Nebraska Public Power District

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NLS8500049

March 6, 1985

Mr. Hugh L. Thompson, Jr., Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Thompson:

Subject: NUREG-0737, Supplement 1 - Regulatory Guide 1.97 Response, Revision V

Reference: 1) Letter from J. M. Pilant to D. G. Eisenhut dated April 16, 1984, "NUREG-0737, Supplement 1 - Regulatory Guide 1.97"

2) Letter from J. M. Pilant to D. G. Eisenhut dated March 1, 1984, NLS8400073, same subject

Reference 1 provided Revision IV of the District's status and schedule for implementation of Regulatory Guide 1.97 requirements. In Reference 2, potential reasons for changes in the implementation schedule were provided. Circumstances now dictate that the table be updated to reflect the present schedule for implementation and status; therefore, Revision V of the table is enclosed as Attachment 1. Details of the differences between Revision IV and Revision V of the table are included in Attachment 2 in the form of a marked up table with explanations.

It should be noted that the schedule dates for implementation provided herein are considered estimated dates in accordance with our April 15, 1983, response to NUREG-0737, Supplement 1. As defined in Attachment 8 to that document, our NRC Project Manager will be kept informed of all substantive changes in the implementation schedule. Changes in the implementation schedule are anticipated as the integration effort continues for all Supplement 1 projects; specifically, Detailed Control Room Design Review, EOP's, and SPDS. Changes in the table are also anticipated when integrating Equipment Qualification, the ATWS rule, Appendix R, Generic Letter 84-23, the CNS exemption to 10CFR50.44, and outage work load management practices.

Whereas Revision IV of the attached table reflected Revision 2 of Regulatory Guide 1.97, this Revision V is now structured to reflect Revision 3. Recognizing the various changes between

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Revisions IV and V, the District would welcome an opportunity to meet with the NRC staff and contractors to discuss additional details relating to the changes from our previously-submitted table. Our NRC Project Manager will be contacted to discuss such a meeting.

Eight copies of this submittal are enclosed for the staff's use. Two additional copies are being provided directly to our NRC Project Manager to expedite the review process.

Sincerely,

Jay M. Pilant

Jay M. Pilant
Technical Staff Manager
Nuclear Power Group

JMP/jdw:emz6/2
Attachments

cc: R. D. Martin
USNRC, Region IV

E. Sylvester w/2 copies
USNRC

Attachment 1

Revision V of Reg. Guide 1.97 Table

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Reactivity Control							
Neutron Flux	10^{-6}% to 100% Full Power (SRM, APRM)	B-1	Function Detection; Accomplishment of Mitigation	SRM's, LPRM's	1-1	10^{-8}% to 125% Full Power	Not Qualified
Control Rod Position	Full In or Not Full In	B-3	Verification	RPIS	3-1	Full In or Not Full In 0"-144"	N/A
RCS Soluble Boron Concentration (Sample)	0 to 1,000 ppm	B-3	Verification	PASS	3-2	0-1000 PPM Grab Sample	N/A
Core Cooling							
Coolant Level in Reactor	Bottom of Core Support Plate to lesser of Top of Vessel or Centerline of Main Stream Line	A-1 B-1	Function Detection: Accomplishment of Mitigation: Long-Term Surveillance	NBI-LITS-59A,B NBI-CU-59A,B NBI-LI-85A,B	1-2 1-3 1-4	-150 - +60	Not Qualified Not Qualified Mild Environment
				NBI-LT-61 NBI-LI-86	1-5 1-6	0 - +400"	Not Qualified Mild Environment
				NBI-LITS-73A,B NBI-LI-91A,B	1-7 1-8	-100 - +200" (-264.2" - +35.8" When using same ref. zero as other instruments)	Not Qualified Mild Environment
BWR Core Thermocouples	200°F to 2300°F		To Provide Diverse Indication of Water Level	None		N/A	N/A

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Maintaining Reactor Coolant System Integrity							
RCS Pressure	0 psia to 1500 psig	A-1	Function Detection; Accomplishment of	NBI-PT-6A,B	1-9	0 - 1500 psig	Will Comply
		B-1	Mitigation; Verification	PC-IE-3A,3B	1-10		Mild Environment
		C-1		PC-SC-2A,2B	1-11		Mild Environment
				NBI-PR-2A,2B	1-12		Mild Environment
Drywell Pressure	0 to Design Pressure (D.P. = 56 psig)	A-1	Function Detection: Accomplishment of	PC-PT-512A,B	1-13	0 - 80 psia	Will Comply
		B-1	Mitigation; Verification	PC-R-(PR512-LR11)	1-14		Mild Environment
				PC-PI-512B	1-15		Mild Environment
				PC-PT-4A1,4B2	1-16	0 - 250 psia	Will Comply
				PC-IE-3A,3B	1-17		Mild Environment
				PC-SC-3A,3B	1-18		Mild Environment
				PC-PR-1A,1B	1-19		Mild Environment
Drywell Sump Level	Top to Bottom	B-1	Function Detection; Accomplishment of Mitigation; Verification	None	1-20	-	
Maintaining Containment Integrity							
Primary Containment Pressure	-5 psig to Design Pressure	B-1	Function Detection; Accomplishment of	PC-PT-512A,B	1-21	0 - 80 psia	Will Comply
			Mitigation; Verification	PC-R-(PR512-LR11)	1-22		Mild Environment
				PC-PI-512B	1-23		Mild Environment
				PC-PT-4A1,4B2	1-24	0 - 250 psia	Will Comply
				PC-IE-3A,3B	1-25		Mild Environment
				PC-SC-3A,3B	1-26		Mild Environment
				PC-PR-1A,1B	1-27		Mild Environment
				PC-PT-20	1-28	0 - 2 psig	Will Comply
				PC-PR-20	1-29		Mild Environment
Primary Containment Isolation Valve Position (Excluding Check Valves)	Closed - Not Closed	B-1	Accomplishment of Isolation	PC-AO-237AV-L.S.	1-30	Closed - Not Closed	Complies
				PC-AO-237AV Indicating Lights	1-31		Mild Environment
				PC-AO-238AV-L.S.	1-32	Closed - Not Closed	Complies
				PC-AO-238AV Indicating Lights	1-33		Mild Environment
				PC-AO-243AV-L.S.	1-34	Closed - Not Closed	Complies
				PC-AO-243AV Indicating Lights	1-35		Mild Environment
				PC-AO-244AV-L.S.	1-36	Closed - Not Closed	Complies
				PC-AO-244AV Indicating Lights	1-37		Mild Environment

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
				PC-AO-245AV-L.S.	1-38	Closed - Not Closed	Complies
				PC-AO-245AV	1-39		Mild Environment
				Indicating Lights			
				PC-AO-246AV-L.S.	1-40	Closed - Not Closed	Complies
				PC-AO-246AV	1-41		Mild Environment
				Indicating Lights			
				PC-MO-230MV	1-42	Closed - Not Closed	Complies
				PC-MO-230MV	1-43		Mild Environment
				Indicating Lights			
				PC-MO-231MV	1-44	Closed - Not Closed	Complies
				PC-MO-231MV	1-45		Mild Environment
				Indicating Lights			
				PC-MO-232MV	1-46	Closed - Not Closed	Complies
				PC-MO-232MV	1-47		Mild Environment
				Indicating Lights			
				RW-AO-A094-L.S.	1-48	Closed - Not Closed	Complies
				RW-AO-A094	1-49		Mild Environment
				Indicating Lights			
				RW-AO-A095-L.S.	1-50	Closed - Not Closed	Complies
				RW-AO-A095	1-51		Mild Environment
				Indicating Lights			
				RW-AO-A082-L.S.	1-52	Closed - Not Closed	Complies
				RW-AO-A082	1-53		Mild Environment
				Indicating Lights			
				RW-AO-A083-L.S.	1-54	Closed - Not Closed	Complies
				RW-AO-A083	1-55		Mild Environment
				Indicating Lights			
				PC-MO-233MV	1-56	Closed - Not Closed	Complies
				PC-MO-233MV	1-57		Mild Environment
				Indicating Lights			
				MS-AO-A080A,B,C,D-L.S.	1-58	Closed - Not Closed	Will Comply
				MS-AO-A080A,B,C,D	1-59		Mild Environment
				Indicating Lights			
				MS-AO-A086A,B,C,D-L.S.	1-60	Closed - Not Closed	Will Comply
				MS-AO-A086A,B,C,D	1-61		Mild Environment
				Indicating Lights			
				MS-MO-M074	1-62	Closed - Not Closed	Complies
				MS-MO-M074	1-63		Mild Environment
				Indicating Lights			
				MS-MO-M077	1-64	Closed - Not Closed	Complies
				MS-MO-M077	1-65		Mild Environment
				Indicating Lights			
				HPCI-MO-M015	1-66	Closed - Not Closed	Complies
				HPCI-MO-M015	1-67		Mild Environment
				Indicating Lights			
				HPCI-MO-M016	1-68	Closed - Not Closed	Complies
				HPCI-MO-M016	1-69		Mild Environment
				Indicating Lights			
				RCIC-MO-M015	1-70	Closed - Not Closed	Will Comply
				RCIC-MO-M015	1-71		Mild Environment
				Indicating Lights			

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
				RCIC-MO-M016	1-72	Closed - Not Closed	Complies
				RCIC-MO-M016 Indicating Lights	1-73		Mild Environment
				PC-MO-305	1-74	Closed - Not Closed	Complies
				PC-MO-305 Indicating Lights	1-75		Mild Environment
				PC-MO-306	1-76	Closed - Not Closed	Complies
				PC-MO-306 Indicating Lights	1-77		Mild Environment
				RWCU-MO-15	1-78	Closed - Not Closed	Complies
				RWCU-MO-15 Indicating Lights	1-79		Mild Environment
				RWCU-MO-18	1-80	Closed - Not Closed	Complies
				RWCU-MO-18 Indicating Lights	1-81		Mild Environment
				RHR-MO-M017	1-82	Closed - Not Closed	Complies
				RHR-MO-M017 Indicating Lights	1-83		Mild Environment
				RHR-MO-M018	1-84	Closed - Not Closed	Complies
				RHR-MO-M018 Indicating Lights	1-85		Mild Environment
				RHR-MO-M025A	1-86	Closed - Not Closed	Complies
				RHR-MO-M025A Indicating Lights	1-87		Mild Environment
				RHR-MO-M025B	1-88	Closed - Not Closed	Will Comply
				RHR-MO-M025B Indicating Lights	1-89		Mild Environment
				RHR-MO-M027A	1-90	Closed - Not Closed	Will Comply
				RHR-MO-M027A Indicating Lights	1-91		Mild Environment
				RHR-MO-M027B	1-92	Closed - Not Closed	Complies
				RHR-MO-M027B Indicating Lights	1-93		Mild Environment
				CS-MO-M012A	1-94	Closed - Not Closed	Complies
				CS-MO-M012A Indicating Lights	1-95		Mild Environment
				CS-MO-M012B	1-96	Closed - Not Closed	Will Comply
				CS-MO-M012B Indicating Lights	1-97		Mild Environment
				CS-MO-M011A	1-98	Closed - Not Closed	Will Comply
				CS-MO-M011A Indicating Lights	1-99		Mild Environment
				CS-MO-M011B	1-100	Closed - Not Closed	Complies
				CS-MO-M011B Indicating Lights	1-101		Mild Environment
				RR-AO-740AV-L.S.	1-102	Closed - Not Closed	Will Comply
				RR-AO-740AV Indicating Lights	1-103		Mild Environment
				RR-AO-741AV-L.S.	1-104	Closed - Not Closed	Will Comply

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
				RR-AO-741AV Indicating Lights	1-105		Mild Environment
				RHR-MO-57	1-106	Closed - Not Closed	Will Comply
				RHR-MO-57 Indicating Lights	1-107		Mild Environment
				RHR-MO-67	1-108	Closed - Not Closed	Will Comply
				RHR-MO-67 Indicating Lights	1-109		Mild Environment
				ACAD-MO-M01301	1-110	Closed - Not Closed	Will Comply
				ACAD-MO-M01301 Indicating Lights	1-111		Mild Environment
				ACAD-MO-M01302	1-112	Closed - Not Closed	Will Comply
				ACAD-MO-M01302 Indicating Lights	1-113		Mild Environment
				ACAD-MO-M01303	1-114	Closed - Not Closed	Will Comply
				ACAD-MO-M01303 Indicating Lights	1-115		Mild Environment
				ACAD-MO-M01304	1-116	Closed - Not Closed	Will Comply
				ACAD-MO-M01304 Indicating Lights	1-117		Mild Environment
				ACAD-MO-M01305	1-118	Closed - Not Closed	Will Comply
				ACAD-MO-M01305 Indicating Lights	1-119		Mild Environment
				ACAD-MO-M01306	1-120	Closed - Not Closed	Will Comply
				ACAD-MO-M01306 Indicating Lights	1-121		Mild Environment
				ACAD-MO-M01308	1-122	Closed - Not Closed	Will Comply
				ACAD-MO-M01308 Indicating Lights	1-123		Mild Environment
				ACAD-MO-M01310	1-124	Closed - Not Closed	Will Comply
				ACAD-MO-M01310 Indicating Lights	1-125		Mild Environment
				ACAD-MO-M01311	1-126	Closed - Not Closed	Will Comply
				ACAD-MO-M01311 Indicating Lights	1-127		Mild Environment
				ACAD-MO-M01312	1-128	Closed - Not Closed	Will Comply
				ACAD-MO-M01312 Indicating Lights	1-129		Mild Environment

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Reactor Coolant Pressure Boundary							
Primary Containment Area Radiation	1 R/hr to 10^5 R/hr	C-3	Detection of Breach; Verification	RMA-RE-40A,B	3-3	1R/hr to 10^7 R/hr	N/A
				RMA-RM-40A,B	3-4		N/A
				RMA-IO-40A,B	3-5		N/A
				(RMA-RR-40 for A and B)	3-6		N/A
Drywell Drain Sumps Level (Identified and Unidentified Leakage)	Top to Bottom	C-1	Detection of Breach; Accomplishment of Mitigation; Verification Long-Term Surveillance	None	1-130	None	
Suppression Pool Water Level	Bottom of ECCS Suction Line to 5' Above Normal Water Level	A-1 C-1	Detection of Breach; Accomplishment of Mitigation; Verification Long-Term Surveillance	PC-DPT-3A1,3B2	1-131	0 - 30' (866' - 896')	Will Comply
				PC-IE-2A,2B	1-132		Mild Environment
				PC-SC-1A,1B	1-133		Mild Environment
				PC-LR-1A,1B	1-134		Mild Environment
Containment							
Primary Containment Pressure	-5 psig to 4 Times Design Pressure D.P. = 56 psig	C-1	Detection of Potential for or Actual Breach; Accomplishment of Mitigation	PC-PT-4A1,4B2	1-135	0 - 250 psia	Will Comply
				PC-IE-3A,3B	1-136		Mild Environment
				PC-SC-3A,3B	1-137		Mild Environment
				PC-PR-1A,1B	1-138		Mild Environment
Effluent Radioactivity-Noble Gases	10^{-6} uCi/ cc to 10^{-2} uCi/cc	C-2	Indication of Breach	ERP Hi-range Effluent Monitor		10^{-7} uCi/cc to $1x10^5$ uCi/cc	
				RMP-RM-3A	2-1		Mild Environment
				RMP-RM-3B	2-2		Mild Environment
Containment and Drywell Hydrogen Concentration	0 - 30% (Capability of Operating from -5 psig to Design Pressure)	C-1	Detection of Potential for Breach; Accomplishment of Mitigation	PC-AN-(H21A-3156B)	1-139	0 - 5% Bendix	Mild Environment
				PC-AN-(H21A-3156A)	1-140	0 - 10%, 20% Beckman	Mild Environment
				PC-R-(H2R-3157B)	1-141		Mild Environment
				PC-R-(H2R-3157A)	1-142		Mild Environment
Containment and Drywell Oxygen Concentration (for Inerted Containment Plants)	0 - 10% (Capability of Operating from -5 psig to design Pressure)	C-1	Detection of Potential for Breach; Accomplishment of Mitigation	PC-AN-(02A-512)	1-143	0 - 5%, 10%, 20%	Mild Environment
				PC-R-(02A-512)	1-144		Mild Environment

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Condensate and Feedwater System							
Main Feedwater Flow	0 - 110% Design Flow (D.F.=9.52 x 10^6 lb/hr)	D-3	Detection of Operation: Analysis of Cooling	RFC-FT-50A,B	3-7	0-7.0 x 10^6 lb/hr	N/A
				RFC-ES-93	3-8	Per Pump	N/A
				RFC-SQRT-110A,B	3-9		N/A
				RFC-FI-89A,B	3-10		N/A
Condensate Storage Tank Level	Top to Bottom	D-3	Indication of Available Water for Cooling	CM-LT-5	3-11	0 - 100%	N/A
				Computer PT F001	3-12	(0 - 40')	N/A
				ES-ES-1	3-13		N/A
				CM-LIC-5	3-14		N/A
				CM-LT-680A	3-15	2.8% - 100% (1' - 36')	N/A
				CM-LIS-8	3-16		N/A
Emergency Storage Tank Level	Bottom to Top	D-3	Indication of Available Water for Cooling	CM-LT-681A,B	3-17	0 - 100%	N/A
				CM-LI-681A,B	3-18	(0 - 16')	N/A
				CM-ES-6	3-19		N/A
Fuel Cladding							
Radioactivity Concentration or Radiation Level in Circulating Primary Coolant	1/2 Tech Spec Limit to 100 Times Tech Spec Limit	C-1	Detection or Breach	Post-Accident Sample System	1-145	Grab Sample	N/A
Ventilation Systems							
Emergency Ventilation Damper Position	Open - Closed Status	D-2	To Monitor Operation	HV-257AV	2-3	Open-Closed	Not Qualified
				HV-257AV Indicating Lights	2-4		Mild Environment
				HV-272MV	2-5	Open-Closed	Not Qualified
				HV-272MV Indicating Lights	2-6		Mild Environment
				HV-AV259	2-7	Open-Closed	Not Qualified
				HV-AV259 Indicating Lights	2-8		Mild Environment
				HV-MV258	2-9	Open-Closed	Not Qualified
				HV-MV258 Indicating Lights	2-10		Mild Environment
				HV-MV260	2-11	Open-Closed	Not Qualified
				HV-MV260 Indicating Lights	2-12		Mild Environment
				HV-AV261	2-13	Open-Closed	Not Qualified
				HV-AV261 Indicating Lights	2-14		Mild Environment

