 WHICH WAS SUBMITTED IN RESPONSE TO QUESTION 030.1

* ACTUATION FUNCTION IN 14.2.5 ANALYSIS RELIEVED PER OUR RESPONSE TO IEB-79-06A WHICH REPLACED LEVEL CONTRIBUTION TO ACTUATION LOGIC WITH A CONSTANT "TRIP" SIGNAL.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST E PLANT ID NO: NPP-151 152 & 153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: POST ACCIDENT & NORMAL MONITOR + ACTUATION ACCURACY: SPEC: ± 10% DEMON: +14% (A) & -5% SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	1.5 SEC & 4 MONTH	≤ 3.0 SEC	Q030.1 & Q022.9-3 (B)	TECH SPEC 3.3-5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	328.2 peak	360 & 250	Q FIG 022.7-1 & -2	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Pressure (PSIA)	22	89.7 & 14.7	N13.7-3	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID + .15% NAOH	1.14% BORIC ACID + .15% NAOH	N5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.6	.76		REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 55818	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF. 30 - WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950

Notes: (B) REQUIREMENTS ADDRESSED IN REFERENCE 30 WHICH WAS SUBMITTED IN RESPONSE TO QUESTION Q30.1

14.2.5 & 14.2.8 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST E PLANT ID NO: NPP 151 152 £153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: POST ACCIDENT MONITOR + ACTUATION ACCURACY: SPEC: ±10% DEMON: +14% (A) SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	.71SEC LLOCA 28SEC SLOCA	≤1.0SEC	TABLE 14.3.1-6 & 14.3.2-1	TECH. SPEC 3.3-2	RESPONSE TIME TESTING	NONE
	Temperature (°F)	250	320 + 250	NO. 3.1-3 + FIG N13.13-1	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Pressure (PSIA)	29.1	89.7 + 14.7	14.3.4	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Chemical Spray	1.14% BORIC ACID + .15% NAOH	1.14% BORIC ACID + .15% NAOH	N5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	.07	50 @ 2.5/HR	WCAP 7410-L VOL I	REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 55818	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS

REF 30 — WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950

Notes: 14.3-1 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

(A) FRACTURE MECHANICS ANALYSIS HAS SHOWN THIS VALUE TO BE ACCEPTABLE REFERENCE AEP: NRC: 00192

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST E PLANT ID NO: NPP-151, 152, E153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: LONG TERM POST ACCIDENT + NORMAL MONITOR + ACTUATION ACCURACY: SPEC: ±10 % DEMON: -5% SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTH	4 MONTH	Q(B) 030.1	REF 30	SEQUENTIAL & SEPERATE EFFECT	NONE
	Temperature (°F)	160	160	FIG 14.3.4-2	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Pressure (PSIA)	27.2	89.7	REW 6504	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100 + 0	7.5	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Chemical Spray	1.14 % BORIC ACID + .15 % NAOH	1.14 % BORIC ACID + .15% NAOH	N5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	40	50 @ 2.5/HR	Q(B) 030.1	REF 30	SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DWRG 55818	NA	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF. 30 - WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950.

Notes: (B) REQUIREMENTS ADDRESSED IN REFERENCE 30 WHICH WAS SUBMITTED IN RESPONSE TO FSAR QUESTION 030.1 14.3.1 IS THE ACCIDENT ANALYSIS GENERATING AN ADVERSE ENVIRONMENT FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT + POST ACCIDENT MONITOR PLANT ID NO: NPS 121 + 122 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: MONITORING ACCURACY: SPEC: ± 10 % DEMON: ± 10 % SERVICE: REACTOR COOLANT PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTHS	4 MONTHS	REF 30	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Temperature (°F)	328.2	330 & 320	FIG Q 022.7-1 & -2	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Pressure (PSIA)	22	89.7 & 14.7	N13.7-3	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID + .015% NAOH	1.14% BORIC ACID + .017% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	2.6	.76	REF 30	REF 30	SEQUENTIAL + SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT	75 PSIG	DRWG 557068C	ENGR JUGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

30 – WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950.

Notes: Q022.8; Q022.16 + Q212.35 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT & POST ACCIDENT MONITOR PLANT ID NO: NPS 121 & 122 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: LONG TERM MONITORING ACCURACY: SPEC: ± 10% DEMON: ± 10% SERVICE: REACTOR COOLANT PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTHS	4 MONTHS	REF 30	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Temperature (°F)	250 & 160	280	FIGS 14.3.4-2 & 14.3.13-1	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Pressure (PSIA)	29.1 & 27.2	89.7 & 14.7	14.3.4 & REW 6504	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Relative Humidity (%)	100	100	7.5	REF 30	SEQUENTIAL	NONE
	Chemical Spray	1.14% BORIC ACID + .015% NAOH	1.14% BORIC ACID + .017% NAOH	N 5.3.6	REF 30	SEQUENTIAL	NONE
	Radiation (10^6 rads)	40	50	REF 30	REF 30	SEQUENTIAL & SEPARATE EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: NO	Submergence	12 FT	75 PSIG	DRWG 5570B-C	ENGR JDGMT	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.

REF. 30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950.

Notes: Q022.8, Q022.16 & Q212.35 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMEND FOR OPERATION OF THESE DEVICES.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT & REMOTE SHUTDOWN MONITORING PLANT ID NO: NPS 153 COMPONENT: PRESSURE TRANSMITTER MANUFACTURER: ITT BARTON MODEL NUMBER: 763 FUNCTION: LONG TERM MONITORING ACCURACY: SPEC: ± 10% DEMON: - 5% SERVICE: PRESSURIZER PRESSURE LOCATION: INSIDE CONTAINMENT	Operating Time	4 MONTH	4 MONTH	Q030.1 NOTE(B)	REF. 30	SEQ. & SEP. EFFECTS	NONE
	Temperature (°F)	160	160	FIG. 14.3.4-2	REF. 30	SEQ. & SEP. EFFECTS	NONE
	Pressure (PSIA)	27.2	89.7	AEW 6504	REF. 30	SEQ. & SEP. EFFECTS	NONE
	Relative Humidity (%)	100	100 & 0	7.5	REF. 30	SEQ. & SEP. EFFECTS	NONE
	Chemical Spray	1.14% boric acid & .15% NaOH	1.14% boric acid & .15% NaOH	N 5.3.6	REF. 30	SEQ.	NONE
	Radiation (10^6 rads)	40	50 @ 2.5/HR	Q030.1 NOTE(B)	REF. 30	SEP. EFFECTS	NONE
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	DRWG 5581B	ENGRG REVIEW	ENGINEERING REVIEW	NONE

*Documentation References:
UNLESS OTHERWISE NOTED, ALL REF.S ARE TO FSAR SECTIONS.

REF. 30: WESTINGHOUSE ELECTRIC CORP. CORRESPONDENCE NS-TMA-1950.

Notes: REQUIREMENT & QUALIFICATIONS SAME AS MONITORING PHASE REQUIREMENTS AND QUALIFICATIONS OF NPP-151, 152 & 153 DEVICES.

(B) REQUIREMENTS ADDRESSED IN REF. 30 WHICH WAS SUBMITTED IN RESPONSE TO FSAR QUESTION Q 030.1. 14.3.1 IS THE ACCIDENT ANALYSIS.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST D	Operating Time	10 SEC	≤6.0 SEC	N13.7	TECH. SPEC 3.3-2	RESPONSE TIME TESTING	NONE
PLANT ID NO: NTP-111,121,131, 141,211,221,231 & 241	Temperature (°F)	328.2	330	Q FIG 022.9-1 & -2	REF 28	SEQUENTIAL	NONE
COMPONENT: RESISTANCE TEMPERATURE DETECTOR MANUFACTURER: SOSTMAN OR ROSEMOUNT	Pressure (PSIA)	22.0	89.7	N13.7-3	REF 28	SEQUENTIAL	NONE
MODEL NUMBER: 11834B OR 176 KF RESPECTIVELY FUNCTION: ISOLATION ACTUATION & NORMAL MONITOR	Relative Humidity (%)	100	100	7.5	REF 28	SEQUENTIAL	NONE
ACCURACY: SPEC: ± 7.3% DEMON: -2.29%	Chemical Spray	1.14% BORIC ACID + .15% NAOH	1.14% BORIC ACID + .15% NAOH	N5.3.6	REF 28	SEQUENTIAL	NONE
SERVICE: REACTOR COOLANT TEMPERATURE	Radiation (10^6 rads)	.04	100	WCAP 7410-L VOL I	REF. 28	SEQUENTIAL	NONE
LOCATION: INSIDE CONTAINMENT	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG 5507		

*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS

28 – WESTINGHOUSE ELECTRIC CORP. ENVIRONMENTAL QUALIFICATIONS WCAP-9157

Notes: ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THESE DEVICES IS N13.7, 14.2.5 & 14.2.8.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT	Operating Time						
PLANT ID NO: NTP 110 120 130 140 210 220 230 & 240	Temperature (°F)						
COMPONENT: RESISTANCE TEMPERATURE DETECTOR	Pressure (PSIA)						
MANUFACTURER: SOSTMAN OR ROSEMOUNT	Relative Humidity (%)						
MODEL NUMBER: 11834B OR 176KF RESPECTIVELY	Chemical Spray						
FUNCTION: IN PLACE SPARES	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON: N A	Aging (years)						
SERVICE: REACTOR COOLANT TEMPERATURE	Submergence						
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL:							

SEE NTP-111, 121, 131, 141, 211, 221, 231 & 241 SHEETS

*Documentation References:

Notes: REQUIREMENTS AND QUALIFICATION FOR THESE DEVICES IDENTICAL TO NTP-111 ETC. REQUIREMENTS AND QUALIFICATIONS

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT. POST ACCIDENT MONITORING.	Operating Time	4 MONTHS	4 MONTHS	NOTE (E)	REF. 28.	SEQUENTIAL AND SEPARATE EFFECTS & ENGINEERING ANALYSIS	NONE
PLANT ID NO: NTR-110, 120, 130, 140, 210, 220, 230 & 240	Temperature (°F)	160 & 328.2	160 & 330	FIGS 14. 3.4-2 & Q022.9-1	"	SEQUENTIAL	"
COMPONENT: RESISTANCE TEMPERATURE DETECTOR	Pressure (PSIA)	27.2 & 22	89.7	DEW 6504 & TABLE N13.7-3	"	"	"
MANUFACTURER: EASTMAN OR ROSEMOUNT	Relative Humidity (%)	100	100	7.5	"	"	"
MODEL NUMBER: 11901B OR 176 KS	Chemical Spray	1.14% BORIC ACID & .15% NaOH	1.14% BORIC ACID & .17% NaOH	N 5.3.6	"	"	"
FUNCTION: NORMAL & ACCIDENT MONITORING	Radiation (10^6 rads)	40	100	NOTE (E)	"	SEPARATE EFFECTS AND ENGINEERING ANALYSIS	"
ACCURACY: SPEC: FUNCTIONAL DEMON: -7.5%	Aging (years)						
SERVICE: REACTOR COOLANT TEMPERATURE							
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 611'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	DRWG-5507	ENGINEERING REVIEW	NONE

*Documentation References: UNLESS OTHERWISE NOTED REF 28 = WESTINGHOUSE ELECTRIC CORP ENVIRONMENTAL QUALIFICATION REPORT WCAP-9157

Notes: Q-022.8 Q022.16 & Q212.35 ARE THE ADVERSE ENVIRONMENT GENERATING ACCIDENT ANALYSES FOR WHICH CREDIT IS ASSUMED FOR THE OPERATION OF THESE DEVICES.

(E) REF 28 STATES THAT A RADIATION DOSE OF 1×10⁸ RADS IS EQUIVALENT TO 12 YEARS OF OPERATION PLUS 2 WEEKS OF MONITORING. REVIEW OF FIG. 2-1 IN REF 28 SHOWS THAT FOR THE ACCIDENT DOSE OF 40×10⁶ RADS SPECIFIED FOR OTHER ACCIDENT MONITORING DEVICES AT 4 MONTHS; THESE DEVICES WOULD QUALIFY FOR AN NOMINAL 8 YEARS OF OPERATION.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST F	Operating Time						
PLANT ID NO: PPP-300, 301 & 302	Temperature (°F)						
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)						
MANUFACTURER: FOXBORO	Relative Humidity (%)						
MODEL NUMBER: EHGM-HSAAI	Chemical Spray						
FUNCTION: ACCIDENT MONITORING & ACTUATION	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON:	Aging (years)						
SERVICE: CONTAINMENT PRESSURE	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

NOT APPLICABLE

*Documentation References:

Notes:

THESE DEVICES WERE INCLUDED IN THE FIRST SUBMITTAL OF 79-01B TO ACCOUNT FOR DEVICES REFERENCED BY ACCIDENT ANALYSIS P.1, 14.2.5, 14.2.8 & 14.3.1. AS DISCUSSED IN Q 022.16 & Q 212.55 THESE DEVICES ARE NOT EXPOSED TO AN ADVERSE ENVIRONMENT FOR AN IN CONTAINMENT EVENT AND FOR AN ACCIDENT EVENT OUTSIDE CONTAINMENT NO CONTAINMENT PRESSURE SUPPRESSION IS REQUIRED. THESE DEVICES THEREFORE ARE ADEQUATELY PROTECTED FROM THE ACCIDENT EVENT.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: LIST G	Operating Time						
PLANT ID NO: PPP-303	Temperature (°F)						
COMPONENT: PRESSURE TRANSMITTER	Pressure (PSIA)						
MANUFACTURER: FOXBORO	Relative Humidity (%)						
MODEL NUMBER: EIIGM-HSAAI	Chemical Spray						
FUNCTION: ACCIDENT MONITORING	Radiation (10^6 rads)						
ACCURACY: SPEC: DEMON:	Aging (years)						
SERVICE: CONTAINMENT PRESSURE	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

NOT APPLICABLE

*Documentation References:

Notes:

THESE DEVICES WERE INCLUDED IN THE FIRST SUBMITTAL OF 79-01B TO ACCOUNT FOR DEVICES REFERENCED BY ACCIDENT ANALYSIS P.1, 14.2.5, 14.2.8, & 14.3.1.

AS DISCUSSED IN Q 022.16 & Q 212.35, THESE DEVICES ARE NOT EXPOSED TO AN ADVERSE ENVIRONMENT FOR AN INCONTAINMENT EVENT AND FOR AN ACCIDENT EVENT OUTSIDE CONTAINMENT NO CONTAINMENT PRESSURE SUPPRESSION IS REQUIRED. THESE DEVICES THEREFORE ARE ADEQUATELY PROTECTED FROM THE ACCIDENT EVENT.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT VENTILATION ISOLATION PLANT ID NO: VRC-302 COMPONENT: RADIATION MONITOR MANUFACTURER: WESTINGHOUSE MODEL NUMBER: 1101 FUNCTION: ACTUATION ACCURACY: SPEC: ± 6% DEMON: < 1% SERVICE: CONTAINMENT AREA RADIATION LOCATION: INSIDE CONTAINMENT	Operating Time	NA	NA				
	Temperature (°F)	250	120	FIG N13.B-1 & NO.3.1-3	E SPEC 677271		NONE (C)
	Pressure (PSIA)	28.8 & 29.1	28.7	N13.2 & 14.3.4	E SPEC 677271		NONE (C)
	Relative Humidity (%)	100	100	7.5	E SPEC 677271		NONE (C)
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	NONE	N53.6			NONE (C)
	Radiation (10^6 rads)	.07	10mR/HR	WCAP 7410-L VOL I	E SPEC 677271		NONE (C)
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA				

*Documentation References:

Notes:

(C) INCLUDED IN FIRST SUBMITTAL OF 79-01B TO ACCOUNT FOR DEVICES WHICH ARE A CONTAINMENT PURGING ISOLATION ACTUATION DEVICE. THIS DEVICE IS ONE OF THE "DEFENSE IN DEPTH" DEVICES FOR ISOLATION WHICH INCLUDES ALL ESF ACTUATION DEVICES, THE CONTAINMENT AIR PARTICULATE & RADIOGAS DETECTOR, CONTAINMENT PRESSURE, AND THIS AREA MONITOR. SINCE FOR AN INCONTAINMENT ACCIDENT EVENT THIS DEVICE SERVES A SECONDARY FUNCTION IN RELATION TO THE ESF ACTUATION AND CONTAINMENT PRESSURE DEVICES THE USE OF CONTROL GRADE EQUIPMENT IS CONSIDERED ADEQUATE. FURTHER THIS DEVICE IS TO BE UPGRADED AS REQUIRED BY OUR COMMITMENT TO NUREG 0578 ITEMS. THEREFORE THIS DOES NOT REPRESENT AN OUTSTANDING ITEM.

E SPEC: WESTINGHOUSE EQUIPMENT SPECIFICATION 677271.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: ESW	Operating Time	1 day		WCAP 9600			
PLANT ID NO: WPS702, 706	Temperature (°F)	Fig 0-27	See note below	FSAR App O			
COMPONENT: Pressure Switch MANUFACTURER: Mercoid	Pressure (PSIA)	Fig 0-27	See note below.	FSAR App O			
MODEL NUMBER: DA-7031-153	Relative Humidity (%)	NA	NA	NA	NA	NA	
FUNCTION: Auto. pump Start ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: ESW pressure	Radiation (10^6 rads)	NA	NA	NA	NA	NA	
LOCATION: Outside Containment	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

Notes: Justification for not having these switches qualified is as follows: The normally closed contact of these switches allows automatic starting of the ESW pump motors. Should the accident disable the switch making its contact go open (and stay open), the motor can be started by manually placing the control switch in the "close" position. We intend to replace these switches with ones that are qualified to survive the HELB environment.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Reactor Coolant	Operating Time		30 DAYS		43	Seq.	
PLANT ID NO: Same as valve served	Temperature (°F)	Fig 022.9-1,-2	340	FSAR App Q	43	Seq.	
COMPONENT: Limit Switch	Pressure (PSIA)	Fig 1 Fig 2	84.7	Appx 6504	43	Seq.	
MANUFACTURER: Namco	Relative Humidity (%)	100	100		43	Seq.	
MODEL NUMBER: EA 180 *	Chemical Spray	2000 ppmB	3000 ppmB	T.S. 3/4.5 3/4.5.6	43	Seq.	
FUNCTION: valve position indication	Radiation (10^6 rads)	—	204	WCAP 7410-L Vol 1	43	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		200hrs/200°F Yes		43	Seq.	
SERVICE: Pzr PORV's: NRV-151,152,-153	Submergence	NA	NA	NA	NA	NA	
LOCATION: In Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: yes							

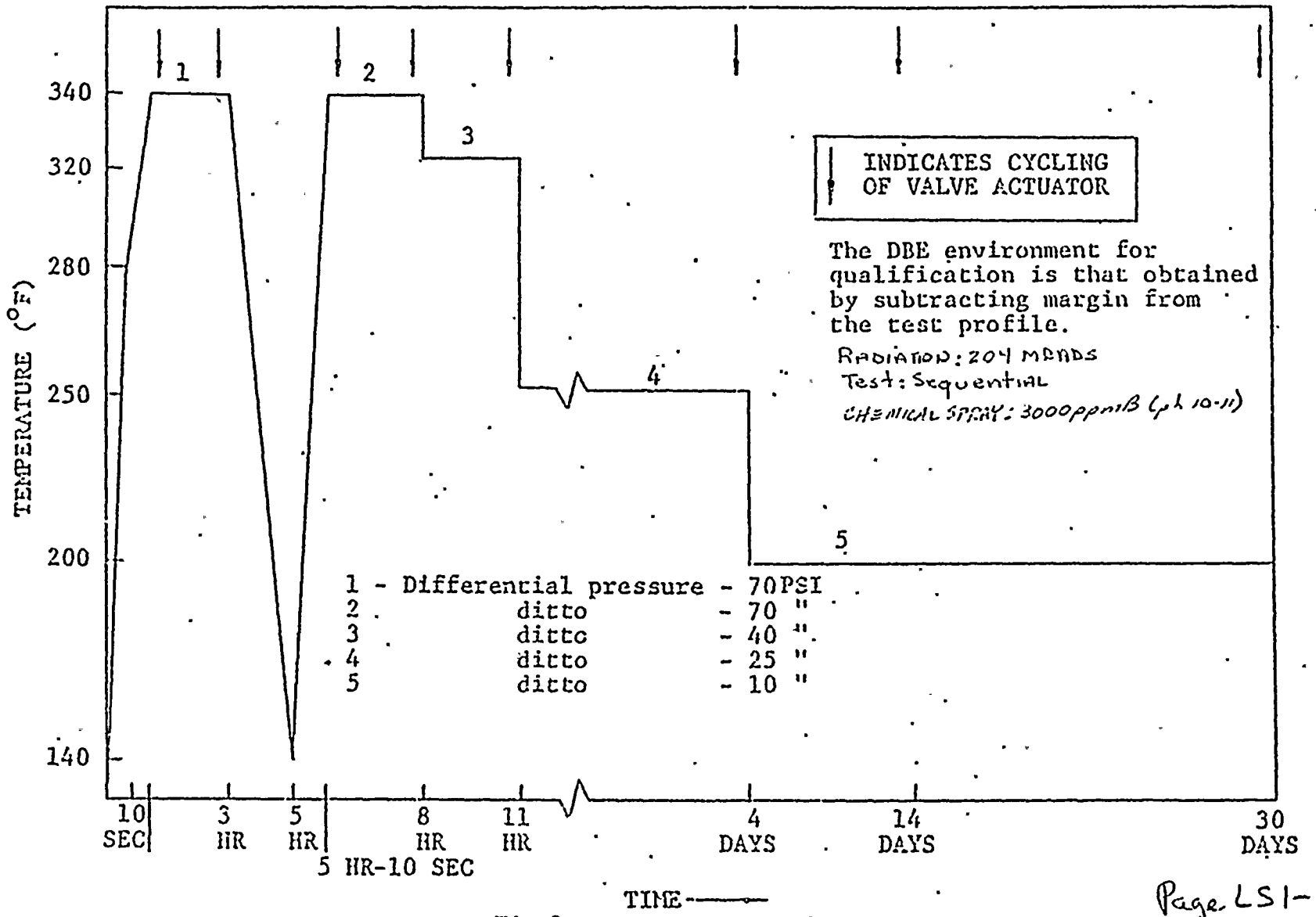
*Documentation References:

43. Acme-Cleveland Development Co: Qual of Namco Controls Limit Switch, Sept 5, 1978

Notes:

* to be installed as per NUREG 578

from Ref. 43. Qual. of Namco Controls Limit Switch



Page LS1-2

Fig 1
Test Chamber Temperature Profile for Accident Environment Simulation
(Taken from IEEE Standard 382-1972)

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS, SI, RHR	Operating Time	1 year			See Note B.		
PLANT ID NO: PP-050, 026, 035	Temperature (°F)	NA	NA	NA	NA	NA	
COMPONENT: Pump Motor	Pressure (PSIA)	NA	NA	NA	NA	NA	
MANUFACTURER: WESTINGHOUSE	Relative Humidity (%)	NA	NA	NA	NA	NA	
MODEL NUMBER: 5808Z, 5009H, 5009-P24	Chemical Spray	NA	NA	NA	NA	NA	
FUNCTION: Emergency Core Cooling ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	16.6	200	See Note A	See Note B	Similarity to TESTED Equipment	
SERVICE: Centrifugal Charging, Safety Injection & Residual Heat Removal Pumps LOCATION: Outside Containment.	Aging (years)		200°C/500hrs YES		See note B	TEST	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

Notes:

A) AEPSC NSRL calculation DC-N-6520-2.

B) Westinghouse Test Report WCAP 7829.
letter of LF Caso (AEP) to F. Noonn (WELCO) of 3-20-80.
letter of F. Noonn (WELCO) to LF Caso (AEP) of 4-21-80.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Spray PLANT ID NO: PP-009 COMPONENT: Pump Motor MANUFACTURER: Reliance MODEL NUMBER: frame # 5810 P FUNCTION: CT Spray ACCURACY: SPEC: NA DEMON: NA SERVICE: Containment Spray Pump LOCATION: Outside CT	Operating Time	1 year					
	Temperature (°F)	NA	NA	NA	NA		
	Pressure (PSIA)	NA.	NA	NA	NA		
	Relative Humidity (%)	NA	NA	NA	NA		
	Chemical Spray	NA	NA	NA	NA		
	Radiation (10^6 rads)	17	100	AEPSC NS&L calc, DC-N-6420-2	see note below	similarity to tested materials	see note below
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA		

*Documentation References:

Notes: Information received by telephone from manufacturer. Letter of confirmation expected.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN FEEDWATER & CONTAINMENT ISOLATION	Operating Time						
PLANT ID NO: FKV-210, 220, 230 & 240	Temperature (°F)						
COMPONENT: DIAPHRAM FOR AIR OPERATOR	Pressure (PSIA)						
MANUFACTURER: FISHER CONTROLS CO.	Relative Humidity (%)						
MODEL NUMBER: 667	Chemical Spray	SEE VCR-HE21					
FUNCTION: SHUTOFF & REGULATION	Radiation (10^6 rads)						
ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED	Aging (years)						
SERVICE: FEEDWATER FLOW REGULATION	Submergence						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A							

*Documentation References:

Notes:

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: FRV-210, 220, 230, & 240 PLANT ID NO: EPT 210, 220, 230 & 240 COMPONENT: ELECTRO-PNEUMATIC TRANSDUCER MANUFACTURER: FISHER CONTROLS COMPANY MODEL NUMBER: 546 FUNCTION: VALVE MODULATION CONTROL ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: MAIN FEEDWATER FLOW CONTROL LOCATION: OUTSIDE CONTAINMENT	Operating Time	NA	NA	EMRGY PROCS	ENGRG ADGMT		NONE
	Temperature (°F)	223	320/288	FIG 0-26	MNFTR LIT	SEQUENTIAL	NONE
	Pressure (PSIA)	20.5	90/59	FIG 0-26	MNFTR LIT	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	FIG 0-26	MNFTR LIT	SEQUENTIAL	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA	NA				NONE
	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL:	Submergence	NA	NA				NONE

*Documentation References: FSAR APPENDIX O.

MNFTR LIT - FISHER CONTROLS COMPANY OPERATIONAL TESTS OF FISHER TYPE 546 ELECTRO-PNEUMATIC TRANSDUCER

Notes: The subject transducer is not required for the FRV to perform its safety function in the case of a LOCA or HELB.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: FRV-210, FRV-220, FRV-230, FRV-240 PLANT ID NO: X50-291, 292, 293, 294, 295, 296, 297, 298 COMPONENT: SOLENOID VALVE MANUFACTURER: AUTOMATIC SWITCH COMPANY MODEL NUMBER: HF-8300C58RU AR HF-8300B58RU FUNCTION: TRIP REGULATING VALVE CLOSED. ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: MAIN FEEDWATER REGULATING VALVES TRIP VALVES LOCATION: OUTSIDE CONTAINMENT	Operating Time	25 SEC.	5 SEC.	D.4.2		VALVE TESTING	NONE
	Temperature (°F)	223	160	FIG. D-26	MANF. LIT.	ANALYSIS BASED ON MEASURED DATA & MANF. LIT.	YES (F) REPLACE WITH MODEL 206-381-2RVU
	Pressure (PSIA)	20.5	NA	FIG D-26			"
	Relative Humidity (%)	100	NA	FIG D-26			"
	Chemical Spray	NA	NA				
	Radiation (10^6 rads)	NA	NA				
	Aging (years)	NA	NA				
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence	NA	NA				

*Documentation References: UNLESS OTHERWISE NOTED REFERENCES ARE FSAR SECTIONS

Notes: D.4.2 14.2.5 & 14.2.8 ARE THE ADVERSE ENVIRONMENT ACCIDENT ANALYSES FOR WHICH CREDIT FOR FUNCTION IS ASSUMED.

PRESENT CONFIGURATION ACCEPTABLE PENDING SOLENOID REPLACEMENT BECAUSE: MAIN FEEDWATER SHUT-OFF VALVES FMO-201 202 203 204 AND PUMP DISCHARGE VALVES FMO-251 & 252 AND PUMP TRIP ALSO STOP FEEDWATER FLOW WITHIN THE BOUNDS OF D.4.2 INCIDENT ANALYSIS.

MANF. LIT.: AUTOMATIC SWITCH CO. CATALOG NO. 30. BULLETINS 8300, 8302, 8315.

(F) MODIFIED REPLACEMENTS ORDERED VIA PURCHASE ORDER 7875-251-9 DATED MAY. 1, 1977. DEVICE IS ON SITE.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: RESIDUAL HEAT REMOVAL PLANT ID NO: IRV-310 & 320 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: BAILEY MODEL NUMBER: 656 FUNCTION: VALVE POSITIONING ACCURACY: SPEC: FAIL OPEN DEMON: FAIL OPEN SERVICE: RHR HEAT EXCHANGER OUTLET FLOW MODULATION LOCATION: OUTSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: NA	Submergence						

SEE VCR-HEZ

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN STEAM & CONTAINMENT ISOLATION	Operating Time						
PLANT ID NO: MRV 210, 220, 230 & 240	Temperature (°F)						
COMPONENT: STEAM PISTON FOR SLIDE VALVE	Pressure (PSIA)						
MANUFACTURER: ATWOOD-MOKEL	Relative Humidity (%)						
MODEL NUMBER: NONE							
FUNCTION: SHUTOFF	Chemical Spray						
ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED	Radiation (10^6 rads)						
SERVICE: MAIN STEAM FLOW SHUTOFF	Aging (years)						
LOCATION: OUTSIDE CONTAINMENT							
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence						

SEE NOTE BELOW

*Documentation References:

Notes: VENTING OF THE STEAM SPACE ABOVE THE PISTON BY DUMP VALVES MRV-211, 212, 221, 222, 231, 232, 241 OR 242 FOR THEIR RESPECTIVE STEAM GENERATOR STOP VALVE WILL CAUSE MAIN STEAM SYSTEM PRESSURE TO DRIVE THE SUBJECT VALVE CLOSED. SEE FSAR SECTION 10 AND RESPONSE TO QUESTIONS 10.1 & 10.2 FOR FULL DESCRIPTION OF VALVE OPERATION.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN STEAM PLANT ID NO: MRV 211,212, 221, 222, 231, 232, 241 & 242 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: FISHER CONTROLS CO. MODEL NUMBER: 657 FUNCTION: SHUTOFF INITIATION ACCURACY: SPEC: FAIL OPEN DEMON: FAIL OPEN SERVICE: STEAM GENERATOR STOP VALVE DUMP VALVE LOCATION: OUTSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence						

SEE VCR-112-21

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MRV 211,212,221,222, 231,232,241 & 242 PLANT ID NO: XSO-211,212,221, 222,231,232,241 & 242 COMPONENT: SOLENOID MANUFACTURER: AUTOMATIC SWITCH CO. MODEL NUMBER: HT8316B17 FUNCTION: CLOSURE ACTUATION ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: STEAM GENERATOR STOP VALVE DUMP VALVE LOCATION: OUTSIDE CONTAINMENT	Operating Time	5 SEC	5 SEC	14.2.5	TECH SPEC 3.7.1.5	RESPONSE TIME TESTING	NONE
	Temperature (°F)	230	180	FIG 0-27	MFTR LIT		NONE (L)
	Pressure (PSIA)	26.2	14.7	FIG 0-27	MFTR LIT		NONE (L)
	Relative Humidity (%)	100	0	7.5	MFTR LIT		NONE (L)
	Chemical Spray	NA	NA				NA
	Radiation (10^6 rads)	NA	NA				NA
	Aging (years)						
FLOOD LEVEL ELEV: N A ABOVE FLOOD LEVEL:	Submergence	NA	NA				NA

*Documentation References:

MFTR LIT - AUTOMATIC SWITCH CO.
CATALOG NO 30
BULLETIN 8316

Notes: 14.2.5 & 14.2.8 ARE THE ADVERSE ENVIRONMENT ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THE DEVICE.

(L) ACCIDENT ANALYSIS: Q212.25 SHOWS THAT MAIN STEAM LINE BREAK PLUS THE FAILURE OF ANOTHER STEAM LINE TO ISOLATE IS ACCEPTABLE. SINCE THE LOCATION OF THESE DEVICES IS SUCH THAT ONLY TWO STEAM GENERATOR STOP VALVES CAN BE AFFECTED BY ANY ONE BREAK. USE OF CONTROL GRADE DEVICES IS ACCEPTABLE

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MAIN STEAM & CONTAINMENT ISOLATION PLANT ID NO: MRV 213, 223, 233 & 243 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: FISHER CONTROLS CO. MODEL NUMBER: 667 FUNCTION: PRESSURE RELIEF ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: MAIN STEAM PRESSURE RELIEF LOCATION: OUTSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: ABOVE FLOOD LEVEL: N/A	Submergence						

SEE VCR-11 & 21

*Documentation References:

Notes:

No credit is taken for the subject MRV's (the Steam Generator PORV's) in LOCA or MELB accident analysis.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: MRV-213, 223, 233 & 243 PLANT ID NO: EPT-213, 223, 233 & 243 COMPONENT: ELECTRO-PNEUMATIC TRANSDUCER MANUFACTURER: FISHER CONTROLS CO. MODEL NUMBER: 546 FUNCTION: VALVE MODULATION CONTROL ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: MAIN STEAM PRESSURE RELIEF LOCATION: OUTSIDE CONTAINMENT	Operating Time	NA	NA	EMRGY PROC	ENGRG JDGMT		NONE
	Temperature (°F)	230	320/288	FIG 0-27	MNFTR LIT	SEQUENTIAL	NONE
	Pressure (PSIA)	26.2	90/59	FIG 0-27	MNFTR LIT	SEQUENTIAL	NONE
	Relative Humidity (%)	100	100	FIG 0-27	MNFTR LIT	SEQUENTIAL	NONE
	Chemical Spray	NA	NA				NONE
	Radiation (10^6 rads)	NA	NA				NONE
	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL:	Submergence	NA	NA				NONE

*Documentation References: FSAR APPENDIX O

MNFTR LIT. FISHER CONTROLS COMPANY OPERATIONAL TESTS OF. FISHER TYPE 546 ELECTRO-PNEUMATIC TRANSDUCER

Notes: No credit is taken for the subject MRV's (the Steam Generator PORV's) for LOCA or HELB accident analysis.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: REACTOR COOLANT PLANT ID NO: NRV-151 152 & 153 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: MASONEILAN MODEL NUMBER: 37 AND 38 FUNCTION: PRESSURE RELIEF ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: PRESSURIZER POWER OPERATED RELIEF VALVE LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence						

SEE VCR-114 & 21

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: NRV-151 NRV-152 NRV-153 PLANT ID NO: XSO-503 XSO-505 XSO-507 COMPONENT: SOLENOID VALVE MANUFACTURER: AUTOMATIC SWITCH COMPANY MODEL NUMBER: NP-831654V FUNCTION: TRIP CONTROL VALVE CLOSED ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: PRESSURIZER PRESSURE CONTROL LOCATION: INSIDE CONTAINMENT	Operating Time	NA	NA	NA	SEE NOTE		NONE
	Temperature (°F)	328.2	SEE TEST PROFILE	FIG 022.9-1E-2	REF. 29	SEQUENTIAL	NONE
	Pressure (PSIA)	35.5	SEE TEST PROFILE	NB.8	"	"	"
	Relative Humidity (%)	100	100	7.5	"	"	"
	Chemical Spray	1.14% BORIC ACID & .15% NAOH	3000 PPM BORIC ACID WITH 0.06M $Na_2S_2O_3$	N 5.3.6	"	"	"
	Radiation (10^6 rads)	40	150	REF 30	"	"	"
	Aging (years)		4		"	"	"
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence	NA	NA	NA	NEP DRWG	ENGINEERING-DRAWING REVIEW	

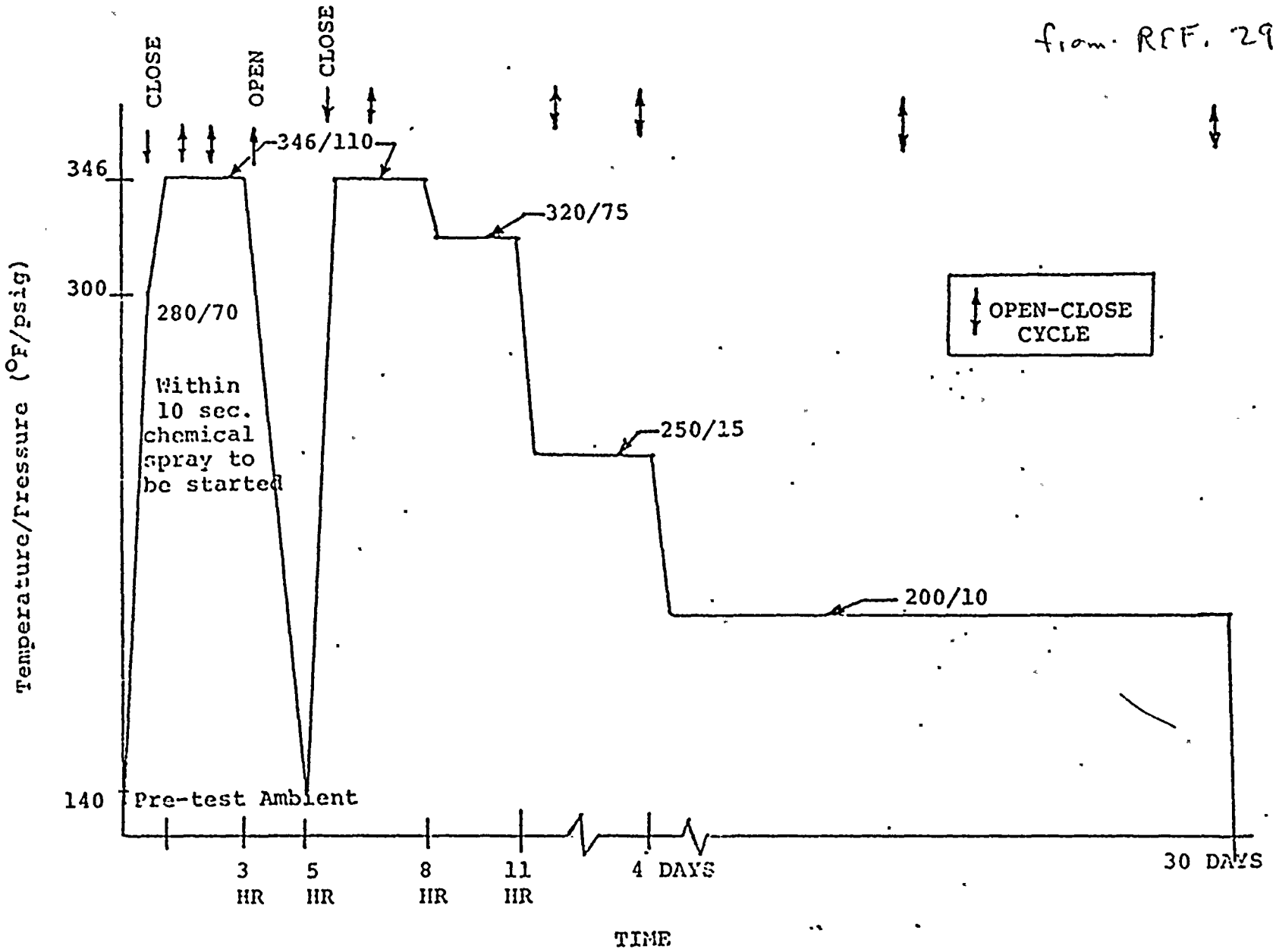
*Documentation References: UNLESS OTHERWISE NOTED ALL REFERENCES ARE FSAR SECTIONS.
REF. 29 - AUTOMATIC SWITCH COMPANY REPORT ANS 21678/TR.