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Power Supplies							
Status of Standby Power and Other Energy Sources Important to Safety	Plant Specific	D-2	To Monitor System Status	DG-A1-AM11,AM12	2-15	0 - 1200 Amps	Mild Environment
				DG-FQI,FM2,FM3	2-16	55 - 65 CPS	Mild Environment
				DG-VARI-VARM8,VARM9	2-17	0 - 7 MVAR	Mild Environment
				DG-VI-VM11,VM12	2-18	0 - 5250 VAC	Mild Environment
				DG-WI-WM1-WM2	2-19	0 - 7 M WATTS	Mild Environment
				EE-CB-4160DG1(EG1) Current Transformers	2-20		Mild Environment
				EE-CB-4160DG1(EG1) Potential Transformers	2-21		Mild Environment
				EE-CB-4160DG2(EG2) Current Transformers	2-22		Mild Environment
				EE-CB-4160DG2(EG2) Potential Transformers	2-23		Mild Environment
				DG-XFMR-Varm8	2-24		Mild Environment
				DG-XFMR-Varm9	2-25		Mild Environment
				EE-XFMR-EG1(RA)	2-26		Mild Environment
				EE-XFMR-EG1(RB)	2-27		Mild Environment
				EE-XFMR-EG1(RC)	2-28		Mild Environment
				EE-XFMR-EG2(RA)	2-29		Mild Environment
				EE-XFMR-EG2(RB)	2-30		Mild Environment
				EE-XFMR-EG2(RC)	2-31		Mild Environment
				1A-PI-606	2-32	0 - 120 psig	Mild Environment
				ES-ES-1	2-33		Mild Environment
				1A-PI-606	2-34		Mild Environment
				250VDC 1A Batt. Amp Indicator	2-35	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				250VDC Bus 1A Voltage Indicator	2-36	0 - 300 Volts	Mild Environment
				250VDC 1A CHG. Amp Indicator	2-37	0 - 300 Amps	Mild Environment
				250VDC 1B Batt. Amp Indicator	2-38	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				250VDC 1B CHG. Amp Indicator	2-39	0 - 300 Amps	Mild Environment
				250VDC Bus 1B Voltage Indicator	2-40	0 - 300 Volts	Mild Environment
				125VDC 1A Batt. Amp Indicator	2-41	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				125VDC 1A CHG. Amp Indicator	2-42	0 - 200 Amps	Mild Environment
				125VDC BUS 1A Voltage Indicator	2-43	0 - 150 Volts	Mild Environment
				125VDC 1B Batt. Amp Indicator	2-44	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				125VDC 1B CHG. Amp Indicator	2-45	0 - 200 Amps	Mild Environment
				125VDC BUS 1B Voltage Indicator	2-46	0 - 150 Volts	Mild Environment
				AC BUS Status	2-47		

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Primary Containment - Related Systems							
Suppression Chamber Spray Flow	0 - 100% Design Flow	D-2	To Monitor Operation	None	2-48	N/A	N/A
Drywell Pressure	-5 psig to 3 psig	D-2	To Monitor Operation	PC-PT-513	2-49	0 - +2.0 psig	Will Comply
				PC-R-(FRPR-513)	2-50		Mild Environment
	0 - 110% Design Pressure						
				PC-PT-512A,B	2-51	0 - 80 psig	Will Comply
				PC-R-(PR512-LR11)	2-52		Mild Environment
				PC-PI-512	2-53		Mild Environment
				PC-PT-4A1,4B2	2-54	0 - 250 psig	Will Comply
				PC-IE-3A,3B	2-55		Mild Environment
				PC-SC-3A,3B	2-56		Mild Environment
				PC-PR-1A,1B	2-57		Mild Environment
Suppression Pool Water Level	Top of Vent to Top of Weir Wall	D-2	To Monitor Operation	PC-DPT-3A1,3B2	2-58	0 - 30' (866'-896')	Will Comply
				PC-IE-2A,2B	2-59		Mild Environment
				PC-SC-1A,1B	2-60		Mild Environment
				PC-LR-1A,1B	2-61		Mild Environment
Suppression Pool Water Temperature	30°F to 230°F	A-1 D-2	To Monitor Operation	PC-TE-1A,B,C,D,E,F,G,H 2A,B,C,D,E,F,G,H	1-146	0 - 250°F	Will Comply
				PC-TR-24	1-147		Mild Environment
Drywell Atmospheric Temperature	40°F to 440°F	D-2	To Monitor Operation	PC-TE-505A-E	2-62	50° - 350°F	Will Comply
				PC-RI-505A-E	2-63		Mild Environment
				PC-TI-505A-E	2-64		Mild Environment
				PC-TE-510A-E	2-65	50° - 350°F	Will Comply
				PC-RI-510A-E	2-66		Mild Environment
				PC-TR-510(1)&(2)	2-67		Mild Environment
Drywell Spray Flow	0 to 110% Design Flow	D-2	To Monitor Operation	None	2-68		
Main Steam System							
Main Steamline Isolation Valves leakage control System Pressure	0 to 15" of Water 0 to 5 psig	D-2	To Provide Indication of Pressure Boundary Maintenance	N/A to BWR 4	2-69		
Primary system Safety Relief Valve Positions, Including ADS or Pressure in Valve Lines	Closed - Not Closed or 0 - 50 psig	D-2	Detection of Accident; Boundary Integrity Indication	MS-PS-300A-H (SRV)	2-70	27.5 psi (0-30 psi)	Complies
				MS-TE-112A,B,C (SV)	2-71	0 - 600°F	Will Comply
				MS-TE-114A,B,C (SV)	2-72	0 - 600°F	Will Comply
				MS-TR-166	2-73		Mild Environment
Isolation Condenser System Shell-side Water Level	Top to Bottom	D-2	To Monitor Operation	N/A to CNS	2-74		
Insulation Condenser System Valve Position	Open or Closed	D-2	To Monitor Operation	N/A to CNS	2-75		

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
RCIC Flow	0 - 110% Design Flow (D.F. = 416 GPM)	D-2	To Monitor Operation	RCIC-FT-58	2-76	0 - 500 GPM	Will Comply
				RCIC-FIC-91	2-77		Mild Environment
				RCIC-SQRT-99	2-78		Mild Environment
HPCI Flow	0 - 110% Design Flow (D.F. = 4250 GPM)	D-2	To Monitor Operation	HPCI-FT-82	2-79	0 - 5000 GPM	Will Comply
				HPCI-FIC-108	2-80		Mild Environment
				HPCI-IVTR-119	2-81		Mild Environment
				HPCI-SQRT-118	2-82		Mild Environment
Core Spray System Flow	0 - 110% Design Flow (D.F. = 4720 GPM)	D-2	To Monitor Operation	CS-FT-40A,B	2-83	0 - 6000 GPM	Will Comply
				CS-ES-52A&B	2-84		Mild Environment
				CS-FI-50A&B	2-85		Mild Environment
LPCI Flow	0 - 110% Design Flow (D.F. = 15,000 GPM)	D-2	To Monitor Operation	RHR-FT-109A,B	2-86	0 - 20,000 GPM	Will Comply
				RHR-ES-145A&B	2-87		Mild Environment
				RHR-SQRT-134A&B	2-88		Mild Environment
				RHR-FI-133A&B	2-89		Mild Environment
SLCS Flow	0 - 110% Design Flow	D-2	To Monitor Operation	None	2-90		
SLCS Storage Tank Level	Top to Bottom	D-2	To Monitor Operation	SLC-LT-45	2-91	0 - 100% Level	Mild Environment
				SLC-LI-66	2-92		Mild Environment
				SLC-ES-69	2-93		Mild Environment
Residual Heat Removal Systems							
RHR System Flow	0 - 110% Design Flow (D.F. = 15,000 GPM)	D-2	To Monitor Operation	RHR-FT-109A,B	2-94	0 - 20,000 GPM	Will Comply
				RHR-ES-145A&B	2-95		Mild Environment
				RHR-SQRT-134A&B	2-96		Mild Environment
				RHR-FI-133A&B	2-97		Mild Environment
RHR Heat Exchanger Outlet Temperature	40°F to 350°F	D-2	To Monitor Operation	RHR-TE-94C,D	2-98	0 - 600°F	Will Comply
				RHR-TR-131	2-99		Mild Environment
				SW-TE-94A,B	2-100	0 - 600°F	Will Comply
				RHR-TR-131	2-101		Mild Environment
Cooling Water System							
Cooling Water Temperature to ESF System Components	40°F to 200°F	D-2	To Monitor Operation	SW-TE-388A,B (REC Hx Outlet)	2-102	0°F - 150°F	Not Qualified
				SW-TE-390A,B (RHR Hx Inlet)	2-103	0°F - 150°F	Not Qualified
				SW-TE-387A,B (REC Hx Inlet)	2-104	0°F - 150°F	Not Qualified

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Cooling Water Flow to ESF System Components	0 - 110% Design Flow	D-2	To Monitor Operation	SW-FT-97A,B (RHR Hx)	2-105	0 - 10,000 GPM	Will Comply
				RHR-ES-145A,B	2-106		Mild Environment
				SW-SQRT-132A,B	2-107		Mild Environment
				SW-FI-132A,B	2-108		Mild Environment
				SW-FT-387A,B (REC Hx)	2-109	0 - 8000 GPM	Will Comply
				SW-SQRT-387A,B	2-110		Mild Environment
				SW-FT-387A,B	2-111		Mild Environment
				REC-ES-10(A)	2-112		Mild Environment
				REC-ES-9(B)	2-113		Mild Environment
Radwaste Systems							
High Radioactivity Liquid Tank Level	Top to Bottom	D-3	To Monitor Operation	RW-LT-420 (FLR DRN COLL TK)	3-20	0 - 100%	N/A
				RW-LT-369 (WASTE COLL TK)	3-21	0 - 100%	N/A
Containment Radiation							
Primary Containment Area Radiation High Range	1 R/hr to 10^7 R/hr	E-1	Detection of Significant Releases; Release Assessment; Long-Term Surveillance Emergency Plan Actuation	RMA-RE-40A,B	1-148	1 R/hr to 10^7 R/hr	Not Qualified
				RMA-RM-40A,B	1-149		Mild Environment
				RMA-RR-40	1-150		Mild Environment
Secondary Containment Area Radiation High Range	10^{-1} R/hr to 10^4 R/hr for Mark I Containments	E-2	Detection of Significant Releases; Release Assessment; Long-Term Surveillance	Fuel Pool Area-		10^{-1} R/hr to 10^3 R/hr	
				RMA-RE-1	2-114		Not Qualified
				RMA-RM-AU1	2-115		Not Qualified
				RMA-RA-1	2-116		Mild Environment
				HPCI Room-		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-10	2-117		Not Qualified
				RMA-RA-10	2-118		Mild Environment
				RHR SW QUAD		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-11	2-119		Not Qualified
				RMA-RM-AU11	2-120		Not Qualified
				RMA-RA-11	2-121		Mild Environment
				RHR NW QUAD		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-12	2-122		Not Qualified
				RMA-RM-AU12	2-123		Not Qualified
				RMA-RA-12	2-124		Mild Environment
				RCIC RM		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-13	2-125		Not Qualified
				RMA-RA-13	2-126		Mild Environment
				CS SE RM		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-14	2-127		Not Qualified
				RMA-RM-AU14	2-128		Not Qualified
				RMA-RA-14	2-129		Mild Environment
Area Radiation							
Radiation Exposure Rate	10^{-1} R/hr to 10^4 R/hr	E-2	Detection of Significant Releases; Release Assessment, Long-Term Surveillance	Same List as Above		Same List as Above	Same List as Above

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Airborne Radioactive Materials Released from Plant							
Noble Gases and Vent Flow Rate Drywell Purge, Standby Gas Treatment System Purge	10^{-6} uCi/cc to 10^{5} uCi/cc 0 - 110% Vent Design Flow (DF=6035 cfm)	E-2 C-3	Detection of Significant Releases, Release Assessment	ERP Hi-range Effluent Monitor RMP-RM-3A,B	2-130	10^{-7} uCi/cc to $1x10^{5}$ uCi/cc	Mild Environment
				OG-FIT-4001	2-131		Mild Environment
				HV-FR-4000	2-132	0-10,000 cfm	Mild Environment
Auxiliary Building	10^{-6} uCi/cc to 10^{3} uCi/cc 0 - 110% Vent Design Flow (DF=152,130)	E-2 C-3	Detection of Significant Releases, Release Assessment	T-G Hi-range Effluent Monitor RMV-RM-20A,B	2-133	10^{-7} uCi/cc to $1x10^{5}$ uCi/cc	Mild Environment
				HV-FT-4002A,B,C,D	2-134		Mild Environment
				HV-SQRT-4002A,B,C,D	2-135		Mild Environment
				HV-SUM-4002	2-136		Mild Environment
				HV-FR-4000	2-137	0-250,000 cfm	Mild Environment
Auxiliary Building	10^{-6} uCi/cc to 10^{3} uCi/cc 0 - 110% Vent Design Flow (DF=66,870)	E-2 C-3	Detection of Significant Releases, Release Assessment	RW Hi-range Effluent Monitor RMV-RM-30A,B	2-138	10^{-7} uCi/cc to $1-10^{5}$ uCi/cc	Mild Environment
				HV-FT-4004	2-139		Mild Environment
				HV-SQRT-4004	2-140		Mild Environment
				HV-FRDPR-4003	2-141	0-81,600 cfm	Mild Environment
Common Plant Vent	10^{-6} uCi/cc to 10^{3} uCi/cc 0 - 110% Design Flow (DF=6035)	E-2 C-3	Detection of Significant Releases, Release Assessment	ERP Hi-range Effluent Monitor RMP-RM-3A,B	2-142	10^{-7} uCi/cc to 10^{5} uCi/cc	Mild Environment
				OG-FIT-4001	2-143		Mild Environment
				HV-FR-4000	2-144	0-10,000 cfm	Mild Environment
Particulates and Halogens Common Plant Vent	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=6035)	E-3	Detection of Significant Releases, Release Assessment; Long-Term Surveillance	ERP Hi-range Effluent Monitor RMP-RM-3A,B	3-22	10^{-4} uCi/cc to $1x10^{2}$ uCi/cc	N/A
				OG-FIT-4001	3-23		N/A
				HV-FR-4000	3-24	0-10,000 cfm	N/A
Auxiliary Building	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=152,130)	E-3	Detection of Significant Releases; Release Assessment; Long-Term Surveillance	T-G Hi-range Effluent Monitor RMV-RM-20A,B	3-25	10^{-4} uCi/cc to 10^{2} uCi/cc	N/A
				HV-FT-4002,A,B,C,D	3-26		N/A
				HV-SQRT-4002A,B,C,D	3-27		N/A
				HV-SUM-4002	3-28		N/A
				HV-FR-4000	3-29	0-250,000 cfm	N/A
Auxiliary Building	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=66,870)	E-3	Detection of Significant Releases; Release Assessment; Long-Term	RW Hi-range Effluent Monitor RMV-RM-30A,B	3-30	10^{-4} uCi/cc to 10^{2} uCi/cc	N/A
				HV-FT-4004	3-31		N/A
				HV-SQRT-4004	3-32		N/A
				HV-FRDPR-4003	3-33	0-81,6000 cfm	N/A
Auxiliary Building	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=15,000 cfm)	E-3	Detection of Significant Releases; Release Assessment; Long-Term	MPF Hi-range Effluent Monitor RMV-RM-10	3-34	10^{-12} to 10^{-6} uCi/cc Particulate Monitor with Onsite Analysis to 10^{2} uCi/cc	N/A
				RMV-FT-4006	3-35		N/A
				RMV-ES-4006	3-36		N/A
				RMV-SQRT-4006	3-37		N/A
				RMV-FR-4006	3-38	0-20,000 cfm	N/A

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ STATUS
Environs Radiation and Radioactivity							
Airborne Radiohalogens and Particulates (portable sampling with onsite analysis capability)	10^{-9} uCi/cc to 10^{-3} uCi/cc	E-3	Release assessment; analysis	HP-1	3-39	10^{-9} uCi/cc to 10^{-3} uCi/cc	N/A
Plant and Environs Radiation (portable instrumentation)	10^{-3} R/hr to 10^{4} R/hr, photons 10^{-3} rads/hr to 10^{4} rads/hr, beta radiations and low-energy photons	E-3 E-3	Release assessment; analysis	HP-2 HP-3	3-40	10^{-3}R/hr to 10^{3}R/hr Gamma, 10^{-3} rads/hr to 200 rads/hr Beta	N/A
Plant and Environs Radioactivity (portable instrumentation)	(Isotopic Analysis)	E-3	Release assessment; analysis	None	3-42	Iodine Analysis	N/A
Meteorology							
Wind Direction	0 to 360° (±5° accuracy with a deflection of 10°). Starting speed less than 0.4 mps (1.0 mph). Damping ratio greater than or equal to 0.4, delay distance less than or equal to 2 meters.	E-3	Release assessment	Met 003 Met 011 Met 019	3-43	0-540° ± 3° threshold 0.58 mph damping 0.4 at 1.13 meters	N/A
Wind Speed	0 to 22 mps (50 mph). ±2 mps (0.5) mph) accuracy for speeds less than 2 mps (5 mph), 10% for speeds in excess of 2 mps (5 mph), with a starting threshold of less than 0.4 mps (1.0 mph) and a distance constant not to exceed 2 meters.	E-3	Release assessment	Met 002 Met 010 Met 018	3-44	0-100 mph acc. ±0.15 mph or 1% threshold 0.6 mph, dist. const. equals 1.5 meters	N/A
Estimation of Atmospheric Stability	Based on vertical temperature difference from primary meteorological system, 5°C to 10°C (-9°F to 18°F) and ±0.15°C accuracy per 50-meter intervals (±0.3°F accuracy per 164-foot intervals) or analogous range for alternative stability estimates.	E-3	Release assessment	Met-005 Met-013 Met-021	3-45	-30 to +50°C ±5% not to exceed 0.15°C	N/A
Accident Sampling Capability (Analysis Capability On Site)							
Primary Coolant and Sump	Grab Sample	E-3	Release assessment; verification; analysis	PASS	3-46		N/A
Gross Activity	1 uCi/ml to 10 Ci/ml					1 uCi/ml to 10 Ci/ml	
Gamma Spectrum	(Isotopic Analysis)					Istopic Analysis	
Boron Content	0 to 1000 ppm					0 to 15 ppm (dilutable)	
Chloride Content	0 to 20 ppm					10 ppb to 10 ppm (dilutable)	
Dissolved Hydrogen or Total Gas	0 to 2000 cc(STP)/kg					Not available-calculated	
Dissolved Oxygen	0 to 20 ppm					10 ppb to 1 ppm (dilutable)	
pH	1 to 13					1 to 14 (online)	

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	CODE CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Containment Air	Grab Sample	E-3	Release assessment; verification; analysis	PASS	3-47		N/A
Gamma Spectrum	(Isotopic analysis)					Isotopic Analysis	

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-1	A	B	Yes[a]	RPS	Indicators	SRM Alarm Only	SRM Alarm Only	Yes	No Action Necessary	Will implement as Category 3. SRM's indicate 3 counts per second which meets the lower flux requirement of R.G. 1.97.
3-1	N/A	B	N/A	RPS	Indicators	Yes	Yes	Yes	No Action Necessary	None
3-2	N/A	C	N/A	LPRW2A	None	No	No	No	No Action Necessary	None
1-2	A	B	Yes[c]	EE-PNL-CPP(2)	Indicator	Yes	Yes	Yes	Integrate with CRDR HED's 18T, 13I, 14I and 15I. Implement in accordance with NPPD's response to Generic Letter 84-23. Implement during the 1987 outage.[9]	Water level instrumentation below the 2/3 core coverage is not necessary for post accident monitoring at Cooper Nuclear Station. Vessel design provides for a minimum 2/3 core coverage so instrumentation below that level is not needed. It is NPPD's position that the existing instrumentation, which provides indication to 30.6 percent of core coverage, meets with the intent of R.G. 1.97. NPPD will supply only one qualified channel for the upper water range, from +60 inches to the center of the steam line at +123.25 inches. In order to comply with the single failure requirement of R.G. 1.97, an additional penetration would be needed for a redundant reference column for the upper range. There are no manual or automatic functions initiated in the upper 63.25 inches, these functions occur in the range monitored by redundant channels. Thus, it is NPPD's position that single channel indication for the range from +60 inches to the center of the steam line meets the intent of the Regulatory Guide and the addition of a redundant channel would result in only a marginal improvement in plant safety.
1-3	None	None	Yes[c]	EE-PNL-CPP(2)						
1-4	None	None	Yes[c]	EE-PNL-CPP(2)						
1-5	A	B	No	NBI-ES-88	Indicator	Yes	Yes	Yes		
1-6	A	B	No	EE-PNL-CPP						
1-7	A	B	Yes[a]	IE-RPS	Indicator	Yes	Yes	Yes		
1-8	A	B	Yes[a]							
	N/A	N/A	N/A	N/A	N/A	No	No	No		Will not implement. Reference BWROG Position, Appendix A.

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-9	None[6]	A	Yes[a]	1E (RPS)	Indicators and Recorders Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	None
1-10	None[5]	A								
1-11	None[5]	A								
1-12	None[5]	A								
1-13	B[6]	B[7]	Yes[c]	EE-PNL-CCP1B(1)	Recorder One Channel - Indicator Both Channels	Yes	Yes	Yes	Modifications scheduled for completeion before the end of the 1984-85 outage	None
1-14	B[5]	B								
1-15	B[5]	B								
1-16	None[6]	A	Yes[a]	1E (RPS)	Indicators and Recorders Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	
1-17	None[5]	A								
1-18	None[5]	A								
1-19	None[5]	A								
1-20						Yes	Yes	Yes	Integrate with CRDR HED 631 Implement during 1987 outage.[9]	Will implement as Category 3. Reference BWROG Position, Issue 4.
1-21	B[6]	B[7]	Yes[c]	EE-PNL-CCP1B(1)	Recorder One Channel - Indicator Both Channels	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage	None
1-22	B[5]	B								
1-23	B[5]	B								
1-24	None[6]	A	Yes[a]	1E (RPS)	Indicators and Recorders Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	
1-25	None[5]	A								
1-26	None[5]	A								
1-27	None[5]	A								
1-28	B[6]	B[7]	No	EE-PNL-CCP(14)	Recorder Single Channel	Yes	Yes	Yes	Integrate with CRDR HED 191. Implement during 1986 outage.[8]	
1-29	B	B	No							None
1-30	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-31	None	B								
1-32	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-33	None	B								
1-34	B	B	No[d]	EE-PNL-CCP1A(9)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-35	None	B								
1-36	B	B	No[d]	EE-PNL-CCP1A(9)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-37	None	B								

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-38	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-39	None	B								
1-40	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-41	None	B								
1-42	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-43	None	B								
1-44	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2B)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-45	None	B								
1-46	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-47	None	B								
1-48	None[5]	B	Yes[a]	EE-PNL-RPSPP1A(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-49	None	B								
1-50	None[5]	B	Yes[a]	EE-PNL-RPSPP1B(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-51	None	B								
1-52	None[5]	B	Yes[a]	EE-PNL-RPSPP1A(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-53	None	B								
1-54	None[5]	B	Yes[a]	EE-PNL-RPSPP1B(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-55	None	B								
1-56	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-57	None	B								
1-58	None[5]	B	Yes[a]	EE-AA2(15)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-59	None	B								
1-60	None[5]	B	Yes[a]	EE-BB2(9)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-61	None	B								
1-62	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(4C)	Indicator Lights	Yes	Yes	Yes[a]	No Action Necessary	Implement Indicating Lights as Category 3
1-63	None	B								
1-64	Operator Qualified to 6 g's	B	Yes[a]	EE-STR-125RX	Indicator Lights	Yes	Yes	Yes[a]	No Action Necessary	Implement Indicating Lights as Category 3
1-65	None	B								
1-66	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(5A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-67	None	B								
1-68	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR HPCI	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-69	None	B								
1-70	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-Y(10B)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-71	None	B								

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-72	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR RCIC	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-73	None	B								
1-74	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-K(4C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-75	None	None								
1-76	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-M(5B)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-77	None	None								
1-78	Operator Qualified to 6 g's	A	Yes[a]	MCC-R(5C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-79	None	B								
1-80	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR(958')	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-81	None	B								
1-82	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR(859')	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-83	None	B								
1-84	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(7A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-85	None	B								
1-86	Operator Qualified to 6 g's	A	Yes[b]	EE-STR-250 DIV I	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-87	None	B								
1-88	Operator Qualified to 6 g's	A	Yes[b]	EE-STR-250 DIV II	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-89	None	B								
1-90	Operator Qualified to 6 g's	B	Yes[b]	EE-MCC-CA(3E)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-91	None	B								
1-92	Operator Qualified to 6 g's	B	Yes[b]	EE-MCC-RB(8C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-93	None	B								
1-94	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Q(6A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-95	None	B								
1-96	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Y(5C)	Indicator Lights	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	Implement Indicating Lights as Category 3
1-97	None	B								
1-98	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Q(5D)	Indicator Lights	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	Implement Indicating Lights as Category 3
1-99	None	B								
1-100	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Y(5B)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-101	None	B								
1-102	B[6]	B[7]	Yes[a]	EE-PNL-CCP1B(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-103	None	B								
1-104	None[6]	C[7]	Yes[a]	EE-PNL-CCP1A(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3

ITEM NO.	[illegible]	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-105	None	B								
1-106	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(3B)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-107	None	B								
1-108	Operator Qualified to 6 g's	B	Yes[a]	EE-PNL-BB3(3)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-109	None	B								
1-110	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CB(3A)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-111	None	None								
1-112	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CA(1)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-113	None	None								
1-114	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CB(1)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-115	None	None								
1-116	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CA(2A)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-117	None	None								
1-118	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CB(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-119	None	None								
1-120	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CA(2B)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-121	None	None								
1-122	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CA(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-123	None	None								
1-124	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CB(3)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-125	None	None								
1-126	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CA(3)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-127	None	None								
1-128	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CB(3C)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-129	None	None								

ITEM NO.	SECONDARY SOURCE	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO PMIS[4]	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-3	N/A	A	N/A	EE-PNL-CCP1A(19)	Common	Yes	Yes	Yes	No Action Necessary	None
3-4	N/A			9-2	Recorder					
3-5	N/A			Both Trains						
3-6	N/A									
1-130						Yes	Yes	Yes	Integrate with CRDR HED 63T Implement during the 1987 outage.[9]	Will implement as Category 3. See BWROG Position, Issue 4.
1-131	None[6]	A	Yes[8]	1E (MrS)	Recorder and	Yes	Yes	Yes	Modification scheduled for 1986 outage[8]	None
1-132	None[5]	A			Indicator -					
1-133	None[5]	A			Both Channels					
1-134	None[5]	A								
1-135	None[6]	A	Yes[8]	1E (RPS)	Recorder and	Yes	Yes	Yes	Modification scheduled for 1986 outage[8]	None
1-136	None[5]	A			Indicator -					
1-137	None[5]	A			Both Channels					
1-138	None[5]	A								
			N/A	480 VAC from PPQB1	Recorder and	Yes	Yes	Yes	No Action Necessary	None
				120 VAC from	Indicator -					
2-1	N/A	C		LLPQB1	Single Channel					
2-2	N/A	C								
1-139	None	A	No	CP-CAD-1A	Recorder -	No	No	No	No Action Necessary	Will not implement as Reg Guide 1.97 variable. Ref. NPPD 10CFR50.44 exemption request to hydrogen recombiner rule for inerted containments.
1-140	B	B	No	CP-CAD-1A	Both Channels	No	No	Yes		
1-141	B	B								
1-142	B	B								
1-143	B	B	No	EE-PNL-CCP1A(9)	Recorder -	Yes	Yes	Yes	Integrate with CRDR HED'S 52T and 53T Implement during the 1998 outage.[10]	Will implement as Category 2.
1-144	B	B			Both Channels					

ITEM NO.	[illegible]	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT ID[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-7	N/A	C	N/A	EE-PNL-NBPP(4)	Indicator -	Yes	Yes	Yes	No Action Necessary	None
3-8	N/A	C		EE-PNL-AA2(2)	Both Channels					
3-9	N/A	C			Recorder -					
3-10	N/A	C			Single Channel					
3-11	N/A	C	N/A	EE-PNL-CCP1A(16)	Indicator -	Yes	Yes	Yes	No Action Necessary	None
3-12	N/A				Single Channel					
3-13	N/A	C								
3-14	N/A	C								
3-15	N/A	C	N/A	EE-PNL-PPCK1	Indicator -	Yes	Yes	Yes[a]	No Action Necessary	None
3-16	N/A	C		EE-PNL-CCP1B	Single Channel					
3-17	N/A	C	N/A	EE-PNL-CCP1B(12)	Indicator -	Yes	Yes	Yes	No Action Necessary	None
3-18	N/A	C			Both Channels					
3-19	N/A	C								
1-45	None	C	No	LPRM-2A	None	No	No	No	No Action Necessary	Implemented as Category 3. See BWROG Position, Issue 5.
2-3	N/A	B	Yes[a]	EE-PNL-CCP1B(16)	Indicator Lights	Yes	Yes	Yes[a]	No Action Necessary	Implement as Category 3
2-4	N/A	B								
2-5	N/A	B	Yes[a]	EE-MCC-RA	Indicator Lights	Yes	Yes	Yes[a]		
2-6	N/A	B								
2-7	N/A	B	Yes[a]	EE-PNL-CCP1B(16)	Indicator Lights	Yes	Yes	Yes[a]		
2-8	N/A	B								
2-9	N/A	B	Yes[a]	EE-PNL-RA	Indicator Lights	Yes	Yes	Yes[a]		
2-10	N/A	B								
2-11	N/A	B	Yes[a]	EE-PNL-RA	Indicator Lights	Yes	Yes	Yes[a]		
2-12	N/A	B								
2-13	N/A	B	Yes[a]	EE-PNL-CCP1B(16)	Indicator Lights	Yes	Yes	Yes[a]		
2-14	N/A	B								

ITEM NO.	NUREG 0737	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] ERDS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-15	N/A	B	Yes[a]	DG1 & DG2	Indicators -	Yes	Yes	Yes[a]	No Action Necessary	None
2-16	N/A	B	Yes[a]	PT'S & CT's	Both Channels	Yes	Yes	Yes[a]		
2-17	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-18	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-19	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-20	N/A	B								
2-21	N/A	B								
2-22	N/A	B								
2-23	N/A	B								
2-24	N/A	B								
2-25	N/A	B								
2-26	N/A	B								
2-27	N/A	B								
2-28	N/A	B								
2-29	N/A	B								
2-30	N/A	B								
2-31	N/A	B								
2-32	N/A	B	No	ES-ES-1		No	No	No		
2-33	N/A	B								
2-34	N/A	B								
2-35	N/A	B	N/A	250 VDC Batt. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-36	N/A	B	N/A	250 VDC BUS 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-37	N/A	B	N/A	250 VDC CHG. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-38	N/A	B	N/A	250 VDC Batt. 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-39	N/A	B	N/A	250 VDC CHG. 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-40	N/A	B	N/A	250 VDC BUS 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-41	N/A	B	N/A	125 VDC Batt. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-42	N/A	B	N/A	125 VDC CHG. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-43	N/A	B	N/A	125 VDC BUS 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-44	N/A	B	N/A	125 VDC 1B Batt.	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-45	N/A	B	N/A	125 VDC 1B CHG.	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-46	N/A	B	N/A	125 VDC BUS 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-47										Will not implement as Status can be derived from other sources.

ITEM NO.	SECTION 57	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-48	N/A	N/A	N/A	N/A	N/A	No	No	No	No Action Necessary	Will not implement. Reference BWROG Position, Issue 7.
2-49	N/A	B	N/A	EE-PNL-CCP1A(9)	Recorder - Single Channel	Yes	Yes	Yes	Modifications scheduled for completion before the end of 1984-85 outage.	None
2-50	N/A	B								
2-51	N/A	B	N/A	EE-PNL-CCP1B(1)	Recorders - Single Channel	Yes	Yes	Yes	Modifications scheduled for completion before the end of 1984-85 outage.	None
2-52	N/A	B								
2-53	N/A	B								
2-54	N/A	B	N/A	NE (RPS)	Recorders -	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	None
2-55	N/A	B								
2-56	N/A	B								
2-57	N/A	B								
2-58	N/A	A	N/A	NE (RPS)	Recorders - Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	None
2-59	N/A	A								
2-60	N/A	A								
2-61	N/A	A								
1-146	None	A	Yes[6]	NE (RPS)	Common Recorder	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	Implement as category 2 as other instruments are available for SRV position.
1-147	B	B	No	EE-PNL-CCP1A						
2-62	N/A	B[7]	N/A	EE-PNL-CCP1A(16)	Indicator - Single Channel	Yes	Yes	Yes	Modifications scheduled for completion before end of 1984-85 outage.	Will not implement expanded range. Max LOCA temperature equals 340° F.
2-63	N/A	B								
2-64	N/A	B								
2-65	N/A	B[7]	N/A	EE-PNL-CCP1A(16)	Indicator - Single Channel	Yes	Yes	Yes[9]	Modifications scheduled for completion before end of 1984-85 outage.	Will not implement expanded range. Max LOCA temperature equals 340° F.
2-66	N/A	B								
2-67	N/A	B								
2-68									No Action Necessary	Will not implement. Reference BWROG Position, Issue 7.
2-69									No Action Necessary	Not applicable to CNS.
2-70	N/A	B	N/A	E-PNL-AA2(6)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	None
2-71	N/A	B[7]	N/A	E-PNL-CPP	Recorded - Single Channel	Yes	Yes	Yes	Modification scheduled for 1986 outage.[8]	
2-72	N/A	B[7]	N/A	E-PNL-CPP	Computer Pt.	Yes	Yes	Yes	Modifications scheduled for completion before end of 1984-85 outage.	
2-73	N/A	B	N/A							
2-74	*								No Action Necessary	Not applicable to CNS.
2-75									No Action Necessary	Not applicable to CNS.