REF. 30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATIONS NS-TMA-1950.

Notes: FUNCTION OF THESE DEVICES IS NOT ASSUMED BY ADVERSE ENVIRONMENT ACCIDENT ANALYSIS. SEE GENERAL NOTE 4.

FIGURE 1
LOCA SIMULATION BY ENVIRONMENTAL
EXPOSURE (STEAM/CHEMICAL)

from: REF. 29



Temperature/Pressure Profile for simulation of loss-of-coolant accident (LOCA) design basis event (DBE) by steam/chemical-spray environmental exposure.

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT ISOLATION PLANT ID NO: VCR-11 & 21 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: GRINNELL MODEL NUMBER: 3250 FUNCTION: ISOLATION ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: ICE CONDENSER REFRIGERANT SUPPLY LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: 604'-0" ABOVE FLOOD LEVEL: YES	Submergence						

SEE NOTE BELOW

*Documentation References:

Notes: FAILURE MECHANISM OF DIAPHRAM, DUE TO ACTUATOR SPRING LOADING, WILL CAUSE VALVE TO POSITION TO PROPER POSITION. THEREFORE NO QUALIFICATION TO ACCIDENT CONDITIONS IS NECESSARY.

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT ISOLATION PLANT ID NO: VCR-101 & 102 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: BAILEY MODEL NUMBER: 656 FUNCTION: ISOLATION ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: INSTRUMENT ROOM PURGE SUPPLY & EXHAUST RESPECTIVELY LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence						

SEE VCR-11 & 12

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT ISOLATION PLANT ID NO: VCR-103 & 105 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: BAILEY MODEL NUMBER: 722 & 732 RESPECTIVELY FUNCTION: ISOLATION ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: CONTAINMENT PURGE SUPPLY LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: 614'-0" ABOVE FLOOD LEVEL: YES	Submergence						

SEE VCR-112 & 21

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT ISOLATION PLANT ID NO: VCR-104 & 106 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: BAILEY MODEL NUMBER: 737 & 722 RESPECTIVELY FUNCTION: ISOLATION ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: CONTAINMENT PURGE EXHAUST LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: 611'-04 ABOVE FLOOD LEVEL: YES	Submergence						

SEE VCR-11 & 21

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CONTAINMENT ISOLATION PLANT ID NO: VCR-107 COMPONENT: DIAPHRAM FOR AIR OPERATOR MANUFACTURER: BAILEY MODEL NUMBER: 656 FUNCTION: ISOLATION ACCURACY: SPEC: FAIL CLOSED DEMON: FAIL CLOSED SERVICE: CONTAINMENT PRESSURE RELIEF EXHAUST LOCATION: INSIDE CONTAINMENT	Operating Time						
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity (%)						
	Chemical Spray						
	Radiation (10^6 rads)						
	Aging (years)						
FLOOD LEVEL ELEV: 644'-0" ABOVE FLOOD LEVEL: YES	Submergence						

SEE VCR-1621

*Documentation References:

Notes:

DONALD C. COOK NUCLEAR PLANT UNITS NO. 1 & 2 DOCKETS NO. 50-315 & 50 - 316 LICENSES NO. DRR-58 & DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VCE-11, 21, 101, 102, 103, 104, 105, 106 & 107 PLANT ID NO: XSO-12, 21, 121, 122, 123, 124, 125, 126 & 127 COMPONENT: SOLENOID VALVE MANUFACTURER: AUTOMATIC SWITCH COMPANY MODEL NUMBER: NP-8316541V FUNCTION: TRIP ISOLATION VALVE CLOSED ACCURACY: SPEC: FUNCTIONAL DEMON: FUNCTIONAL SERVICE: CONTAINMENT VENTILATION & ICE CONDENSER REFRIGERATION ISOLATION LOCATION: INSIDE CONTAINMENT	Operating Time	5 SEC.	≤ 10 SEC.	Q 022.4	TECH. SPEC. 3.6-1	TIME RESPONSE TESTING	NONE
	Temperature (°F)	328.2	SEE TEST PROFILE	FIG. 022A-1 & -2	REF. 29	SEQUENTIAL	NONE
	Pressure (PSIA)	35.5	SEE TEST PROFILE	N 13.8	"	"	"
	Relative Humidity (%)	100	100	7.5	"	"	"
	Chemical Spray	1.14% BORIC ACID AND 0.15% NaOH	3000 PPM BORIC ACID WITH 0.064M $Na_2S_2O_8$	N 5.3.6	"	"	"
	Radiation (10^6 rads)	40	150	REF. 30	"	"	"
	Aging (years)		4		"	"	"
FLOOD LEVEL ELEV: 11-614'-0 ABOVE FLOOD LEVEL: YES	Submergence	N A	N A	NA	A.E.P. DRWG.	ENGINEERING DRAWING REVIEW	"

*Documentation References: UNLESS OTHERWISE NOTED REFERENCES ARE FSAR SECTIONS.

REF #29 - AUTOMATIC SWITCH COMPANY REPORT AQS 21678/TR.

REF #30 - WESTINGHOUSE ELECTRIC CORP. COMMUNICATION NS-TMA-1950.

Notes:

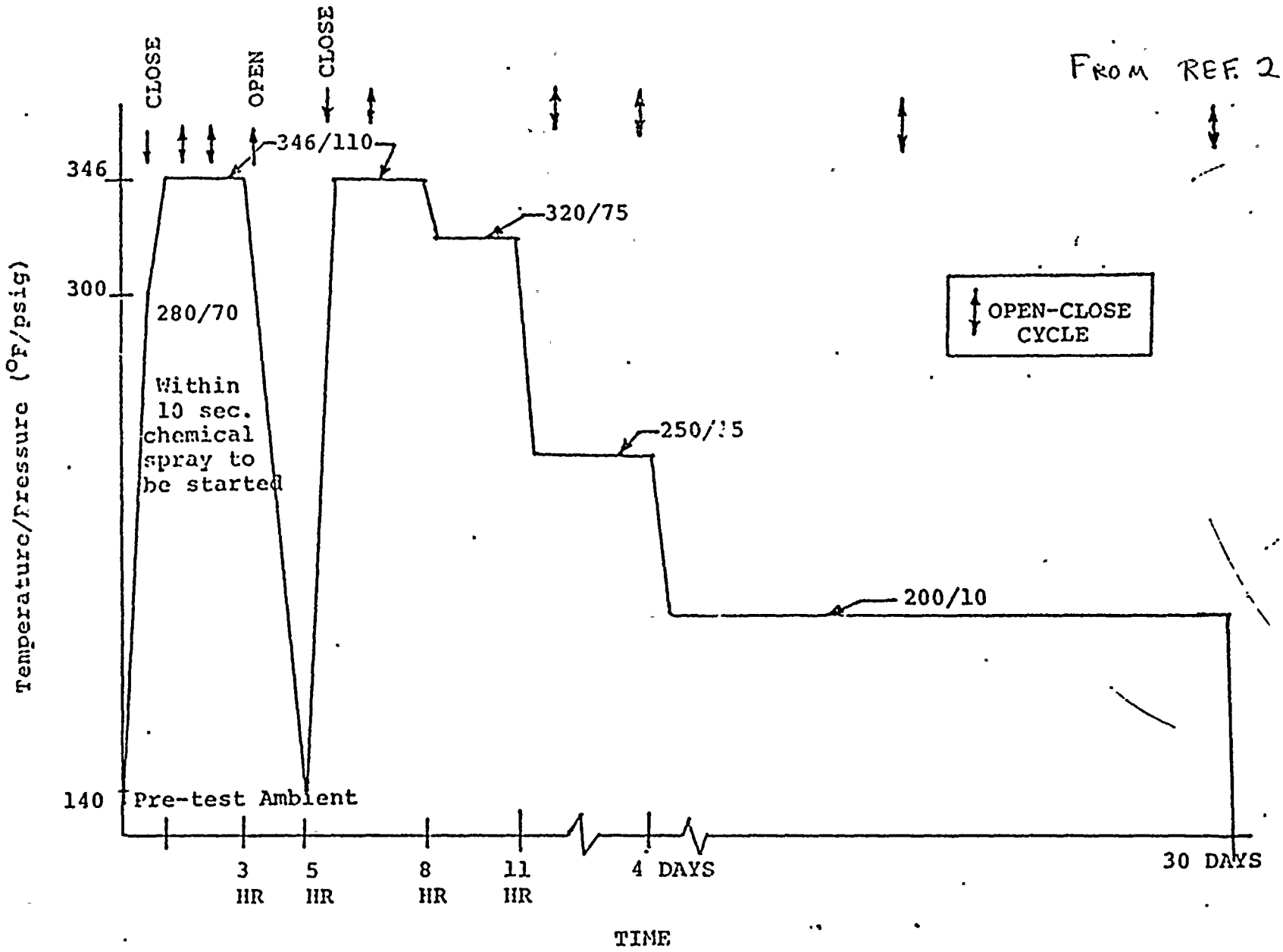


FIGURE 1
LOCA SIMULATION BY ENVIRONMENTAL EXPOSURE (STEAM/CHEMICAL)

Temperature/Pressure Profile for simulation of loss-of coolant accident (LOCA) design basis event (DBE) by steam/chemical-spray environmental exposure.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	½ hr	See Note 1 on Cable Tests	Table 7.5-2	22	Simul.	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.9-1,-2 328.2 PEAK	330	FSAR APP Q	22	Simul.	
COMPONENT: CONTROL CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 1. Fig 2	104.7	AEC 6504	22	Simul.	
MODEL NUMBER: CABLE TERMINATION AT VALVES FUNCTION:	Relative Humidity (%)	100	100		22	Simul.	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000. ppm B	2600 ppm B	TS 3/4.5 3/4.5.6	22	Simul.	
SERVICE: VARIOUS	Radiation (10^6 rads)	2.1	See Note A	WCAP 7410-L VOL 1		Engineering Review	
LOCATION: IN CONTAINMENT	Aging (years)		180°C/100hr Yes		22	Simul.	
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: NO	Submergence		IN FLOOD UP TUBES				

*Documentation References:

22. Limitorque Corp Test Report #600198

Notes:

A.) VALVE will perform its function in the first 15 secs. (Tech Spec Table 3.6-1), corresponding to a calculated LOCA dose of only .02×10⁶ rads (WCAP 7410-L Fig. 5), not significantly more than its normal environment accumulated dose.

22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.67.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	½ hr	See Note 1 on Cable Term.	Table 7.5-2	24	Seq	
PLANT ID NO: N/A	Temperature (°F)	Fig 13.13-1 250 Upper Volume	250	FSAR App D	24	Seq.	
COMPONENT: CONTROL CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG1 FIG2	39.7	AEW 6504	24	Seq.	
MODEL NUMBER: CABLE TERMINATION AT VALVES FUNCTION:	Relative Humidity (%)	100	100		24	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	See Note A	NA	See Note B	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	3.9	204	WCAP 7410-L Vol 1	24	Seq.	
LOCATION: In Containment	Aging (years)		165°F/200 hrs Yes		24	Seq.	
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

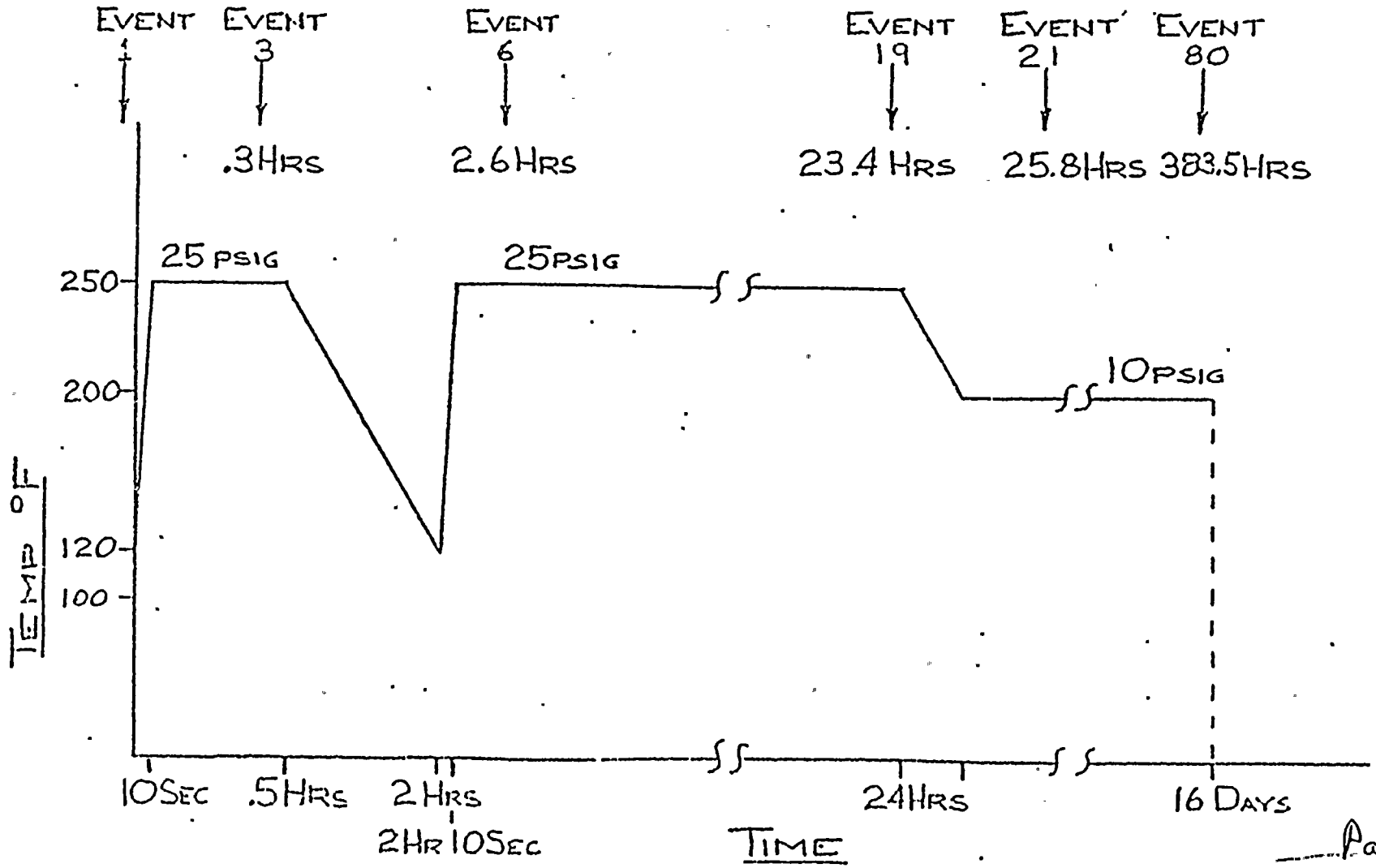
24. Limitorque Corp Test Report #600461

Notes:

A. Valve Location is not subjected to direct caustic spray impingement.

B. mech installation drawings 2-5427

TEMPERATURE PROFILE



Page TC2-2

FIGURE 1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

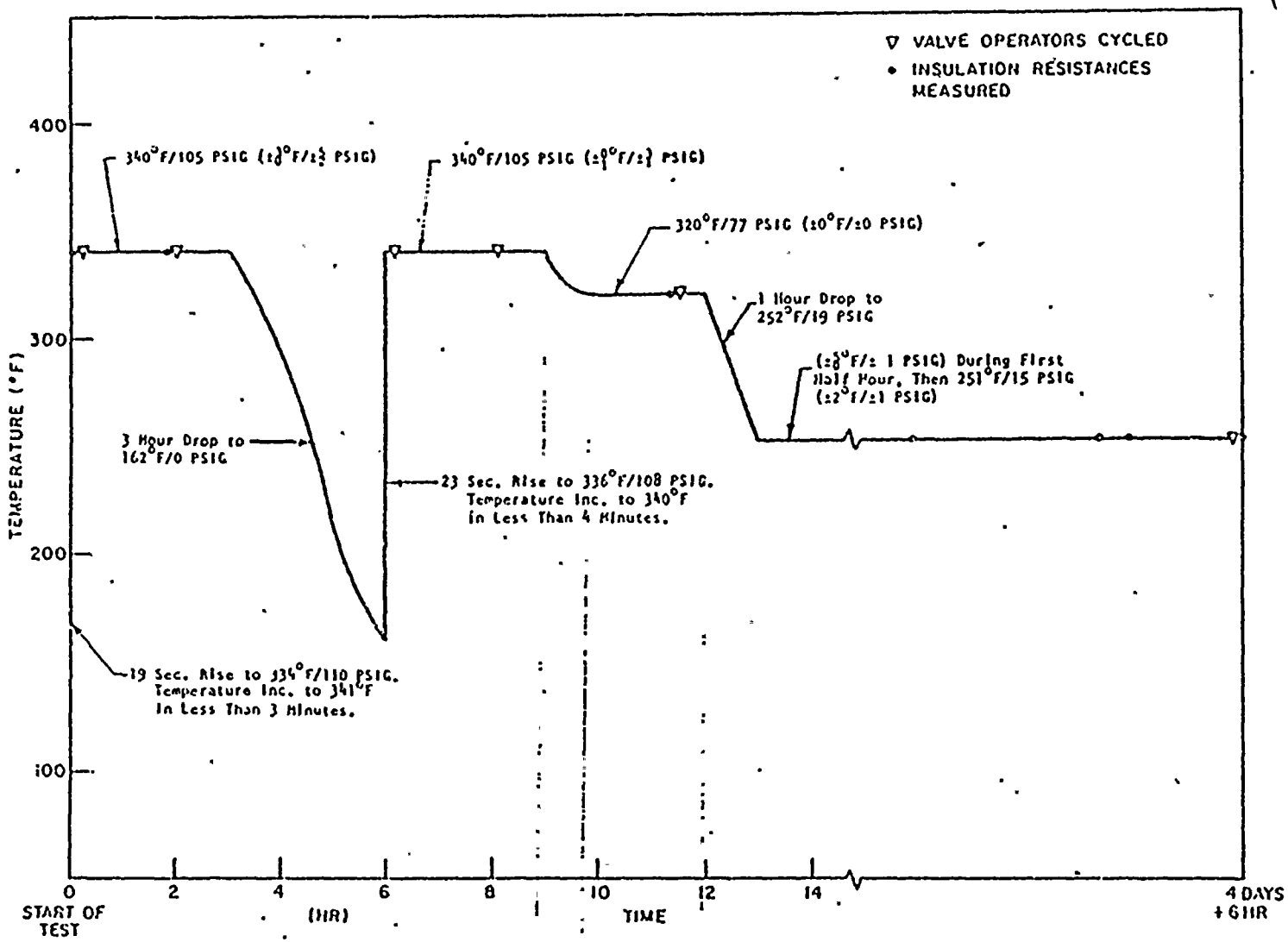
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Note 1 on Cable Terminat.	See Note 1	23	Seq	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	340	FSAR App Q	23	SEQ.	
COMPONENT: CONTROL CABLE TERMINATION	Pressure (PSIA)	FIG 1 FIG 2	119.7	AEC 6504	23	SEQ.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		23	SEQ	
MODEL NUMBER: CABLE TERMINATION AT VALVES	Chemical Spray	2000 ppmB	2622 ppmB	T.S. 3/4.5 3/4.5.b	22	Simul.	
FUNCTION:	Radiation (10^6 rads)	26	204	WCAP 7410-L VOL 1	23	SEQ.	
ACCURACY: SPEC: DEMON:	Aging (years)		180°C, 100 hrs Yes		23	SEQ.	
SERVICE: VARIOUS	Submergence		In Floodup Tubes				
LOCATION: IN CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: NO							

*Documentation References:

22. Limitorque Corp. Test Report # 600198
23. Limitorque Corp. Test Report # 600376A.

Notes: Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

from Ref. 23



F-C3447

Figure 3. Actual Steam Exposure Profile

Page TC3-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 DAY	See Note 1 on Cable Terminal	N/A below	16	SEQ	
PLANT ID NO: N/A	Temperature (°F)	Fig 13.13-1 250	315	FSAR APP D	16	SEQ.	
COMPONENT: CONTROL CABLE TERMINATION	Pressure (PSIA)	Fig 1 Fig 2	84.7	AEW 6504	16	SEQ.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		16	SEQ.	
MODEL NUMBER: CABLE TERM. AT VALVES	Chemical Spray	2000 ppm B	IEEE 382 1972	T.S. 3/4.5 3/4.5.6			
FUNCTION:	Radiation (10^6 rads)	26	204	WCAP 7410-L Vol 1	16	SEQ.	
ACCURACY: SPEC: N/A DEMON: N/A	Aging (years)		180°C, 100 hrs Yes		16	SEQ.	
SERVICE: VARIOUS	Submergence		IN FLOODUP TUBES				
LOCATION: INSIDE CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No							

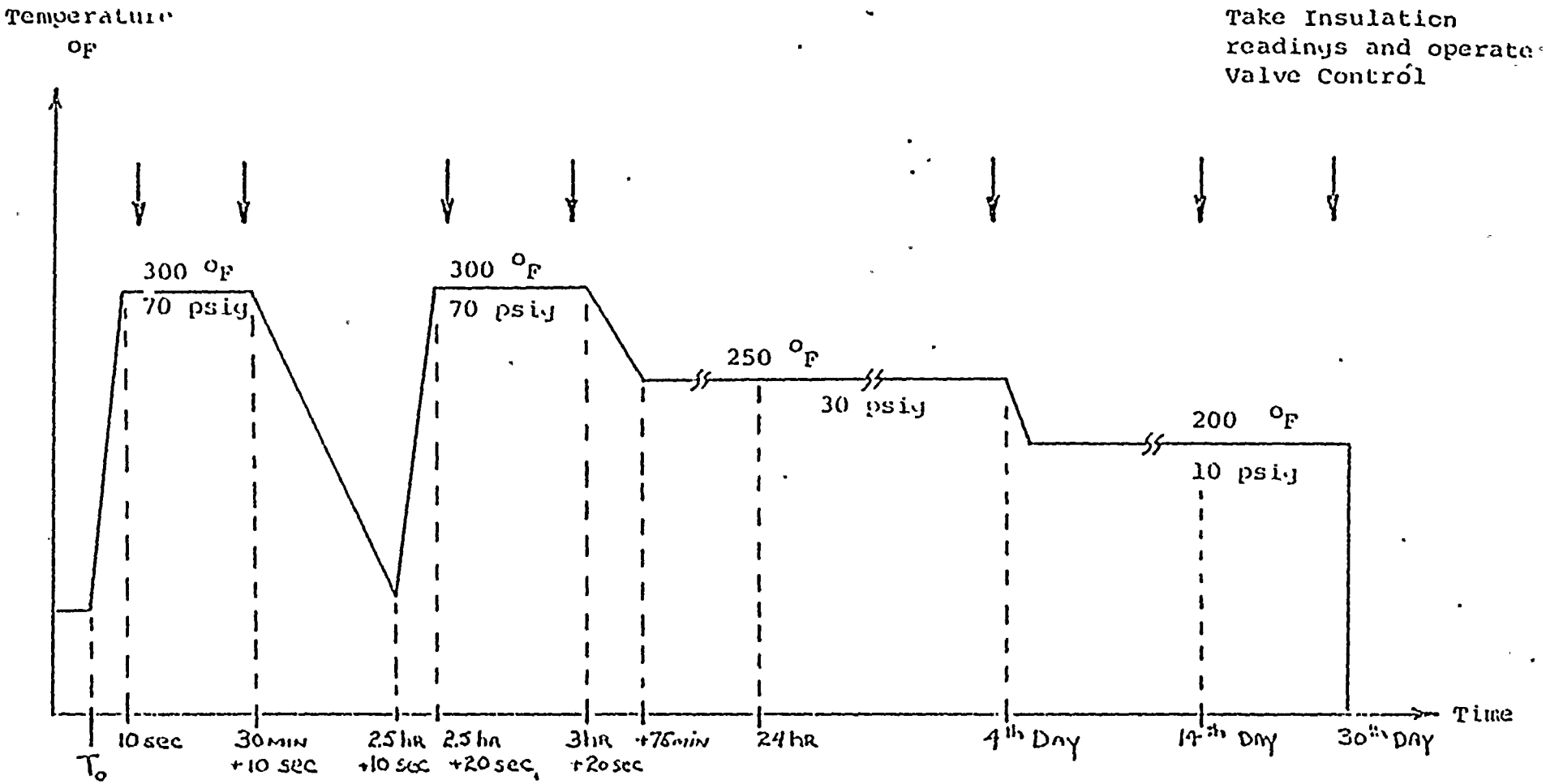
*Documentation References:

16. Limitorque Corp. Test Report #600456

Notes: Letters of J. Tillinghast (NRC) to K. Kriel (NRC) of 4-14-75 and 9-29-75.

from Ref. 16

Specified Accident Profile



Page TC4-2

Figure 5

ACTUAL ACCIDENT PROFILE

From Ref. 16

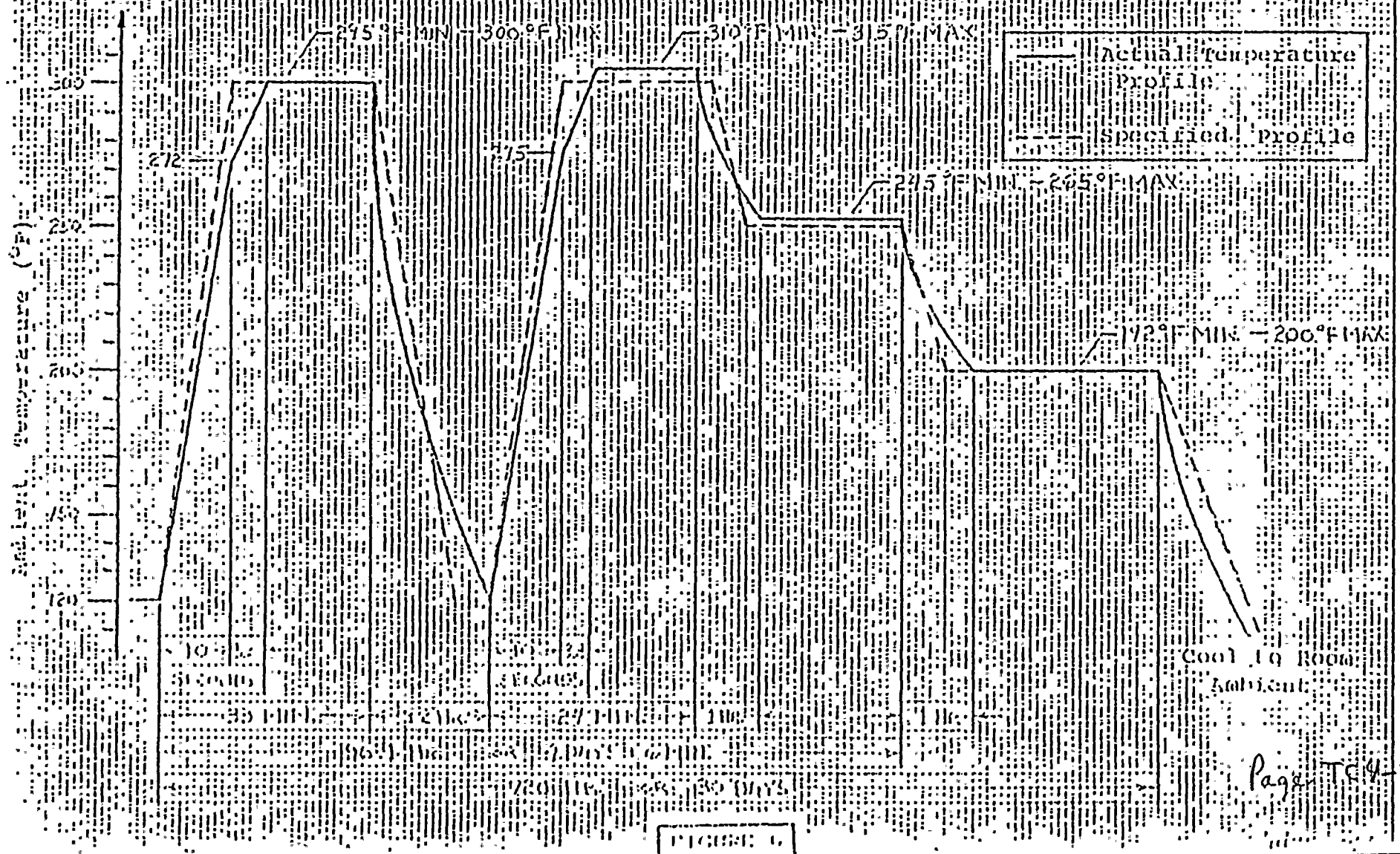


FIGURE 6

Page TC4-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Tum.	Table 7.5-2	13	Seq.	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	340	FSAR APP Q	13	Seq.	
COMPONENT: CONTROL CABLE TERMINATION	Pressure (PSIA)	FIG 1 FIG 2	118	AEC 6504	13	Seq.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		13	Seq.	
MODEL NUMBER: SOLID KAPTON SPLICED TO STRANDED KAPTON	Chemical Spray	Not Req'd	2500 PPM B	T.S. 314.5 314.5.6	13	Seq.	
FUNCTION:	Radiation (10^6 rads)	6.0	60	Letter AEW 729	13	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Aging (years)						
SERVICE: VARIOUS	Submergence		IN FLOODUP TUBES				
LOCATION: In Containment							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: NO							

*Documentation References:

13. Westinghouse-Canada Test Report CWAPD-332

Notes:

FIGURE 2 TEST PROFILE

from Ref. 13

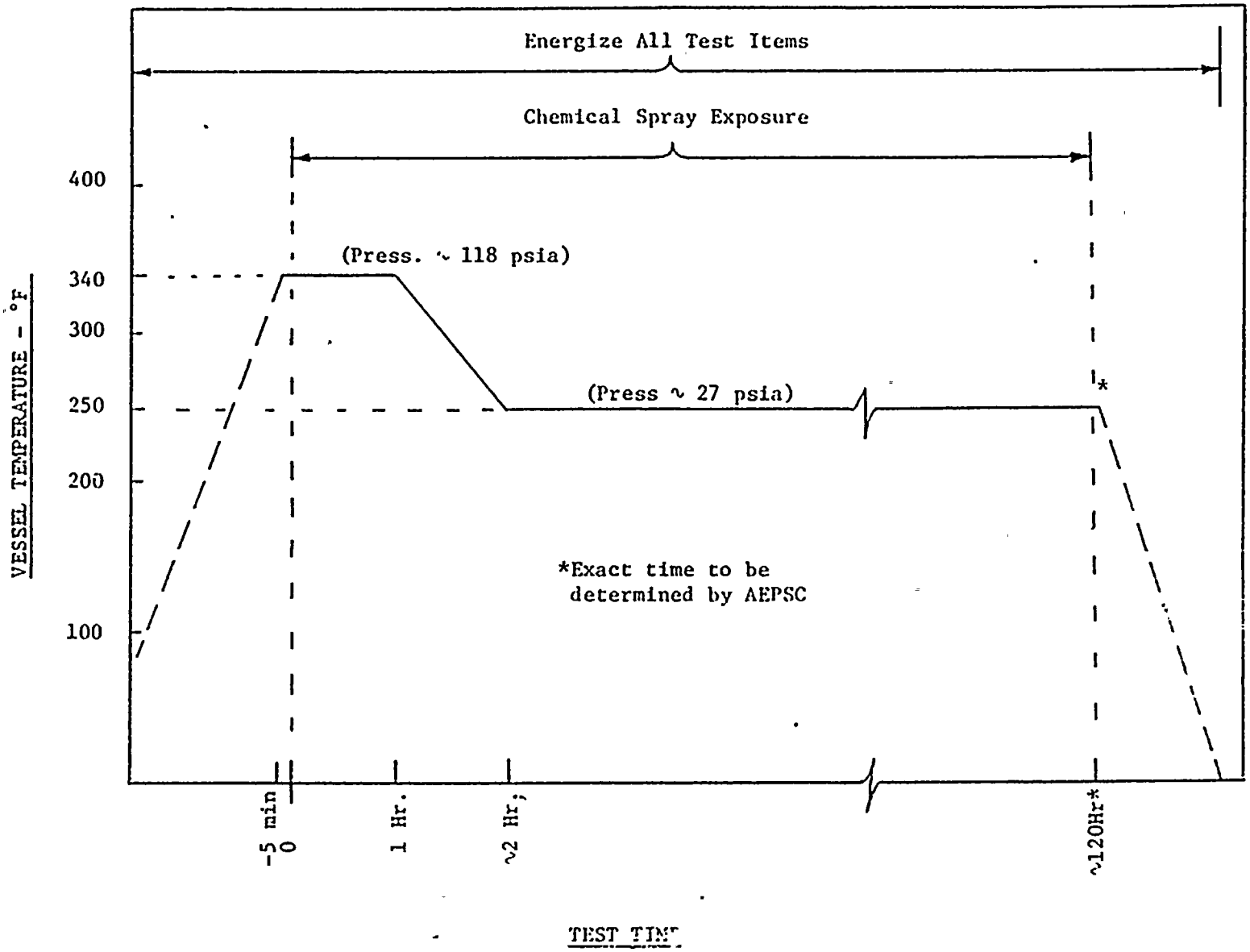
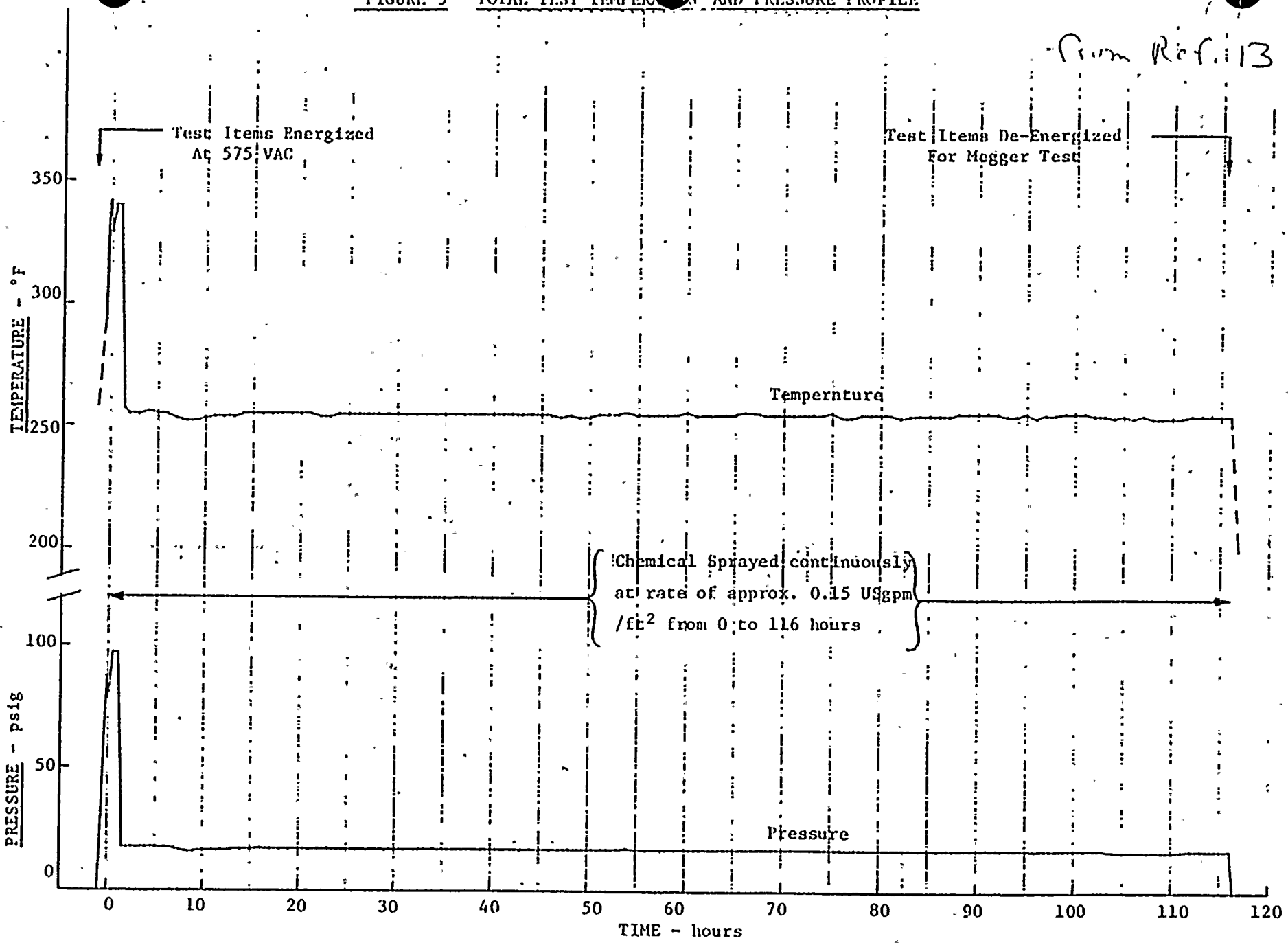


FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

From Ref. 13



DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Termination	Table 7.5-2	8	Seq	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.7-1,-2 328.2 PEAK	345	FSAR App Q	8	Seq.	
COMPONENT: CONTROL CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG 1 FIG 2	124.7	AEO 6804	8	Seq.	
MODEL NUMBER: STRANDED KAPTON. SPLICED TO SOLID XL POLYETHYLENE FUNCTION:	Relative Humidity (%)	100	100		14	SIMUL.	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.6.6	8	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol-1	8	Seq.	
LOCATION: In Containment	Aging (years)		302°F, 7 days Yes		14	SIMUL.	
FLOOD LEVEL ELEV: 619' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

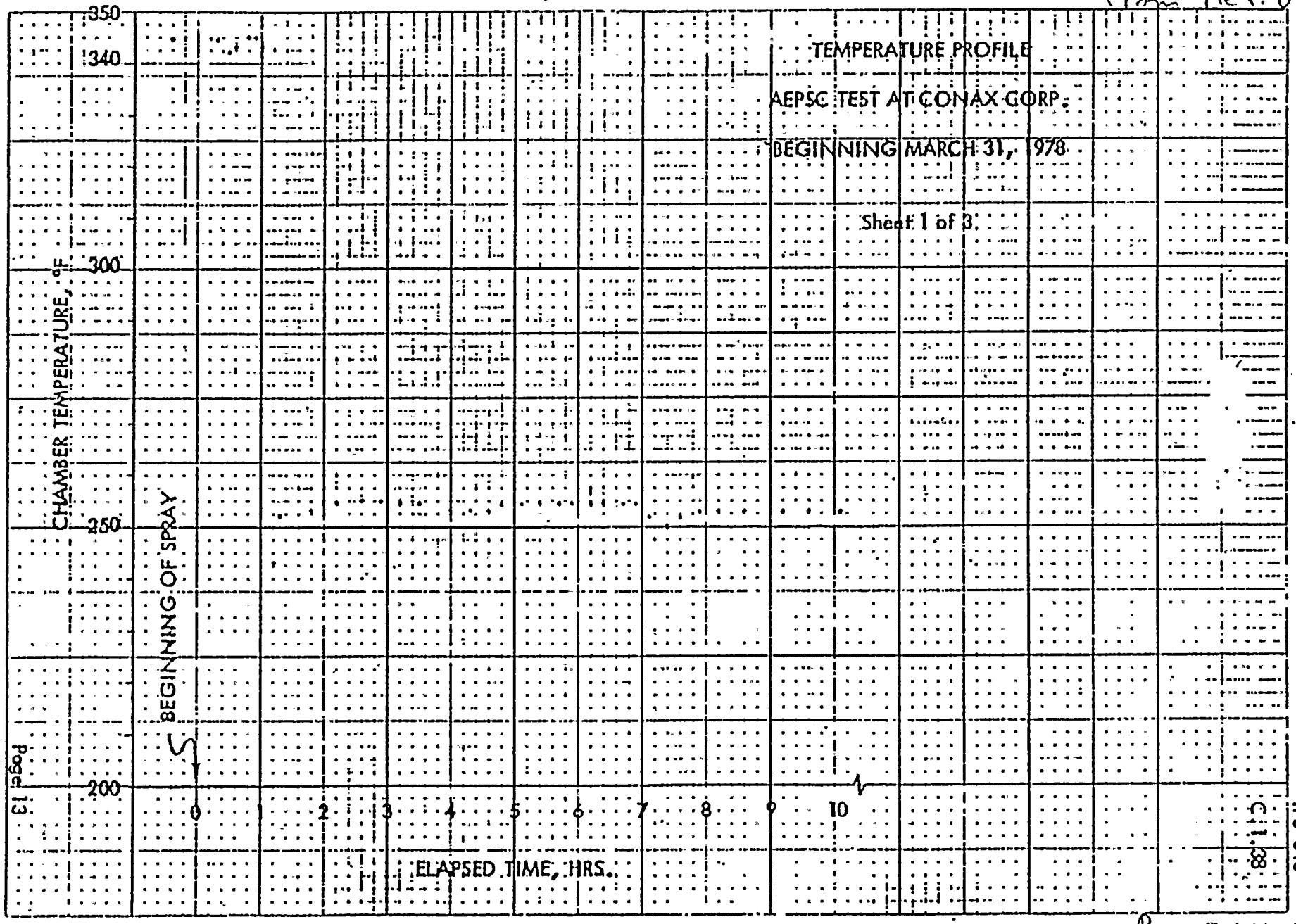
*Documentation References:

8. CONAX Corp. Test Report IPS-348

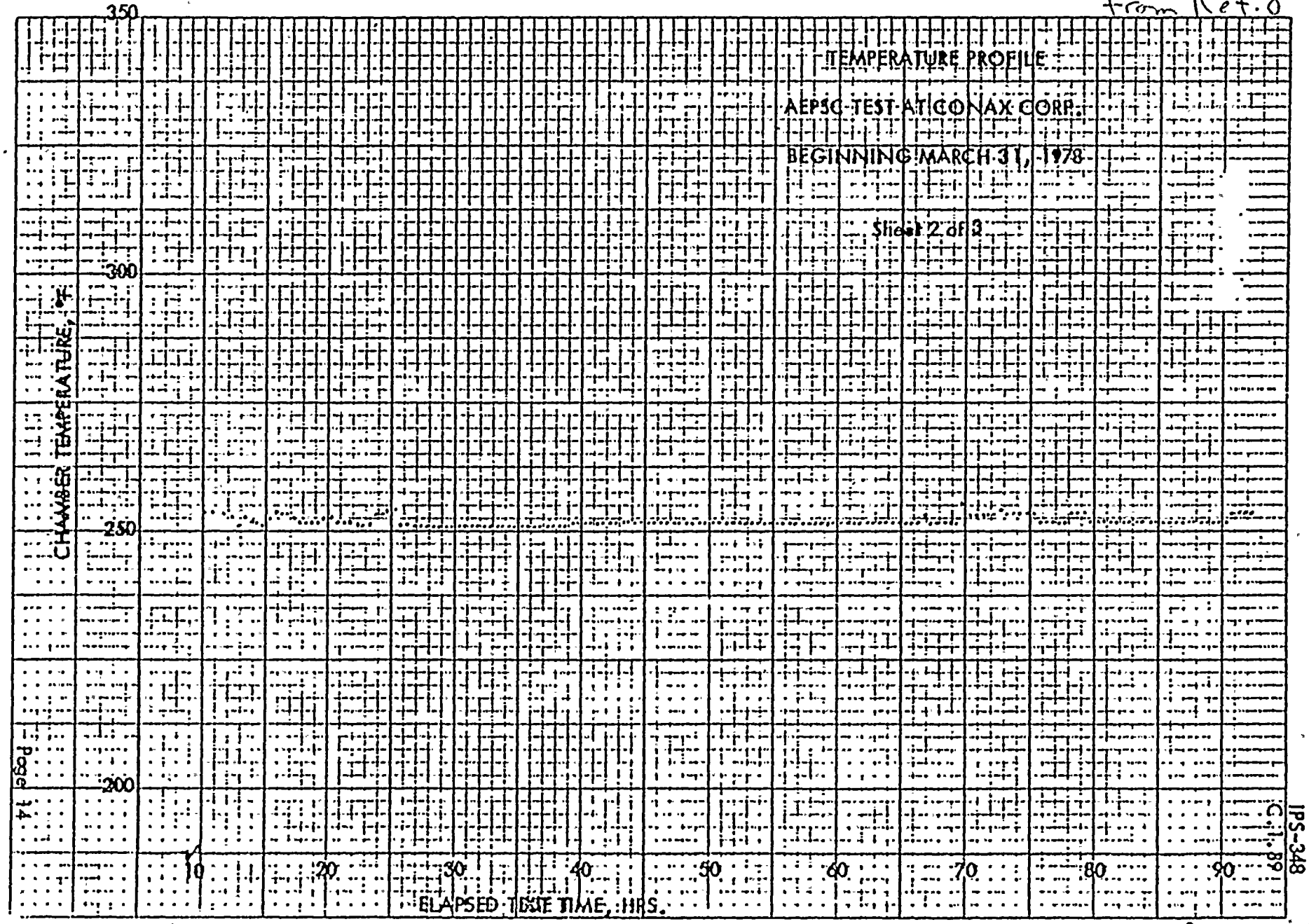
14. FIRL TEST REPORT F-C4033-3

Notes:

From Ref. 8

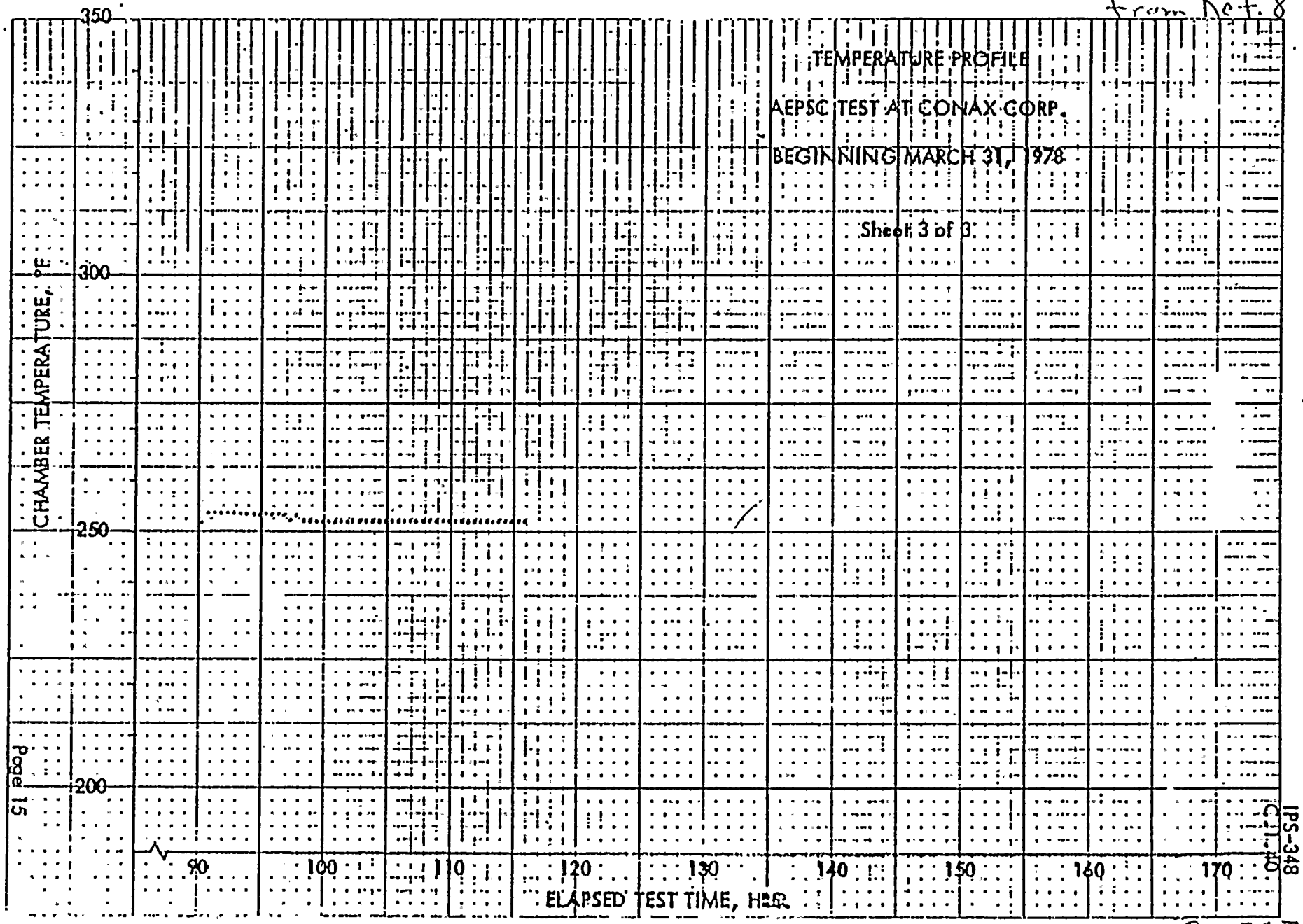

TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

from Ref. 8



IPS-348
C.J. 89

from Ref. 8



IPS-348
C.J. 40

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

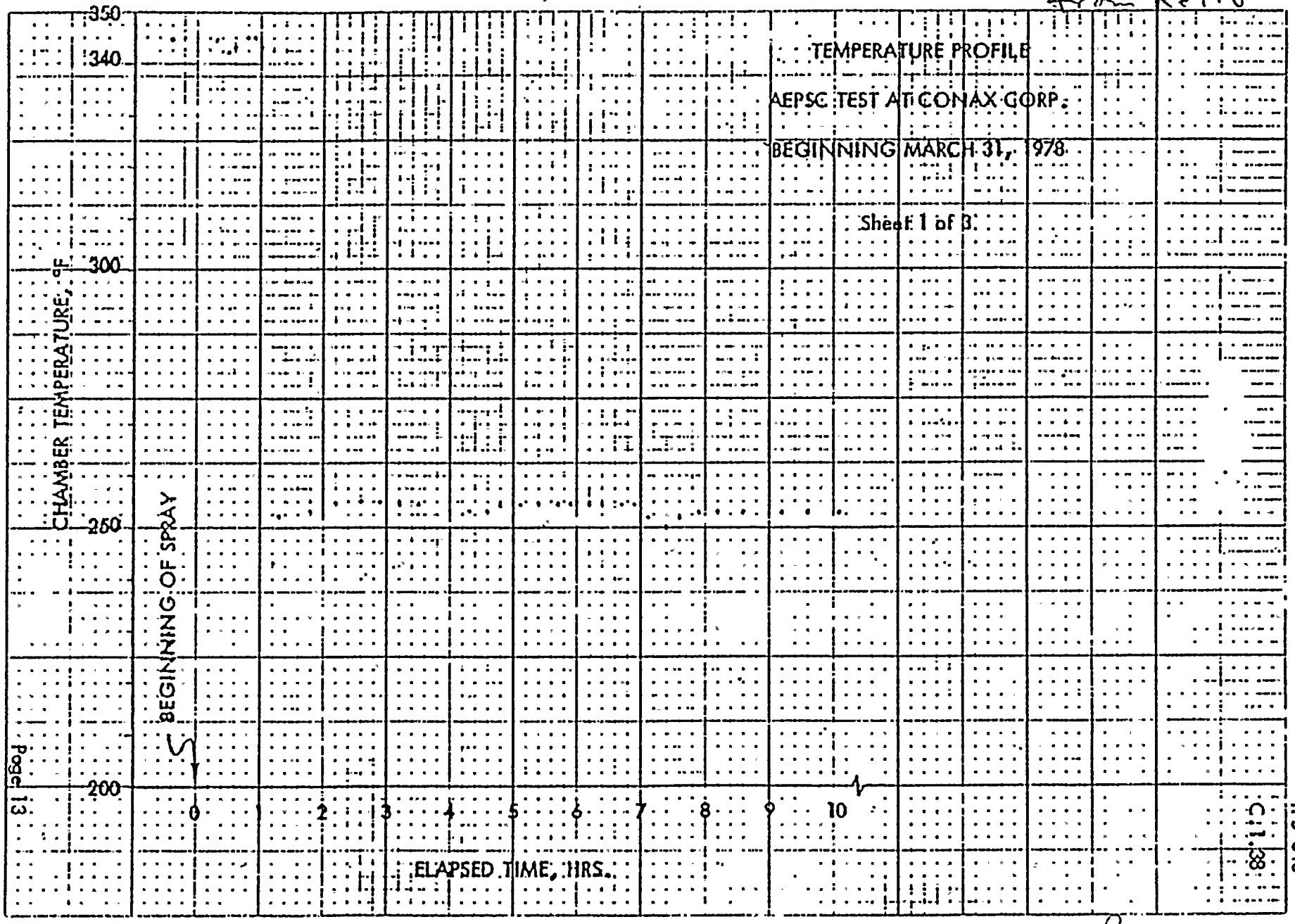
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Mod/ on Cable Tiem	Table 7.5-2	8	Seq	
PLANT ID NO: N/A	Temperature (°F)	FIG 0229-1,-2 328.2 PEAK	345	FSAR APP. Q	8	Seq.	
COMPONENT: CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG.1 FIG2	124.7	AEO 6504	8	Seq.	
MODEL NUMBER: XL POLYETHYLENE SOLID SPLICED TO XL POLYETYHLENE SOLID	Relative Humidity (%)	100	100		14	Simul.	
FUNCTION: ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2500 ppm B	T.S. 3/4.5 3/4.5.6	8	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L VOL 1	8	Seq.	
LOCATION: In Containment	Aging (years)		302°F, 7 days Yes		14	Simul	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes!	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

8. Conax Corp. Test Report IPS-348
14. FIRL Test Report F-C4033-3

Notes:

from Ref. 8

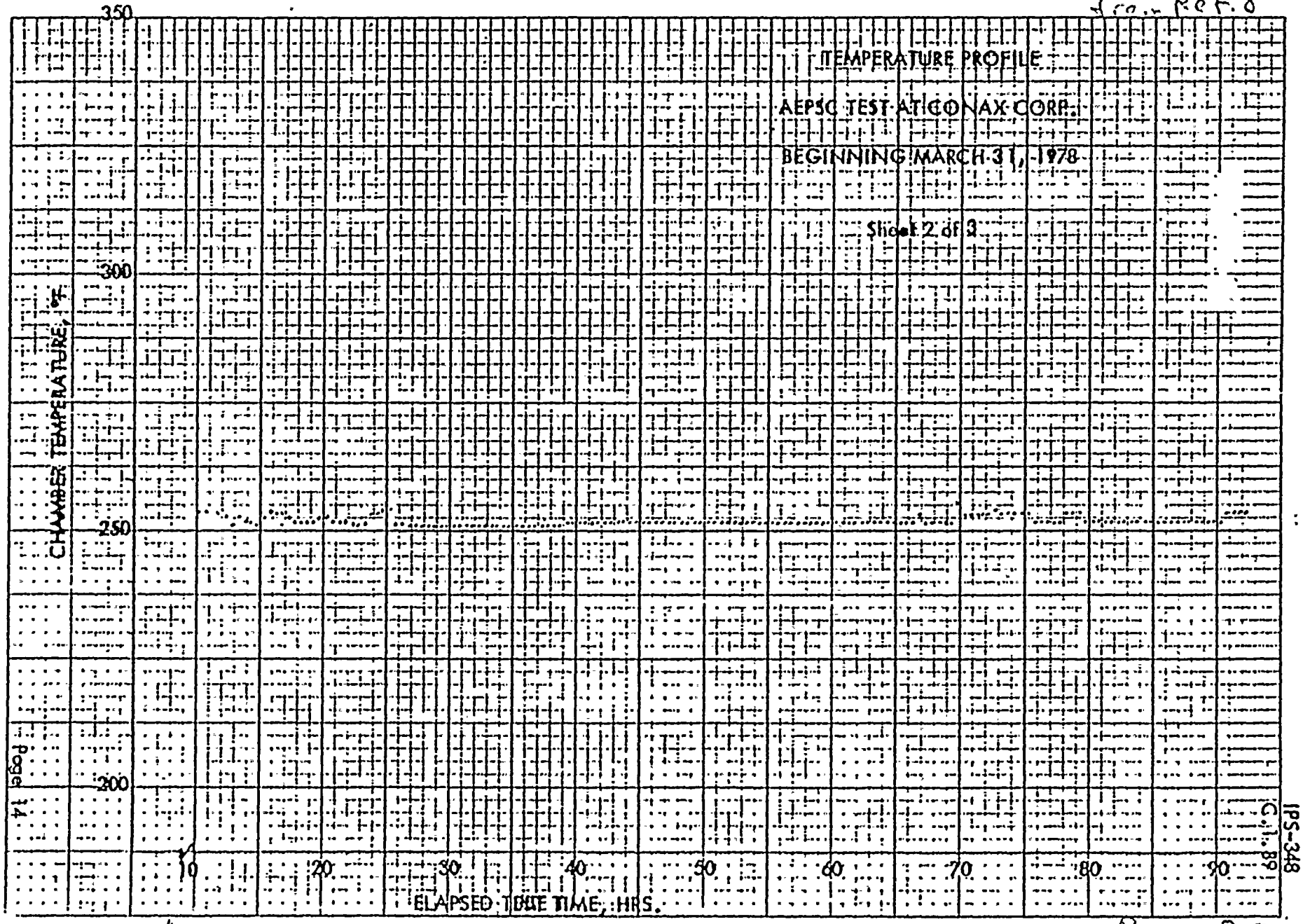


IPS-348

C.1.38

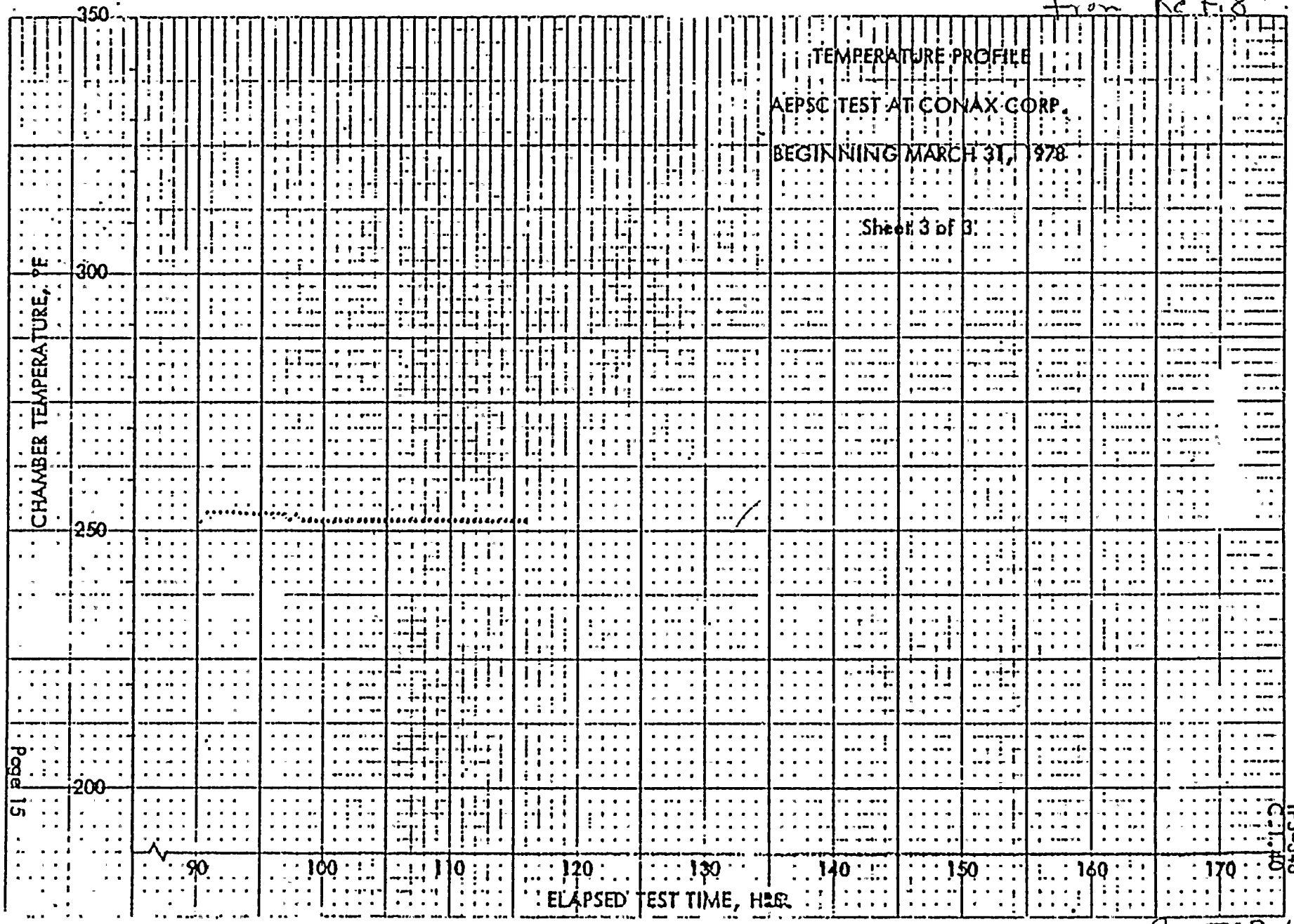
Page 7C8-2

From Ref. 8



IPS-348
C.1.89

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HR.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 day	See Note 2 on Cable Termin.	Note A below	44	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	Fig 0-27	212	FSAR App O	44*	SEQ	
COMPONENT: CONTROL CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 0-27	14.7	FSAR App. O	44	SEQ	
MODEL NUMBER: TERM. AT VALVE MOTOR OPERATOR FUNCTION: VARIOUS	Relative Humidity (%)	NA	100		44	SEQ	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	See Note 1 on Valve Motor operators	AEPSC NSLL calc. DC-N-6420-2			See Note 1 on Valve Motor Operators
LOCATION: OUTSIDE CONTAINMENT	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

44. FIRL TEST REPORT F-C3271

Notes: * see Note 2 on Cable Termination

A) Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 & 9-29-75.

- 44. EXCERPT FROM FIRL F-C 2935

RADIATION: 10 MRAD @ .45 MRAD/HR
100% R.H.
151°F, , 6hr preconditioning
340°F, 100psig, 2hr
160°F, , 20hr

Type of Test: Sequential

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR.	See Note 2 on Cabinet Thermo.	A, L	23	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	FIG 0-27	340	FSAR APP O	23	SEQ	
COMPONENT: CONTROL CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG 0-27	119.7	FSAR APP O	23	SEQ	
MODEL NUMBER: VARIOUS	Relative Humidity (%)	100	100		23	SEQ	
FUNCTION: VARIOUS ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2600 ppm B	T.S. 3/4.5 3/4.5.6	22	SIMUL.	
SERVICE: VARIOUS	Radiation (10^6 rads)	16.6	204	See Note A	23	SEQ	
LOCATION: OUTSIDE CONTAINMENT	Aging (years)		180°C, 100 hrs Yes		23	SEQ	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

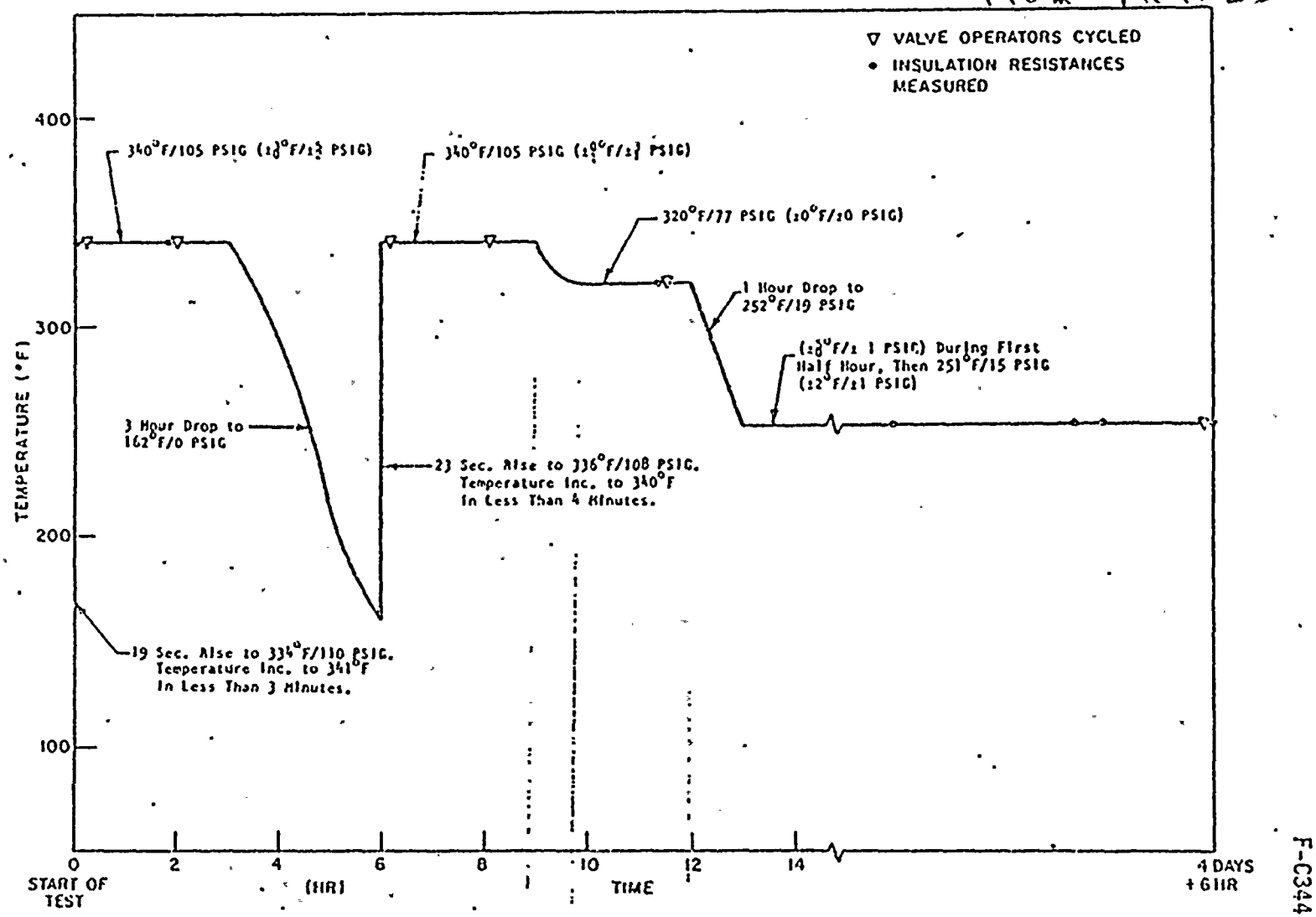
22. LIMITORQUE TEST REPORT # 600198

23. LIMITORQUE TEST REPORT # 600376A

Notes:

A) AEPSC NS+L Calculation SC-N-6420-2

from Ref. 23



F-C3441

Figure 3. Actual Steam Exposure Profile

Page TC 10-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 2 on Cable Terminals		24	SEQ	
PLANT ID NO: N/A	Temperature (°F)	FIG 0-27	250	FSAR APP D	24	SEQ.	
COMPONENT: CONTROL CABLE TERMINATION	Pressure (PSIA)	FIG 0-27	39.7	FSAR APP D	24	SEQ	
MANUFACTURER: N/A							
MODEL NUMBER: TERM. AT VALVE MOTOR	Relative Humidity (%)	100	100		24	SEQ	
FUNCTION: VARIOUS	Chemical Spray	NA	NA	NA	NA	NA	
ACCURACY: SPEC: N/A DEMON: N/A	Radiation (10^6 rads)	16.6	204		24	SEQ.	
SERVICE: VARIOUS							
LOCATION: OUTSIDE CONTAINMENT	Aging (years)		165°F, 200 hrs Yes		24	SEQ.	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. LIMITORQUE TEST REPORT # 600461

Notes:

A) AEPSC NS+L Calculation SC-N-6420-2

from Ref. 24

TEMPERATURE PROFILE

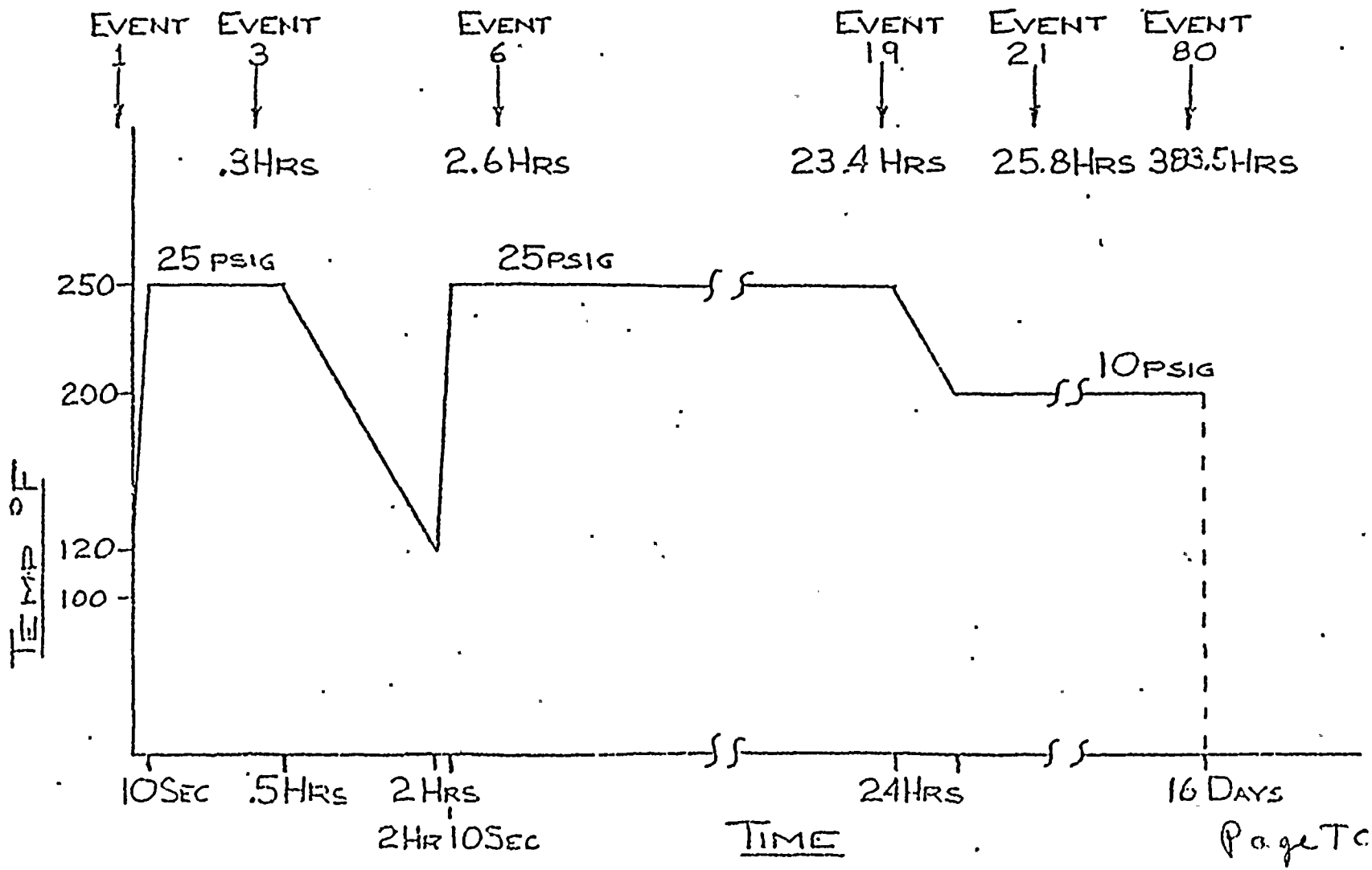


FIGURE 1

Page TC 11-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1	See Note 1 on Cable Term.	Table 7.5-2	24	SEQ	
PLANT ID NO: VARIOUS	Temperature (°F)	F16 022.9-1,-2	250 See Note C	FSAR App. Q	24	SEQ	
COMPONENT: CONTROL CABLE TERM. MANUFACTURER: N/A	Pressure (PSIA)	F16 1 F16 2	39.7	AEW 6504	24	SEQ	
MODEL NUMBER: TERM. AT VALVE MOTOR OPERATOR FUNCTION: VARIOUS	Relative Humidity (%)	100	100		24	SEQ	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	See Note A	NA	See Note B	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	204	WCAP 7410-L Vol. 1	24	SEQ	
LOCATION: INSIDE CONTAINMENT	Aging (years)		165°F, 200 hrs Yes		24	SEQ.	
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. LIMITORQUE CORP. TEST REPORT # 600461

Notes:

A) Valve Location is not subjected to direct caustic Spray impingement.

B) mech. installation drawings
2-5435
2-5435A
2-5436

C) See General Note 4.

TEMPERATURE PROFILE

from Ref. 24

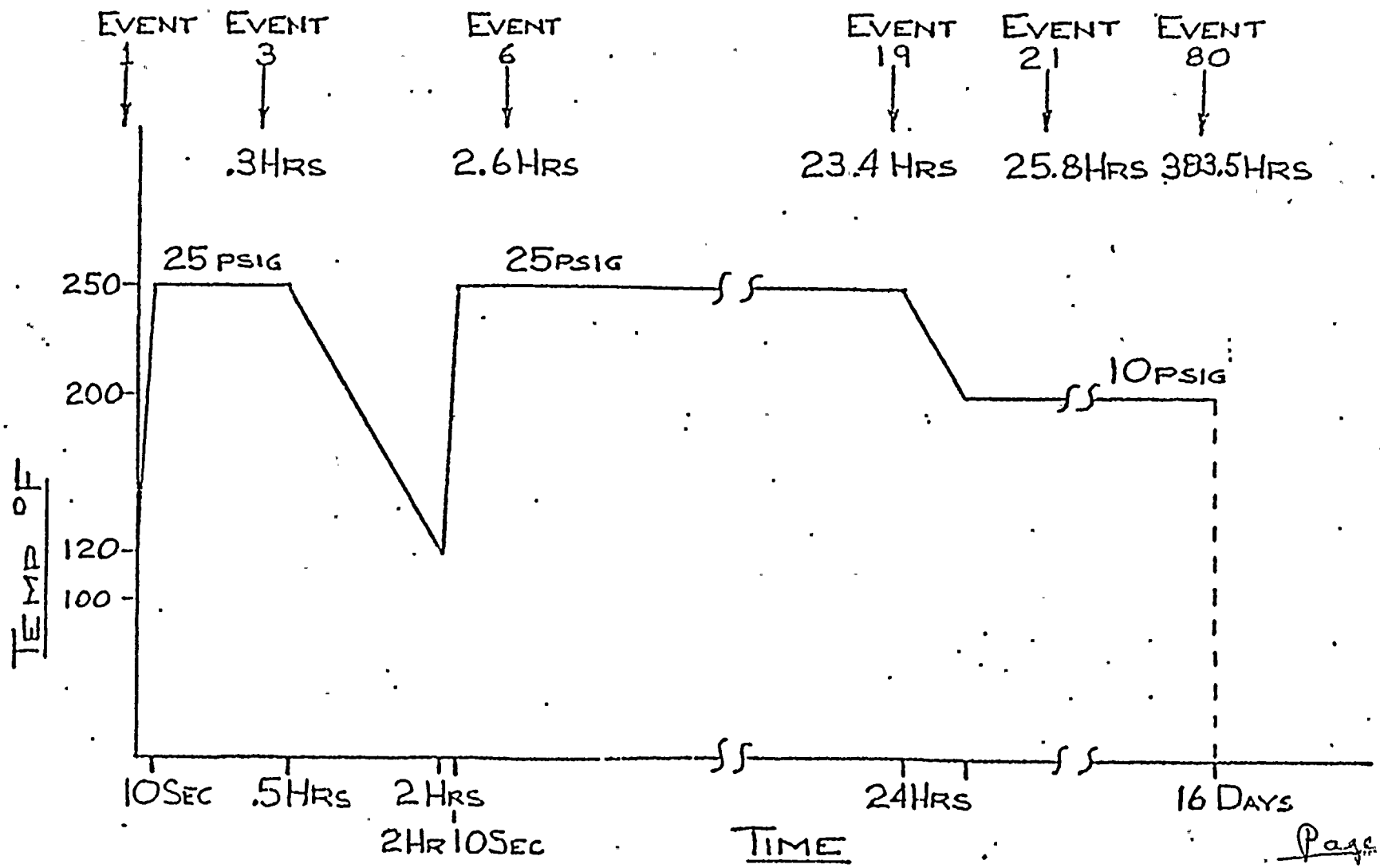


FIGURE 1

Page TC 12-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 2 on Cable Terminat		45	SIMUL.	
PLANT ID NO: N/A	Temperature (°F)	FIG 0-27	345	FSAR APP O	45	SIMUL.	
COMPONENT: CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG 0-27	124.7	FSAR APP O	45	SIMUL.	
MODEL NUMBER: TERM. AT TERM BLOCK FUNCTION: CABLE CONNECTION	Relative Humidity (%)	NA	100%	NA	45	SIMUL.	
ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	2500 PPM B		45	SIMUL.	
SERVICE: VARIOUS	Radiation (10^6 rads)	16.6	20	See Note A	46	SEQ	
LOCATION: Outside CONT.	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA		NA	

*Documentation References:

45. CONAX Test Report IPS-339
46. CONAX Test Report IPS-349

Notes:

A) AEPSC NSTL calculation DC-N-6420-2

from Ref. 45

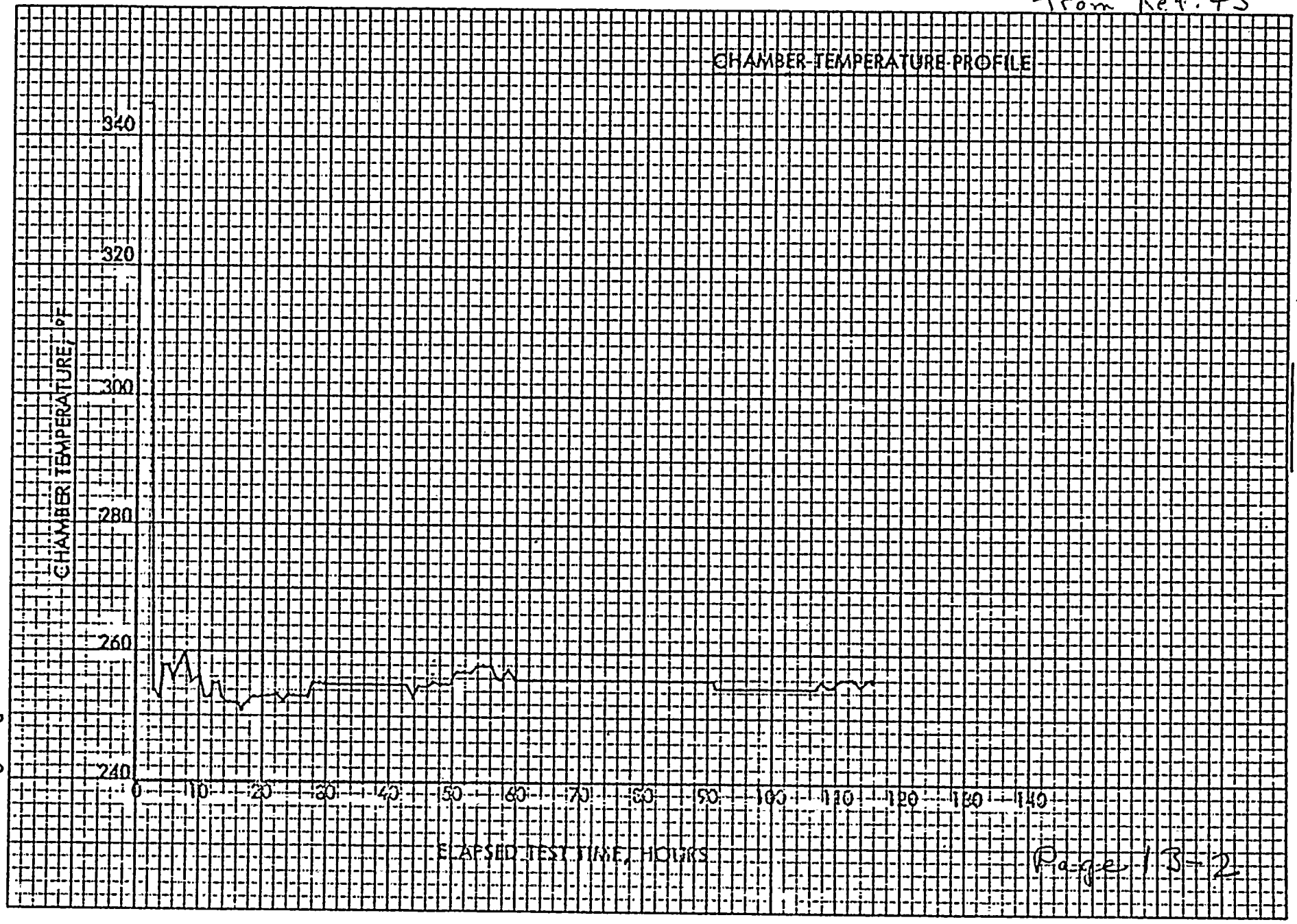


FIGURE 6.1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: RHR	Operating Time	1 DAY	See Note 1 on Cable Term.	See Note (A)	22	Simul.	
PLANT ID NO: ICM-305, 306	Temperature (°F)	FIG 022.9-1,-2	330	FSAR App Q	22	Simul.	
COMPONENT: Control Cable Termination	Pressure (PSIA)	FIG 1 FIG 2	104.7	AEW 6504	22	Simul.	
MANUFACTURER: NA	Relative Humidity (%)	100	100		22	Simul.	
MODEL NUMBER: Cable Term. at Valves.	Chemical Spray	NA	2600 ppmB	inside CT ext.	22	Simul.	
FUNCTION: long term post accident cooling	Radiation (10^6 rads)	4.6	1	AEP NC&L CALCUL. DC-N-6420-2	100		
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		180°C/100hrs Yes		22	Simul.	
SERVICE: Recirculation switchover to sump suction	Submergence		Floodup Tubes				
LOCATION: In Containment							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No							

*Documentation References:

22. Limitorque Corp Test Report #600198.
1. Conax Corp. Test Report IPS-234.

Notes: (A) Letters of J. Tillinghast (AEP) to K. Krill (NRC) dated 4-14-75 and 9-25-75.

from Ref. 22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.6%.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	5 sec	5 sec	14.2.5	TECH SPEC 3.7.1.5	RESPONSE TIME TESTING	NONE
PLANT ID NO: NA	Temperature (°F)	FIG 0-27	180	FSAR APP O	MFTR LIT	Eng'g Review	NONE(L)
COMPONENT: CABLE TERM	Pressure (PSIA)	FIG 0-27	14.7	FSAR APP O	"	Eng'g Review	NONE(L)
MANUFACTURER: NA	Relative Humidity (%)	NA	NA	NA	NA	NA	NA
MODEL NUMBER: Control Cable Term at Solenoid	Chemical Spray	NA	NA	NA	NA	NA	NA
FUNCTION: VARIOUS	Radiation (10^6 rads)	NA	NA	NA	NA	NA	NA
ACCURACY: SPEC: NA DEMON: NA	Aging (years)						
SERVICE: VARIOUS	Submergence	NA	NA	NA	NA	NA	NA
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA							

*Documentation References:

MFTR LIT – AUTOMATIC SWITCH CO.
CATALOG NO. 30
BULLETIN 8316

Notes: 14.2.5 & 14.2.8 ARE THE ADVERSE ENVIRONMENT ACCIDENT ANALYSIS FOR WHICH CREDIT IS ASSUMED FOR OPERATION OF THE DEVICE.

(L) ACCIDENT ANALYSIS Q212.25 SHOWS THAT MAIN STEAM LINE BREAK PLUS THE FAILURE OF ANOTHER STEAM LINE TO ISOLATE IS ACCEPTABLE. SINCE THE LOCATION OF THESE DEVICES IS SUCH THAT ONLY TWO STEAM GENERATOR STOP VALVES CAN BE AFFECTED BY ONE BREAK, USE OF CONTROL GRADE DEVICES IS ACCEPTABLE.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	5 SEC	≤ 10 SEC	Q 022.4	TECH SPEC 3.6-1	TIME RESPONSE TESTING	NONE
PLANT ID NO: NA	Temperature (°F)	FIG 022.9-1,-2	SEE TEST PROFILE	FSAR APP Q	REF. 29	SEQUENTIAL	NONE
COMPONENT: CABLE TERM MANUFACTURER: NA	Pressure (PSIA)	FIG 1 FIG 2	SEE TEST PROFILE	AEW 6504	"	"	"
MODEL NUMBER: CONTROL CABLE TERM AT SOLENOID FUNCTION: VARIOUS	Relative Humidity (%)	100	100	7.5	"	"	"
ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppm B	3000 ppm (1%) BORIC ACID WITH .064 M $NA_2S_2O_3$	T.S. 3/4.5 3/4.6.5	"	"	"
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L VOL 1	"	"	"
LOCATION: IN CONTAINMENT	Aging (years)		4		"	"	"
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES	Submergence	NA	NA		AEP DWG	ENGINEERING DRAWING REVIEW	"

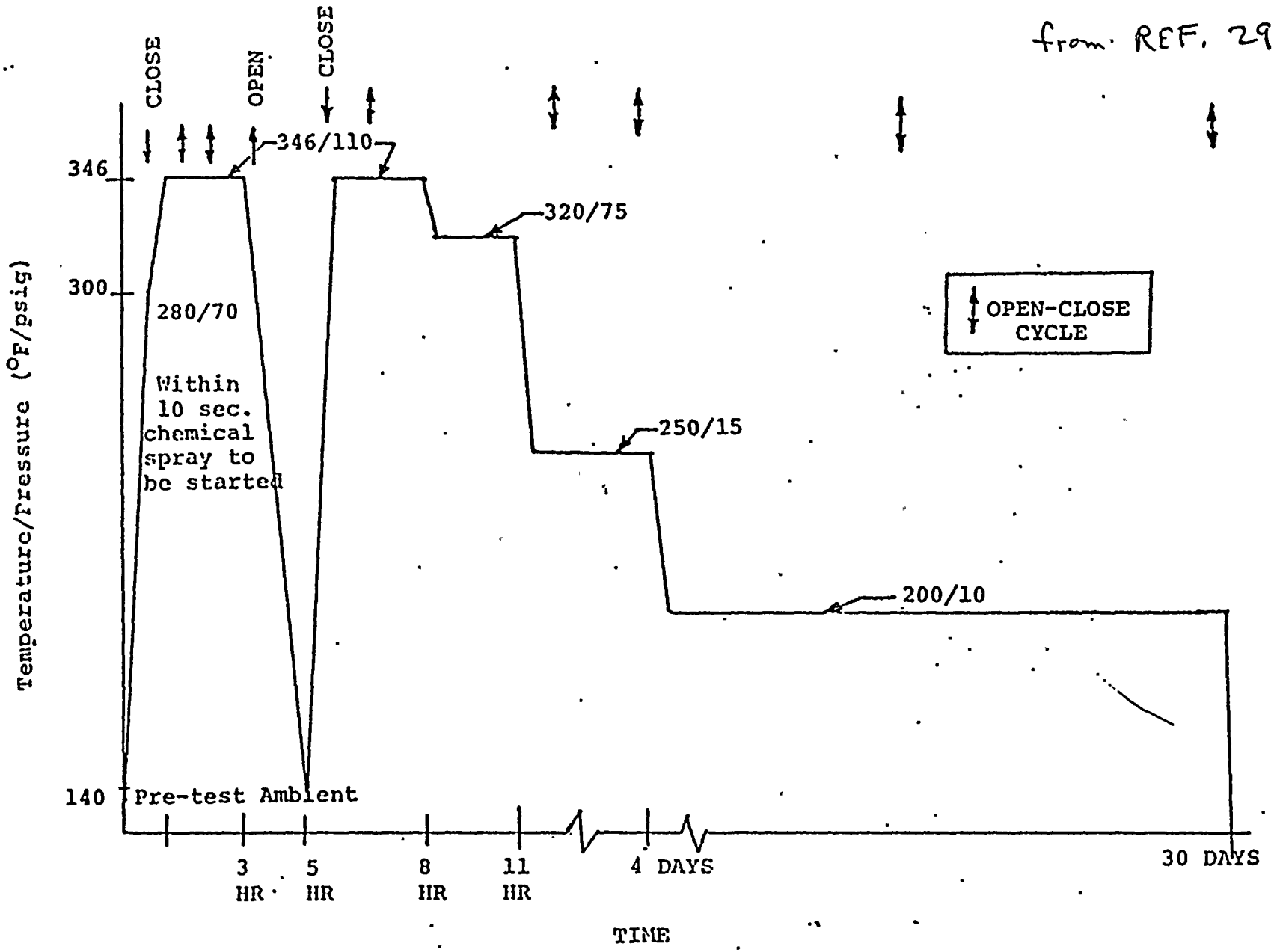
*Documentation References: UNLESS OTHERWISE STATED REFERENCES ARE FSAR SECTIONS.

Notes:

REF #29 - AUTOMATIC SWITCH CO. REPORT AQS 21678/TR

FIGURE 1
LOCA SIMULATION BY ENVIRONMENTAL
EXPOSURE (STEAM/CHEMICAL)

from REF. 29



Temperature/Pressure Profile for simulation of loss-of coolant accident (LOCA) design basis event (DBE) by steam/chemical-spray environmental exposure.

Page TC 16-2

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

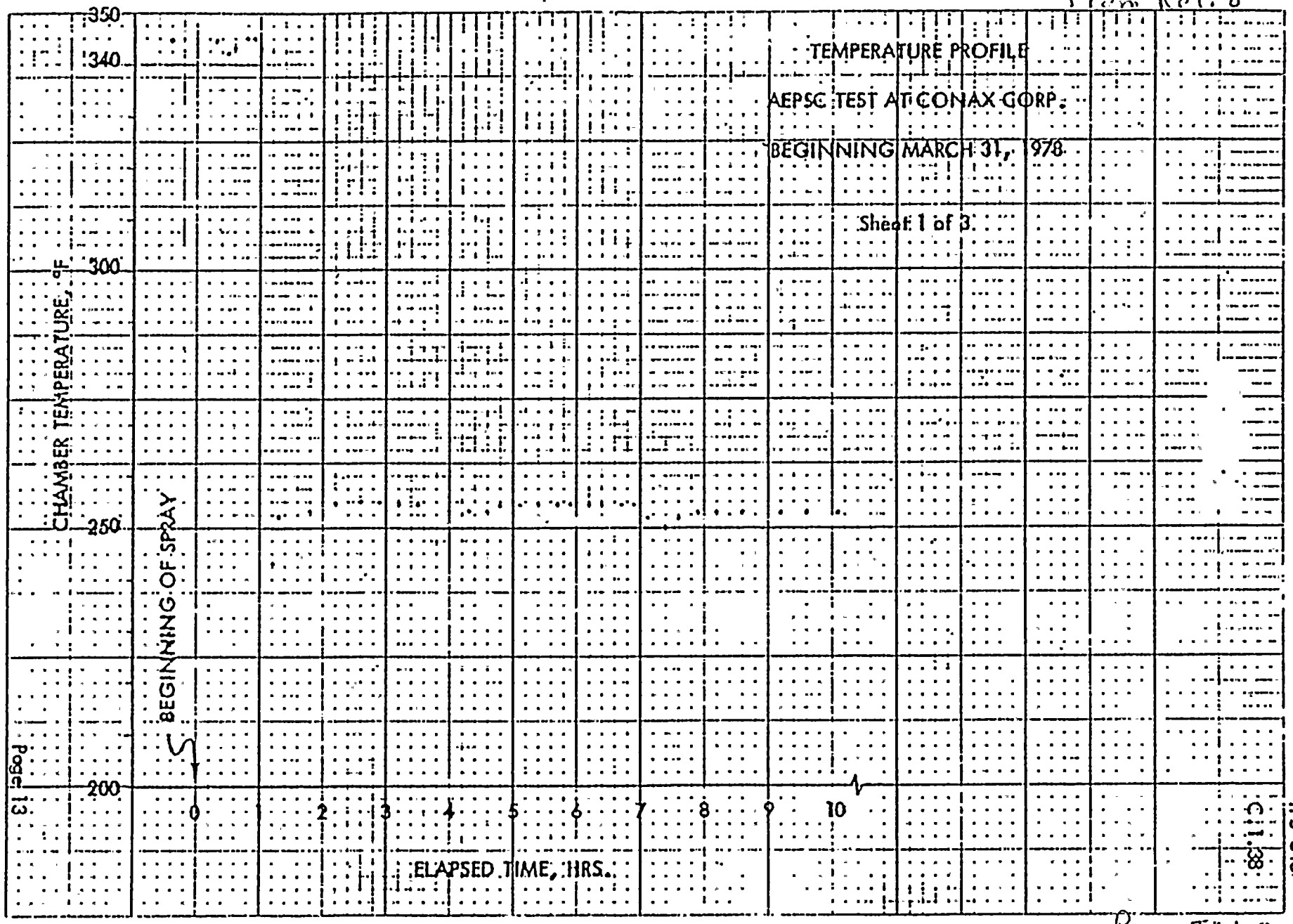
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Termination	Table 7.5-2	8, 9, 10,	11, 12, 14 Separate	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.3-1,-2 328.2	340	FSAR App Q	8, 9,	10, 11, 12, 14 Separate	
COMPONENT: Instrumentation Termination MANUFACTURER: N/A	Pressure (PSIA)	FIG 1 FIG 2	119.7	AEW 6504	8, 9,	10, 11, 12, 14 Separate	
MODEL NUMBER: Barton Instrument Termination FUNCTION:	Relative Humidity (%)	100	100		8, 9,	10, 11, 12, 14 Separate	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2000 ppm B	T.S. 3/4.5 3/4.5.6	8, 9,	10, 11, 12, 14 Separate	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	8, 9,	10, 11, 12, 14 Separate	
LOCATION: In and Out Containment	Aging (years)		250°F, 7 days Yes		8, 9,	10, 11, 12, 14 Separate	
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No	Submergence		Yes		8, 9,	10, 11, 12, 14 Separate	

*Documentation References:

8. Conax Corp Test Report IPS-348
9. FIRL Test Report F-C 4033-1
10. FIRL Test Report F-C 3683
11. Isomadix Corp Test Report of May 1976
12. Cerro Wire + Cable Test Report of May 1976
14. FIRL Test Report F-C 4083-3

Notes:

from Ref. 8

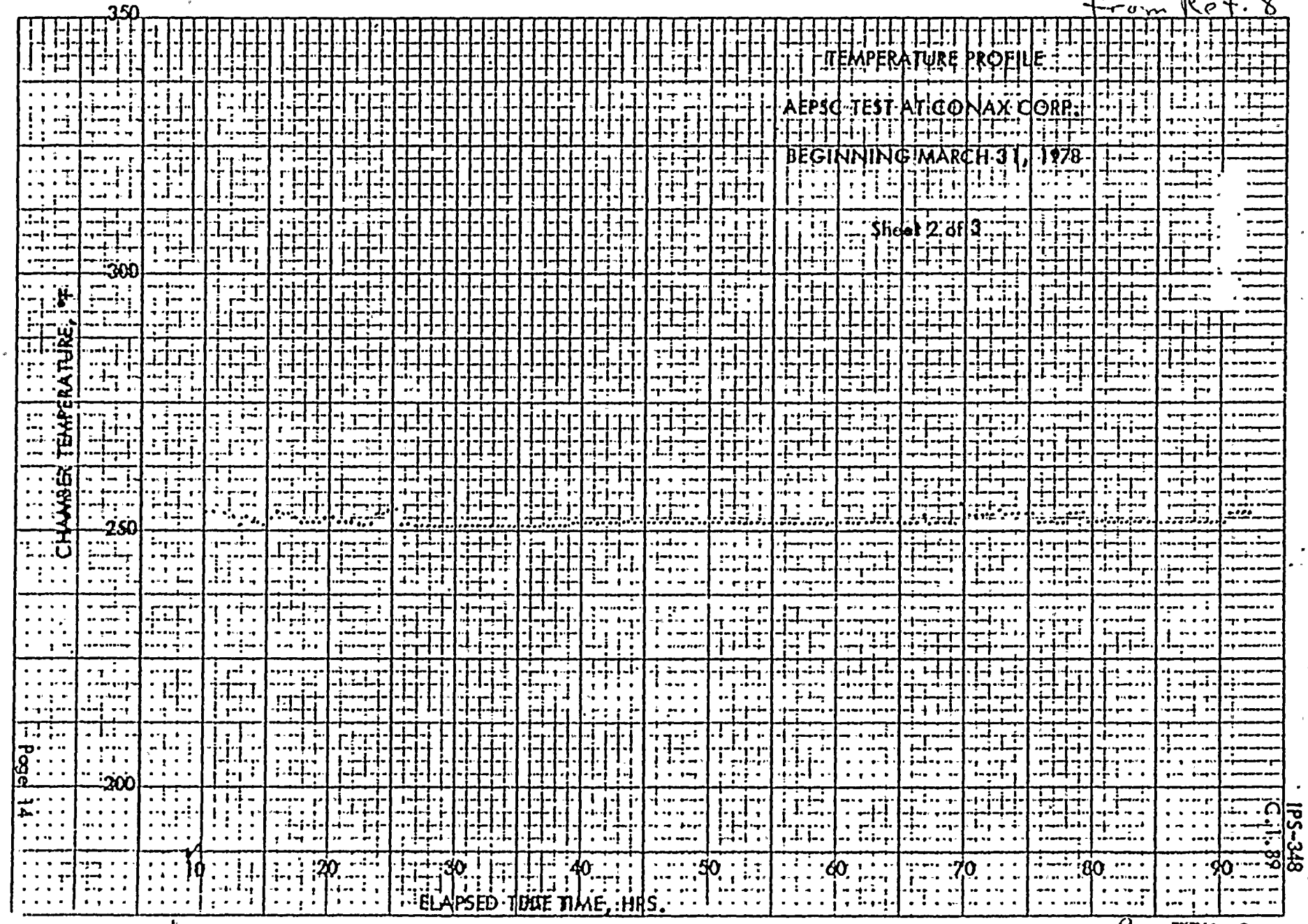


IPS-348

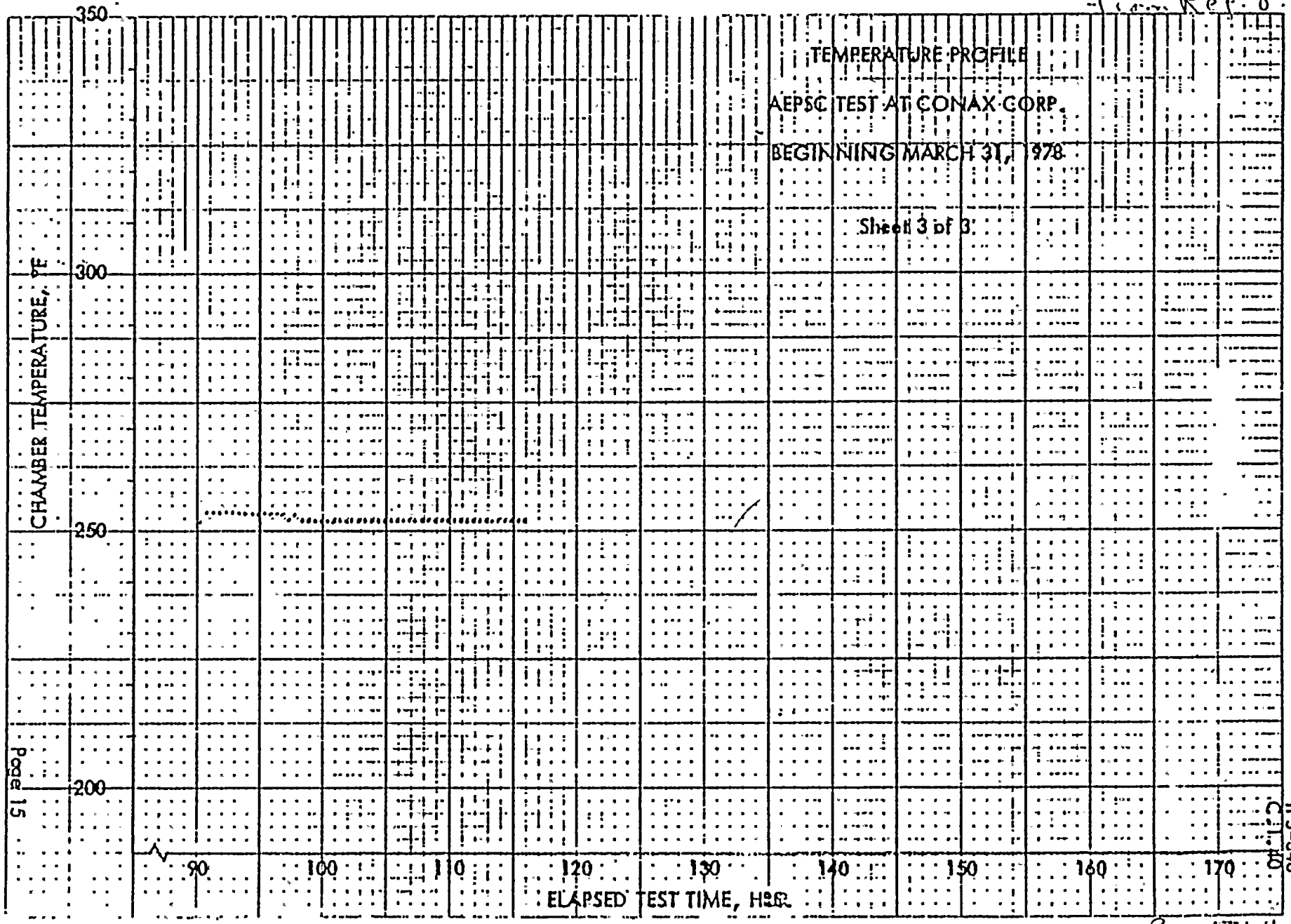
C1.38

Page T1.1-2

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.

From Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HR.

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

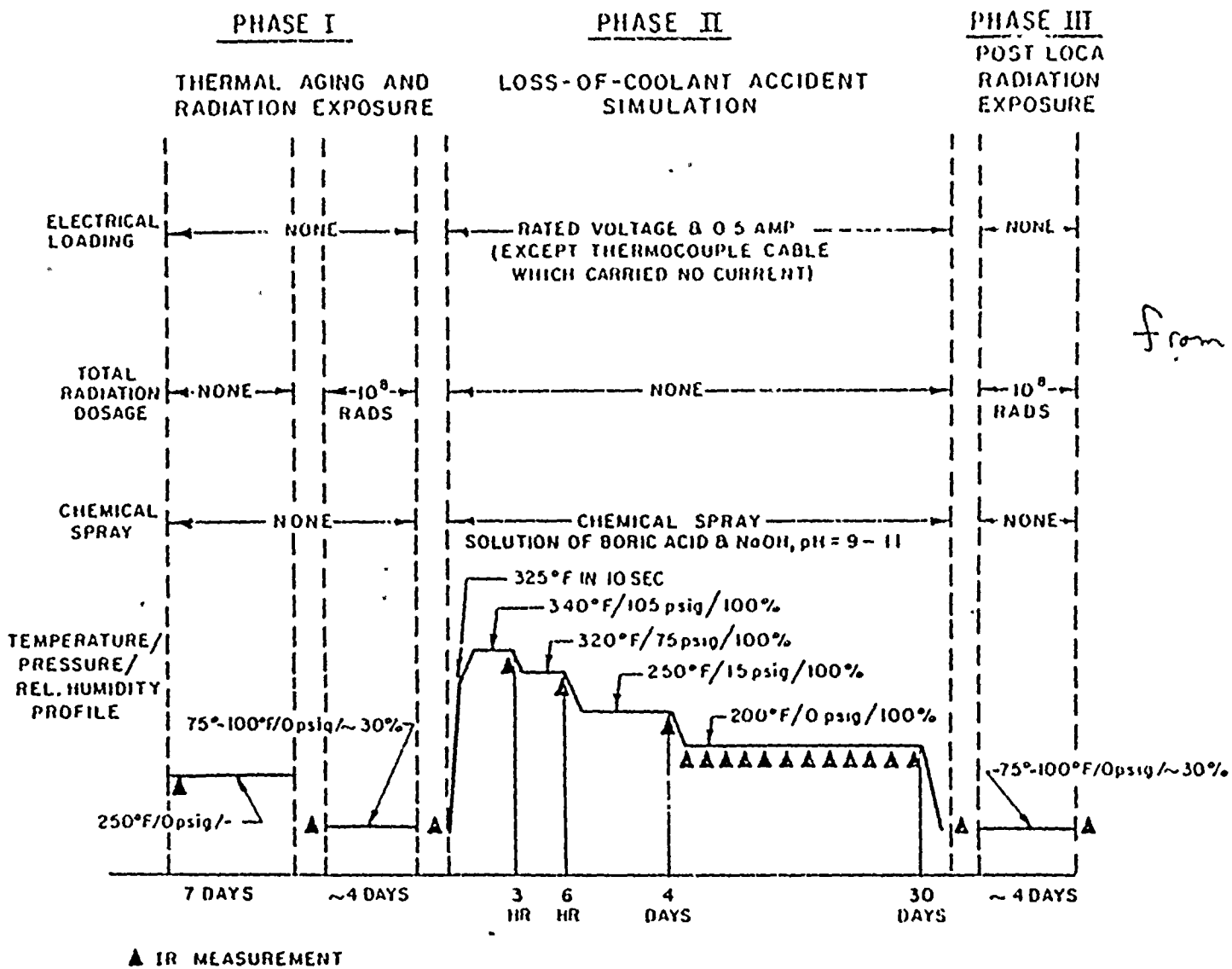
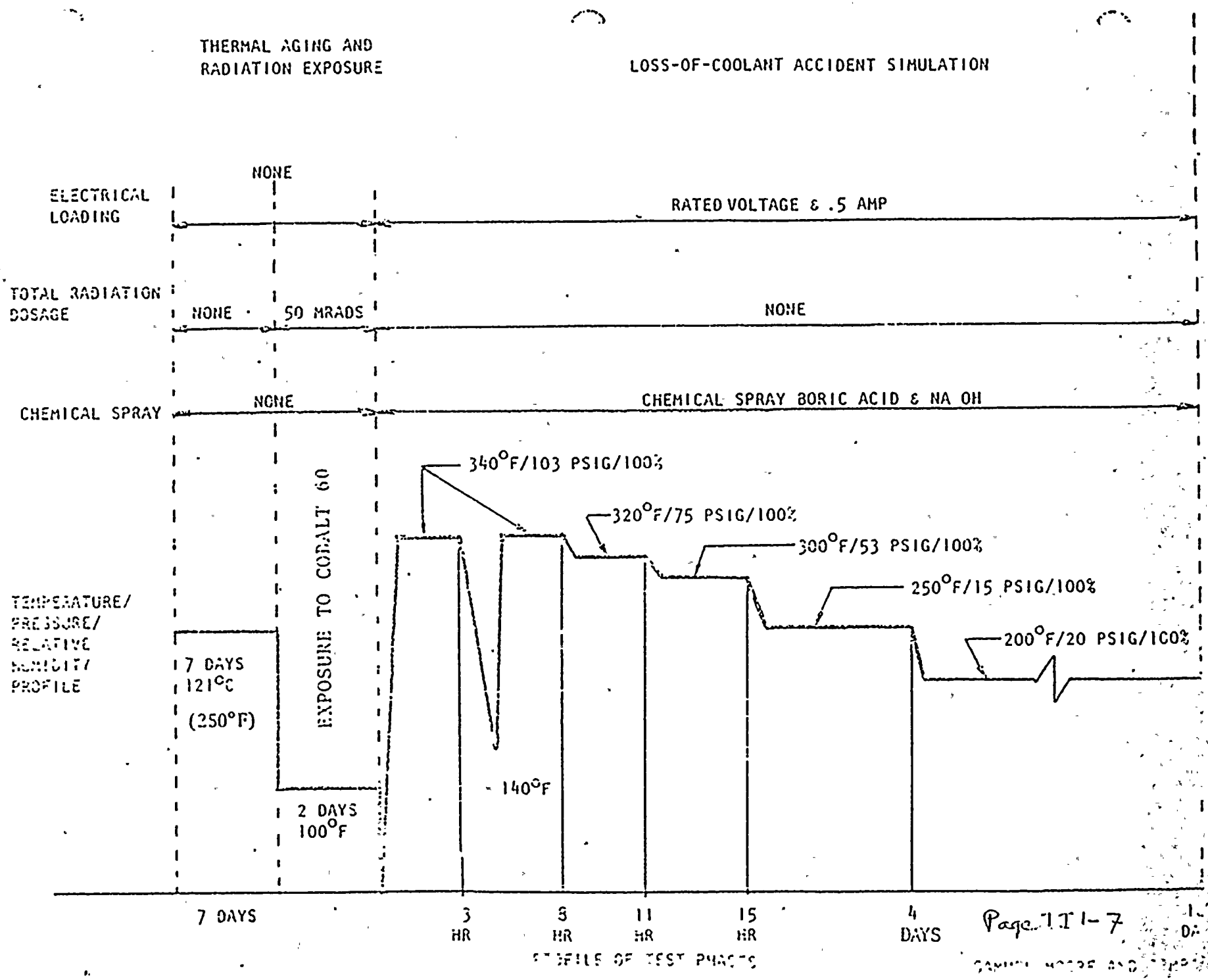


Figure 2. Profile of Test Phases

from Ref. 10

F-C3683

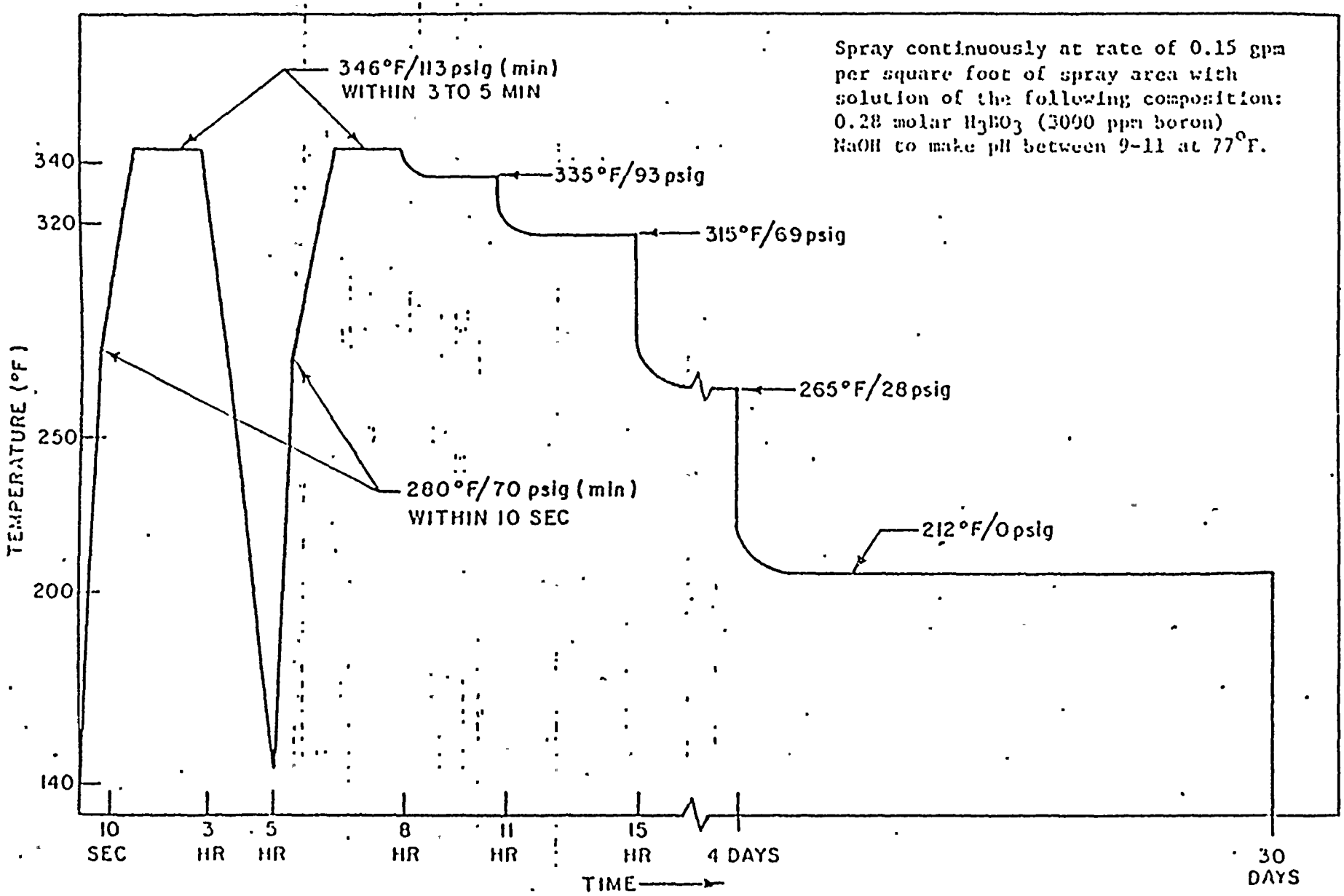
Page TJ 1-6


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
ELECTRICAL LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/ PRESSURE/ RELATIVE HUMIDITY/ PROFILE
7 DAYS 121°C (250°F)
EXPOSURE TO COBALT 60
2 DAYS 100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3 HR
8 HR
11 HR
15 HR
4 DAYS

Page III-7

-9-

LOCA Profile



LOCA PROFILE

7.