ITEM NO.	SEISM STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO PMIS[4]	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-76	N/A	B[7]	N/A	EE-PNL-NBPP(19)	Indicator -	Yes	Yes	Yes	Modifications scheduled for completion	None
2-77	N/A	B	N/A	9-4(13A-F14)	Single Channel				before the end of the 1984-85 outage.	
2-78	N/A	B	N/A							
2-79	N/A	B[7]	N/A	EE-PNL-BB2(18)	Indicator -	Yes	Yes	Yes	Modifications scheduled for completion	None
2-80	N/A	B	N/A	9-4(13A-F25 &	Single Channel				before the end of the 1984-85 outage.	
2-81	N/A	B	N/A	23A-F26)						
2-82	N/A	B	N/A							
2-83	N/A	B[7]	N/A	EE-PNL-CC1A(3)	Indicators -	Yes	Yes	Yes	Modifications scheduled for completion	None
2-84	N/A	B	N/A	9-19(14-F52AV)	Double Channel				before the end of the 1984-85 outage.	
2-85	N/A	B	N/A	EE-PNL-CPP(9)						
				9-18(14A-F3)						
2-86	N/A	B[7]	N/A	EE-PNL-CCP1A(3)	Indicator -	Yes	Yes	Yes	Modifications scheduled for completion	None
2-87	N/A	B	N/A	9-18(14A-F16A)	Double Channel				before the end of the 1984-85 outage.	
2-88	N/A	B	N/A	EE-PNL-CCP1B(3)						
2-89	N/A	B	N/A	9-18(10A-F16B)						
2-90									Integrate with CPDR HED'S 171 and 237, AWTS and EOP'S if required.	None
2-91	N/A	B	N/A	EE-PNL-CPP(9)	Indicator -	Yes	Yes	Yes	No Action Necessary	Will implement as Category 3. Reference BWROG Position, Issue 10. Final ATWS rule implementation may require re-evaluation.
2-92	N/A	B	N/A	(11A-F2)	Single Channel					
2-93	N/A	B	N/A							
2-94	N/A	B[7]	N/A	EE-PNL-CCP1A(3)	Indicators -	Yes	Yes	Yes	Modifications scheduled for completion	None
2-95	N/A	B	N/A	EE-PNL-CCP1B(3)	Double Channels				before the end of the 1984-85 outage.	
2-96	N/A	B	N/A							
2-97	N/A	B	N/A							
2-98	N/A	B[7]	N/A	EE-PNL-CCP(4)	Common	Yes	Yes	Yes[8]	Modifications scheduled for comp-	None
2-99	N/A	B	N/A		Recorder				letion during 1986 refueling outage[8]	
2-100	N/A	B[7]	N/A	EE-PNL-CCP(4)	Common	Yes	Yes	Yes[8]	Modifications scheduled for comp-	None
2-101	N/A	B	N/A		Recorder				letion during 1986 refueling outage[8]	
2-102	N/A	B	N/A		Computer Pts	Yes	Yes	Yes	Will extend range during 1986 refueling outage[8]	Will install as category 3 as output is to PMIS only.
2-103	N/A	B	N/A		Computer Pts	Yes	Yes	Yes	Will extend range during 1986 refueling outage[8]	Will install as category 3 as output is to PMIS only.
2-104	N/A	B	N/A		Computer Pts	Yes	Yes	Yes	Will extend range during 1986 refueling outage[8]	Will install as category 3 as output is to PMIS only.

ITEM NO.	SKETCH STA.	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO PMIS[4]	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-105	N/A	B[7]	N/A	EE-PNL-CCP1A(3)		Yes	Yes	Yes[8]	Modifications scheduled for completion before the end of the 1984- 85 outage.	None
2-106	N/A	B	N/A	EE-PNL-CCP1B(3)						
2-107	N/A	B	N/A							
2-108	N/A	B	N/A							
2-109	N/A	B[7]	N/A	EE-PNL-CCP1A(20)		Yes	Yes	Yes[8]	Mocifications scheduled for 1986 outage[8]	None
2-110	N/A	B	N/A	EE-PNL-CCP1B(17)						
2-111	N/A	B	N/A							
2-112	N/A	B	N/A							
2-113	N/A	B	N/A							
3-20	N/A	None	N/A	EE-PNL-NBPP(5) 25-17-(20A-F1)	Radwaste C.R. Only	No	No	No	No Action Necessary	No direct indication in Control Room. Monitored every two hours by Operations Personnel.
3-21	N/A	None	N/A	EE-PNL-NBPP(5) 25-17-(20A-F1)						
1-148	None	A	Yes[8]	EE-PNL-RPSPP1A	Common Recorder	Yes	Yes	Yes	No Action Necessary	Implement as Catagory 3.
1-149	None	A		EE-PNL-RPSPP1B						
1-150	None	A	No	EE-PNL-CCP1A(19)						
			N/A		Indicator -	Yes	Yes	Yes	No Action Necessary	Will not implement as a Reg. Guide 1.97 parameter. Reference BWROG Position, Issue 12.
2-114	N/A	B		EE-PNL-CPP(5)	Single Channel					
2-115	N/A	B		EE-PNL-CPP(5)						
2-116	N/A	B		EE-PNL-CPP(5)						
			N/A		Indicator -	Yes	Yes	Yes	No Action Necessary	See Above
2-117	N/A	B		EE-PNL-CPP(5)	Single Channel					
2-118	N/A	B		EE-PNL-CPP(5)						
			N/A		Indicator -	Yes	Yes	Yes	No Action Necessary	See Above
2-119	N/A	B		EE-PNL-CPP(5)	single Channel					
2-120	N/A	B		EE-PNL-CPP(5)						
2-121	N/A	B		EE-PNL-CPP(5)						
			N/A		Indicator -	Yes	Yes	Yes	No Action Necessary	See Above
2-122	N/A	B		EE-PNL-CPP(5)	Single Channel					
2-123	N/A	B		EE-PNL-CPP(5)						
2-124	N/A	B		EE-PNL-CPP(5)						
			N/A		Indicator -	Yes	Yes	Yes	No Action Necessary	See Above
2-125	N/A	B		EE-PNL-CPP(5)	Single Channel					
2-126	N/A	B		EE-PNL-CPP(5)						
			N/A		Indicator -	Yes	Yes	Yes	No Action Necessary	See Above
2-127	N/A	B		EE-PNL-CPP(5)	Single Channel					
2-128	N/A	B		EE-PNL-CPP(5)						
2-129	N/A	B		EE-PNL-CPP(5)						
									See Above	See Above

ITEM NO.	SEISMIC STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-130	N/A	C	N/A	480 VAC from PPGB1 120 VAC from LPGB1	Indicator and Recorder -	Yes	Yes	Yes	No Action Necessary	None
2-131	N/A	C		EE-PNL-NBPP(15)	Single Channel	No	No	No	No Action Necessary	None
2-132	N/A	C								
2-133	N/A	C	N/A	480 VAC from MCC-DG1 120 VAC from CCP2B	Indicator and Recorder -	Yes	Yes	Yes	No Action Necessary	None
2-134	N/A	C		HV-ES-4002A,B	Single Channel					
2-135	N/A	C		HV-ES-4102A,B						
2-136	N/A	C								
2-137	N/A	C		EE-PNL-CPP(22)						
2-138	N/A	C	N/A	480 VAC from MCC-W 120 VAC from LPRW3	Indicator and Recorder -	Yes	Yes	Yes	No Action Necessary	None
2-139	N/A	C		HV-ES-4000	Single Channel					
2-140	N/A	C		HV-ES-4000						
2-141	N/A	C		EE-PNL-CPP(22)						
2-142	N/A	C	N/A	480 VAC from PPGB1 120 VAC from LPGB1	Indicator and Recorder -					
2-143	N/A	C		EE-PNL-NBPP(15)	Single Channel					
2-144	N/A	C								
3-22	N/A	C	N/A	480 VAC from PPGB1 120 VAC from LPGB1	None	No	No	No	No Action Necessary	None
3-23	N/A	C		EE-PNL-NBPP(15)						
3-24	N/A	C								
3-25	N/A	C	N/A	480 VAC from MCC-DG1 120 VAC from CCP2B	None	No	No	No	No Action Necessary	None
3-26	N/A	C		HV-ES-4002A,B						
3-27	N/A	C		HV-ES-4002A,B						
3-28	N/A	C								
3-29	N/A	C		EE-PNL-CPP(22)						
3-30	N/A	C	N/A	480 VAC from MCC-W 120 VAC from LPRW3	None	No	No	No	No Action Necessary	None
3-31	N/A	C		HV-ES-4000						
3-32	N/A	C		HV-ES-4000						
3-33	N/A	C		EE-PNL-CPP(22)						
3-34	N/A	C	N/A	480 VAC from PPMP2 120 VAC from PPMP1	Indicator and Recorder -	Yes	Yes	Yes[8]	No Action Necessary	None
3-35	N/A	C			Single Channel					
3-36	N/A	C		EE-PNL-CPP(22)						
3-37	N/A	C		EE-PNL-CPP(22)						
3-38	N/A	C		EE-PNL-CPP(22)						

ITEM NO.	SEISMIC STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED (1) EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-39	N/A	C	N/A	Portable-N/A	No	No	No	No	No Action Necessary	None
3-40	N/A	C	N/A	Portable-N/A	No	No	No	No	No Action Necessary	Existing equipment range is satisfactory.
3-42	N/A	C	N/A	Portable-N/A	No	No	No	No	No Action Necessary	None
3-43	N/A	C	N/A	Normal-Offsite Emergency-MCC-L	SPDS	Yes	Yes	Yes	Installed	None
3-44	N/A	C	N/A	Normal-Offsite Emergency-MCC-L	SPDS	Yes	Yes	Yes	Installed	None
3-45	N/A	C	N/A	Normal-Offsite Emergency-MCC-L	SPDS	Yes	Yes	Yes	Installed	None
3-46	N/A	C	N/A	EE-PNL-LPRW2	No	No	No	No	Installed	Implement as Category 3 for primary coolant sampling only. Sump sample not implemented. Reference BWROG Position, Issue 14. Post Accident Sampling System (PASS) approved as per NUREG-0737 item II, B3.

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-47	N/A	C	N/A	EE-PNL-LPRM2	No	No	No	No	Installed	None

[1]Seismic Status
A - Original Plant Criteria furnished by GE
B - Original Plant Criteria BOP

[2]QA Status
A - 10 CFR 50 Appendix B
B - Original QA Design Criteria
C - High Quality

[3]Redundant Channel
a - All redundant or diverse channels are electrically independent and are physically separated from each other although they do not always meet with the minimum separation distances as specified in Reg. Guide 1.75.
b - Although supplied by one division, one channel is supplied by a DC source and the other by an AC source.
c - Diverse circuits supplied by one division
d - Redundant valve is a check valve without indication.

[4]INPUT to PMIS
a - Will be added to PMIS during 1987

[5]No Seismic Requalification will be initiated at this time. NPPD recognizes that the NRC is establishing an explicit set of guidelines that can be used to judge the adequacy of seismic qualification of electrical equipment at operating plants and establishing guidelines for requalification of equipment whose seismic qualification was found to be inadequate (Reference Unresolved Safety Issue Task A-46).

[6]This item will be qualified to R.G. 1.100 after modifications.

[7]This item will meet 10CFR50 Appendix B after modifications.

[8]The 1986 outage is the 1st refueling after the 1984-85 outage.

[9]The 1987 outage is the 2nd refueling after the 1984-85 outage.

[10]The 1988 outage is the 3rd refueling after the 1984-85 outage.

Attachment 2

Changes to Reg. Guide 1.97 Table

Attachment 2
Changes to
Regulatory Guide 1.97 List

The following list of changes reflect the differences between our R.G. 1.97 Rev. IV and the newest Rev. V list (reference the highlighted version of Rev. 5 which is part of this attachment). Revision V will also have changes in the Range Required in R.G. 1.97 column to reflect our intent to comply with Revision 3 of R.G. 1.97, which will not be highlighted.

1. A. Redundant Channel Column - This column is changed from its former title "Redundant Status" and a footnote is added to further explain this category.

   B. Input to PMIS Column - A footnote is added to differentiate between variables that will be included in the original PMIS installation and those to be added at a future date.

2. EQ Status - The information in the EQ Status column has been clarified by use of the labels "Complies" or "Will Comply" with the following definitions.

   Complies: This item meets the EQ requirements of R.G. 1.97.

   Will Comply: This item will meet the EQ requirements of R.G. 197 after modifications have been made.

3. Add item numbers to A and B sheets for clarification.

4. Neutron Flux -

   A. The range information has been updated.

   B. A change is made to correct the power supply information.

   C. A change is made to indicate that only the SRM alarm is required for the TSC and EOF.

   D. SRM alarm has been installed.

   E. SRM's indicate three counts per second which meets the lower flux requirement of R.G. 1.97.

5. Control Rod Position -

   A. The range is expanded to include the notch position of each rod.

   B. A change is made to correct the power supply information.

   C. Input to PMIS information is upgraded to include the notch position of each rod.

   D. Changed Seismic and Redundant Channel information to Not Applicable.

Changes to
Regulatory Guide 1.97 List

6. RCS Soluble Boron Concentration -

   A. The installed range information is identified as a grab sample.

   B. Changed Seismic and Redundant Channel information to Not Applicable.

7. Coolant Level in Reactor - New reactor water level instrumentation is replacing previous instrumentation. This new instrumentation covers the range requirements of R.G. 1.97 with exception of the lower level requirement (see deviations). This instrumentation may be upgraded or new instrumentation installed to meet the requirements of R.G. 1.97 depending on the results of integration with CRDR and NPPD's response to Generic Letter 84-23 (see schedule). Regardless of the integration effort, NPPD does not plan to offer redundant indication from +60 inches to the center of the steam line (see Change 8).

8. Coolant Level in Reactor (Deviations) - It is NPPD's position that water level instrumentation below the 2/3 core coverage is not necessary for post-accident monitoring at Cooper Nuclear Station. Vessel design provides for a minimum 2/3 core coverage so instrumentation below that level is not needed. Existing instrumentation provides indication down to 30.6 percent of core coverage which is lower than the necessary 2/3 coverage. NPPD will supply only one qualified channel for the upper water range, from +60 inches to the center of the steam line at +123.25 inches. In order to comply with the single failure requirement of R.G. 1.97, an additional penetration would be needed for a redundant reference column for the upper range. There are no manual or automatic functions initiated in the upper 63.25 inches. These functions occur in the range monitored by redundant channels.

   Thus, it is NPPD's position that single-channel indication for the range from +60 inches to the center of the steam line meets the intent of the Regulatory Guide, and the addition of a redundant channel would result in only a marginal improvement in plant safety.

9. RCS Pressure (NB1-PT-6A,B) -

   A. Previous information on Seismic and QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel, i.e. transmitters. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

   B. The modifications planned for the 1984-85 outage which include Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and installation of the Plant Management Information System are too numerous to include this change. Qualified pressure transmitters will be installed during the 1986 outage.

Changes to
Regulatory Guide 1.97 List

10. Drywell Pressure (PC-PT-512A,B) -

    A. A pressure indicator that was previously omitted has been added.

    B. Previous information on Seismic and QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel, i.e. transmitters. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    C. The power supply information is updated.

11. Drywell Pressure (PC-PT-4A1,4B2) - The modifications planned for the 1984-85 outage which include Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Qualified pressure transmitters will be installed during the 1986 outage.

12. Drywell Sump Level - This will be integrated with CRDR 63T. Installation is currently scheduled for the second refueling (1987).

13. Primary Containment Pressure -

    A. A pressure indication that was previously omitted is added.

    B. Previous information on Seismic and QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel, i.e. transmitters. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    C. The power supply information is updated.

    D. PC-PT-4A1,AB2 and PC-PT-20 instrument loops are added to the list.

14. Primary Containment Isolation Valve Position - All valves have the indicating light information added.

    A. PC-AO-244AV-L.S. - This valve is parallel to Valve PC-AO-243AV which is on on the list. As such it is an addition to the list.

    B. PC-AO-245AV-L.S. - This valve is an isolation valve on the Suppression Pool Purge and Vent Line that was previously omitted from the list. As such it is an addition to the list.

    C. PC-AO-235AV-L.S. - This valve is isolated from the suppression pool by PC-MO-233MV and PC-AO-237AV which are already on the list. This valve is not listed in the Technical Specification Table 3.7.1 as a primary containment valve; it received no automatic actuation signals and provides no safety function. As such it is removed from the list.

Changes to
Regulatory Guide 1.97 List

D. PC-AO-236AV-L.S. - This valve is isolated from the drywell by PC-MO-232MV and PC-AO-238AV which are on the list. This valve is not listed in the Technical Specifications Table 3.7.1 as a primary containment valve; it recevies no automatic actuation signal and provides no safety function. As such it is removed from the list.

E. RW-AO-A094-L.S., RW-AO-A095-L.S., RW-AO-A082-L.S., RW-AO-A083-L.S. - The CIC number on these valves have been updated. They were formerly identified as RW-AO-732-L.S., RW-AO-733-L.S., RW-AO-765-L.S., and RW-AO-766-L.S.

F. The seismic status for these limit switches is corrected.

G. MS-MO-M074, MS-MO-M077 - These variables will be added to PMIS in 1987.

H. RCIC-MO-M015 - The scheduled date for completion of modifications is added.

I. RCIC-MO-M016 - This motor operator is qualified and the EQ-Status is changed to reflect its condition.

J. RHR-MO-M025A, RHR-MO-M025B, RHR-MO-M027A, RHR-MO-M027B, CS-MO-M012A, CS-MO-M012B, CS-MO-M011A, CS-MO-M011B - These valves are isolation valves that were omitted from the original list and are added to this revised list.

K. RHR-MO-M017, RHR-MO-M018, RHR-MO-M057, RHR-MO-M067, RR-AO-740AV-L.S., RR-AO-741AV-L.S., ACAD-MO-M01301, ACAD-MO-M01302, ACAD-MO-M01303, ACAD-MO-M01304, ACAD-MO-M01305, ACAD-MO-M01306, ACAD-MO-M01308, ACAD-MO-M01310, ACAD-MO-M01311, ACAD-MO-M01312 - These valves are found in the technical Specifications Primary Containment Valve Table 3.7.1. As such they are an addition to the list.

15. Primary Containment Area Radiation -

A. CR Display - The Control Room display is via a common recorder. It was formerly identified as having a recorder for each channel.

B. The requirements that are not applicable to Category 3 items have been marked as such.

C. Schedule - The existing instrumentation meets the Category 3 requirements; thus no modification is scheduled.

16. Drywell Drain Sumps Level - The schedule has been changed to incorporate the integration effort with the Control Room Design Review.

Changes to
Regulatory Guide 1.97 List

17. Suppression Pool Water Level -

A. Previous information on Seismic and QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel, i.e. transmitters. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

B. The modifications planned for the 1984-85 outage which include Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Qualified differential pressure transmitters will be installed during the 1986 outage.

18. Primary Containment Pressure -

A. Power Supply - The power supply information is added. It was mistakenly omitted from the previous list.

B. Previous information on Seismic and QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel, i.e. transmitters. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

C. Schedule - The modifications planned for the 1984-85 outage which include Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Qualified pressure transmitters will be installed during the 1986 outage.

19. Effluent Radioactivity - Noble Gases -

A. Cooper CIC Number - The CIC number which was omitted from the previous list is added.

B. The applicable EQ, Seismic and QA Status has been included.

C. Power Supply - The Power Supply information which was omitted from the previous list is added.

20. Containment and Drywell Hydrogen Concentration -

A. The hydrogen recorders are added to the list.

B. Seismic and QA Status on the Bendix hydrogen instrument is revised.

Changes to
Regulatory Guide 1.97 List

C. Power Supply - The Power Supply information is added. It was mistakenly omitted from the previous list.

D. Required for TSC, Required for EOF - This information will not be required for the TSC and EOF (reference Deviations).

E. Input to PMIS - This information has been clarified in that only the output from the 0-10 percent hydrogen analyzer will be input to PMIS.

F. Deviations - The reference for this deviation has been changed from a BWROG Position to NPPD's 10CFR50.44 exemption request to the hydrogen recombiner rule for inert containments.

21. Containment Drywell Oxygen Concentration -

A. The EQ, Seismic, and QA Status information that was previously on the list as a typing error has been removed.

B. Schedule - There are planned modifications from the CRDR that will be implemented.

22. Main Feedwater Flow -

A. The requirements that are not applicable to Category 3 items are marked as such.

B. The Control Room display information is corrected. It had previously been identified as a computer point.

23. Condensate Storage Tank -

A. The requirements that are not applicable to Category 3 items are marked as such.

B. (CM-LT-680A, CM-LIS-8) The addition of these components to the list is due to the installation of a new condensate storage tank.

24. Radioactivity Concentration or Radiation Level in Circulating Primary Coolant - The installed range is clarified by calling it a grab sample.

25. Emergency Ventilation Damper Position -

A. EQ Status, Schedule, and Deviations - These valves remain in a mild environment in the case of a LOCA or a pipe break inside primary containment, as there are no radiation sources near to the valves. The operability of the valves is not required for a pipe break outside of primary containment. As such we will implement as Category 3.

Changes to
Regulatory Guide 1.97 List

B. These valves will be added to PMIS in 1987. The information for the TSC, EOF, and PMIS was omitted in the previous list.

C. The indicating lights which were previously omitted from the previous list are added.

D. Seismic status which is not applicable to Category 2 items is marked as such.

26. Status of Standby Power and Other Energy Sources Important to Safety -

A. Power Supply - The Power Supply information that was previously omitted from the list is added.

B. The variables that will be supplied to the TSC and the EOF via PMIS are clarified.

C. Seismic status which is not applicable to Category 2 items is marked as such.

D. The transformers that supply the indication for the Diesel Generators are added to the list.

E. The AC and DC Bus Status instrumentation are added to the list.

27. Drywell Pressure -

A. Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel, i.e. transmitters. Revision V provides the current status of all equipment.

B. PC-PT-20 and PC-PR-20 - This instrumentation channel is for suppression pool pressure which is not required under this category; thus it has been removed from the list.

C. The seismic status which is not applicable to Category 2 items is marked as such.

D. The modifications planned for the 1984-85 outage which includes Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Qualified pressure transmitters will be installed during the 1986 outage.

Changes to
Regulatory Guide 1.97 List

28. Suppression Pool Water Level - The modifications planned for the 1984-85 outage which includes Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Qualified differential pressure transmitters will be installed during the 1986 outage.

29. Suppression Pool Water Temperature -

    A. Installed Range - The range information is updated.

    B. Previous information on Seismic Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel. Revision V provides the current status of all equipment.

    C. CR Display - The temperature is input to a common recorder; not one for each channel as previously listed.

    D. PC-TR-24 - The temperature recorder which was omitted from the previous list is added.

    E. The modifications planned for the 1984-85 outage which includes Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Modifications will be made by the end of the 1986 outage.

    F. Implement as Category 2 as other instruments are available for SRV position.

30. Drywell Atmospheric Temperature -

    A. PC-RI-505A-E, PC-TI-505A-E - The R to I converter and temperature indicator which were omitted from the previous list are added.

    B. Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. This information was supplied for only part of the instrument channel. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    C. Seismic Status and redundancy requirements which are not applicable to Category 2 items are marked as such.

    D. Input to PMIS - These temperatures will be added to PMIS in 1987.

    E. Schedule - The temperature elements PC-TE-510A-E will be qualified before the end of the 1984-85 outage.

    F. Deviations - The maximum temperature produced in the drywell under LOCA conditions is 340°F; thus, a higher range of temperature indication is unnecessary.

Changes to
Regulatory Guide 1.97 List

31. Primary System Safety Relief Valve Positions, Including ADS or Pressure in Valve Lines -

    A. Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    B. Seismic status and redundancy requirements which are not applicable to Category 2 items are marked as such.

    C. Power Supply, CR Display - The Power Supply and Control Room Display information previously omitted are added.

    D. Schedule - The previous list did not have schedule information for each variable. The individual schedules are added.

    E. The computer points that were on the previous list are covered under the input to PMIS column; as such, they are deleted.

32. A. Seismic status and redundancy requirements which are not applicable to Category 2 items are marked as such.

    B. RCIC Flow - Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    C. Modifications will be completed before the end of the 1984-85 outage.

33. HPCI Flow - Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

34. Core Spray Flow - Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

35. LPCI Flow -

    A. Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    B. The Control Room display previously listed as a single channel is correctly listed as a double channel.

Changes to
Regulatory Guide 1.97 List

36. SLCS Flow - Integrate with CRDR HED's 17T and 23T, ATWS and EOP's if SLCS flow is required.

37. RHR Flow - Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

38. RHR Heat Exchanger Outlet Temperature -

    A. Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    B. Required for TSC, Required for EOF - This information which was previously left blank is added.

    C. Input to PMIS - Input to PMIS will be supplied. It was previously listed as not being at PMIS variable.

39. Cooling Water Temperature to ESF System Components -

    A. Installed Range - The range was changed to coincide with the range input to PMIS.

    B. EQ Status, Deviations - These variables will be implemented as Category 3 because the output is only to PMIS.

    C. QA Status - This information is updated.

    D. Schedule - The range will be extended to meet requirements during the 1986 refueling outage.

    E. The computer points that were previously listed are covered under the input to PMIS column; as such, they are deleted.

40. Cooling Water Flow to ESF System Components -

    A. Seismic status and redundancy requirements which are not applicable to Category 2 items are marked as such.

    B. Previous information on QA Status reflected what the equipment would be qualified to after the planned modifications. Revision V provides the current status of all equipment with notes to explain changes in status after modifications.

    C. Input to PMIS - This flow information will be added to PMIS in 1987.

Changes to
Regulatory Guide 1.97 List

D. Schedule - The modifications planned for the 1984-85 outage which include Reactor Recirculation Pipe Replacement, Equipment Qualification Upgrade, and Installation of the Plant Management Information System are too numerous to include this change. Qualified Flow Transmitters will be installed during the 1986 outage.

41. Radwaste Systems - Those requirements that are not applicable to Category 3 items are marked as such.

42. Primary Containment Area Radiation High Range -

A. The EQ and Seismic status has been modified to reflect the current status.

B. Power Supply - The power supply information is corrected.

C. CR Display - The control display is via a common recorder. It was formerly identified as having a recorder for each channel.

D. Deviations - Implement as Category 3.

43. Secondary Containment Area Radiation High Range -

A. The QA Status information is added.

B. The requirements that are not applicable to Category 2 items have been marked as such.

44. Airborne Radioactive Materials Released from Plant -

A. CIC Number - The CIC number for the effluent monitors that was previously omitted is added.

B. Flow Instrumentation - All the information included with the flow instrumentation which was previously omitted from the list is added.

C. The requirements that are not applicable to Category 2 and 3 items are marked as such.

D. QA Status - The QA status is updated.

E. CR Display - The Control Room Display information which was previously omitted from the list is added.

F. Required for TSC, Required for EOF, Input to PMIS - The Particulates and Halogens are extracted from the gas flow via filters. The filters are removed from the monitors and analyzed once a week during normal operation and as needed during addident conditions. As such, there is no input to PMIS, and the output to the TSC and EOF is not available.

G. The information on the new Effluent Monitor located in the Multi-Purpose Facility is added.

Changes to
Regulatory Guide 1.97 List

45. Environs Radiation and Radioactivity - The EQ Status which is not applicable to Category 3 items is marked as such.

46. Meteorology -

    A. CIC Number - The CIC numbers are changed to match the PMIS variable numbers.

    B. The requirements that are not applicable to Category 3 items are marked as such.

47. Accident Sampling Capability (Installed Range) -

    A. The installed range on the choride content and dissolved oxygen are clarified.

    B. The requirements that are not applicable to Category 3 items are marked as such.

48. Containment Air - The requirements that are not applicable to Category 3 items are marked as such.

49. Additional footnotes are added to explain the variables on the list.

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO. (3)	INSTALLED RANGE	EQ-STATUS (2)
Reactivity Control							
Neutron Flux	10^{-6}% to 100% Full Power (SRM, APRM)	B-1	Function Detection; Accomplishment of Mitigation	SRM's, LPRM's	1-1	10^{-8}% to 125% Full Power (4A)	Not Qualified
Control Rod Position	Full In or Not Full In	B-3	Verification	RPIS	3-1	Full In or Not Full In 0"-144" (5A)	N/A
RCS Soluble Boron Concentration (Sample)	0 to 1,000 ppm	B-3	Verification	PASS	3-2	0-1000 PPM Grab Sample (6A)	N/A
Core Cooling							
Coolant Level in Reactor	Bottom of Core Support Plate to Lesser of Top of Vessel or Centerline of Main Stream Line	A-1 B-1	Function Detection; Accomplishment of Mitigation; Long-Term Surveillance	NBI-LITS-59A,B	1-2	-150 - +60	Not Qualified
				NBI-CU-59A,B	1-3		Not Qualified
				NBI-LI-85A,B	1-4		Mild Environment
				NBI-LT-61	1-5	0 - +400"	Not Qualified
				NBI-LI-86	1-6		Mild Environment
				NBI-LITS-73A,B	1-7	-100 - +200"	Not Qualified
				NBI-LI-91A,B	1-8	(-264.2" - +35.8" When using same ref. zero as other instruments)	Mild Environment
BWR Core Thermocouples	200°F to 2300°F		To Provide Diverse Indication of Water Level	None		N/A	N/A

(7)

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Maintaining Reactor Coolant System Integrity							
RCS Pressure	0 psia to 1500 psig	A-1 B-1	Function Detection; Accomplishment of Mitigation; Verification	NBI-PI-6A,B PC-IE-3A,3B	1-9 1-10	0 - 1500 psig	Will Comply Mild Environment
		C-1		PC-SC-2A,2B NBI-PR-2A,2B	1-11 1-12		Mild Environment Mild Environment
Drywell Pressure	0 to Design Pressure (D.P. = 56 psig)	A-1 B-1	Function Detection; Accomplishment of Mitigation; Verification	PC-PI-512A,B PC-R-(PR512-LR11) PC-PI-512B	1-13 1-14 1-15	0 - 80 psia	Will Comply Mild Environment Mild Environment
				PC-PI-4A1,4B2 PC-IE-3A,3B PC-SC-3A,3B PC-PR-1A,1B	1-16 1-17 1-18 1-19	0 - 250 psia	Will Comply Mild Environment Mild Environment Mild Environment
Drywell Sump Level	Top to Bottom	B-1	Function Detection; Accomplishment of Mitigation; Verification	None	1-20	-	
Maintaining Containment Integrity							
Primary Containment Pressure	-5 psig to Design Pressure	B-1	Function Detection; Accomplishment of Mitigation; Verification	PC-PI-512A,B PC-R-(PR512-LR11) PC-PI-512B	1-21 1-22 1-23	0 - 80 psia	Will Comply Mild Environment Mild Environment
				PC-PI-4A1,4B2 PC-IE-3A,3B PC-SC-3A,3B PC-PR-1A,1B	1-24 1-25 1-26 1-27	0 - 250 psia	Will Comply Mild Environment Mild Environment Mild Environment
				PC-PI-20 PC-PR-20	1-28 1-29	0 - 2 psig	Will Comply Mild Environment
Primary Containment Isolation Valve Position (Excluding Check Valves)	Closed - Not Closed	B-1	Accomplishment of Isolation	PC-AO-237AV-L.S. PC-AO-237AV Indicating Lights PC-AO-238AV-L.S. PC-AO-238AV Indicating Lights PC-AO-243AV-L.S. PC-AO-243AV Indicating Lights PC-AO-244AV-L.S. PC-AO-244AV Indicating Lights	1-30 1-31 1-32 1-33 1-34 1-35 1-36 1-37	Closed - Not Closed Closed - Not Closed Closed - Not Closed Closed - Not Closed 	Complies Mild Environment Complies Mild Environment Complies Mild Environment Complies Mild Environment

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
				PC-AO-245AV-L.S.	1-38	Closed - Not Closed	Complies
				PC-AO-245AV	1-39		Mild Environment
				Indicating Lights			
				PC-AO-246AV-L.S.	1-40	Closed - Not Closed	Complies
				PC-AO-246AV	1-41		Mild Environment
				Indicating Lights			
				PC-MO-230MV	1-42	Closed - Not Closed	Complies
				PC-MO-230MV	1-43		Mild Environment
				Indicating Lights			
				PC-MO-231MV	1-44	Closed - Not Closed	Complies
				PC-MO-231MV	1-45		Mild Environment
				Indicating Lights			
				PC-MO-232MV	1-46	Closed - Not Closed	Complies
				PC-MO-232MV	1-47		Mild Environment
				Indicating Lights			
				RW-AO-A094-L.S.	1-48	Closed - Not Closed	Complies
				RW-AO-A094	1-49		Mild Environment
				Indicating Lights			
				RW-AO-A095-L.S.	1-50	Closed - Not Closed	Complies
				RW-AO-A095	1-51		Mild Environment
				Indicating Lights			
				RW-AO-A082-L.S.	1-52	Closed - Not Closed	Complies
				RW-AO-A082	1-53		Mild Environment
				Indicating Lights			
				RW-AO-A083-L.S.	1-54	Closed - Not Closed	Complies
				RW-AO-A083	1-55		Mild Environment
				Indicating Lights			
				PC-MO-233MV	1-56	Closed - Not Closed	Complies
				PC-MO-233MV	1-57		Mild Environment
				Indicating Lights			
				MS-AO-A080A,B,C,D-L.S.	1-58	Closed - Not Closed	Will Comply
				MS-AO-A080A,B,C,D	1-59		Mild Environment
				Indicating Lights			
				MS-AO-A086A,B,C,D-L.S.	1-60	Closed - Not Closed	Will Comply
				MS-AO-A086A,B,C,D	1-61		Mild Environment
				Indicating Lights			
				MS-MO-M074	1-62	Closed - Not Closed	Complies
				MS-MO-M074	1-63		Mild Environment
				Indicating Lights			
				MS-MO-M077	1-64	Closed - Not Closed	Complies
				MS-MO-M077	1-65		Mild Environment
				Indicating Lights			
				HPCI-MO-M015	1-66	Closed - Not Closed	Complies
				HPCI-MO-M015	1-67		Mild Environment
				Indicating Lights			
				HPCI-MO-M016	1-68	Closed - Not Closed	Complies
				HPCI-MO-M016	1-69		Mild Environment
				Indicating Lights			
				RCIC-MO-M015	1-70	Closed - Not Closed	Will Comply
				RCIC-MO-M015	1-71		Mild Environment
				Indicating Lights			

14B 14C 14D 14E

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
				RCIC-MO-M016	1-72	Closed - Not Closed	Complies (14I)
				RCIC-MO-M016 Indicating Lights	1-73		Mild Environment
				PC-MO-305	1-74	Closed - Not Closed	Complies
				PC-MO-305 Indicating Lights	1-75		Mild Environment
				PC-MO-306	1-76	Closed - Not Closed	Complies
				PC-MO-306 Indicating Lights	1-77		Mild Environment
				RWCU-MO-15	1-78	Closed - Not Closed	Complies
				RWCU-MO-15 Indicating Lights	1-79		Mild Environment
				RWCU-MO-18	1-80	Closed - Not Closed	Complies
				RWCU-MO-18 Indicating Lights	1-81		Mild Environment
				RHR-MO-M017	1-82	Closed - Not Closed	Complies (14K)
				RHR-MO-M017 Indicating Lights	1-83		Mild Environment
				RHR-MO-M018	1-84	Closed - Not Closed	Complies
				RHR-MO-M018 Indicating Lights	1-85		Mild Environment
				RHR-MO-M025A	1-86	Closed - Not Closed	Complies
				RHR-MO-M025A Indicating Lights	1-87		Mild Environment
				RHR-MO-M025B	1-88	Closed - Not Closed	Will Comply
				RHR-MO-M025B Indicating Lights	1-89		Mild Environment (14J)
				RHR-MO-M027A	1-90	Closed - Not Closed	Will Comply
				RHR-MO-M027A Indicating Lights	1-91		Mild Environment
				RHR-MO-M027B	1-92	Closed - Not Closed	Complies
				RHR-MO-M027B Indicating Lights	1-93		Mild Environment
				CS-MO-M012A	1-94	Closed - Not Closed	Complies
				CS-MO-M012A Indicating Lights	1-95		Mild Environment
				CS-MO-M012B	1-96	Closed - Not Closed	Will Comply
				CS-MO-M012B Indicating Lights	1-97		Mild Environment
				CS-MO-M011A	1-98	Closed - Not Closed	Will Comply
				CS-MO-M011A Indicating Lights	1-99		Mild Environment
				CS-MO-M011B	1-100	Closed - Not Closed	Complies
				CS-MO-M011B Indicating Lights	1-101		Mild Environment
				RR-AO-740AV-L.S.	1-102	Closed - Not Closed	Will Comply (14K)
				RR-AO-740AV Indicating Lights	1-103		Mild Environment
				RR-AO-741AV-L.S.	1-104	Closed - Not Closed	Will Comply