Page 711-8

from Ref 14. Type of Test (F-C4033-3): Simultaneous Radiation/chem. spray/steam.

Test Profile:

.2-.3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical spray: 3000 ppm boron as boric acid, .004 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

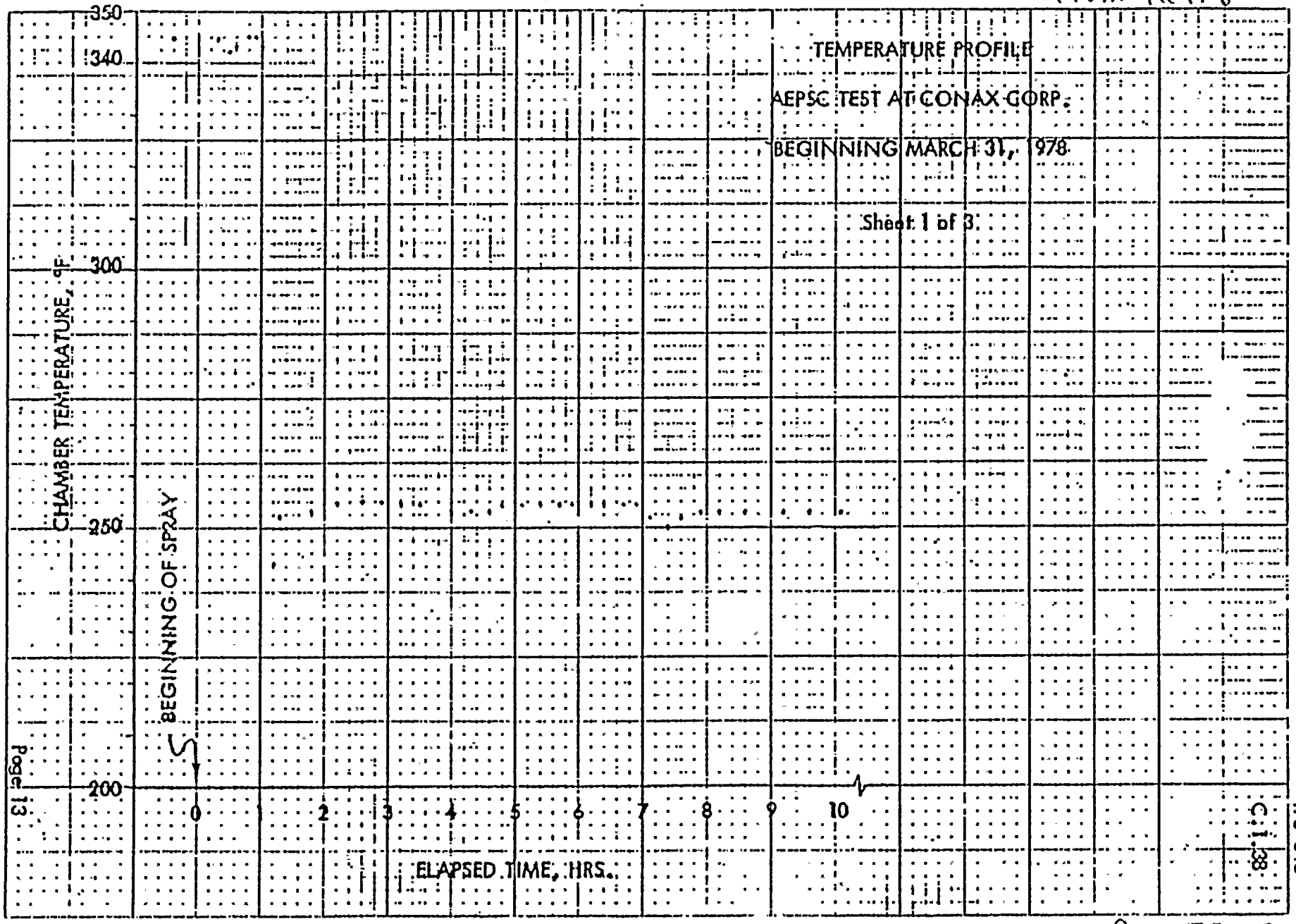
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Termination.	Table 7.5-2	8, 9,	10, 11, 12, 14 Separate	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.9-1,-2 328.2	340	FSAR App Q	8, 9,	10, 11, 12, 14 Separate	
COMPONENT: RTD TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 1 FIG 2	119.7	AEW 6504	8, 9,	10, 11, 12, 14 Separate	
MODEL NUMBER: RTD TERMINATION FUNCTION:	Relative Humidity (%)	100	100		8, 9,	10, 11, 12, 14 Separate	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2000 ppm B	T.S. 3/4.5 3/4.5.6	8, 9,	10, 11, 12, 14 Separate	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	8, 9,	10, 11, 12, 14 Separate	
LOCATION: In and Out Containment	Aging (years)		250°F 7 days Yes		8, 9,	11, 12, 14 Separate	
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No	Submergence		Yes		8, 9,	10, 11, 12, 14 Separate	

*Documentation References:

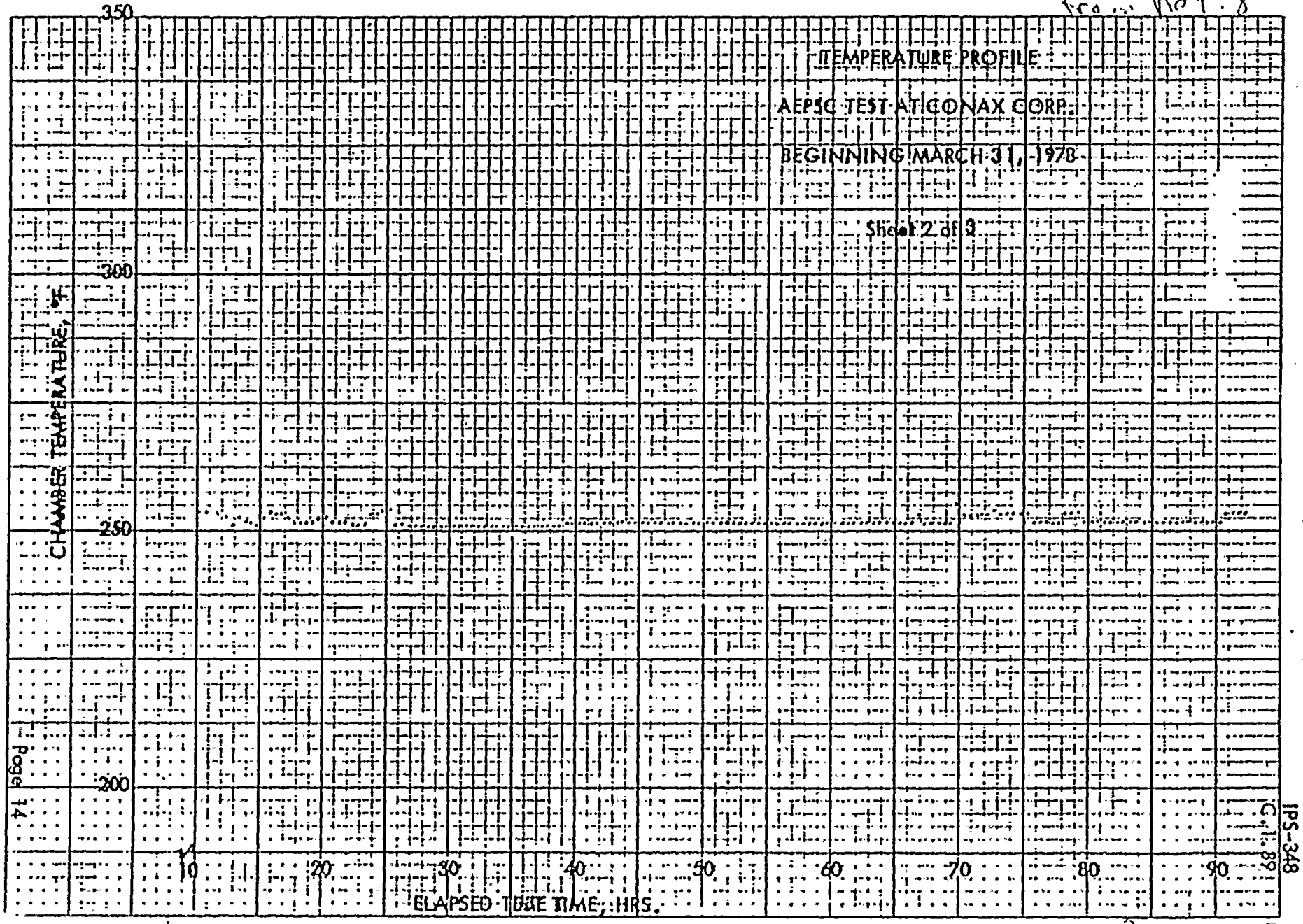
8. Conax Corp Test Report IPS-348.
9. FIRL Test Report F-C 4033-1
10. FIRL Test Report F-C 3683
11. Isomedix Corp Test Report of May 1976
12. Cerro Wire + Cable Test Report of May 1976
14. FIRL Test Report F-C 4033-3

Notes:

from Ref. 8

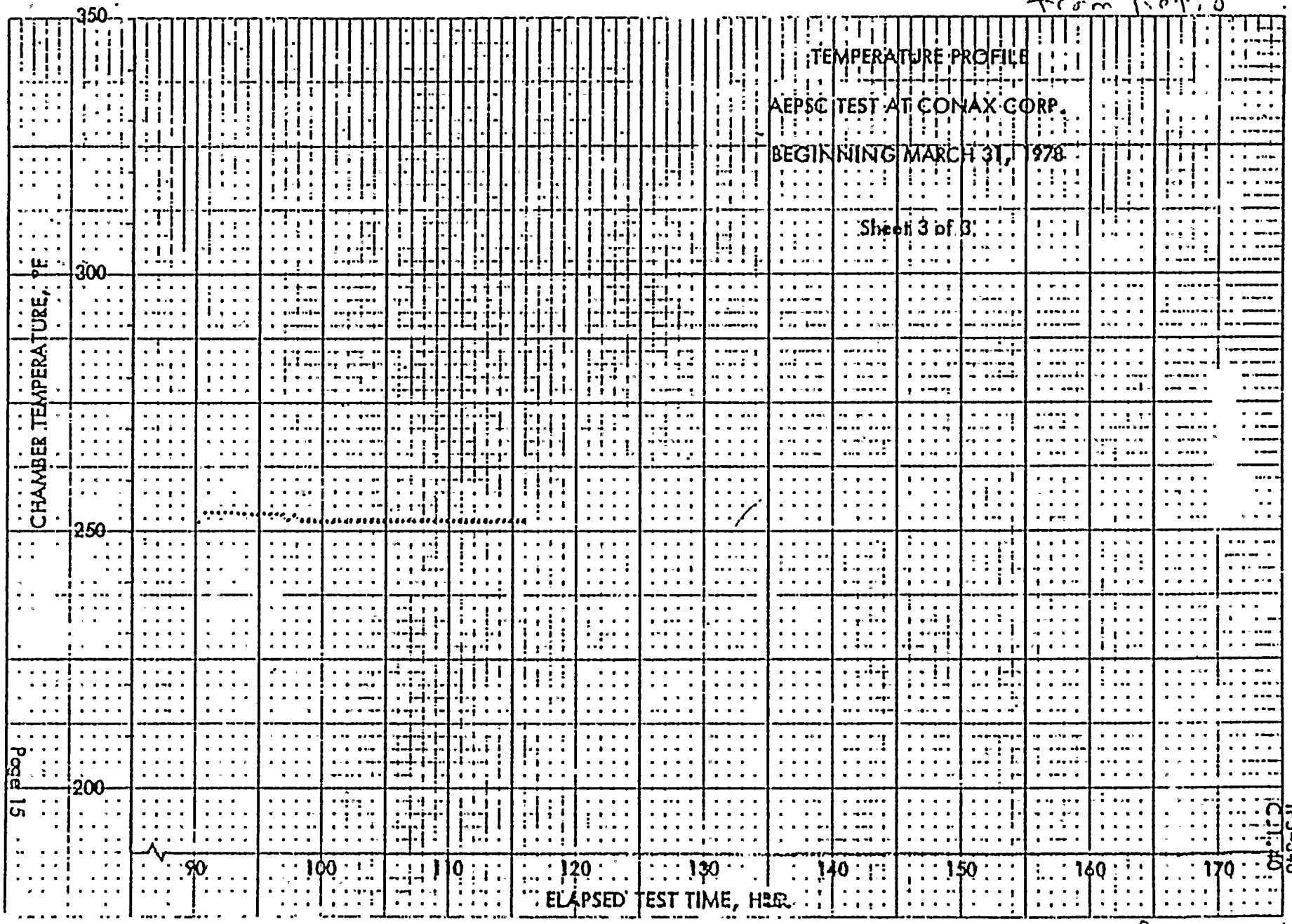

TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

From Ref. 8



IPS-348
6-1-89

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HR.

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 ~ .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

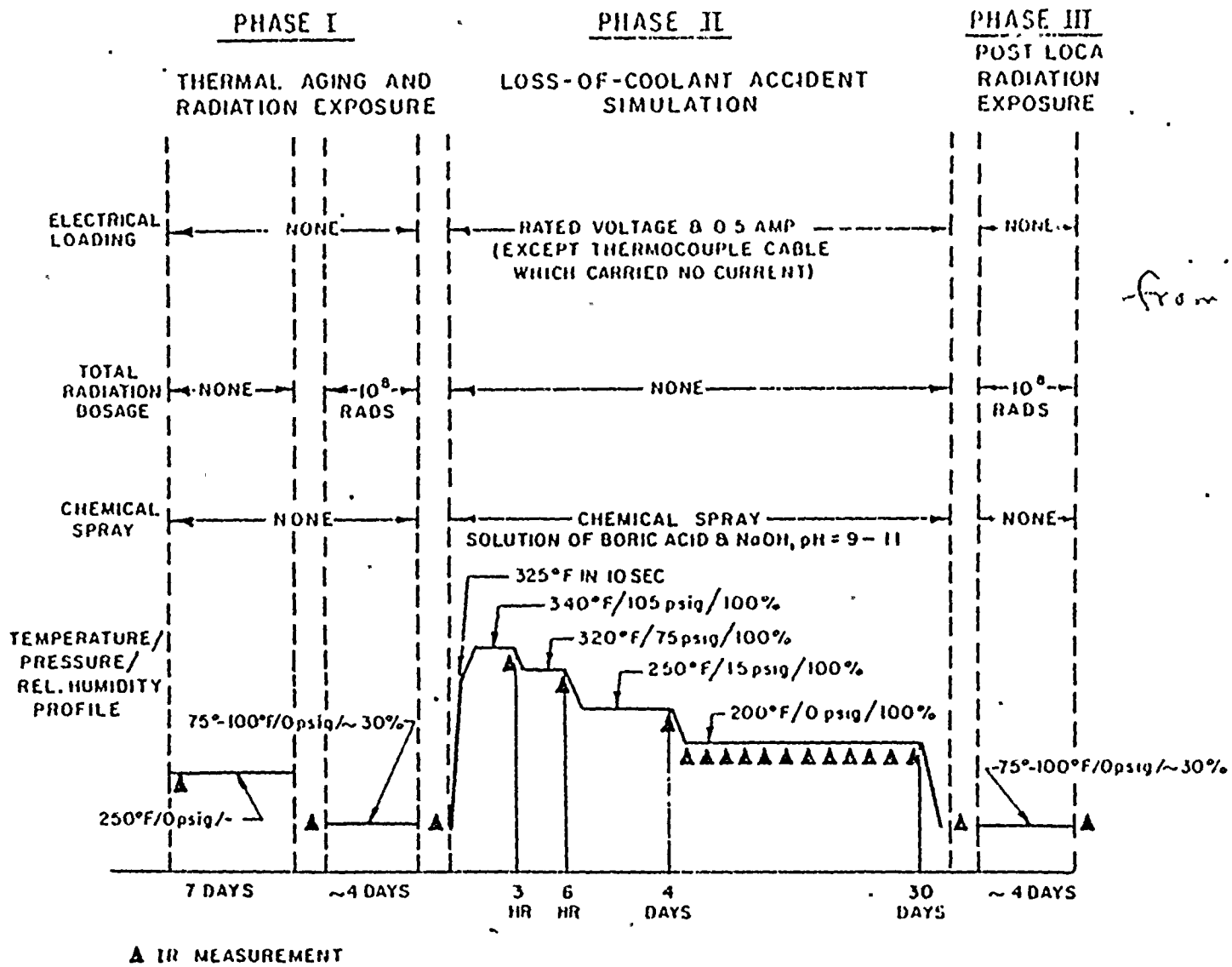
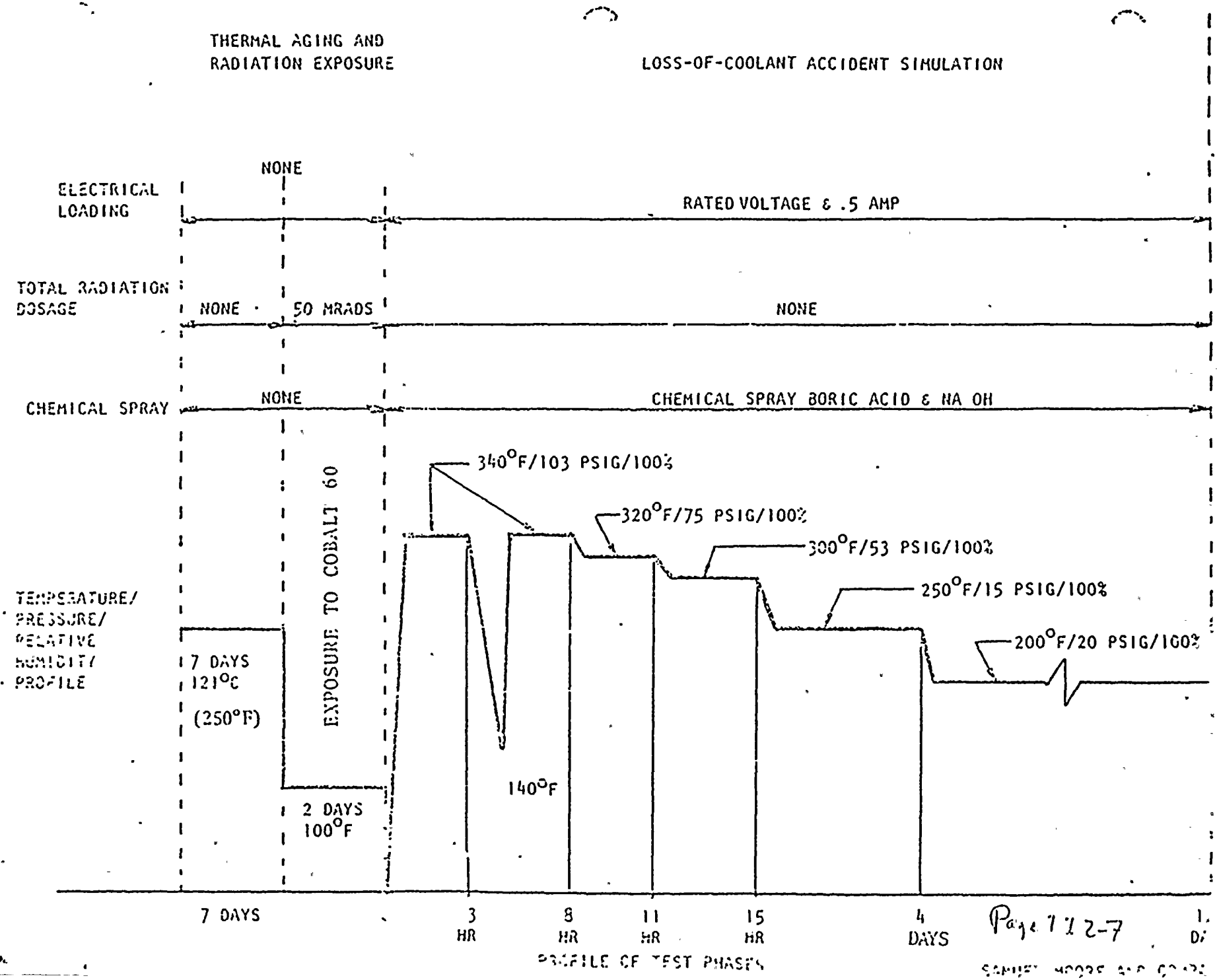


Figure 2. Profile of Test Phases

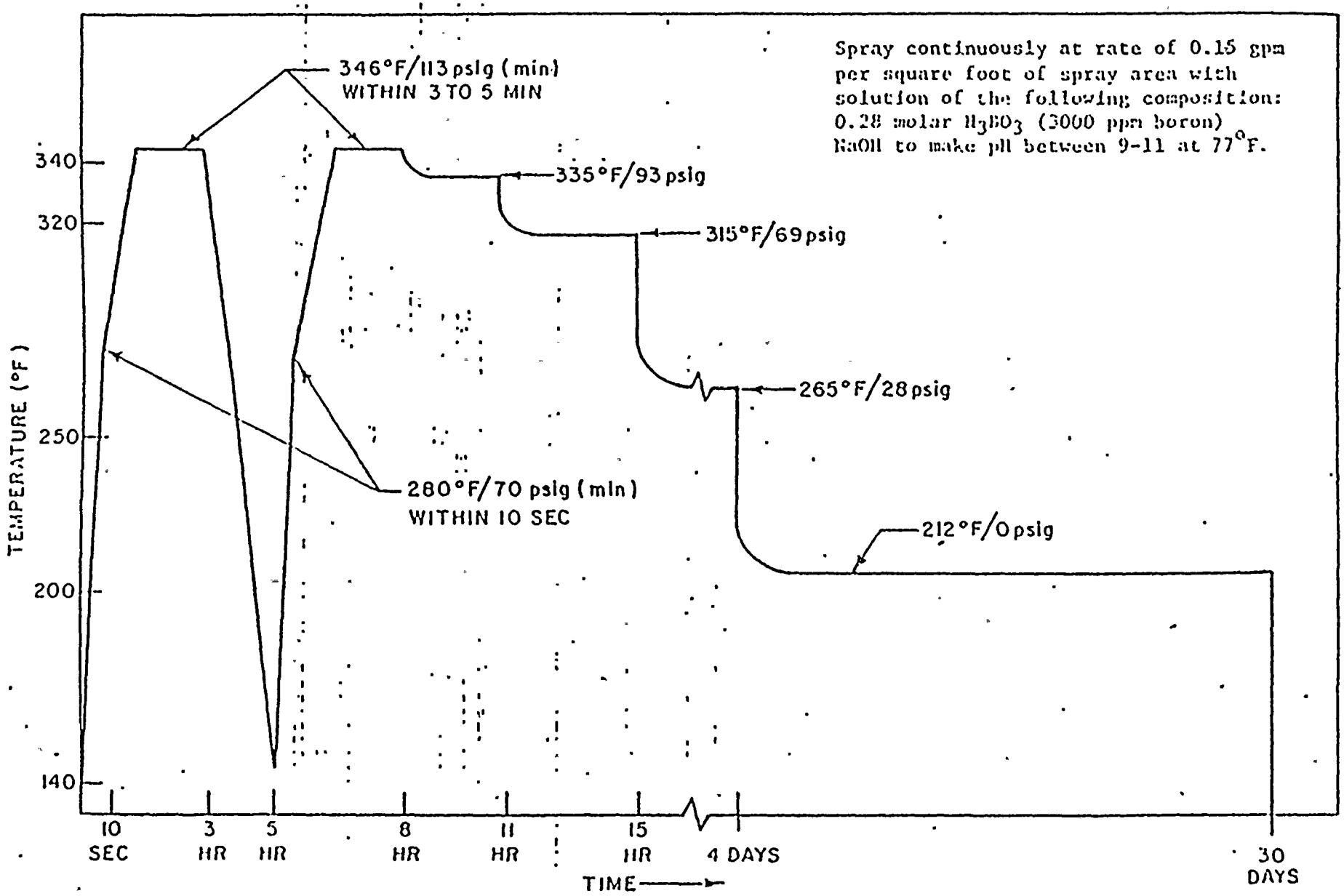
-from Ref. 10

F-C3683

Page 7 1 2-6


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
ELECTRICAL LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/ PRESSURE/ RELATIVE HUMIDITY/ PROFILE
7 DAYS 121°C (250°F)
EXPOSURE TO COBALT 60
2 DAYS 100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3 HR
8 HR
11 HR
15 HR
4 DAYS
PROFILE OF TEST PHASES

LOCA Profile



LOCA PROFILE

7.

(Page 7.12-8)

from Ref. 14. Type of Test (F-C4033-3): Simultaneous Radiation/chem. spray/steam.

Test Profile:

.2-.3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical spray: 3000 ppm boron as boric acid, .004 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

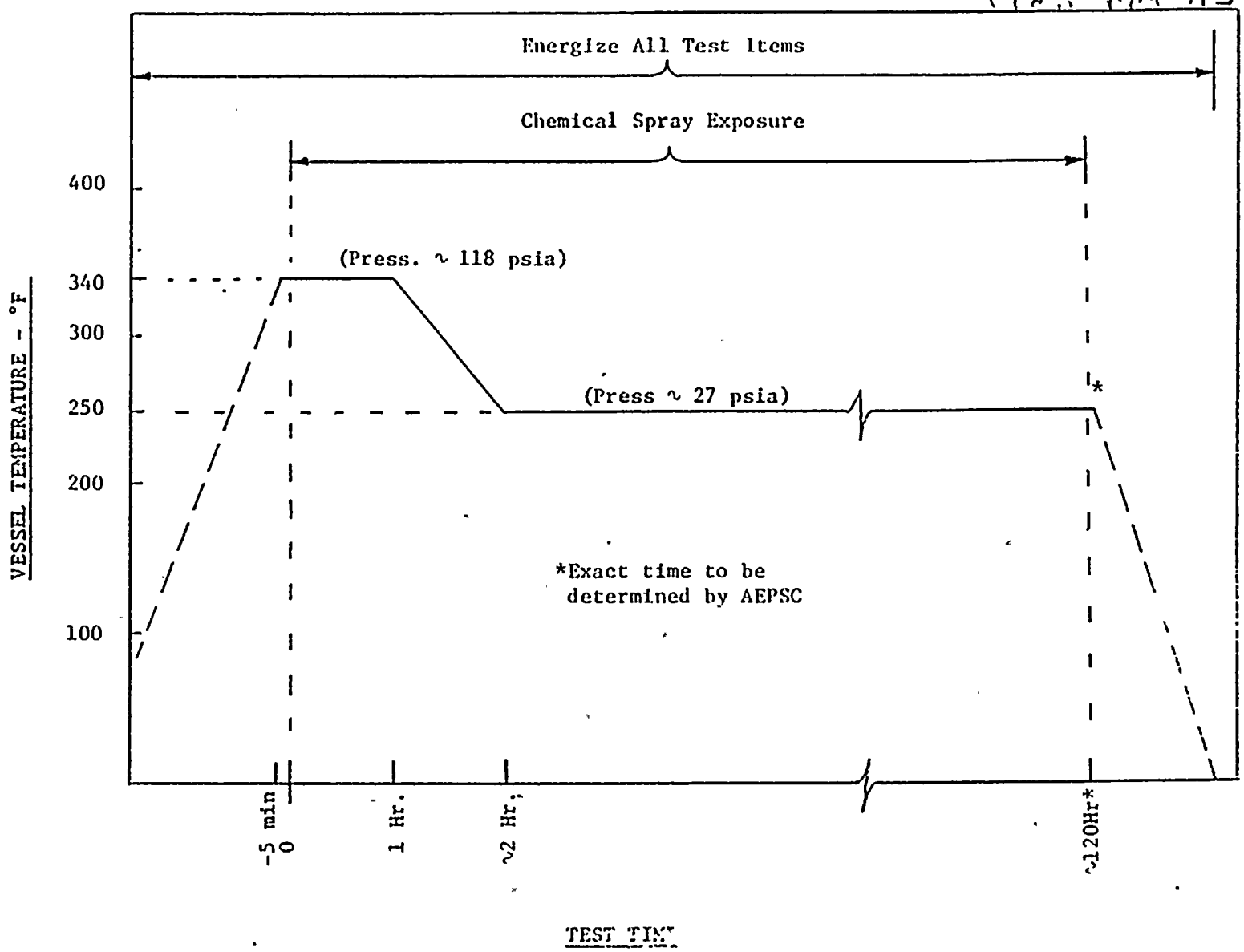
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	see Note 1 on Cable Terminal	Table 7.5-2	13	Seq	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.8-1,-2 328.2	340	FSAR AMP Q	13	Seq.	
COMPONENT: INSTRUMENT PENETRATION TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	FIG 1 FIG 2	118	AEW 6504	13	Seq.	
MODEL NUMBER: PENETRATION TERMINATION FUNCTION:	Relative Humidity (%)	100	100		13	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	Not Req'd	2500 ppm B	T.S 3/4.5 3/4.5.6	13	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	60	150	AEW 729	13	Seq.	
LOCATION: In ~~and~~ Containment	Aging (years)						
FLOOD LEVEL ELEV: 611' ABOVE FLOOD LEVEL: No	Submergence		FLOODUP TUBES		13		

*Documentation References:

13. Westinghouse-Canada Test Report CWAPD-332

Notes:

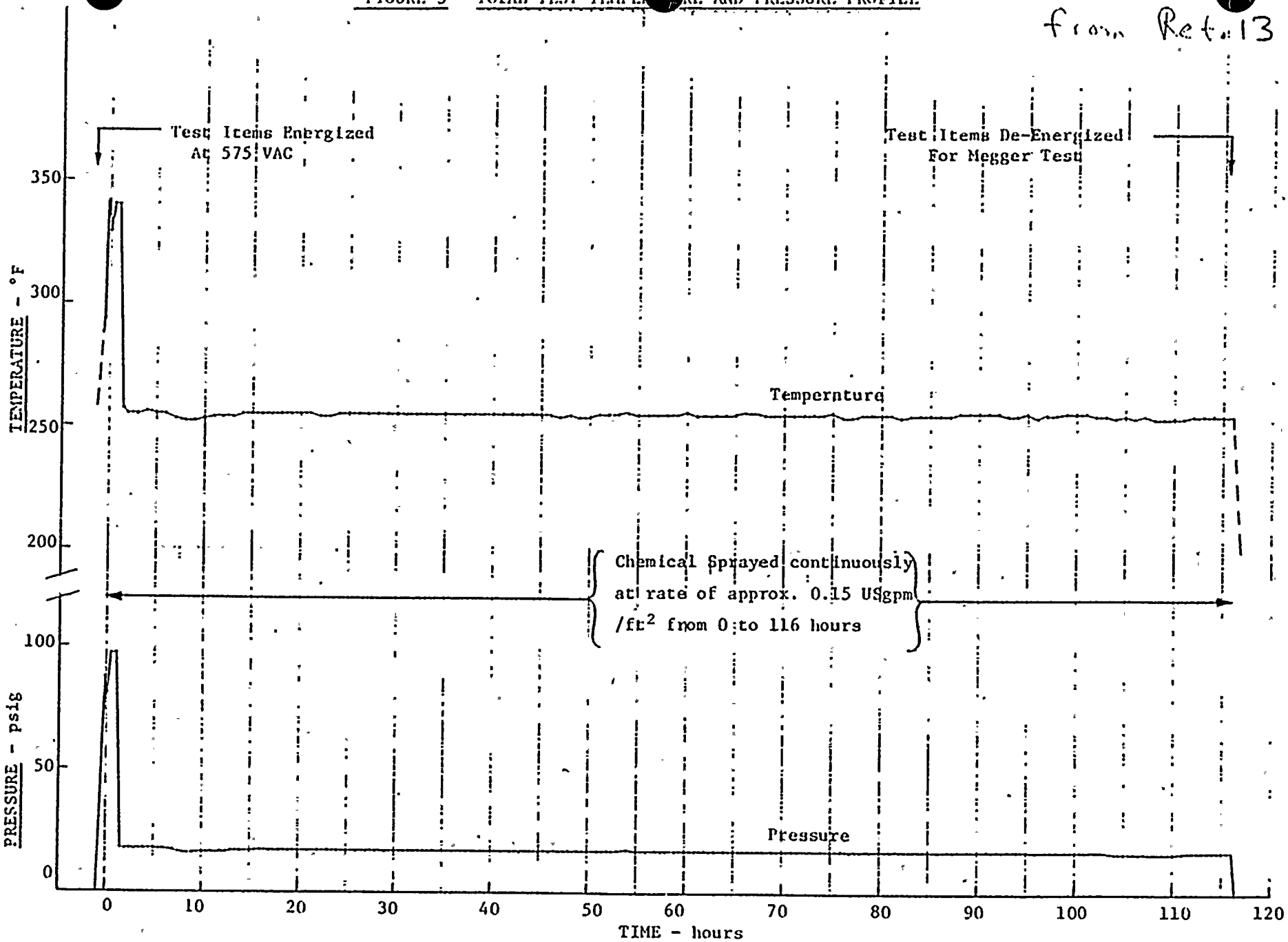
FIGURE 2 TEST PROFILE



Page TI 3-2

FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

from Ref. 13



DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

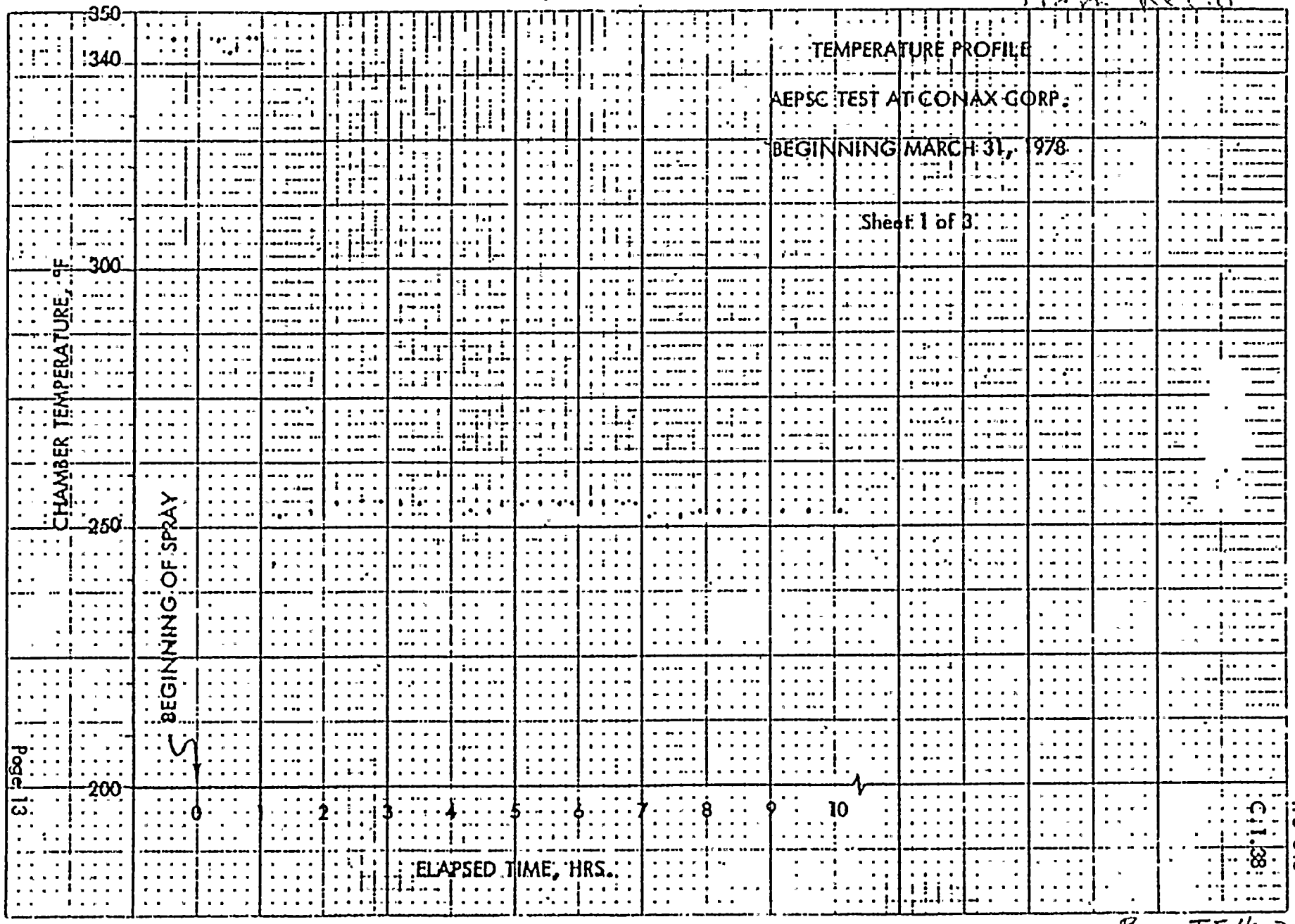
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 YEAR	See Note 1 on Cable Terminal	Table 7.5-2	8,9,10,	11,12,14,18,19 Separate	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.9-1,-2 328.2	340	FSAR APP Q	8,9,10,	11,12,14,18,19 Separate	
COMPONENT: INSTRUMENT CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 4 FIG2	119.7	AEC 6504	8,9,10,	11,12,14,18,19 Separate	
MODEL NUMBER: INSTRUMENT CABLE SPLICE AT PENETRATION FUNCTION:	Relative Humidity (%)	100	100		8,9,10,	11,12,14,18,19 Separate	
ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	2000 ppm B	2000 ppm B	T.S. 3/4.5. 3/4.5.6	8,9,10,	11,12,14,18,19 Separate	
SERVICE: VARIOUS	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	8,9,10,	11,12,14,18,19 Separate	
LOCATION: In Containment	Aging (years)		250°F 7 days Yes		8,9,	10,11,12,14,18,19 Separate	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Yes		8,9,	10,11,12,14,18,19 Separate	

*Documentation References:

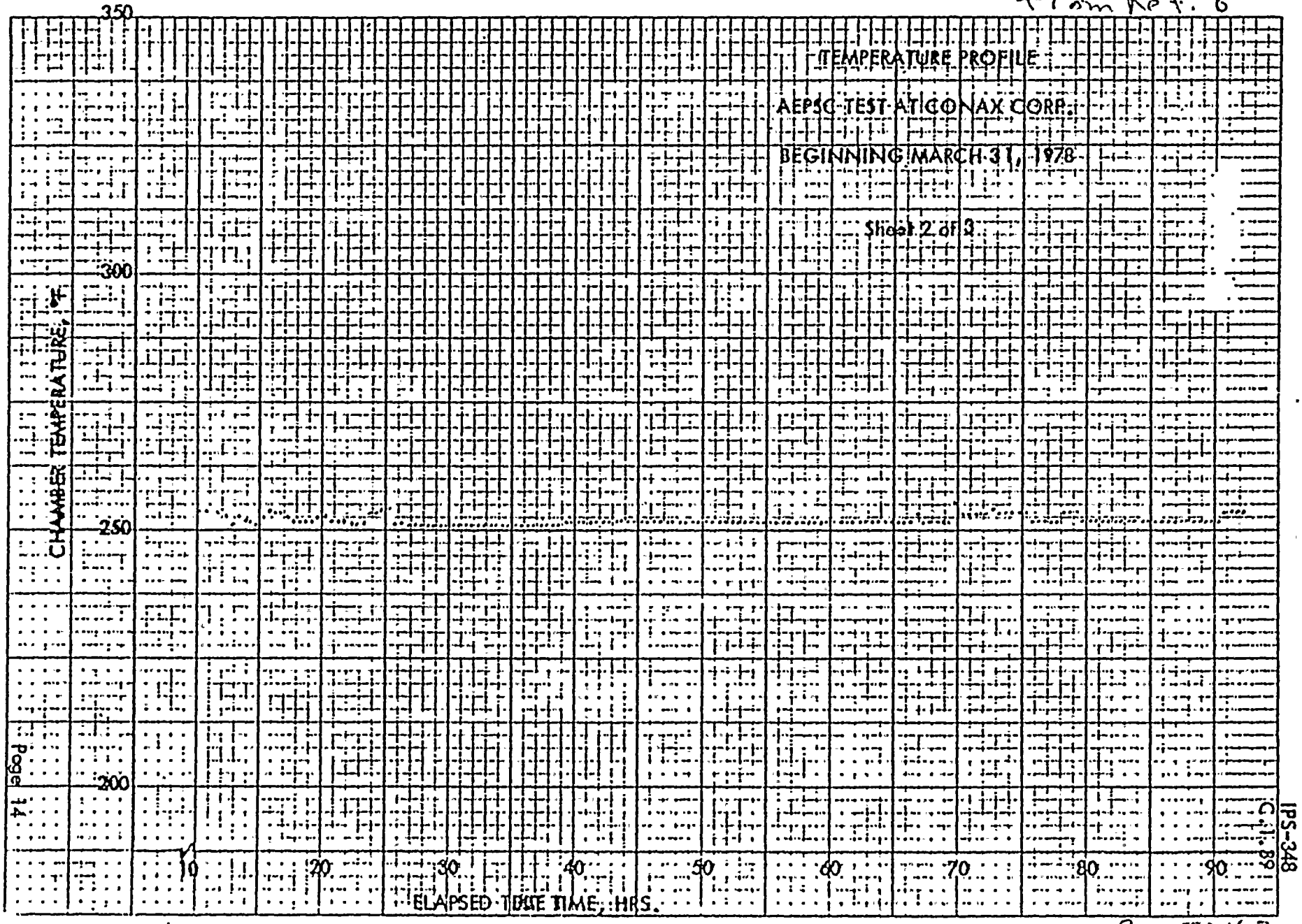
8. Conax Corp. Test Report IPS-348
9. FIRL Test Report F-C 4033-1
10. FIRL Test Report F-C-3683
11. Isomedix Corp. Test Report of May 1976
12. Cerro Wire + Cable Test Report of May 1976
14. FIRL Test Report F-C 4033-3
18. Conax Corp. Test Report IPS-327
19. Conax Corp Test Report IPS-329

Notes:

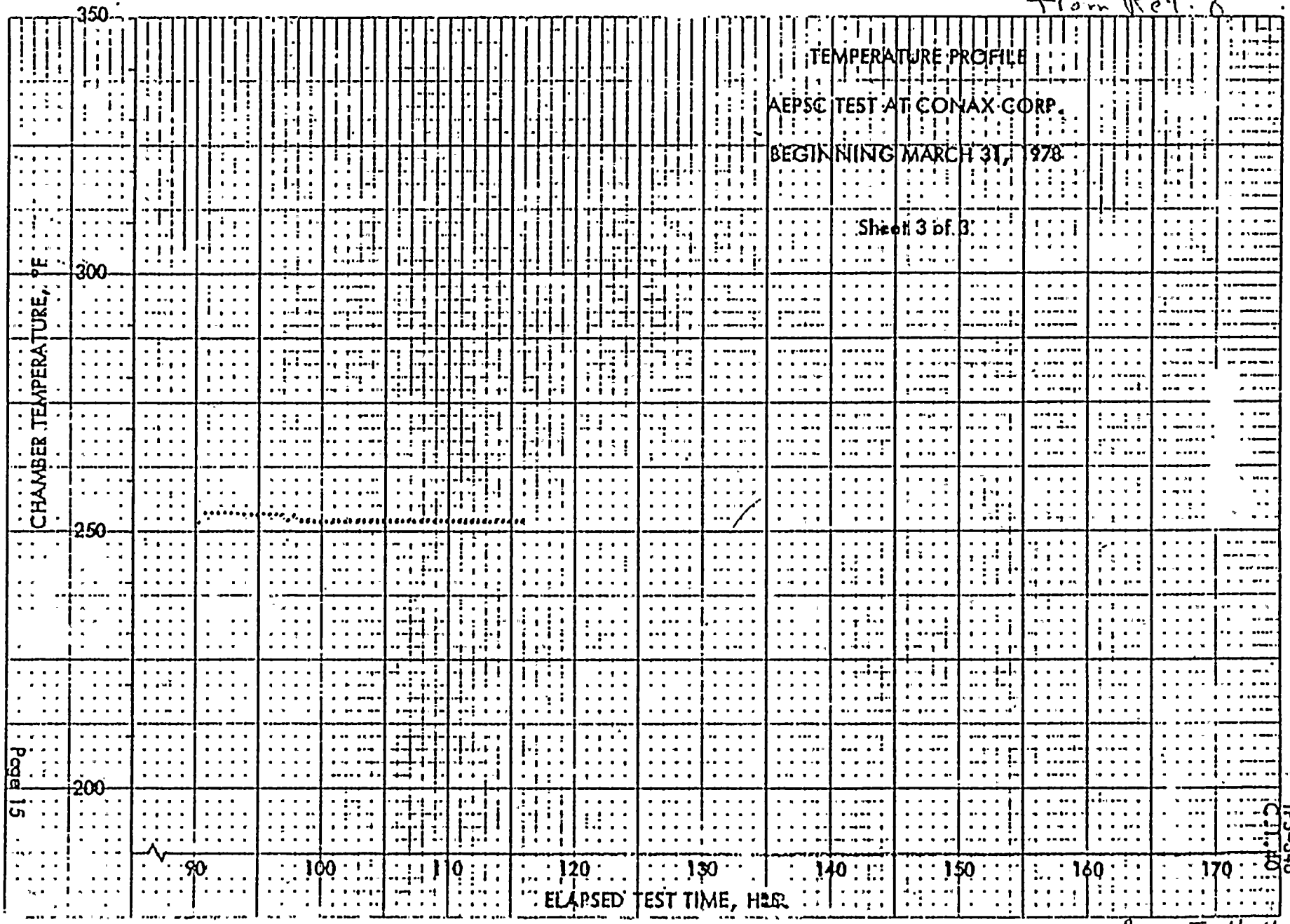
From Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 1 of 3
CHAMBER TEMPERATURE, °F
350
340
300
250
200
BEGINNING OF SPRAY
0
1
2
3
4
5
6
7
8
9
10
ELAPSED TIME, HRS.

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 2 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
10
20
30
40
50
60
70
80
90
ELAPSED TIME, HRS.

from Ref. 8


TEMPERATURE PROFILE
AEPSC TEST AT CONAX CORP.
BEGINNING MARCH 31, 1978
Sheet 3 of 3
CHAMBER TEMPERATURE, °F
350
300
250
200
90
100
110
120
130
140
150
160
170
ELAPSED TEST TIME, HRS.

from Ref. 9. Qualified by FIRL Test Report F-C4033-1 of Jan. 1975 9

Type of Test: Simultaneous, gamma radiation
steam
chemical spray

Test Profile:

.2 - .3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical Spray: 3000 ppm boron as boric acid, .064 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5 at room temp.

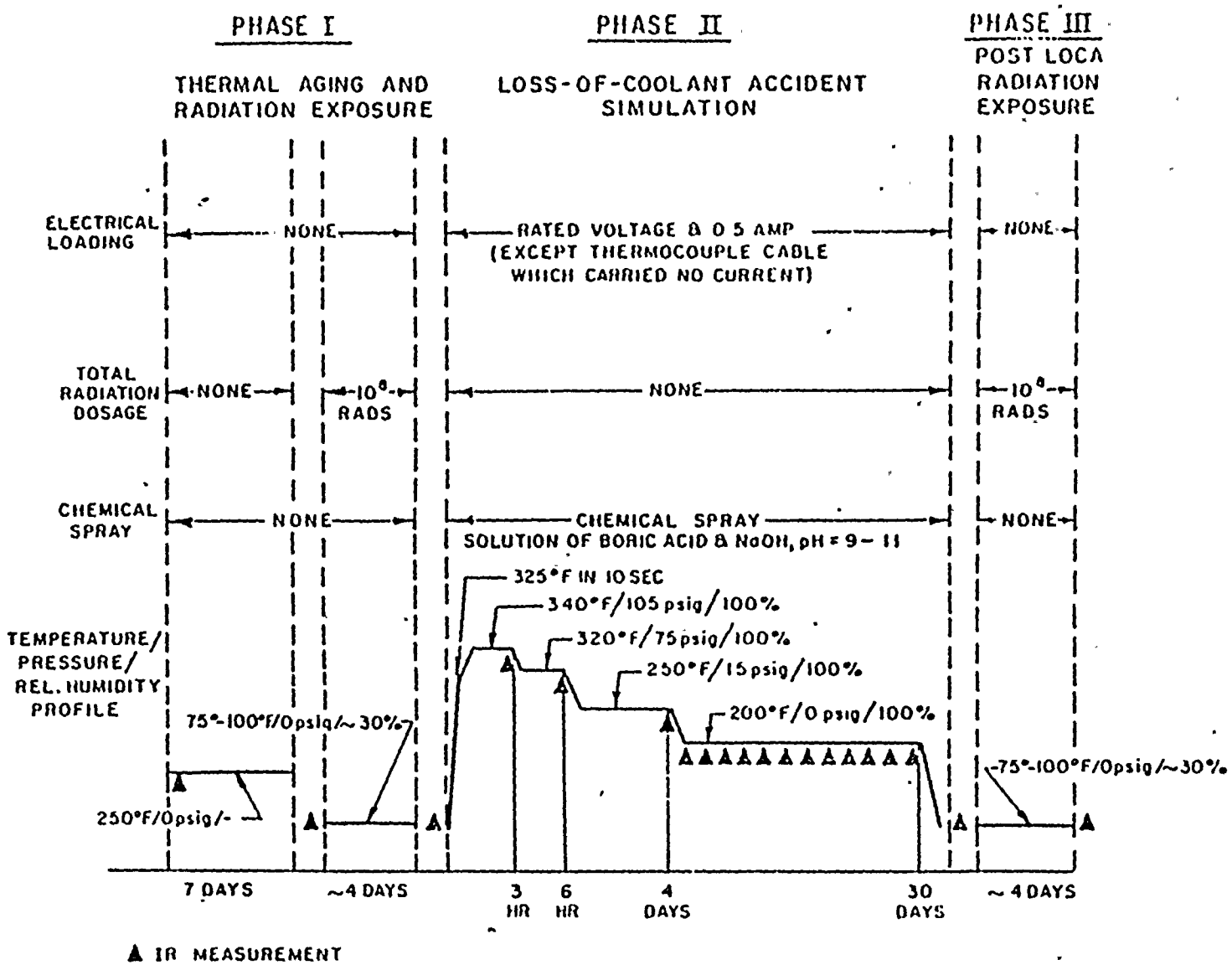
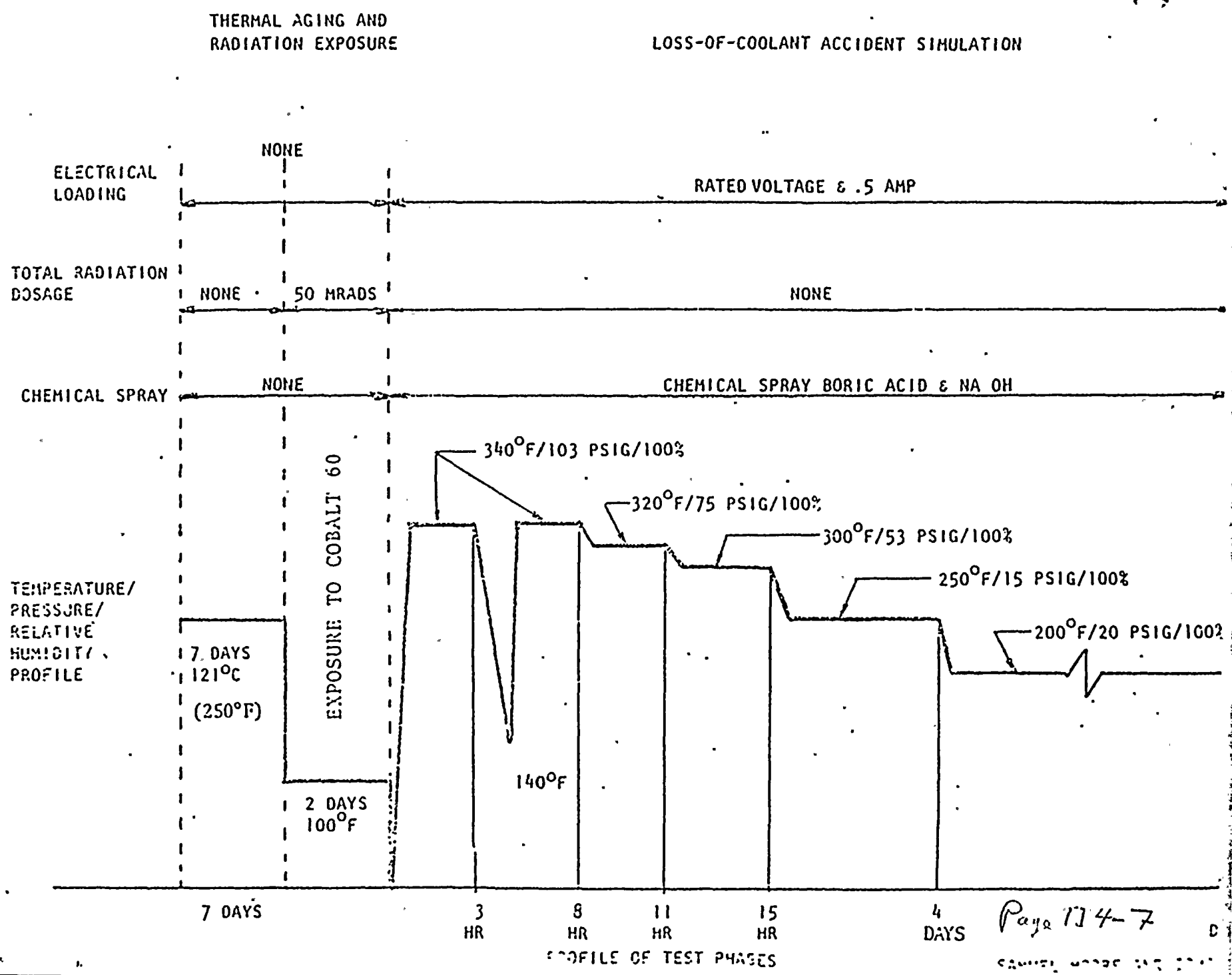


Figure 2. Profile of Test Phases

F-C3683

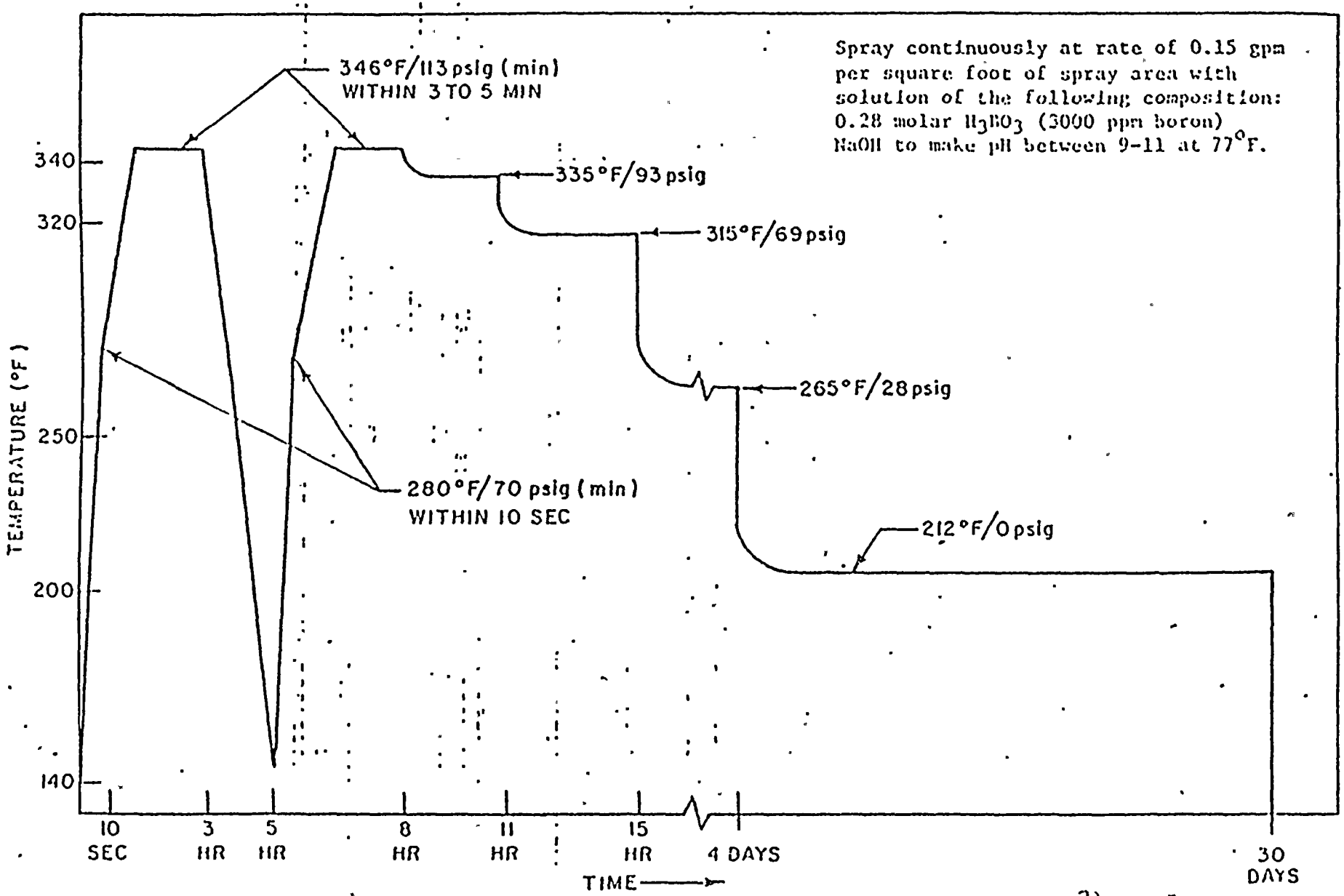
Page T 1 4/-6


THERMAL AGING AND
RADIATION EXPOSURE
LOSS-OF-COOLANT ACCIDENT SIMULATION
ELECTRICAL LOADING
NONE
RATED VOLTAGE & .5 AMP
TOTAL RADIATION DOSAGE
NONE
50 MRADS
NONE
CHEMICAL SPRAY
NONE
CHEMICAL SPRAY BORIC ACID & NA OH
TEMPERATURE/ PRESSURE/ RELATIVE HUMIDITY PROFILE
7 DAYS 121°C (250°F)
EXPOSURE TO COBALT 60
2 DAYS 100°F
340°F/103 PSIG/100%
320°F/75 PSIG/100%
300°F/53 PSIG/100%
250°F/15 PSIG/100%
200°F/20 PSIG/100%
140°F
7 DAYS
3 HR
8 HR
11 HR
15 HR
4 DAYS
PROFILE OF TEST PHASES

Page 134-7

-9-

LOCA Profile



Page 7.14-8

from Ref. 14. Type of Test (F-C4033-3): Simultaneous Radiation/chem. spray/steam.

Test Profile:

.2-.3 Mrads/hr, 200 Mrads
351°F, 70 psig for 10 hrs
275°F, 31 psig for 4.5 days
212°F, 10 psig for 26 days

Chemical spray: 3000 ppm boron as boric acid, .004 molar sodium thiosulfate and adjusted with Na OH to a PH of 10.5.

from Ref. 18.

Qualified by Conax Corp. Test Report IPS-327 of Jan. 1978.

Type of Test: Sequential, steam floodup with borated water.

Test Profile:

340°F, 12 psig for 1 hr
250°F, 12 psig for 6 hrs
190°F, 12 psig for 24 hrs

Floodup borated water

from Ref. 19.

Qualified by Conax Corp. Test Report IPS-329 of Jan. 1978.

Type of Test: Sequential, steam floodup with borated water.

Test Profile:

340°F, 12 psig for 2 hr
250°F, 12 psig for 6 hrs
190°F, 12 psig for 24 hrs

Floodup borated water.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 hr.	See Note 1 on Cable Tunnel	Table 7.5-2	27	SEQ	
PLANT ID NO: NA	Temperature (°F)	FIG 1313-1	320	FSAR App D	27	Seq.	
COMPONENT: Instrument Termination	Pressure (PSIA)	FIG 1 FIG 2	89.7	AEP 6304	27	Seq.	
MANUFACTURER:	Relative Humidity (%)	100	100		26	Seq.	
MODEL NUMBER: Instr. Term At FoxBoro Instr.	Chemical Spray	2000 ppmB	2000 ppmB	T.S. 3/4.5 3/4.6.6	27	Seq.	
FUNCTION:	Radiation (10^6 rads)	3.9	18	WCAP 7410-L Vol 1	27	Seq.	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)						
SERVICE: VARIOUS	Submergence		Floodup Tubes				
LOCATION: In and Out Containment							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No							

*Documentation References:

26. Foxboro Test Report TE-1013
27. Westinghouse Corp. Communication NS-PLC-5023 dated 4/26/78 from T.M. Anderson, Westinghouse to E.G. Case NRC.

Notes: NO SPECIFIC ACCIDENT ANALYSIS TAKES CREDIT FOR ASSUMED OPERATION OF THESE DEVICES. THEIR USE IS REFERENCED BY EMERGENCY OPERATING PROCEDURES.

from Ref. 27.

Qualified by Westinghouse Electric Corp. letter of 4/26/78 (NS-PLC-5023).

From: T. M. Anderson - Westinghouse
To: E. G. Case - NRC

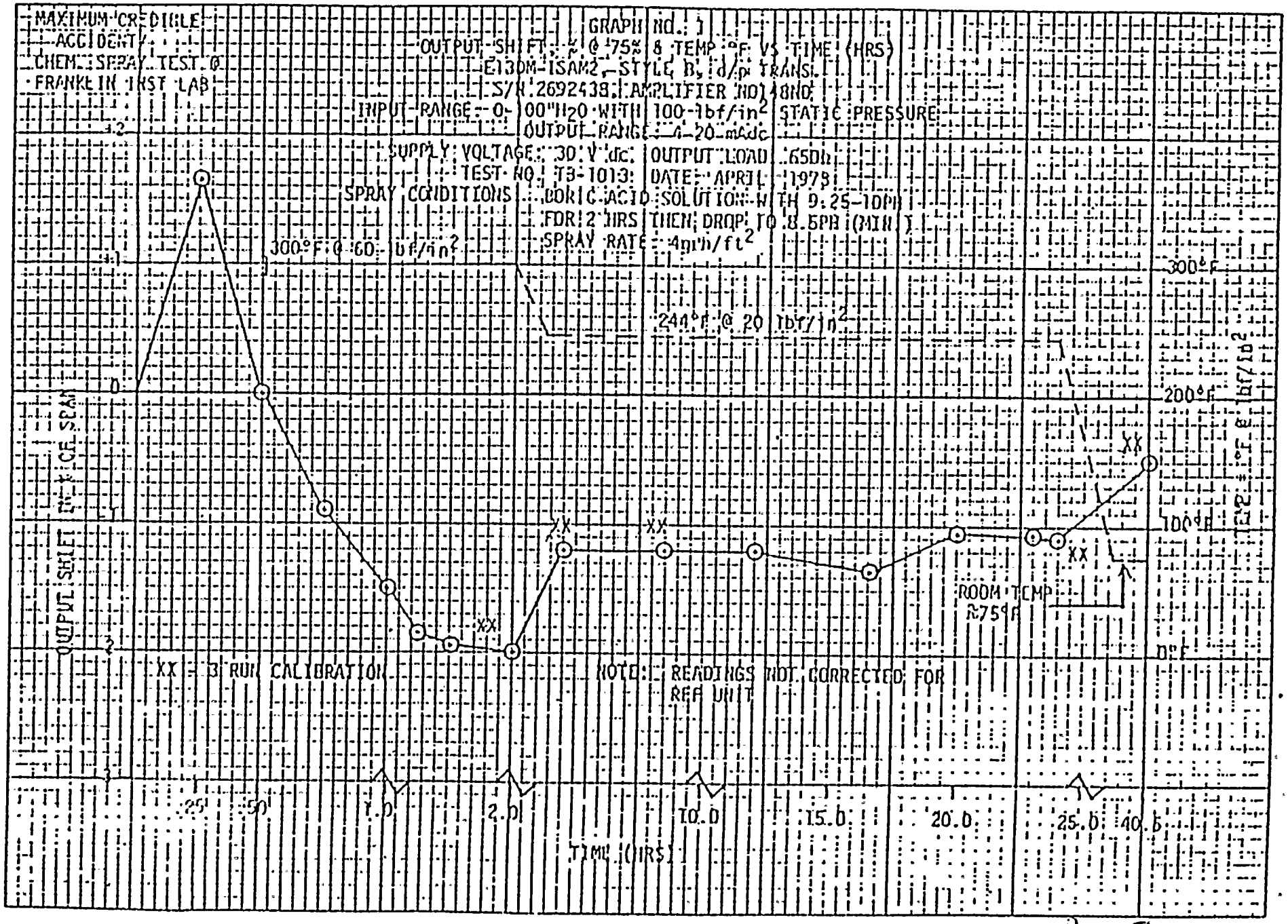
Test Type: Sequential

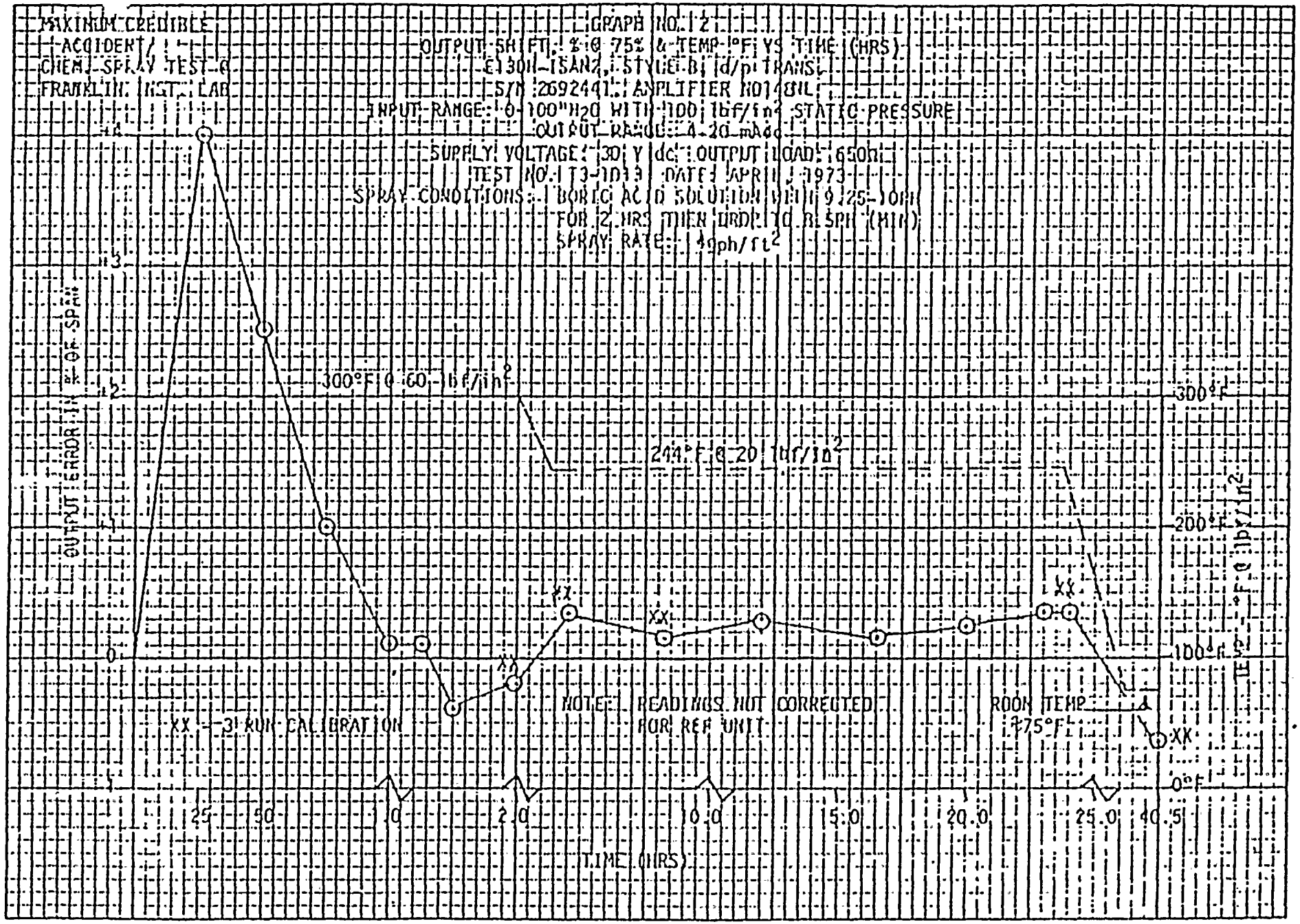
Steam/chemical spray/radiation

Test Profile:

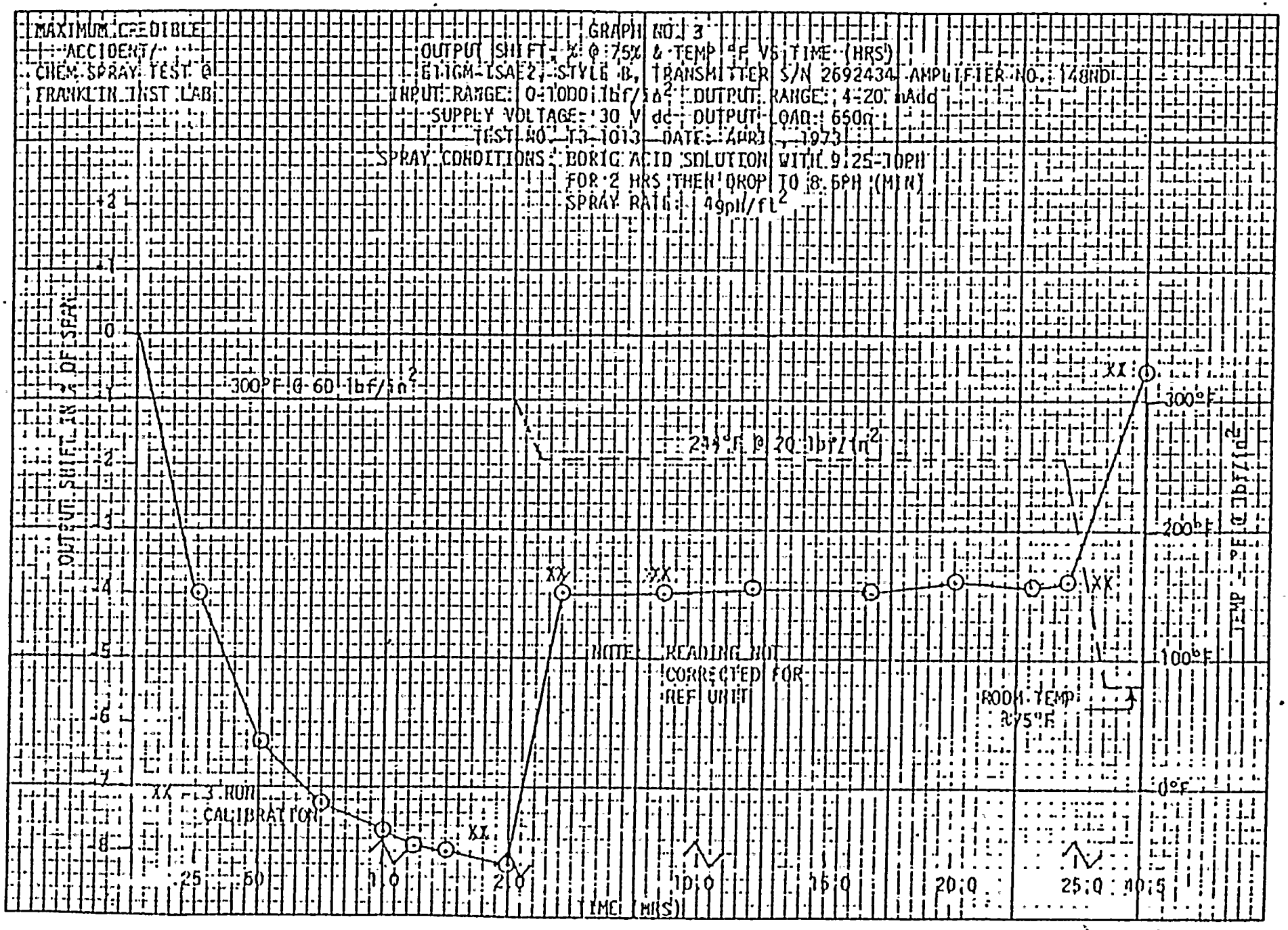
18 Mrads, 1.94 Mrads/hr.
320°F, 75 psig for 20 minutes
From 320°F to 220°F in 24 hrs. (saturated conditions)
220°F, 15 psia for 5.5 days.