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
				RR-AO-741AV Indicating Lights	1-105		Mild Environment
				RHR-MO-57	1-106	Closed - Not Closed	Will Comply
				RHR-MO-57 Indicating Lights	1-107		Mild Environment
				RHR-MO-67	1-108	Closed - Not Closed	Will Comply
				RHR-MO-67 Indicating Lights	1-109		Mild Environment
				ACAD-MO-M01301	1-110	Closed - Not Closed	Will Comply
				ACAD-MO-M01301 Indicating Lights	1-111		Mild Environment
				ACAD-MO-M01302	1-112	Closed - Not Closed	Will Comply
				ACAD-MO-M01302 Indicating Lights	1-113		Mild Environment
				ACAD-MO-M01303	1-114	Closed - Not Closed	Will Comply
				ACAD-MO-M01303 Indicating Lights	1-115		Mild Environment
				ACAD-MO-M01304	1-116	Closed - Not Closed	Will Comply
				ACAD-MO-M01304 Indicating Lights	1-117		Mild Environment
				ACAD-MO-M01305	1-118	Closed - Not Closed	Will Comply
				ACAD-MO-M01305 Indicating Lights	1-119		Mild Environment
				ACAD-MO-M01306	1-120	Closed - Not Closed	Will Comply
				ACAD-MO-M01306 Indicating Lights	1-121		Mild Environment
				ACAD-MO-M01308	1-122	Closed - Not Closed	Will Comply
				ACAD-MO-M01308 Indicating Lights	1-123		Mild Environment
				ACAD-MO-M01310	1-124	Closed - Not Closed	Will Comply
				ACAD-MO-M01310 Indicating Lights	1-125		Mild Environment
				ACAD-MO-M01311	1-126	Closed - Not Closed	Will Comply
				ACAD-MO-M01311 Indicating Lights	1-127		Mild Environment
				ACAD-MO-M01312	1-128	Closed - Not Closed	Will Comply
				ACAD-MO-M01312 Indicating Lights	1-129		Mild Environment

14K

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Reactor Coolant Pressure Boundary							
Primary Containment Area Radiation	1 R/hr to 10^5 R/hr	C-3	Detection of Breach; Verification	RMA-RE-40A,B	3-3	1R/hr to 10^7 R/hr	N/A (15B)
				RMA-RM-40A,B	3-4		N/A
				RMA-IO-40A,B	3-5		N/A
				(RMA-RR-40 for A and B)	3-6		N/A
Drywell Drain Sumps Level (Identified and Unidentified Leakage)	Top to Bottom	C-1	Detection of Breach; Accomplishment of Miligation; Verification Long-Term Surveillance	None	1-130	None	
Suppression Pool Water Level	Bottom of ECCS Suction line to 5' Above Normal Water Level	A-1 C-1	Detection of Breach; Accomplishment of Mitigation; Verification Long-Term Surveillance	PC-DPI-3A1,3B2	1-131	0 - 30' (866' - 896')	Will Comply
				PC-IE-2A,2B	1-132		Mild Environment
				PC-SC-1A,1B	1-133		Mild Environment
				PC-LR-1A,1B	1-134		Mild Environment
Containment							
Primary Containment Pressure	-5 psig to 4 Times Design Pressure D.P. = 56 psig	C-1	Detection of Potential for or Actual Breach; Accomplishment of Mitigation	PC-PT-4A1,4B2	1-135	0 - 250 psia	Will Comply
				PC-IE-3A,3B	1-136		Mild Environment
				PC-SC-3A,3B	1-137		Mild Environment
				PC-PR-1A,1B	1-138		Mild Environment
Effluent Radioactivity-Noble Gases	10^{-6} uCi/ cc to 10^{-2} uCi/cc	C-2	Indication of Breach	ERP Hi-range Effluent Monitor		10^{-7} uCi/cc to $1x10^5$ uCi/cc	
				RMP-RM-3A (19A)	2-1		Mild Environment (19B)
				RMP-RM-3B	2-2		Mild Environment
Containment and Drywell Hydrogen Concentration	0 - 30% (Capability of Operating from -5 psig to Design Pressure)	C-1	Detection of Potential for Breach; Accomplishment of Mitigation	PC-AN-(H21A-3156B)	1-139	0 - 5% Bendix	Mild Environment
				PC-AN-(H21A-3156A)	1-140	0 - 10%, 20% Beckman	Mild Environment
				PC-R-(H2R-3157B) (20A)	1-141		Mild Environment
				PC-R-(H2R-3157A)	1-142		Mild Environment
Containment and Drywell Oxygen Concentration (for Inerted Containment Plants)	0 - 10% (Capability of Operating from -5 psig to design Pressure)	C-1	Detection of Potential for Breach; Accomplishment of Mitigation	PC-AN-(02A-512)	1-143	0 - 5%, 10%, 20%	Mild Environment
				PC-R-(02A-512)	1-144		Mild Environment (21A)

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Condensate and Feedwater System							
Main Feedwater Flow	0 - 110% Design Flow (D.F.=9.52 x 10^6 lb/hr)	D-3	Detection of Operation; Analysis of Cooling	RFC-FT-50A,B	3-7	0-7.0 x 10^6 lb/hr	N/A (22A)
				RFC-ES-93	3-8	Per Pump	N/A
				RFC-SQRT-110A,B	3-9		N/A
				RFC-FI-89A,B	3-10		N/A
Condensate Storage Tank Level	Top to Bottom	D-3	Indication of Available Water for Cooling	CM-LT-5	3-11	0 - 100%	N/A (23A)
				Computer PT F001	3-12	(0 - 40')	N/A
				ES-ES-1	3-13		N/A
				CM-LIC-5	3-14		N/A
			(23B)	CM-LT-680A	3-15	2.8% - 100% (1' - 36')	N/A
				CM-LIS-8	3-16		N/A
Emergency Storage Tank Level	Bottom to Top	D-3	Indication of Available Water for Cooling	CM-LT-681A,B	3-17	0 - 100%	N/A
				CM-LI-681A,B	3-18	(0 - 16')	N/A
				CM-ES-6	3-19		N/A
(Incl) Cladding							
Radioactivity Concentration or Radiation Level in Circulating Primary Coolant	1/2 Tech Spec Limit to 100 Times Tech Spec Limit	C-1	Detection or Breach	Post-Accident Sample System	1-145	Grab Sample (24)	N/A
Ventilation Systems							
Emergency Ventilation Damper Position	Open - Closed Status	D-2	To Monitor Operation	HV-257AV	2-3	Open-Closed	Not Qualified Mild Environment (25A)
				HV-257AV Indicating Lights	2-4		
				HV-272MV	2-5	Open-Closed	Not Qualified Mild Environment
				HV-272MV Indicating Lights	2-6		
				HV-AV259	2-7	Open-Closed	Not Qualified Mild Environment
				HV-AV259 Indicating Lights	2-8		
			(25C)	HV-MV258	2-9	Open-Closed	Not Qualified Mild Environment
				HV-MV258 Indicating Lights	2-10		
				HV-MV260	2-11	Open-Closed	Not Qualified Mild Environment
				HV-MV260 Indicating Lights	2-12		
				HV-AV261	2-13	Open-Closed	Not Qualified Mild Environment
				HV-AV261 Indicating Lights	2-14		

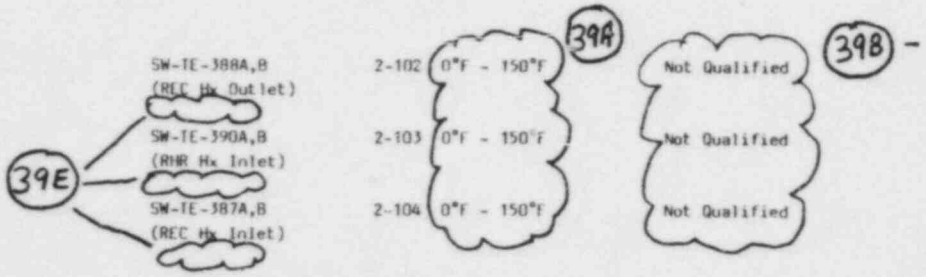
VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Power Supplies							
Status of Standby Power and Other Energy Sources Important to Safety	Plant Specific	D-2	To Monitor System Status	DG-A1-AM11,AM12	2-15	0 - 1200 Amps	Mild Environment
				DG-FQI,FM2,FM3	2-16	55 - 65 CPS	Mild Environment
				DG-VARI-VARM8,VARM9	2-17	0 - 7 MVAR	Mild Environment
				DG-VI-VM11,VM12	2-18	0 - 5250 VAC	Mild Environment
				DG-WI-WM1-WM2	2-19	0 - 7 M WATTS	Mild Environment
				EE-CB-4160DG1(EG1) Current Transformers	2-20		Mild Environment
				EE-CB-4160DG1(EG1) Potential Transformers	2-21		Mild Environment
				EE-CB-4160DG2(EG2) Current Transformers	2-22		Mild Environment
				EE-CB-4160DG2(EG2) Potential Transformers	2-23		Mild Environment
				DG-XFMR-Varm8	2-24		Mild Environment
				DG-XFMR-Varm9	2-25		Mild Environment
				EE-XFMR-EG1(RA)	2-26		Mild Environment
				EE-XFMR-EG1(RB)	2-27		Mild Environment
				EE-XFMR-EG1(RC)	2-28		Mild Environment
				EE-XFMR-EG2(RA)	2-29		Mild Environment
				EE-XFMR-EG2(RB)	2-30		Mild Environment
				EE-XFMR-EG2(RC)	2-31		Mild Environment
				1A-PT-606	2-32	0 - 120 psig	Mild Environment
				ES-ES-1	2-33		Mild Environment
				1A-PI-606	2-34		Mild Environment
				250VDC 1A Batt. Amp Indicator	2-35	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				250VDC Bus 1A Voltage Indicator	2-36	0 - 300 Volts	Mild Environment
				250VDC 1A CHG. Amp Indicator	2-37	0 - 300 Amps	Mild Environment
				250VDC 1B Batt. Amp Indicator	2-38	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				250VDC 1B CHG. Amp Indicator	2-39	0 - 300 Amps	Mild Environment
				250VDC Bus 1B Voltage Indicator	2-40	0 - 300 Volts	Mild Environment
				125VDC 1A Batt. Amp Indicator	2-41	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				125VDC 1A CHG. Amp Indicator	2-42	0 - 200 Amps	Mild Environment
				125VDC BUS 1A Voltage Indicator	2-43	0 - 150 Volts	Mild Environment
				125VDC 1B Batt. Amp Indicator	2-44	200 - 0 Amps 0 - 1000 Amps	Mild Environment
				125VDC 1B CHG. Amp Indicator	2-45	0 - 200 Amps	Mild Environment
				125VDC BUS 1B Voltage Indicator	2-46	0 - 150 Volts	Mild Environment
				AC BUS Status	2-47		

26D

26E

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Primary Containment - Related Systems							
Suppression Chamber Spray Flow	0 - 100% Design Flow	D-2	To Monitor Operation	None	2-48	N/A	N/A
Drywell Pressure	-5 psig to 3 psig	D-2	To Monitor Operation	PC-PT-513	2-49	0 - +2.0 psig	Will Comply
				PC-R-(FRPR-513)	2-50		Mild Environment
	0 - 110% Design Pressure						
				PC-PI-512A,B	2-51	0 - 80 psig	Will Comply
				PC-R-(PR512-LR11)	2-52		Mild Environment
				PC-PI-512	2-53		Mild Environment
				PC-PT-4A1,4B2	2-54	0 - 250 psig	Will Comply
				PC-IE-3A,3B	2-55		Mild Environment
				PC-SC-3A,3B	2-56		Mild Environment
				PC-PR-1A,1B	2-57		Mild Environment
Suppression Pool Water Level	Top of Vent to Top of Weir Well	D-2	To Monitor Operation	PC-DPT-3A1,3B2	2-58	0 - 30' (866'-896')	Will Comply
				PC-IE-2A,2B	2-59		Mild Environment
				PC-SC-1A,1B	2-60		Mild Environment
				PC-LR-1A,1B	2-61		Mild Environment
Suppression Pool Water Temperature	30°F to 230°F	A-1 D-2	To Monitor Operation	PC-TE-1A,B,C,D,E,F,G,H 2A,B,C,D,E,F,G,H	1-146	0 - 250°F	Will Comply
				PC-TR-24	1-147		Mild Environment
Drywell Atmospheric Temperature	40°F to 440°F	D-2	To Monitor Operation	PC-TE-505A-E	2-62	50° - 350°F	Will Comply
				PC-RI-505A-E	2-63		Mild Environment
				PC-TI-505A-E	2-64		Mild Environment
				PC-TE-510A-E	2-65	50° - 350°F	Will Comply
				PC-RI-510A-E	2-66		Mild Environment
				PC-TR-510(1)&(2)	2-67		Mild Environment
Drywell Spray Flow	0 to 110% Design Flow	D-2	To Monitor Operation	None	2-68		
Main Steam System							
Main Steamline Isolation Valves leakage control System Pressure	0 to 15" of Water 0 to 5 psig	D-2	To Provide Indication of Pressure Boundary Maintenance	N/A to BWR 4	2-69		
Primary system Safety Relief Valve Positions, Including ADS or Pressure in Valve LInes	Closed - Not Closed or 0 - 50 psig	D-2	Detection of Accident; Boundary Integrity Indication	MS-PS-300A-H (SRV)	2-70	27.5 psi (0-30 psi)	Complies
				MS-TE-112A,B,C (SV)	2-71	0 - 600°F	Will Comply
				MS-TE-114A,B,C (SV)	2-72	0 - 600°F	Will Comply
				MS-TR-166	2-73		Mild Environment
Isolation Condenser System Shell-side Water Level	Top to Bottom	D-2	To Monitor Operation	N/A to CNS	2-74		
Insulation Condenser System Valve Position	Open or Closed	D-2	To Monitor Operation	N/A to CNS	2-75		

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
RCIC Flow	0 - 110% Design Flow (D.F. = 416 GPM)	D-2	To Monitor Operation	RCIC-FT-58	2-76	0 - 500 GPM	Will Comply
				RCIC-FIC-91	2-77		Mild Environment
				RCIC-SQRT-99	2-78		Mild Environment
HPCI Flow	0 - 110% Design Flow (D.F. = 4250 GPM)	D-2	To Monitor Operation	HPCI-FT-82	2-79	0 - 5000 GPM	Will Comply
				HPCI-FIC-108	2-80		Mild Environment
				HPCI-INTR-119	2-81		Mild Environment
				HPCI-SQRT-118	2-82		Mild Environment
Core Spray System Flow	0 - 110% Design Flow (D.F. = 4720 GPM)	D-2	To Monitor Operation	CS-FT-40A,B	2-83	0 - 6000 GPM	Will Comply
				CS-ES-52A&B	2-84		Mild Environment
				CS-FI-50A&B	2-85		Mild Environment
LPCI Flow	0 - 110% Design Flow (D.F. = 15,000 GPM)	D-2	To Monitor Operation	RHR-FT-109A,B	2-86	0 - 20,000 GPM	Will Comply
				RHR-ES-145A&B	2-87		Mild Environment
				RHR-SQRT-134A&B	2-88		Mild Environment
				RHR-FI-133A&B	2-89		Mild Environment
SLCS Flow	0 - 110% Design Flow	D-2	To Monitor Operation	None	2-90		
SLCS Storage Tank Level	Top to Bottom	D-2	To Monitor Operation	SLC-LT-45	2-91	0 - 100% Level	Mild Environment
				SLC-LI-66	2-92		Mild Environment
				SLC-ES-69	2-93		Mild Environment
Residual Heat Removal Systems							
RHR System Flow	0 - 110% Design Flow (D.F. = 15,000 GPM)	D-2	To Monitor Operation	RHR-FT-109A,B	2-94	0 - 20,000 GPM	Will Comply
				RHR-ES-145A&B	2-95		Mild Environment
				RHR-SQRT-134A&B	2-96		Mild Environment
				RHR-FI-133A&B	2-97		Mild Environment
RHR Heat Exchanger Outlet Temperature	40°F to 350°F	D-2	To Monitor Operation	RHR-TE-94C,D	2-98	0 - 600°F	Will Comply
				RHR-TR-131	2-99		Mild Environment
				SW-TE-94A,B	2-100	0 - 600°F	Will Comply
				RHR-TR-131	2-101		Mild Environment
Cooling Water System							
Cooling Water Temperature to ESF System Components	40°F to 200°F	D-2	To Monitor Operation	SW-TE-388A,B (REC Hx Outlet)	2-102	0°F - 150°F	Not Qualified
				SW-TE-390A,B (RHR Hx Inlet)	2-103	0°F - 150°F	Not Qualified
				SW-TE-387A,B (REC Hx Inlet)	2-104	0°F - 150°F	Not Qualified



VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Cooling Water Flow to ESF System Components	0 - 110% Design Flow	D-2	To Monitor Operation	SW-FT-97A,B (RHR Hx)	2-105	0 - 10,000 GPM	Will Comply
				RHR-ES-145A,B	2-106		Mild Environment
				SW-SQRT-132A,B	2-107		Mild Environment
				SW-FT-132A,B	2-108		Mild Environment
				SW-FT-387A,B (REC Hx)	2-109	0 - 8000 GPM	Will Comply
				SW-SQRT-387A,B	2-110		Mild Environment
				SW-FT-387A,B	2-111		Mild Environment
				REC-ES-10(A)	2-112		Mild Environment
				REC-ES-9(B)	2-113		Mild Environment
Radwaste Systems							
High Radioactivity Liquid Tank Level	Top to Bottom	D-3	To Monitor Operation	RW-LT-420 (FLR DRN COLL TK)	3-20	0 - 100%	N/A (41)
				RW-LT-369 (WASTE COLL TK)	3-21	0 - 100%	N/A
Containment Radiation							
Primary Containment Area Radiation High Range	1 R/hr to 10^7 R/hr	E-1	Detection of Significant Releases; Release Assessment; Long-Term Surveillance Emergency Plan Actuation	RMA-RE-40A,B	1-148	1 R/hr to 10^7 R/hr	Not Qualified (42A)
				RMA-RM-40A,B	1-149		Mild Environment
				RMA-RR-40	1-150		Mild Environment
Secondary Containment Area Radiation High Range	10^{-1} R/hr to 10^4 R/hr for Mark I Containments	E-2	Detection of Significant Releases; Release Assessment; Long-Term Surveillance	Fuel Pool Area-		10^{-1} R/hr to 10^3 R/hr	
				RMA-RE-1	2-114		Not Qualified
				RMA-RM-AU1	2-115		Not Qualified
				RMA-RA-1	2-116		Mild Environment
				HPCI Room-		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-10	2-117		Not Qualified
				RMA-RA-10	2-118		Mild Environment
				RHR SW QUAD		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-11	2-119		Not Qualified
				RMA-RM-AU11	2-120		Not Qualified
				RMA-RA-11	2-121		Mild Environment
				RHR NW QUAD		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-12	2-122		Not Qualified
				RMA-RM-AU12	2-123		Not Qualified
				RMA-RA-12	2-124		Mild Environment
				RCIC RM		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-13	2-125		Not Qualified
				RMA-RA-13	2-126		Mild Environment
				CS SE RM		10^{-5} R/hr to 10^{-1} R/hr	
				RMA-RE-14	2-127		Not Qualified
				RMA-RM-AU14	2-128		Not Qualified
				RMA-RA-14	2-129		Mild Environment
Area Radiation							
Radiation Exposure Rate	10^{-1} R/hr to 10^4 R/hr	E-2	Detection of Significant Releases; Release Assessment, Long-Term Surveillance	Same List as Above		Same List as Above	Same List as Above