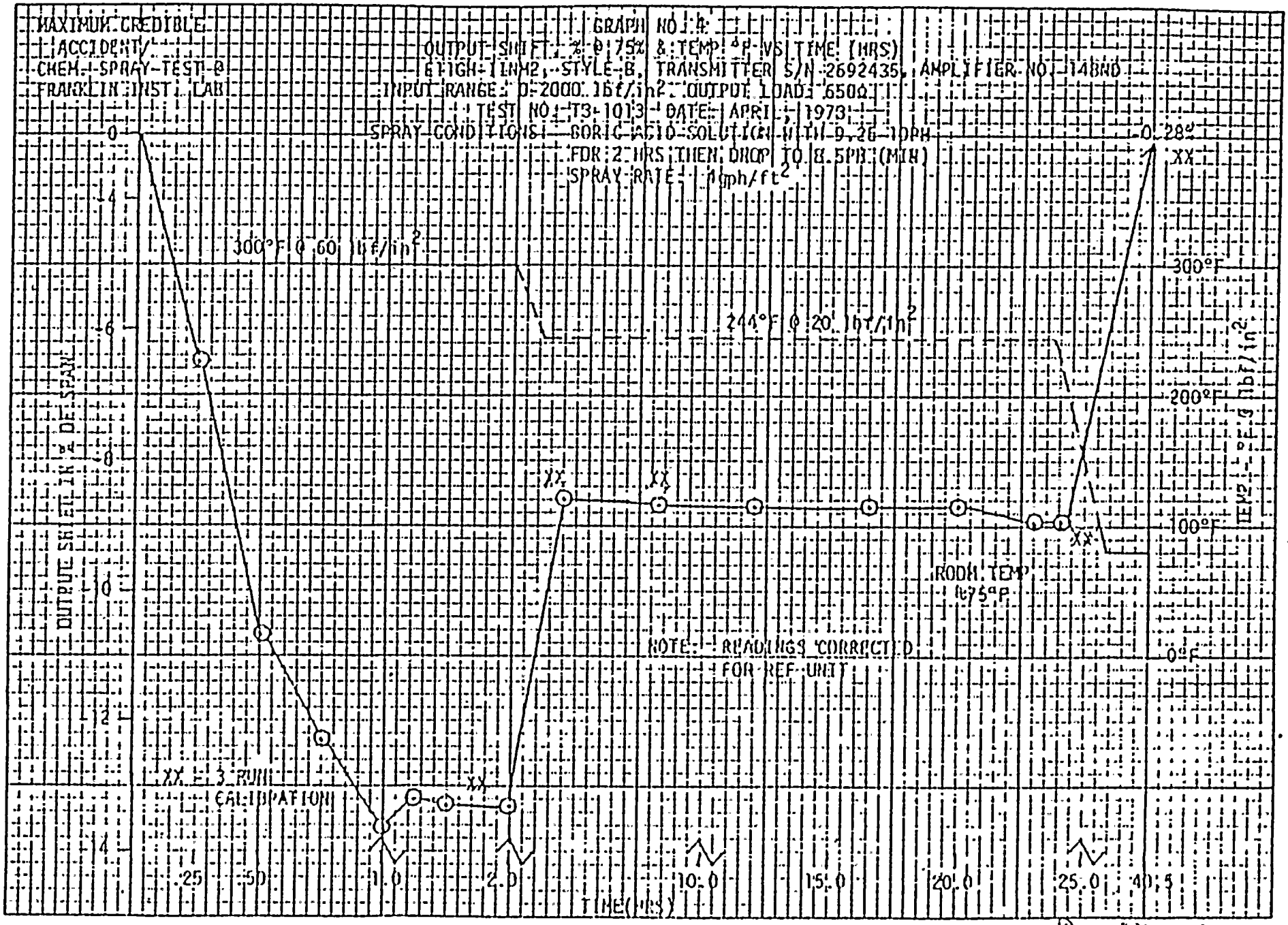
Chemical Spray: 1.14% boric acid
.17% Na OH


MAXIMUM CREDIBLE ACCIDENT
CHEM SPRAY TEST @ FRANKLIN INST LAB
GRAPH NO. 1
OUTPUT SHIFT @ 75% & TEMP °F VS TIME (HRS)
E130M-1SAM2, STYLE B, d/p TRANS.
S/N 2692438 AMPLIFIER NO. 8ND
INPUT RANGE 0-100"H2O WITH 100-lbf/in2 STATIC PRESSURE
OUTPUT RANGE 4-20 mADC
SUPPLY VOLTAGE 30 V dc
OUTPUT LOAD 650Ω
TEST NO. T3-1013
DATE APRIL 1978
SPRAY CONDITIONS
HCl ACID SOLUTION WITH 9.25-10PH
FOR 2 HRS THEN DROP TO 8.5PH (MIN)
SPRAY RATE 4gph/ft2
300°F @ 60 lbf/in2
244°F @ 20 lbf/in2
ROOM TEMP ≈75°F
OUTPUT SHIFT IN % OF SPAN
TEMP °F & lbf/in2
300°F
200°F
100°F
0°F
XX = 3 RUN CALIBRATION
NOTE: READINGS NOT CORRECTED FOR REF UNIT
.25
.50
1.0
2.0
10.0
15.0
20.0
25.0
40.0
TIME (HRS)


MAXIMUM CREDIBLE
ACCIDENT
CHEM. SPRAY TEST
FRANKLIN INST. LAB
GRAPH NO. 12
OUTPUT SHIFT, % @ 75% & TEMP °F VS TIME (HRS)
E130H-ISAN2, STYLE B, d/p TRANS.
S/N 2692441, AMPLIFIER NO. 48L
INPUT RANGE: 0-100" H2O WITH 100 lbf/in² STATIC PRESSURE
OUTPUT RANGE: 4-20 mAdc
SUPPLY VOLTAGE: 30 V dc, OUTPUT LOAD: 650Ω
TEST NO. T3-1013, DATE: APRIL 1, 1973
SPRAY CONDITIONS: BORIC ACID SOLUTION WITH 9.25-10PH
FOR 2 HRS THEN DROP TO 8.5PH (MIN)
SPRAY RATE: 4gph/ft²
300°F @ 60 lbf/in²
244°F @ 20 lbf/in²
300°F
200°F
100°F
0°F
TEMP °F @ lbf/in²
OUTPUT ERROR IN % OF SPAN
XX - 3 RUN CALIBRATION
NOTE: READINGS NOT CORRECTED FOR REF UNIT
ROOM TEMP 75°F
TIME (HRS)
.25
.50
1.0
2.0
10.0
15.0
20.0
25.0
40.5

Q... TIS. 1/


MAXIMUM CREDIBLE ACCIDENT/ CHEM. SPRAY TEST @ FRANKLIN INST. LAB.
GRAPH NO. 3
OUTPUT SHIFT - % @ 75% & TEMP °F VS TIME (HRS)
GIGM-LSAE2, STYLE B, TRANSMITTER S/N 2692434 AMPLIFIER NO. 148ND
INPUT RANGE: 0-1000 lbf/in² OUTPUT RANGE: 4-20 mAdc
SUPPLY VOLTAGE: 30 V dc OUTPUT LOAD: 650Ω
TEST NO. T3-1013 DATE: APRIL, 1973
SPRAY CONDITIONS: BORIC ACID SOLUTION WITH 9.25-10PH
FOR 2 HRS THEN DROP TO 8.5PH (MIN)
SPRAY RATE: 4gpm/ft²
300°F @ 60 lbf/in²
298°F @ 20 lbf/in²
NOTE: READING NOT CORRECTED FOR REF UNIT
ROOM TEMP 275°F
XX = 3 RUN CALIBRATION
OUTPUT SHIFT IN % OF SPAN
TEMP - °F
TIME (HRS)
300°F
200°F
100°F
0°F
+2
+1
0
-1
-2
-3
-4
-5
-6
-7
-8
25
50
10:0
20:0
25:0
40:5


MAXIMUM CREDIBLE
ACCIDENT/
CHEM. SPRAY TEST @
FRANKLIN INST. LAB
GRAPH NO. 4
OUTPUT SHIFT % @ 75%
& TEMP °F VS TIME (HRS)
HIGH-LN2, STYLE-B, TRANSMITTER S/N 2692435, AMPLIFIER NO. 148ND
INPUT RANGE: 0-2000 lbf/in2 OUTPUT LOAD: 6500
TEST NO. T3-1013 DATE: APRIL 1973
SPRAY CONDITIONS — BORIC ACID SOLUTION WITH 9.26 10PH
FOR 2 HRS THEN DROP TO 8.5PH (MIN)
SPRAY RATE: 1 gph/ft2
300°F @ 60 lbf/in2
244°F @ 20 lbf/in2
0.28°
300°F
200°F
100°F
0°F
TEMP. °F
OUTPUT SHIFT IN % OF SPAN
ROOM TEMP 75°F
NOTE: READINGS CORRECTED FOR REF. UNIT
XX = 3 RUN CALIBRATION
.25
.50
1.0
2.0
10.0
15.0
20.0
25.0
40.5
TIME (HRS)

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time		NA				
PLANT ID NO: N/A	Temperature (°F)	Fig 0-27	NA	FSAR APP. O			
COMPONENT: INSTR. TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 0-27	NA	FSAR APP. O			
MODEL NUMBER: TERMINATION AT MERCOID INSTR. FUNCTION:	Relative Humidity (%)	NA	NA	NA	NA	NA	
ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: VARIOUS	Radiation (10^6 rads)	NA	NA	NA	NA	NA	
LOCATION: OUT OF CONTAINMENT	Aging (years)		NA				
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

Notes: INCLUDED IN FIRST 79-01B SUBMITTAL DUE TO POSSIBLE SOURCE/TARGET INTERACTIONS. SUBSEQUENT REVIEW USING ACCEPTANCE CRITERIA OF FSAR APPENDIX O FOR PROTECTION OF ELECTRICAL EQUIPMENT SHOWS NO SOURCE/TARGET INTERACTION.

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Terminal	Table 7.5-2			
PLANT ID NO: N/A	Temperature (°F)	Fig 022.9-1,-2 328.2	340	FSAR App Q	13	Seq.	
COMPONENT: POWER CABLE TERMINATION MANUFACTURER: N/A	Pressure (PSIA)	Fig 1 Fig 2	118	AEW 6501	13	Seq.	
MODEL NUMBER: SOLID KAPTON TO STRANDED KAPTON	Relative Humidity (%)	100	100		13	Seq.	
FUNCTION: CABLE CONNECTION ACCURACY: SPEC: N/A DEMON: N/A	Chemical Spray	Not Req'd	2500 ppm B	T.S. 3/4.5 3/4.5.6	13	Seq.	
SERVICE: VARIOUS	Radiation (10^6 rads)	60	60	AEW 729	13	Seq.	
LOCATION: IN CONTAINMENT	Aging (years)						
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No	Submergence		FLOODOP Tubes				

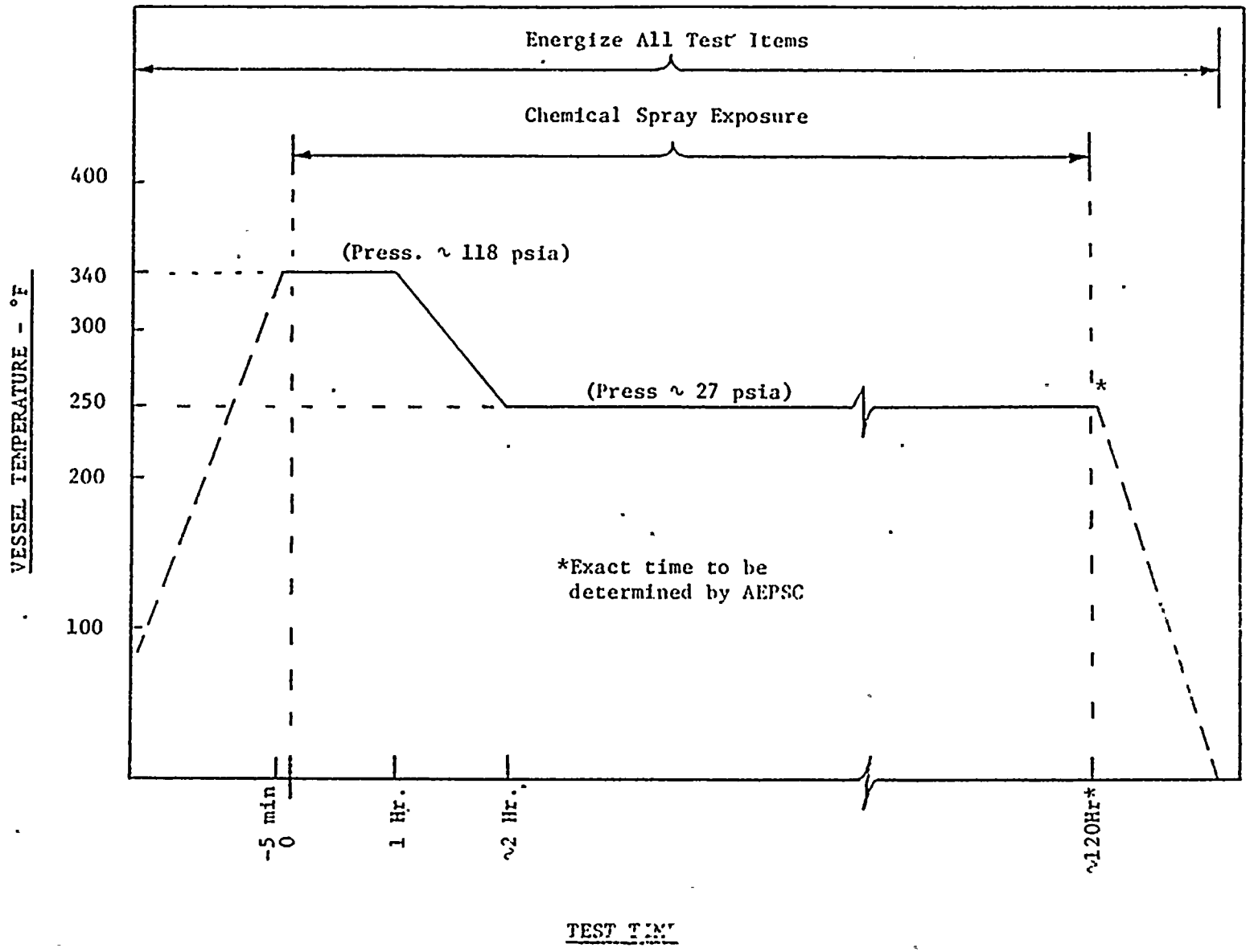
*Documentation References:

13. Westinghouse-Canada Test Report CWAPD-332

Notes:

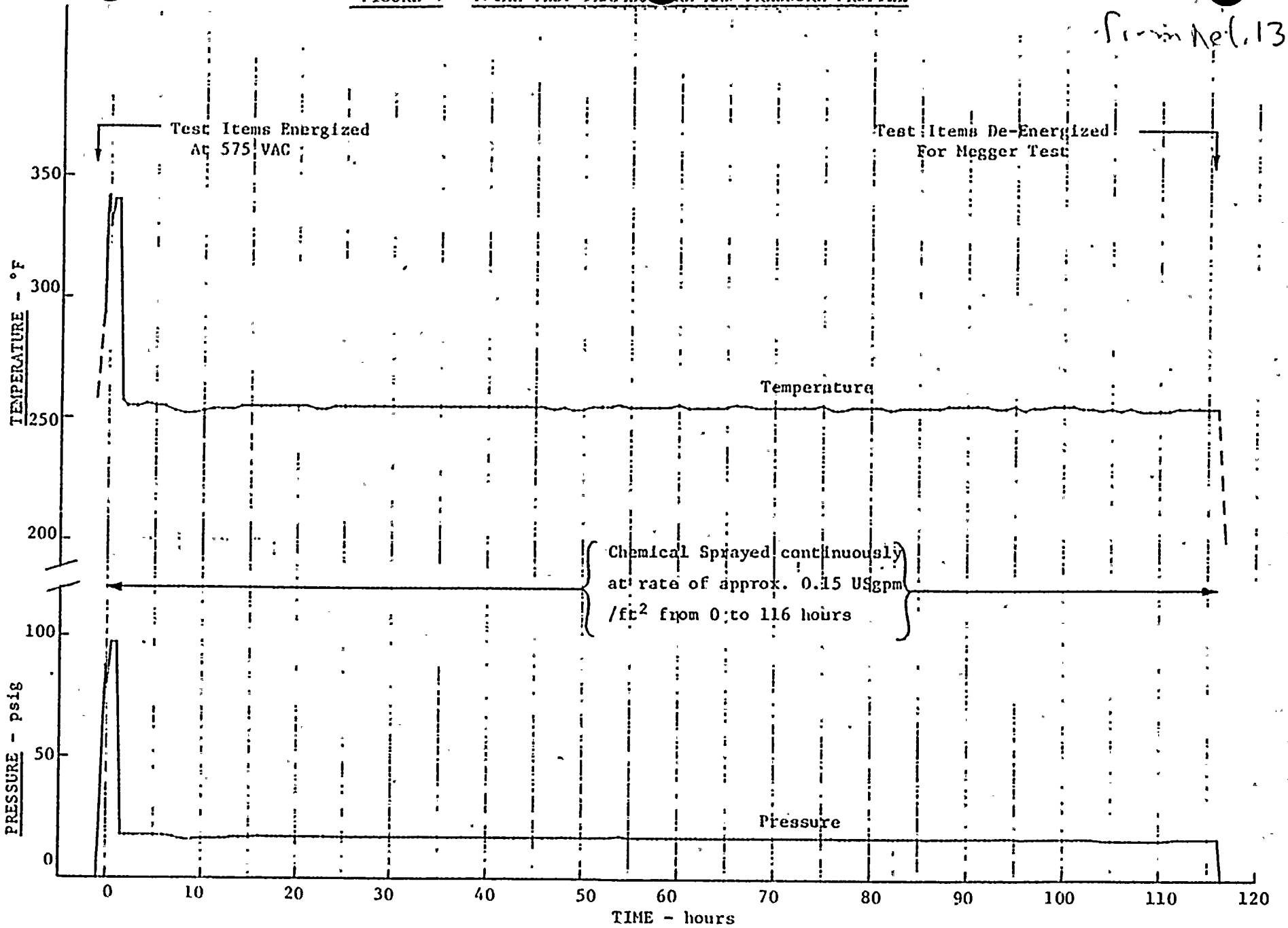
FIGURE 2 TEST PROFILE

From Ref. 13



Page IP1-2

FIGURE 5 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE



Page 7 P1-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

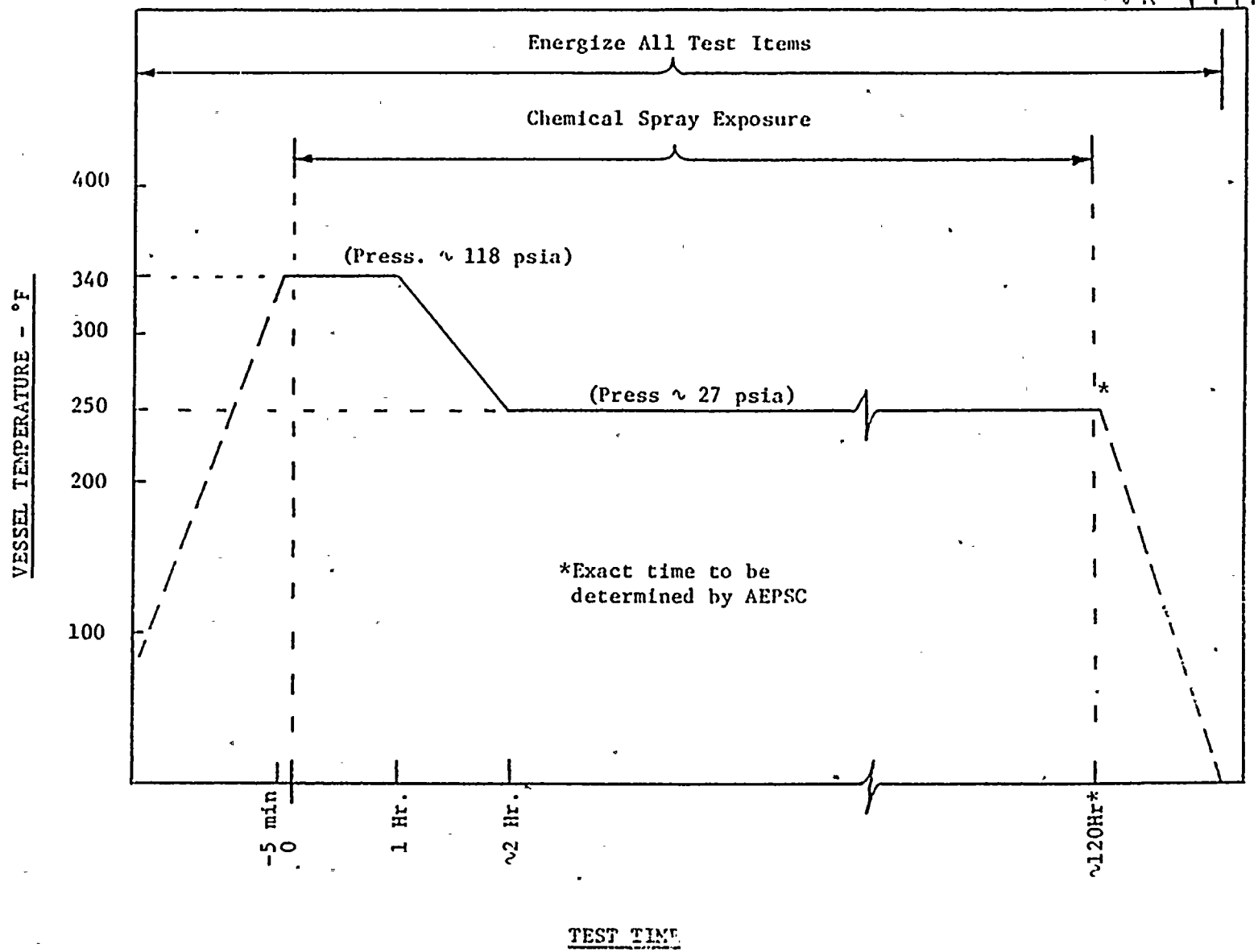
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Terminal	Table 7.5-2	13	Seq	
PLANT ID NO: N/A	Temperature (°F)	Fig 022.8-1,-2 328.2	340	FSAR App Q	13	Seq.	
COMPONENT: CABLE TERM.	Pressure (PSIA)	Fig. 1 Fig 2	118	AEW 6504	13	Seq.	
MANUFACTURER: N/A							
MODEL NUMBER: STRANDED KAPTON SPLICED TO STRANDED HYPALON	Relative Humidity (%)	100	100		13	Seq.	
FUNCTION: CABLE CONNECTION	Chemical Spray	Not Req.'d	2500 ppm B	T.S 3/4.5 3/4.5.6	13	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	13	Seq.	
SERVICE: VARIOUS							
LOCATION: IN CONTAINMENT	Aging (years)						
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

13. Westinghouse-Canada Test Report CWAPD-332

Notes:

FIGURE 2 TEST PROFILE

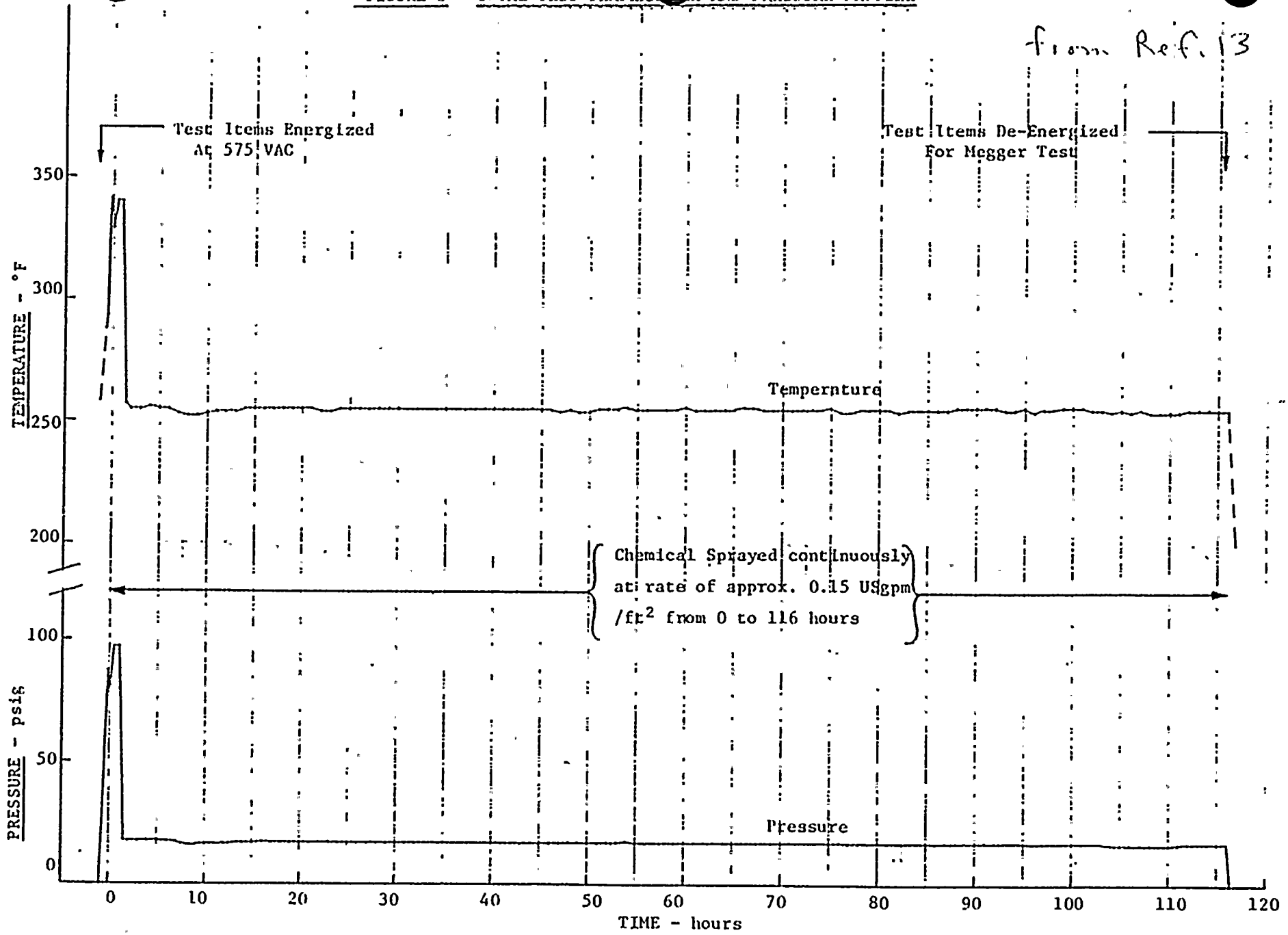


from Ref. 13

Pg 112-2

FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

from Ref. 13



Page TP2-3

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 1 on Cable Termination	Table 7.5-2	13	Seq	
PLANT ID NO: N/A	Temperature (°F)	FIG 022.9-1,-2	340	FSAR App Q	13	Seq.	
COMPONENT: TERMINATION	Pressure (PSIA)	Fig1 Fig2	118	AEW 6504	13	Seq.	
MANUFACTURER: N/A	Relative Humidity (%)	100	100		13	Seq.	
MODEL NUMBER: TERMINATION AT VALVE MOTOR OPERATORS, HYDROGEN RECOMBINER, FAN MOTORS	Chemical Spray	2000 ppm B	2500 ppm B	T.S 3/4.5 3/4.5.6	13	Seq.	
FUNCTION: CABLE CONNECTION	Radiation (10^6 rads)	150	150	WCAP 7410-L Vol 1	13	Seq.	
ACCURACY: SPEC: N/A DEMON: N/A.	Aging (years)						
SERVICE: VARIOUS	Submergence		See note below.				
LOCATION: IN & OUT OF CONTAINMENT							
FLOOD LEVEL ELEV: 614 ABOVE FLOOD LEVEL: No							

*Documentation References:

13. Westinghouse - CANADA Test Report CWAPD-332

Notes: Those power cable terminations inside CT which may be submerged after a LOCA serve certain valve motor operators. The safety significance of this submergence is discussed in FSAR, App. Q, response to question 40.10 and in letter from J. Tillinghast (AEP) to K. Kniel (NRC) dated 9-29-75 (Item 4).

FIGURE 2 TEST PROFILE

from Ref. 13

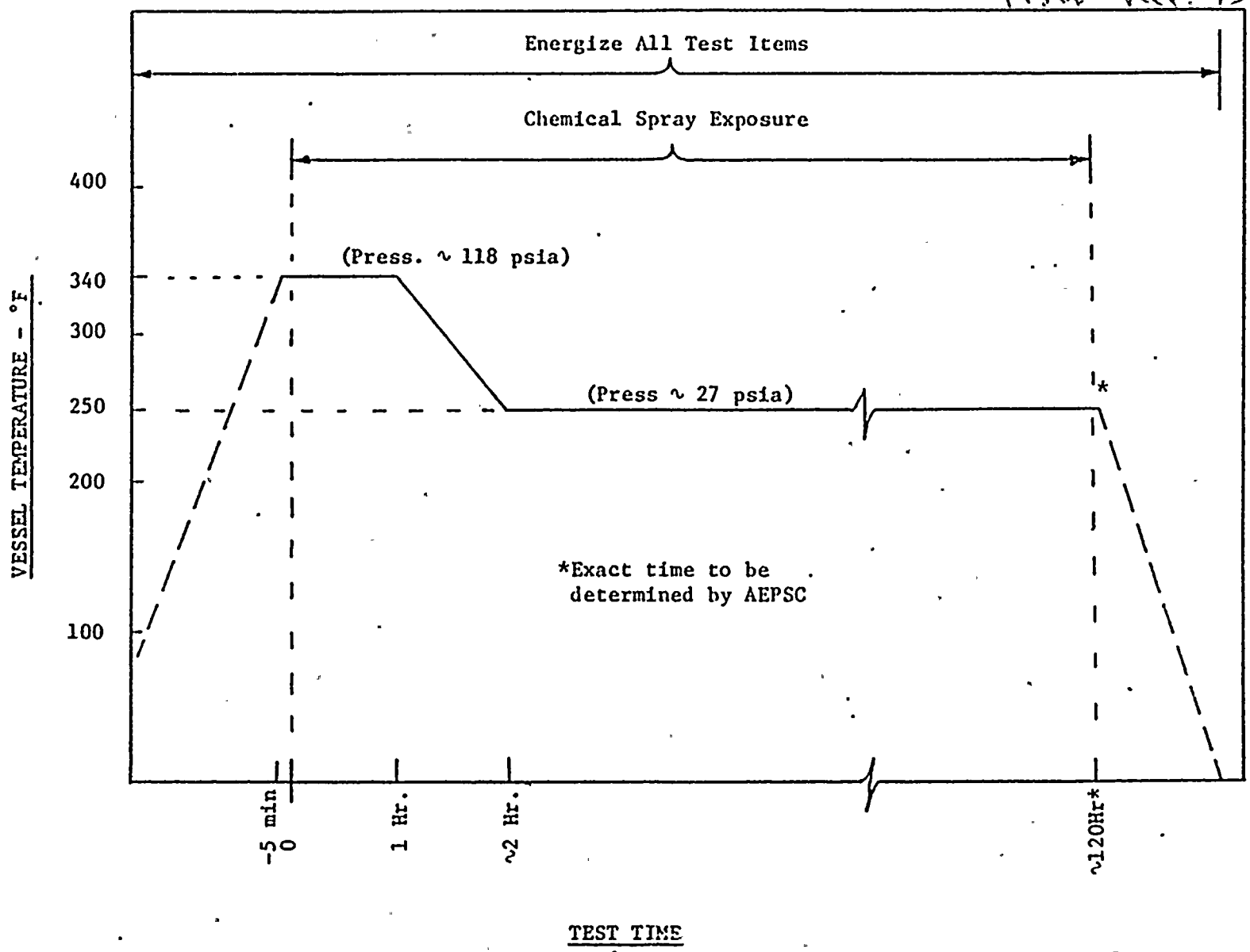


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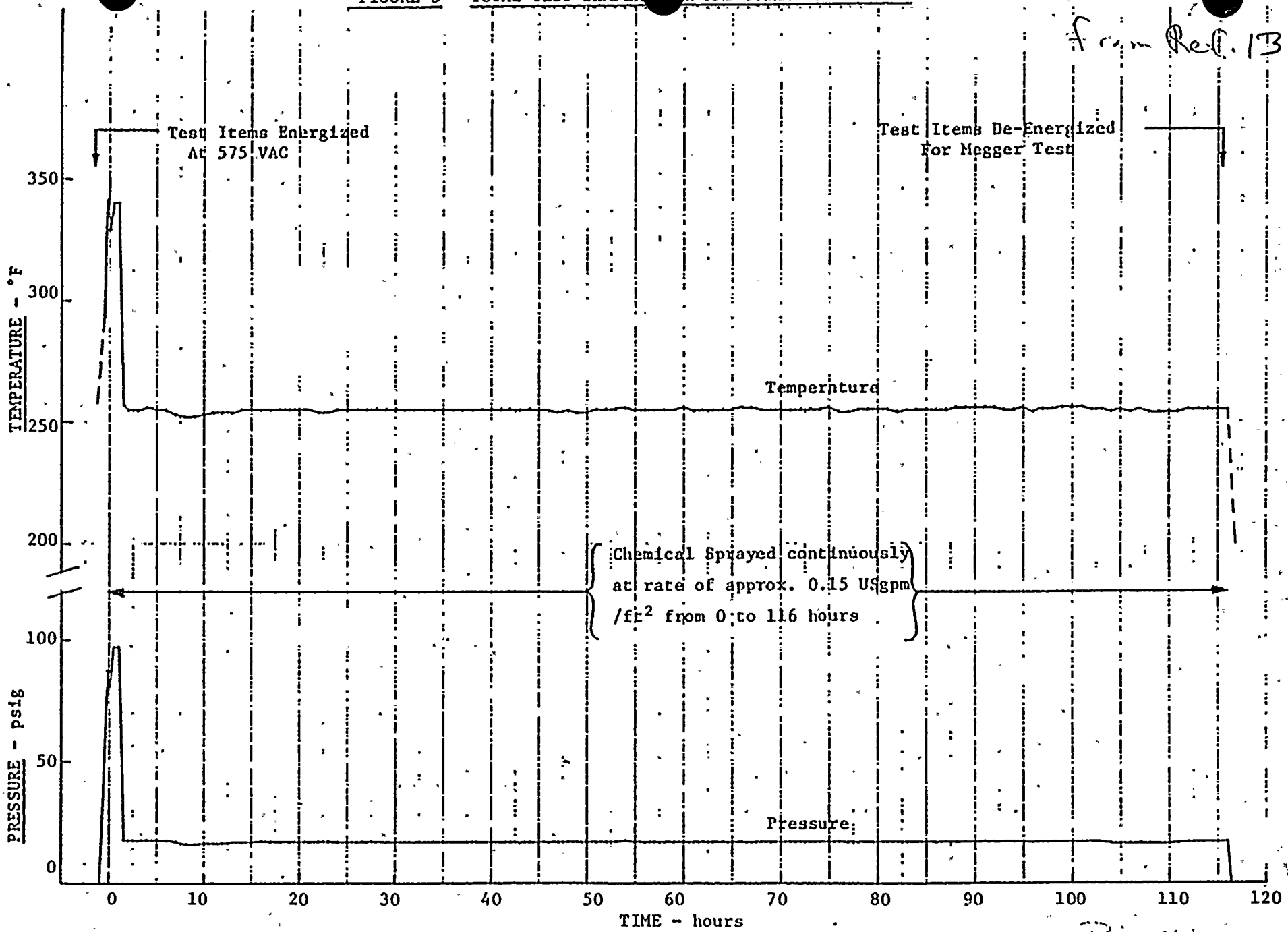
FIGURE 3 TOTAL TEST TEMPERATURE AND PRESSURE PROFILE

from Ref. 13



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DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: VARIOUS	Operating Time	1 year	See Note 2 on Cable Terminal		13	Seq	
PLANT ID NO: NA	Temperature (°F)	NA	NA	NA	NA	NA	
COMPONENT: CABLE TERM	Pressure (PSIA)	NA	NA	NA	NA	NA	
MANUFACTURER: NA	Relative Humidity (%)	NA	NA	NA	NA	NA	
MODEL NUMBER: Power CABLE Term At Pump Motor	Chemical Spray	NA	NA	NA	NA	NA	
FUNCTION: VARIOUS	Radiation (10^6 rads)	16.6	150	See Note A	13	Seq	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)						
SERVICE: VARIOUS							
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