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Airborne Radioactive Materials Released from Plant							
Noble Gases and Vent Flow Rate Drywell Purge, Standby Gas Treatment System Purge	10^{-6} uCi/cc to 10^{5} uCi/cc 0 - 110% Vent Design Flow (DF=6035 cfm)	E-2 C-3	Detection of Significant Releases, Release Assessment	ERP Hi-range Effluent Monitor RMP-RM-3A,B	44A 2-130	10^{-7} uCi/cc to $1x10^{5}$ uCi/cc	Mild Environment
				OG-FIT-4001	2-131		Mild Environment
				HV-FR-4000	2-132	0-10,000 cfm	Mild Environment
Auxiliary Building	10^{-6} uCi/cc to 10^{3} uCi/cc 0 - 110% Vent Design Flow (DF=152,130)	E-2 C-3	Detection of Significant Releases, Release Assessment	T-G Hi-range Effluent Monitor RMV-RM-20A,B	44A 2-133	10^{-7} uCi/cc to $1x10^{5}$ uCi/cc	Mild Environment
				HV-FT-4002A,B,C,D	2-134		Mild Environment
				HV-SQRT-4002A,B,C,D	2-135		Mild Environment
				HV-SUM-4002	2-136		Mild Environment
				HV-FR-4000	2-137	0-250,000 cfm	Mild Environment
Auxiliary Building	10^{-6} uCi/cc to 10^{3} uCi/cc 0 - 110% Vent Design Flow (DF=66,870)	E-2 C-3	Detection of Significant Releases, Release Assessment	RW Hi-range Effluent Monitor RMV-RM-30A,B	44A 2-138	10^{-7} uCi/cc to $1-10^{5}$ uCi/cc	Mild Environment
				HV-FT-4004	2-139		Mild Environment
				HV-SQRT-4004	2-140		Mild Environment
				HV-FRDPR-4003	2-141	0-81,600 cfm	Mild Environment
Common Plant Vent	10^{-6} uCi/cc to 10^{3} uCi/cc 0 - 110% Design Flow (DF=6035)	E-2 C-3	Detection of Significant Releases, Release Assessment	ERP Hi-range Effluent Monitor RMP-RM-3A,B	44A 2-142	10^{-7} uCi/cc to 10^{5} uCi/cc	Mild Environment
				OG-FIT-4001	2-143		Mild Environment
				HV-FR-4000	2-144	0-10,000 cfm	Mild Environment
Particulates and Halogens Common Plant Vent	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=6035)	E-3	Detection of Significant Releases, Release Assessment; Long-Term Surveillance	ERP Hi-range Effluent Monitor RMP-RM-3A,B	44A 3-22	10^{-4} uCi/cc to $1x10^{2}$ uCi/cc	N/A
				OG-FIT-4001	3-23		N/A
				HV-FR-4000	3-24	0-10,000 cfm	N/A
Auxiliary Building	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=152,130)	E-3	Detection of Significant Releases; Release Assessment; Long-Term Surveillance	T-G Hi-range Effluent Monitor RMV-RM-20A,B	44A 3-25	10^{-4} uCi/cc to 10^{2} uCi/cc	N/A
				HV-FT-4002,A,B,C,D	3-26		N/A
				HV-SQRT-4002A,B,C,D	3-27		N/A
				HV-SUM-4002	3-28		N/A
				HV-FR-4000	3-29	0-250,000 cfm	N/A
Auxiliary Building	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=66,870)	E-3	Detection of Significant Releases; Release Assessment; Long-Term	RW Hi-range Effluent Monitor RMV-RM-30A,B	44A 3-30	10^{-4} uCi/cc to 10^{2} uCi/cc	N/A
				HV-FT-4004	3-31		N/A
				HV-SQRT-4004	3-32		N/A
				HV-FRDPR-4003	3-33	0-81,6000 cfm	N/A
Auxiliary Building	10^{-3} uCi/cc to 10^{2} uCi/cc 0 - 110% Design Flow (DF=15,000 cfm)	E-3	Detection of Significant Releases; Release Assessment; Long-Term	MPF Hi-range Effluent Monitor RMV-RM-10	3-34	10^{-12} to 10^{-6} uCi/cc Particulate Monitor with Onsite Analysis to 10^{2} uCi/cc	N/A
				RMV-FT-4006	3-35		N/A
				RMV-ES-4006	3-36		N/A
				RMV-SQRT-4006	3-37		N/A
				RMV-FR-4006	3-38	0-20,000 cfm	N/A

44B 44B 44B 44B 44B 44C 44G

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Environs Radiation and Radioactivity							
Airborne Radiohalogens and Particulates (portable sampling with onsite analysis capability)	10^{-9} uCi/cc to 10^{-3} uCi/cc	E-3	Release assessment; analysis	HP-1	3-39	10^{-9} uCi/cc to 10^{-3} uCi/cc	N/A
Plant and Environs Radiation (portable instrumentation)	10^{-3} R/hr to 10^{4} R/hr, photons 10^{-3} rads/hr to 10^{4} rads/hr, beta radiations and low-energy photons	E-3 E-3	Release assessment; analysis	HP-2 HP-3	3-40	10^{-3}R/hr to 10^{3}R/hr Gamma, 10^{-3} rads/hr to 200 rads/hr Beta	N/A
Plant and Environs Radioactivity (portable instrumentation)	(Isotopic Analysis)	E-3	Release assessment; analysis	None	3-42	Iodine Analysis	N/A
Meteorology							
Wind Direction	0 to 360° (±5° accuracy with a deflection of 10°). Starting speed less than 0.4 mps (1.0 mph). Damping ratio greater than or equal to 0.4, delay distance less than or equal to 2 meters.	E-3	Release assessment	Met 003 Met 011 Met 019	3-43	0-540° ± 3° threshold 0.58 mph damping 0.4 at 1.13 meters	N/A
Wind Speed	0 to 22 mps (50 mph). ±2 mps (0.5) mph) accuracy for speeds less than 2 mps (5 mph), 10% for speeds in excess of 2 mps (5 mph), with a starting threshold of less than 0.4 mps (1.0 mph) and a distance constant not to exceed 2 meters.	E-3	Release assessment	Met 002 Met 010 Met 018	3-44	0-100 mph acc. ±0.15 mph or 1% threshold 0.6 mph, dist. const. equals 1.5 meters	N/A
Estimation of Atmospheric Stability	Based on vertical temperature difference from primary meteorological system, 5°C to 10°C (-9°F to 18°F) and ±0.15°C accuracy per 50-meter intervals (±0.3°F accuracy per 164-foot intervals) or analogous range for alternative stability estimates.	E-3	Release assessment	Met-005 Met-013 Met-021	3-45	-30 to +50°C ±5% not to exceed 0.15°C	N/A
Accident Sampling Capability (Analysis Capability On Site)							
Primary Coolant and Sump	Grab Sample	E-3	Release assessment; verification; analysis	PASS	3-46		N/A
Gross Activity	1 uCi/ml to 10 Ci/ml					1 uCi/ml to 10 Ci/ml	
Gamma Spectrum	(Isotopic Analysis)					Istopic Analysis	
Boron Content	0 to 1000 ppm					0 to 15 ppm (dilutable)	
Chloride Content	0 to 20 ppm					10 ppb to 10 ppm (dilutable)	
Dissolved Hydrogen or Total Gas	0 to 2000 cc(STP)/kg					Not available-calculated	
Dissolved Oxygen	0 to 20 ppm					10 ppb to 1 ppm (dilutable)	
pH	1 to 13					1 to 14 (online)	

45 46A 46B 47A 47B

VARIABLE	RANGE REQUIRED IN R.G. 1.97	TYPE-CATEGORY	PURPOSE	COOPER CIC NUMBER	ITEM NO.	INSTALLED RANGE	EQ-STATUS
Containment Air	Grab Sample	E-3	Release assessment; verification; analysis	PASS	3-47		N/A 48
Gamma Spectrum	(Isotopic analysis)					Isotopic Analysis	

ITEM NO. (3)	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL (1A)	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS (1B)	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-1	A	B	Yes[a]	RPS (4B)	Indicators	SRM Alarm Only (4C)	SRM Alarm Only	Yes	No Action Necessary (4D)	Will implement as Category 3. SRM's indicate 3 counts per second which meets the lower flux requirement of R.G. 1.97. (4E)
3-1	N/A (5D)	B	N/A (5D)	RPS (5B)	Indicators	Yes	Yes	Yes (5C)	No Action Necessary	None
3-2	N/A (6B)	C	N/A (6B)	LPRW2A	None	No	No	No	No Action Necessary	None
1-2	A	B	Yes[c]	EE-PNL-CPP(2)	Indicator	Yes	Yes	Yes	Integrate with CRDR HED's 18I, 13I, 14I and 15I. Implement in accordance with NPPD's response to Generic Letter 84-23. Implement during the 1987 outage.[9] (7)	Water level instrumentation below the 2/3 core coverage is not necessary for post accident monitoring at Cooper Nuclear Station. Vessel design provides for a minimum 2/3 core coverage so instrumentation below that level is not needed. It is NPPD's position that the existing instrumentation, which provides indication to 30.6 percent of core coverage, meets with the intent of R.G. 1.97. NPPD will supply only one qualified channel for the upper water range, from +60 inches to the center of the steam line at +123.25 inches. In order to comply with the single failure requirement of R.G. 1.97, an additional penetration would be needed for a redundant reference column for the upper range. There are no manual or automatic functions initiated in the upper 63.25 inches, these functions occur in the range monitored by redundant channels. Thus, it is NPPD's position that single channel indication for the range from +60 inches to the center of the steam line meets the intent of the Regulatory Guide and the addition of a redundant channel would result in only a marginal improvement in plant safety. (8)
1-3	None	None	Yes[c]	EE-PNL-CPP(2)						
1-4	None	None	Yes[c]	EE-PNL-CPP(2)						
1-5	A	B	No	NBI-ES-88	Indicator	Yes	Yes	Yes		
1-6	A	B	No	EE-PNL-CPP						
1-7	A	B	Yes[a]	IE-RPS	Indicator	Yes	Yes	Yes		
1-8	A	B	Yes[a]							
	N/A	N/A	N/A	N/A	N/A	No	No	No	Will not implement. Reference BWROG Position, Appendix A.	

ITEM NO.	SEISMIC STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EOF	INPUT TO PMIS[4]	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-9	None[6]	A	Yes[a]	1E (RPS)	Indicators and Recorders Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8] (9B)	None
1-10	None[5]	A								
1-11	None[5]	A								
1-12	None[5]	A								
1-13	B[6]	B[7]	Yes[c]	EE-PNL-CCP18(1) (10C)	Recorder One Channel - Indicator Both Channels	Yes	Yes	Yes	Modifications scheduled for completeion before the end of the 1984-85 outage	None
1-14	B[5]	B								
1-15	B[5]	B								
1-16	None[6]	A	Yes[a]	1E (RPS)	Indicators and Recorders Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8] (11)	
1-17	None[5]	A								
1-18	None[5]	A								
1-19	None[5]	A								
1-20						Yes	Yes	Yes	Integrate with CRDR HED 637 Implement during 1987 outage.[9] (12)	Will implement as Category 3. Reference BWROG Position, Issue 4.
1-21	B[6]	B[7]	Yes[c]	EE-PNL-CCP18(1) (13C)	Recorder One Channel - Indicator Both Channels	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage	None
1-22	B[5]	B								
1-23	B[5]	B								
1-24	None[6]	A	Yes[a]	1E (RPS)	Indicators and Recorders Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	
1-25	None[5]	A								
1-26	None[5]	A								
1-27	None[5]	A								
1-28	B[6]	B[7]	No	EE-PNL-CCP(14)	Recorder Single Channel	Yes	Yes	Yes	Integrate with CRDR HED 191. Implement during 1986 outage.[8] (13D)	None
1-29	B	B	No							
1-30	B	B	Yes[a]	EE-PNL-CCP18(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3 (14)
1-31	None	B								
1-32	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-33	None	B								
1-34	B	B	No[d]	EE-PNL-CCP1A(9)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-35	None	B								
1-36	B	B	No[d]	EE-PNL-CCP1A(9)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3 (14A)
1-37	None	B								

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-38	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-39	None	B								
1-40	B	B	Yes[a]	EE-PNL-CCP1B(7)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-41	None	B								
1-42	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-43	None	B								
1-44	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2B)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-45	None	B								
1-46	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-47	None	B								
1-48	None[5]	B	Yes[a]	EE-PNL-RPSPP1A(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-49	None	B								
1-50	None[5]	B	Yes[a]	EE-PNL-RPSPP1B(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-51	None	B								
1-52	None[5]	B	Yes[a]	EE-PNL-RPSPP1A(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-53	None	B								
1-54	None[5]	B	Yes[a]	EE-PNL-RPSPP1B(3)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-55	None	B								
1-56	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-RA(2D)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-57	None	B								
1-58	None[5]	B	Yes[a]	EE-AA2(15)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-59	None	B								
1-60	None[5]	B	Yes[a]	EE-BB2(9)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-61	None	B								
1-62	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(4C)	Indicator Lights	Yes	Yes	Yes[a]	No Action Necessary	Implement Indicating Lights as Category 3
1-63	None	B								
1-64	Operator Qualified to 6 g's	B	Yes[a]	EE-STR-125RX	Indicator Lights	Yes	Yes	Yes[a]	No Action Necessary	Implement Indicating Lights as Category 3
1-65	None	B								
1-66	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(5A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-67	None	B								
1-68	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR HPCI	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-69	None	B								
1-70	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-Y(10B)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-71	None	B								

14B 14F 14G 14H

ITEM NO.	SEISMIC; STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO PMIS[4]	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-72	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR RCIC	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-73	None	B								
1-74	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-K(4C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-75	None	None								
1-76	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-M(5B)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-77	None	None								
1-78	Operator Qualified to 6 g's	A	Yes[a]	MCC-R(5C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-79	None	B								
1-80	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR(958')[1]	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-81	None	B								
1-82	Operator Qualified to 6 g's	B	Yes[a]	EE-125VDCSTR(859')[1]	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-83	None	B								
1-84	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(7A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-85	None	B								
1-86	Operator Qualified to 6 g's	A	Yes[b]	EE-STR-250 DIV I	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-87	None	B								
1-88	Operator Qualified to 6 g's	A	Yes[b]	EE-STR-250 DIV II	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-89	None	B								
1-90	Operator Qualified to 6 g's	B	Yes[b]	EE-MCC-CA(3E)	Indicator Lights	Yes	Yes	Yes	Modification scheduled for completion before the end of the 1984-85 outage	Implement Indicating Lights as Category 3
1-91	None	B								
1-92	Operator Qualified to 6 g's	B	Yes[b]	EE-MCC-RB(8C)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-93	None	B								
1-94	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Q(6A)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-95	None	B								
1-96	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Y(5C)	Indicator Lights	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	Implement Indicating Lights as Category 3
1-97	None	B								
1-98	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Q(5D)	Indicator Lights	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	Implement Indicating Lights as Category 3
1-99	None	B								
1-100	Operator Qualified to 6 g's	B	Yes[c]	EE-MCC-Y(5B)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	Implement Indicating Lights as Category 3
1-101	None	B								
1-102	B[6]	B[7]	Yes[a]	EE-PNL-CCP1B(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-103	None	B								
1-104	None[6]	C[7]	Yes[a]	EE-PNL-CCP1A(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3

ITEM NO.	SEISMIC STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-105	None	B								
1-106	Operator Qualified to 6 g's	B	Yes[a]	EE-MCC-R(3B)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-107	None	B								
1-108	Operator Qualified to 6 g's	B	Yes[a]	EE-PNL-BB3(3)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-109	None	B								
1-110	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CB(3A)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-111	None	None								
1-112	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CA(1)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-113	None	None								
1-114	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CB(1)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-115	None	None								
1-116	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CA(2A)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-117	None	None								
1-118	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CB(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-119	None	None								
1-120	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CA(2B)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-121	None	None								
1-122	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CA(2)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-123	None	None								
1-124	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CB(3)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-125	None	None								
1-126	Operator Qualified to 6 g's	C	Yes[a]	EE-PNL-CA(3)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-127	None	None								
1-128	Operator Qualified to 6 g's	C	Yes[a]	EE-MCC-CB(3C)	Indicator Lights	Yes	Yes	Yes[a]	Modification scheduled for 1986 outage.[8]	Implement Indicating Lights as Category 3
1-129	None	None								

(14k)

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
1-3	N/A	A	N/A	EE-PNL-CCP1A(19) 9-2 Both Trains	Common Recorder	Yes	Yes	Yes	No Action Necessary	None
1-4	N/A									
1-5	N/A									
1-6	N/A									
1-130						Yes	Yes	Yes	Integrate with CRDR HED 63I Implement during the 1987 outage.[9]	Will implement as Category 3. See BWROG Position, Issue 4.
1-131	None[6]	A	Yes[a]	1E (RPS)	Recorder and Indicator - Both Channels	Yes	Yes	Yes	Modification scheduled for 1986 outage[8]	None
1-132	None[5]	A								
1-133	None[5]	A								
1-134	None[5]	A								
1-135	None[6]	A	Yes[a]	1E (RPS)	Recorder and Indicator - Both Channels	Yes	Yes	Yes	Modification scheduled for 1986 outage[8]	None
1-136	None[5]	A								
1-137	None[5]	A								
1-138	None[5]	A								
2-1	N/A	C	N/A	480 VAC from PPG81 120 VAC from LLPG81	Recorder and Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	None
2-2	N/A	C								
1-139	None	A	No	CP-CAD-1A	Recorder - Both Channels	No	No	No	No Action Necessary	Will not implement as Reg Guide 1.97 variable. Ref. NPPD 10CFR50.44 exemption request to hydrogen recombiner rule for inerted containments.
1-140	B	B	No	CP-CAD-1A		No	No	Yes		
1-141	B	B								
1-142	B	B								
1-143	B	B	No	EE-PNL-CCP1A(9)	Recorder - Both Channels	Yes	Yes	Yes	Integrate with CRDR HED'S 52I and 53I Implement during the 1988 outage.[10]	Will implement as Category 2.
1-144	B	B								