13. Westinghouse Condax Test Report CWAPD-332

Notes:

A) NS+L Calculation DC-N6420-2

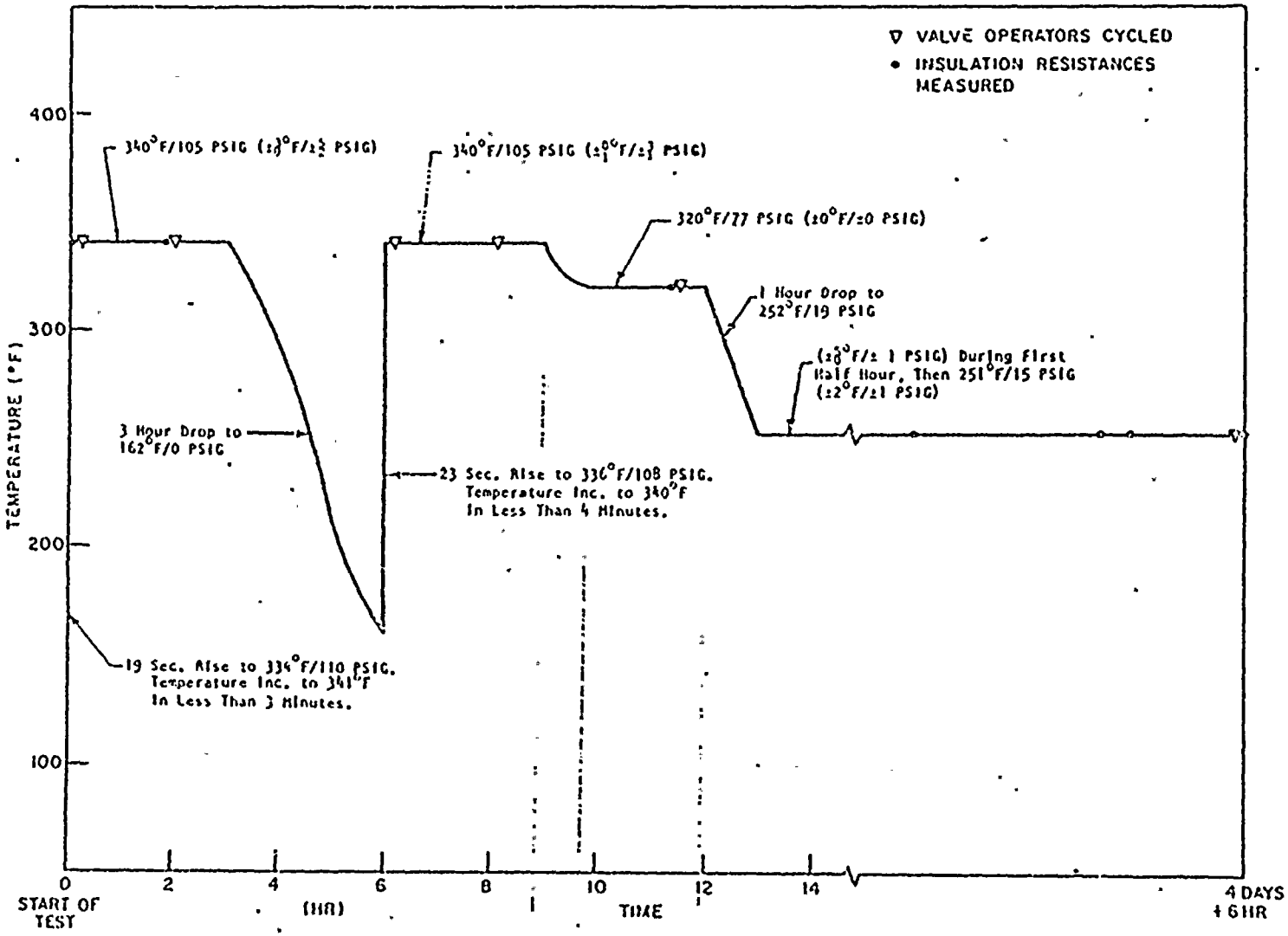
Page TP4-1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVCS, RHR	Operating Time	1/2 hr.	6 DAYS	TABLE 7.5-2 FSAR	23	SEQ	
PLANT ID NO: 1 MO-51, 52, 53, 54, 128; ICM-111, 129	Temperature (°F)	FIG 022.9-1,-2 328.2 PEAK	340	FSAR APP. Q	23	SEQ	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	FIG 1 FIG 2	119.7	AEW 6504	23	SEQ.	
MODEL NUMBER: SMB-1 SMB-00 SMB-2	Relative Humidity (%)	100	100		23	SEQ.	
FUNCTION: Core Cooling & Containment Isolation ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2622 ppmB	T.S. 3/4.5 3/4.5.6	22	SIMUL.	
SERVICE: ECCS [illegible] normal RHR cooling	Radiation (10^6 rads)	2.2	204	WCAP 7410-7 VOL 3	23	SEQ.	
LOCATION: INSIDE CONTAINMENT	Aging (years)		180°C/100hrs Yes		23	SEQ.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: No	Submergence		Yes*		23	SEQ.	

*Documentation References:
22. Limitorque Corp Test Report # 600198
23. Limitorque Corp Test Report # 600376A

Notes: * See also FSAR App. Q response to question 40.10 and letter from J. Tillinghast ( ) to K. Kniel (NRC) dated 9-29-75 (Item 4).



from Ref. 23

F-C3441

Figure 3. Actual Steam Exposure Profile

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DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Safety Injection	Operating Time	1 DAY	30 DAYS	Note A below	16	Seq	
PLANT ID NO: MO-315, 316, 325, 326	Temperature (°F)	Fig 13.13-1 250	315	FSAR APP. N	16	SEQ.	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	FIG. 1 FIG. 2	84.7	AEW 6504	16	SEQ.	
MODEL NUMBER: SMB-1	Relative Humidity (%)	100	100		16	SEQ.	
FUNCTION: Switchover to Hot Leg Injection ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 PPMB	IEEE 382 1972 (3000 PPMB)	T.S. 3/4.5 3/4.5.6			
SERVICE: ECCS Safety Injection	Radiation (10^6 rads)	26	204	WCAP 7410.2 VOL 1	16	SEQ.	
LOCATION: INSIDE CONTAINMENT	Aging (years)		180°C/100hrs Yes		16	SEQ.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

16. Limitorque Test Report #600456

Notes:

A) Letters J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75.

from Ref. 16

ACTUAL ACCIDENT PROFILE

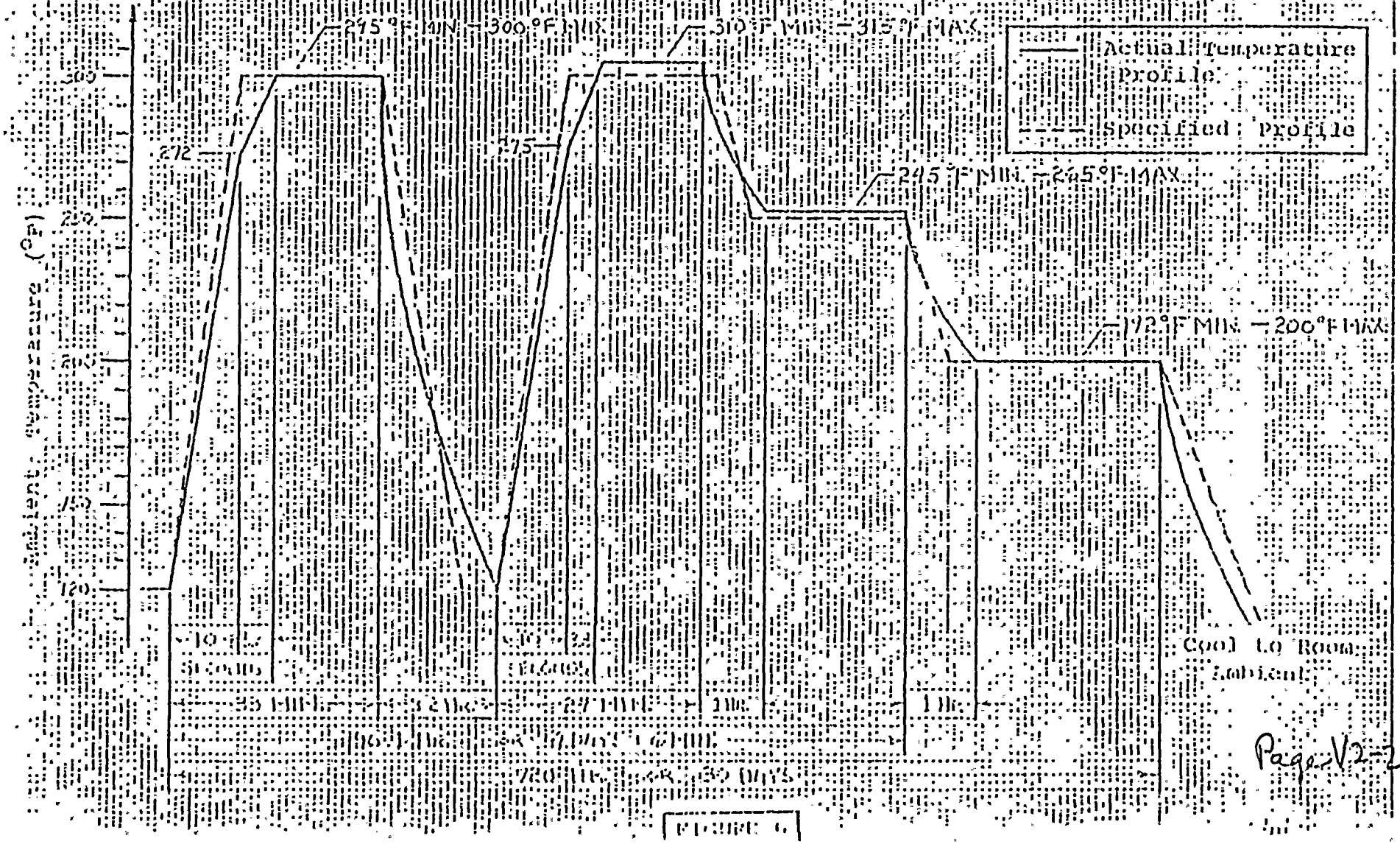

FIGURE 6

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DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Containment Air Recirculation	Operating Time	1/2 hr	16 DAYS	TABLE 7.5-2 FSAR	24	SEQ	
PLANT ID NO: VMO-161, 162	Temperature (°F)	Fig 13.13-1 250	250	FSAR APP N	24	SEQ.	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	FIG. 1 FIG. 2	39.7	AEW 6504	24	SEQ.	
MODEL NUMBER: SMB-000	Relative Humidity (%)	100	100		24	SEQ.	
FUNCTION: CT air recirc. backdraft dampers ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	See Note A	NA	See Note B	NA	NA	
SERVICE: CT air recirc. backdraft dampers	Radiation (10^6 rads)	2.2	224	WCAP 7410-7 VOL1	24	SEQ.	
LOCATION: INSIDE CONTAINMENT	Aging (years)		165°F/200hrs Yes		24	SEQ.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. Limitorque Corp. Test Report #600461

Notes:

A. VALVE Location is not subjected to direct caustic spray impingement.

B. mech installation drawing 2-5427

TEMPERATURE PROFILE

from Ref: 24.

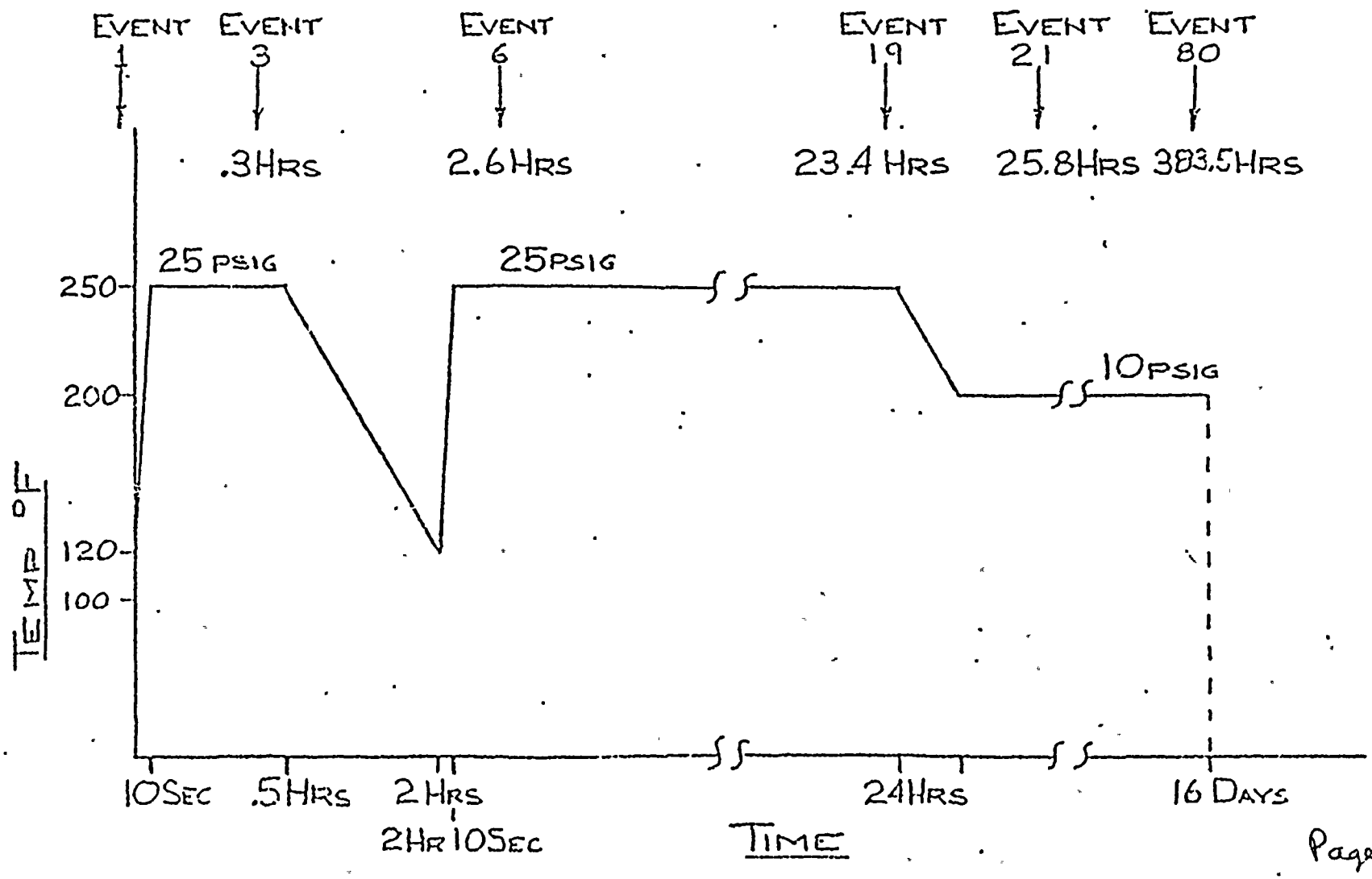

FIGURE 1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: CVC	Operating Time	1/2 hr	6 DAYS	TABLE 7.5.2 FSAR	22	SIMUL.	
PLANT ID NO: QMO 520	Temperature (°F)	Fig 022.9-1,-2 328.2	330	FSAR APP Q	22	SIMUL.	
COMPONENT: VALVE MOTOR OPERATOR MANUFACTURER: LIMITORQUE	Pressure (PSIA)	FIG 1. Fig. 2	104.7	AGW 6504	22	SIMUL.	
MODEL NUMBER: SMB-00	Relative Humidity (%)	100	100		22	SIMUL.	
FUNCTION: RCP seal water CT isolation valve ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	2000 ppmB	2600 ppmB	T.S 3/4.5 3/4.5.2	22	SIMUL.	
SERVICE: RCP seal water discharge	Radiation (10^6 rads)	SEE NOTE B		BELOW.		NA	
LOCATION: INSIDE CONTAINMENT	Aging (years)		180°C/100hr Yes		22	SIMUL.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: NO	Submergence	See Note A	NA		NA	NA	

*Documentation References:

22. Limitorque Corp. Test Report #600198

Notes:

A) Communication of 9-29-75 from J. Tillinghast (AEP) to K. Kniel (NRC). See also App. Q, FSAR, question 40.10

B) This valve closes within 15 sec. (Tech. Spec. Table 3.6-1) of receiving a Phase A CT isolation signal, therefore it not exposed to a radiation dose significantly beyond its normal environment and does not require radiation qualification.

from Ref. 22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.67.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 day	16 DAYS	Note A Below	24	SeQ	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	250	FSAR App O	24	SEQ.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	Fig 0-27	39.7	FSAR App O	24	SEQ.	
MODEL NUMBER: Various	Relative Humidity (%)	100	100		24	SEQ.	
FUNCTION: Various ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	NA	
SERVICE: Various	Radiation (10^6 rads)	4.1	224	Note B Below	24	SeQ.	
LOCATION: Outside Containment	Aging (years)		165°F/200hrs Yes		24	SeQ.	
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

24. Limitorque Corp. Test Report #600461

Notes:

A) letter J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 and 9-29-75

B) AEPSC NS&L calculation DC-N-6720-2

FIGURE 1

TEMPERATURE PROFILE

from Ref. 24

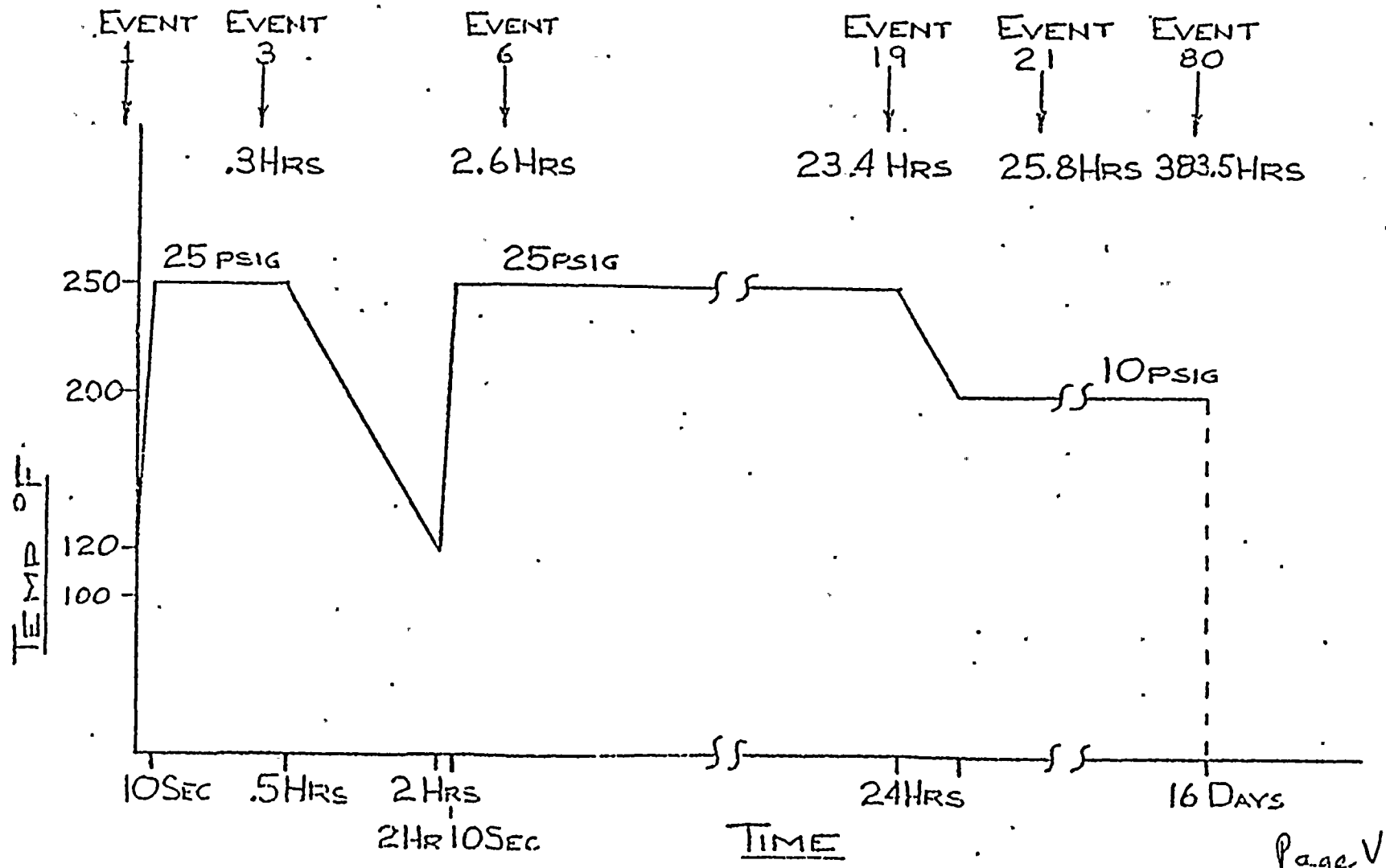

FIGURE 1

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DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

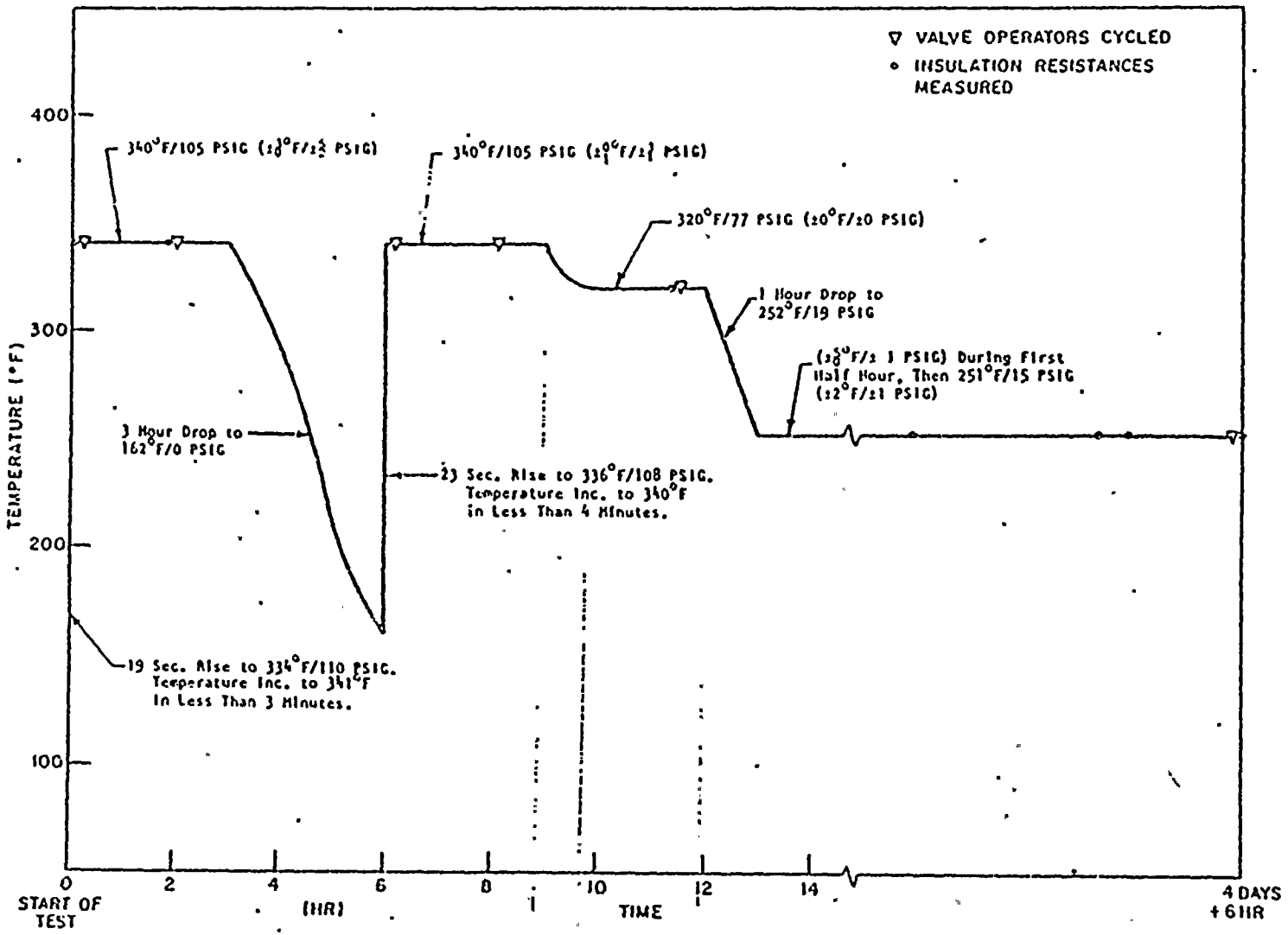
EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 day	6 DAYS	Note A	23	Seq	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	340	FSAR App O	23	Seq.	
COMPONENT: Valve Motor Operator	Pressure (PSIA)	Fig 0-27	119.7	FSAR App O	23	Seq.	
MANUFACTURER: Limitorque							
MODEL NUMBER: Various	Relative Humidity (%)	100	100		23	Seq.	
FUNCTION: Various	Chemical Spray	NA	2600 ppmB	NA	22	Simul.	
ACCURACY: SPEC: NA DEMON: NA	Radiation (10^6 rads)	4.1	.204	AEPSC NSLL calc. DC-N-6420-2	23	Seq.	
SERVICE: Various	Aging (years)		180°C/100hrs Yes		23	Seq.	
LOCATION: Outside Containment							
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	Yes	NA	23	Seq.	

*Documentation References:

22. Limitorque Corp Test Report #600198
23. Limitorque Corp Test Report #600376A

Notes:

A) Letters from J. Tillinghast to K. Kniel (NRC) dated 4-14-75 and 9-29-75.



from Ref. 23

F-C3441

Figure 3. Actual Steam Exposure Profile

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DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Various	Operating Time	1 day	28 hr	Note A	44	Seq	
PLANT ID NO: Various	Temperature (°F)	Fig 0-27	212	FSAR App 10	44	SEQ.	
COMPONENT: Valve Motor Operator MANUFACTURER: Limitorque	Pressure (PSIA)	Fig 0-27	14.7	FSAR App 0	44	Seq.	
MODEL NUMBER: Various	Relative Humidity (%)	NA	100		44	SEQ.	
FUNCTION: Various ACCURACY: SPEC: NA DEMON: NA	Chemical Spray	NA	NA	NA	NA	N A	
SERVICE: VARIOUS	Radiation (10^6 rads)	4.1	See Valve Motor Operator Note 1	AEPSC NSGL calc. DC-N-6420-2			See Valve Motor Operator Note 1
LOCATION: Outside Containment	Aging (years)						
FLOOD LEVEL ELEV: NA ABOVE FLOOD LEVEL: NA	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

44. FIRL TEST REPORT F-C3271

Notes:

A) Letters from J. Tillinghast (AEP) to K. Kniel (NRC) dated 4-14-75 & 9-29-75.

Ref. 44. EXCERPT FROM FIRL F-C 2935

RADIATION: 10 MRAD @ .45 MRAD/HR
100% R.H.
151°F, , 6hr preconditioning
340°F, 100psig, 2hr
160°F, , 20hr

Type of Test: Sequential

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: [illegible]	Operating Time	See Gen. Note 4	16 Days	—	24	Seq.	
PLANT ID NO: [illegible] 151, 152, 153	Temperature (°F)	Fig 1 022.9-1,-2	250	FSAR APP Q	24	SEQ	
COMPONENT: VALVE MOTOR OPERATOR	Pressure (PSIA)	Fig 1 Fig. 2	39.7	AEW 6504	24	SEQ	
MANUFACTURER: LIMITORQUE	Relative Humidity (%)	100	100		24	SEQ	
MODEL NUMBER: SMB-00	Chemical Spray	See note A	NA	Installation drawing Note B	NA	NA	
FUNCTION: Pzr PORV Block Valves	Radiation (10^6 rads)	<150	224	WCAP 7410-L Vol. 1	24	SEQ	
ACCURACY: SPEC: NA DEMON: NA	Aging (years)		165°F/200hrs Yes		24	SEQ	
SERVICE: Pzr relief line	Submergence	NA	NA				
LOCATION: IN CONTAINMENT							
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: YES							

*Documentation References:

24. LIMITORQUE CORP. TEST REPORT #600461

Notes:

A) VALVE LOCATION IS NOT SUBJECT TO DIRECT CAUSTIC SPRAY IMPINGEMENT.

B) Mech Drawing Ref.
2-5435
2-5435A
2-5436

from Ref. 24

TEMPERATURE PROFILE

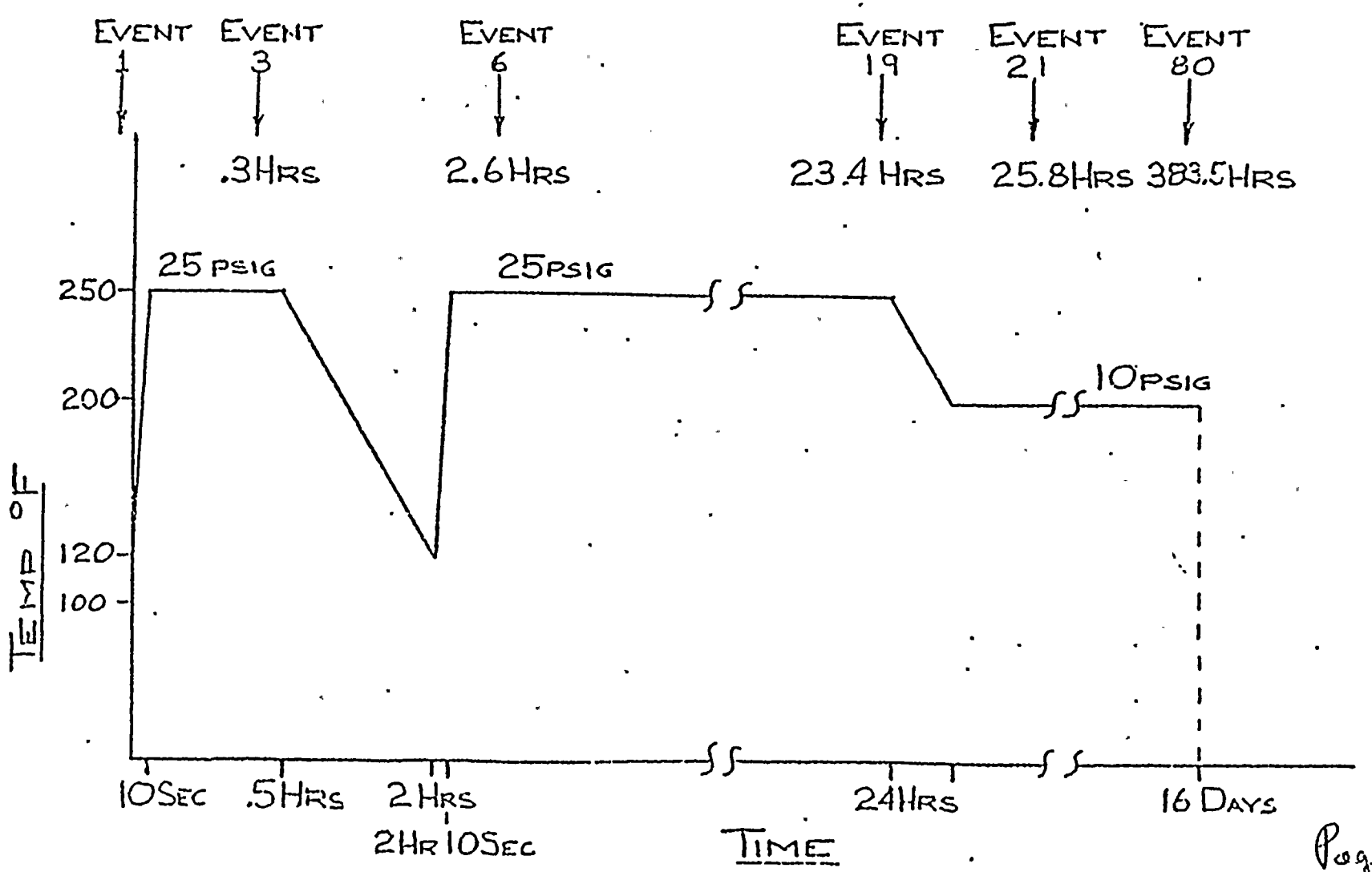

FIGURE 1

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2 DOCKET NO. 50-316 LICENSE NO. DPR-74

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF.*		QUALIFICATION METHOD	OUTSTANDING ITEMS
	PARAMETER	SPEC.	QUAL.	SPEC.	QUAL.		
SYSTEM: Residual Heat Removal	Operating Time	1 day	6 DAYS	See Note A	22	Simul.	
PLANT ID NO: 1CM 305,306	Temperature (°F)	Fig 022.9-1,-2	330	FSAR App Q	22	Simul.	
COMPONENT: Valve Motor Operator	Pressure (PSIA)	Fig. 2 Fig 1	104.7	AEW 6504	22	Simul.	
MANUFACTURER: Limitorque							
MODEL NUMBER: SMB-2	Relative Humidity (%)	100	100		22	Simul.	
FUNCTION: Long term post-accident cooling	Chemical Spray	NA	2600 ppmB	Inside CT	22	Simul.	
ACCURACY: SPEC: NA DEMON: NA							
SERVICE: RH Recirculation from CT sump	Radiation (10^6 rads)	<4.6	See Note B	AEPSC NS&L calc. DC-N-6470-2	See Note B below		OPEN (Note B below)
LOCATION: Inside Containment	Aging (years)		180°C/100hrs Yes		22	Simul.	
FLOOD LEVEL ELEV: 614' ABOVE FLOOD LEVEL: Yes	Submergence	NA	NA	NA	NA	NA	

*Documentation References:

22. Limitorque Test Report #600198

Notes:

A) Letters J Tillinghast - AEP to K Kniel - NRC dated 4/14/75 & 9/29/75.

B) These are Westinghouse-supplied valves, insulation class H, specified for nuclear service inside CT. Limit switch material for these valves is white melamine, a radiation resistant material. We are continuing to seek information.

Ref. 22. Qualified by Limitorque Corp. Test Laboratory
Project #600198. November 1968

22

Type of Test: simultaneous, steam
chemical spray
separate seismic test

Type Profile:

328°F, 90 psig for 1 hr
312°F, 70 psig for 2 hrs
287°F, 40 psig for 2 hrs
271°F, 20 psig for 19 hrs
250°F, 15 psig for 6 days

Chemical Spray:

1.5% boric acid buffered with Na OH to a PH of 7.67.

Seismic Test 8/20/79
Horizontal Force, 5.3 G at 35 Hz
Vertical force 5.3 G at 35 Hz
No resonance freq from 5 to 35 Hz