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-7	N/A	C	N/A	EE-PNL-NBPP(4)	Indicator - Both Channels Recorder - Single Channel	Yes	Yes	Yes	No Action Necessary	None
3-8	N/A	C		EE-PNL-AA2(2)						
3-9	N/A	C								
3-10	N/A	C								
3-11	N/A	C	N/A	EE-PNL-CCP1A(16)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	None
3-12	N/A									
3-13	N/A	C								
3-14	N/A	C								
3-15	N/A	C	N/A	EE-PNL-PPCM1	Indicator - Single Channel	Yes	Yes	Yes[a]	No Action Necessary	None
3-16	N/A	C		EE-PNL-CCP1B						
3-17	N/A	C	N/A	EE-PNL-CCP1B(12)	Indicator - Both Channels	Yes	Yes	Yes	No Action Necessary	None
3-18	N/A	C								
3-19	N/A	C								
1-45	None	C	No	LPRW-2A	None	No	No	No	No Action Necessary	Implemented as Category 3. See BWROG Position, Issue 5.
2-3	N/A	B	Yes[a]	EE-PNL-CCP1B(16)	Indicator Lights	Yes	Yes	Yes[a]	No Action Necessary	Implement as Category 3
2-4	N/A	B								
2-5	N/A	B	Yes[a]	EE-MCC-RA	Indicator Lights	Yes	Yes	Yes[a]		
2-6	N/A	B								
2-7	N/A	B	Yes[a]	EE-PNL-CCP1B(16)	Indicator Lights	Yes	Yes	Yes[a]		
2-8	N/A	B								
2-9	N/A	B	Yes[a]	EE-PNL-RA	Indicator Lights	Yes	Yes	Yes[a]		
2-10	N/A	B								
2-11	N/A	B	Yes[a]	EE-PNL-RA	Indicator Lights	Yes	Yes	Yes[a]		
2-12	N/A	B								
2-13	N/A	B	Yes[a]	EE-PNL-CCP1B(16)	Indicator Lights	Yes	Yes	Yes[a]		
2-14	N/A	B								

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-15	N/A	B	Yes[a]	DG1 & DG2 PT'S & CT's	Indicators - Both Channels	Yes	Yes	Yes[a]	No Action Necessary	None
2-16	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-17	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-18	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-19	N/A	B	Yes[a]			Yes	Yes	Yes[a]		
2-20	N/A	B								
2-21	N/A	B								
2-22	N/A	B								
2-23	N/A	B								
2-24	N/A	B								
2-25	N/A	B								
2-26	N/A	B								
2-27	N/A	B								
2-28	N/A	B								
2-29	N/A	B								
2-30	N/A	B								
2-31	N/A	B								
2-32	N/A	B	No	ES-ES-1		No	No	No		
2-33	N/A	B								
2-34	N/A	B								
2-35	N/A	B	N/A	250 VDC Batt. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-36	N/A	B	N/A	250 VDC BUS 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-37	N/A	B	N/A	250 VDC CHG. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-38	N/A	B	N/A	250 VDC Batt. 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-39	N/A	B	N/A	250 VDC CHG. 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-40	N/A	B	N/A	250 VDC BUS 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-41	N/A	B	N/A	125 VDC Batt. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-42	N/A	B	N/A	125 VDC CHG. 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-43	N/A	B	N/A	125 VDC BUS 1A	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-44	N/A	B	N/A	125 VDC 1B Batt.	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-45	N/A	B	N/A	125 VDC 1B CHG.	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-46	N/A	B	N/A	125 VDC BUS 1B	Indicator	Yes	Yes	Yes[a]	No Action Necessary	None
2-47										Will not implement as Status can be derived from other sources.

26A 26B 26C 26D 26E

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-48	N/A	N/A	N/A	N/A	N/A	No	No	No	No Action Necessary	Will not implement. Reference BWROG Position, Issue 7.
2-49	N/A	B	N/A	EE-PNL-CCP1A(9)	Recorder - Single Channel	Yes	Yes	Yes	Modifications scheduled for completion before the end of 1984-85 outage.	None
2-50	N/A	B								
2-51	N/A	B	N/A	EE-PNL-CCP1B(1)	Recorders - Single Channel	Yes	Yes	Yes	Modifications scheduled for completion before the end of 1984-85 outage.	None
2-52	N/A	B								
2-53	N/A	B								
2-54	N/A	B	N/A	1E (RPS)	Recorders -	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	None
2-55	N/A	B								
2-56	N/A	B								
2-57	N/A	B								
2-58	N/A	A	N/A	1E (RPS)	Recorders - Both Channels	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	None
2-59	N/A	A								
2-60	N/A	A								
2-61	N/A	A								
1-146	None	A	Yes[a]	1E (RPS)	Common Recorder	Yes	Yes	Yes	Modifications scheduled for 1986 outage[8]	Implement as category 2 as other instruments are available for SRV position.
1-147	B	B	No	EE-PNL-CCP1A						
2-62	N/A	B[7]	N/A	EE-PNL-CCP1A(16)	Indicator - Single Channel	Yes	Yes	Yes	Modifications scheduled for completion before end of 1984-85 outage.	Will not implement expanded range. Max LOCA temperature equals 340° F.
2-63	N/A	B								
2-64	N/A	B								
2-65	N/A	B[7]	N/A	EE-PNL-CCP1A(16)	Indicator - Single Channel	Yes	Yes	Yes[a]	Modifications scheduled for completion before end of 1984-85 outage.	Will not implement expanded range. Max LOCA temperature equals 340° F.
2-66	N/A	B								
2-67	N/A	B								
2-68									No Action Necessary	Will not implement. Reference BWROG Position, Issue 7.
2-69									No Action Necessary	Not applicable to CNS.
2-70	N/A	B	N/A	E-PNL-AA2(6)	Indicator Lights	Yes	Yes	Yes	No Action Necessary	None
2-71	N/A	B[7]	N/A	E-PNL-CPP	Recorded - Single Channel	Yes	Yes	Yes	Modification scheduled for 1986 outage.[8]	
2-72	N/A	B[7]	N/A	E-PNL-CPP	Computer Pt.	Yes	Yes	Yes	Modifications scheduled for completion before end of 1984-85 outage.	
2-73	N/A	B	N/A							
2-74									No Action Necessary	Not applicable to CNS.
2-75									No Action Necessary	Not applicable to CNS.

ITEM NO.	SEISMIC[1] STATUS		QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-76	N/A		B[7]	N/A	EE-PNL-NBPP(19)	Indicator -	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage. (32C)	None
2-77	N/A	(32B)	B	N/A	9-4(13A-F14)	Single Channel					
2-78	N/A		B	N/A (32A)							
2-79	N/A	(32A)	B[7]	N/A	EE-PNL-BB2(18)	Indicator -	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	None
2-80	N/A	(33)	B	N/A	9-4(23A-F25 &	Single Channel					
2-81	N/A		B	N/A	23A-F26)						
2-82	N/A		B	N/A							
2-83	N/A		B[7]	N/A	EE-PNL-CC1A(3)	Indicators -	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	None
2-84	N/A	(34)	B	N/A	9-19(14-F52AV)	Double Channel					
2-85	N/A		B	N/A	EE-PNL-CPP(9)						
2-86	N/A		B[7]	N/A	9-18(14A-F3)	(35B)					
2-87	N/A	(35A)	B	N/A	EE-PNL-CCP1A(3)	Indicator -	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	None
2-88	N/A		B	N/A	9-18(14A-F16A)	Double Channel					
2-89	N/A		B	N/A	EE-PNL-CCP1B(3)						
2-90					9-18(10A-F16B)					Integrate with CRDR HED'S 17I and 23I, AWTS and EOP'S if required. (36)	None
2-91	N/A		B	N/A	EE-PNL-CPP(9)	Indicator -	Yes	Yes	Yes	No Action Necessary	Will implement as Category 3. Reference BWROG Position, Issue 10. Final ATWS rule implementation may require re-evaluation.
2-92	N/A		B	N/A	(11A-F2)	Single Channel					
2-93	N/A		B	N/A							
2-94	N/A	(37)	B[7]	N/A	EE-PNL-CCP1A(3)	Indicators -	Yes	Yes	Yes	Modifications scheduled for completion before the end of the 1984-85 outage.	None
2-95	N/A		B	N/A	EE-PNL-CCP1B(3)	Double Channels					
2-96	N/A		B	N/A							
2-97	N/A		B	N/A							
2-98	N/A	(38A)	B[7]	N/A	EE-PNL-CCP(4)	Common	(38B) Yes	Yes	(38C) Yes[a]	Modifications scheduled for completion during 1986 refueling outage[8]	None
2-99	N/A		B	N/A		Recorder					
2-100	N/A		B[7]	N/A	EE-PNL-CCP(4)	Common	Yes	Yes	Yes[a]	Modifications scheduled for completion during 1986 refueling outage[8]	None
2-101	N/A		B	N/A		Recorder					
2-102	N/A	(39C)	B	N/A		Computer Pts	Yes	Yes	Yes	Will extend range during 1986 refueling outage[8] (39D)	Will install as category 3 as output is to PMIS only. (39B)
2-103	N/A		B	N/A		Computer Pts	Yes	Yes	Yes	Will extend range during 1986 refueling outage[8]	Will install as category 3 as output is to PMIS only.
2-104	N/A		B	N/A		Computer Pts	Yes	Yes	Yes	Will extend range during 1986 refueling outage[8]	Will install as category 3 as output is to PMIS only.

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-105	N/A	B[7]	N/A	EE-PNL-CCP1A(3)		Yes	Yes	Yes[a]	Modifications scheduled for completion before the end of the 1984-85 outage.	None
2-106	N/A	B	N/A	EE-PNL-CCP1B(3)						
2-107	N/A	B	N/A							
2-108	N/A	B	N/A							
2-109	N/A	B[7]	N/A	EE-PNL-CCP1A(20)		Yes	Yes	Yes[a]	Modifications scheduled for 1986 outage[8]	None
2-110	N/A	B	N/A	EE-PNL-CCP1B(17)						
2-111	N/A	B	N/A							
2-112	N/A	B	N/A							
2-113	N/A	B	N/A							
1-20	N/A	None	N/A	EE-PNL-NBPP(5)	Radwaste C.R. Only	No	No	No	No Action Necessary	No direct indication in Control Room. Monitored every two hours by Operations Personnel.
3-21	N/A	None	N/A	25-17-(20A-F1) EE-PNL-NBPP(5) 25-17-(20A-F1)						
1-148	None	A	Yes[a]	EE-PNL-RPSPP1A	Common Recorder	Yes	Yes	Yes	No Action Necessary	Implement as Catagory 3.
1-149	None	A		EE-PNL-RPSPP1B						
1-150	None	A	No	EE-PNL-CCP1A(19)						
2-114	N/A	B	N/A	EE-PNL-CPP(5)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	Will not implement as a Reg. Guide 1.97 parameter. Reference BWROG Position, Issue 12.
2-115	N/A	B		EE-PNL-CPP(5)						
2-116	N/A	B		EE-PNL-CPP(5)						
2-117	N/A	B	N/A	EE-PNL-CPP(5)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	See Above
2-118	N/A	B		EE-PNL-CPP(5)						
2-119	N/A	B	N/A	EE-PNL-CPP(5)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	See Above
2-120	N/A	B		EE-PNL-CPP(5)						
2-121	N/A	B		EE-PNL-CPP(5)						
2-122	N/A	B	N/A	EE-PNL-CPP(5)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	See Above
2-123	N/A	B		EE-PNL-CPP(5)						
2-124	N/A	B		EE-PNL-CPP(5)						
2-125	N/A	B	N/A	EE-PNL-CPP(5)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	See Above
2-126	N/A	B		EE-PNL-CPP(5)						
2-127	N/A	B	N/A	EE-PNL-CPP(5)	Indicator - Single Channel	Yes	Yes	Yes	No Action Necessary	See Above
2-128	N/A	B		EE-PNL-CPP(5)						
2-129	N/A	B		EE-PNL-CPP(5)						
									See Above	See Above

ITEM NO.	SEISMIC STATUS	QA STATUS[2]	REDUNDANT CHANNEL[3]	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR EOF	INPUT TO PMIS[4]	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
2-130	N/A	C	N/A	480 VAC from PPQB1 120 VAC from LPQB1	Indicator and Recorder - Single Channel	Yes	Yes	Yes	No Action Necessary	None
2-131	N/A	C		EE-PNL-NBPP(15)		No	No	No	No Action Necessary	None
2-132	N/A	C								
2-133	N/A	C	N/A	480 VAC from MCC-DG1 120 VAC from CCP2B	Indicator and Recorder - Single Channel	Yes	Yes	Yes	No Action Necessary	None
2-134	N/A	C		HV-ES-4002A,B						
2-135	N/A	C		HV-ES-4102A,B						
2-136	N/A	C								
2-137	N/A	C		EE-PNL-CPP(22)						
2-138	N/A	C	N/A	480 VAC from MCC-W 120 VAC from LPRW3	Indicator and Recorder - Single Channel	Yes	Yes	Yes	No Action Necessary	None
2-139	N/A	C		HV-ES-4000						
2-140	N/A	C		HV-ES-4000						
2-141	N/A	C		EE-PNL-CPP(22)						
2-142	N/A	C	N/A	480 VAC from PPQB1 120 VAC from LPQB1	Indicator and Recorder - Single Channel					
2-143	N/A	C		EE-PNL-NBPP(15)						
2-144	N/A	C								
3-22	N/A	C	N/A	480 VAC from PPQB1 120 VAC from LPQB1	None	No	No	No	No Action Necessary	None
3-23	N/A	C		EE-PNL-NBPP(15)						
3-24	N/A	C								
3-25	N/A	C	N/A	480 VAC from MCC-DG1 120 VAC from CCP2B	None	No	No	No	No Action Necessary	None
3-26	N/A	C		HV-ES-4002A,B						
3-27	N/A	C		HV-ES-4002A,B						
3-28	N/A	C								
3-29	N/A	C		EE-PNL-CPP(22)						
3-30	N/A	C	N/A	480 VAC from MCC-W 120 VAC from LPRW3	None	No	No	No	No Action Necessary	None
3-31	N/A	C		HV-ES-4000						
3-32	N/A	C		HV-ES-4000						
3-33	N/A	C		EE-PNL-CPP(22)						
3-34	N/A	C	N/A	480 VAC from PPMP2 120 VAC from PPMP1	Indicator and Recorder - Single Channel	Yes	Yes	Yes[a]	No Action Necessary	None
3-35	N/A	C								
3-36	N/A	C		EE-PNL-CPP(22)						
3-37	N/A	C		EE-PNL-CPP(22)						
3-38	N/A	C		EE-PNL-CPP(22)						

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR TSC	REQUIRED FOR LOF	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-39	N/A	C	N/A	Portable-N/A	No	No	No	No	No Action Necessary	None
3-40	N/A	C	N/A	Portable-N/A	No	No	No	No	No Action Necessary	Existing equipment range is satisfactory.
3-42	N/A	C	N/A	Portable-N/A	No	No	No	No	No Action Necessary	None
3-43	N/A (46B)	C	N/A (46B)	Normal-Offsite Emergency-MCC-L	SPDS	Yes	Yes	Yes	Installed	None
3-44	N/A	C	N/A	Normal-Offsite Emergency-MCC-L	SPDS	Yes	Yes	Yes	Installed	None
3-45	N/A	C	N/A	Normal-Offsite Emergency-MCC-L	SPDS	Yes	Yes	Yes	Installed	None
3-46	N/A (47B)	C	N/A (47B)	EE-PNL-LPRM2	No	No	No	No	Installed	Implement as Category 3 for primary coolant sampling only. Sump sample not implemented. Reference BWROG Position, Issue 14. Post Accident Sampling System (PASS) approved as per NUREG-0737 item II, B3.

ITEM NO.	SEISMIC[1] STATUS	QA STATUS[2]	REDUNDANT[3] CHANNEL	POWER SUPPLY	CR DISPLAY	REQUIRED FOR ISC	REQUIRED FOR EQ	INPUT TO[4] PMIS	SCHEDULE	DEVIATIONS AND JUSTIFICATIONS
3-47	N/A (48)	C	N/A (48)	EE-PNL-LPRM2	No	No	No	No	Installed	None

[1]Seismic Status
A - Original Plant Criteria furnished by GE
B - Original Plant Criteria BOP

[2]QA Status
A - 10 CFR 50 Appendix B
B - Original QA Design Criteria
C - High Quality

(49)

[3]Redundant Channel
a - All redundant or diverse channels are electrically independent and are physically separated from each other although they do not always meet with the minimum separation distances as specified in Reg. Guide 1.75.
b - Although supplied by one division, one channel is supplied by a DC source and the other by an AC source.
c - Diverse circuits supplied by one division.
d - Redundant valve is a check valve without indication.

[4]INPUT to PMIS
F - Will be added to PMIS during 1987

[5]No Seismic Requalification will be initiated at this time. NPPD recognizes that the NRC is establishing an explicit set of quidelines that can be used to judge the adequacy of seismic qualification of electrical equipment at operating plants and establishing guidelines for requalification of equipment whose seismic qualification was found to be inadequate (Reference Unresolved Safety Issue Task A-46).

[6]This item will be qualified to R.G. 1.100 after modifications.

[7]This item will meet 10CFR50 Appendix B after modifications.

[8]The 1986 outage is the 1st refueling after the 1984-85 outage.

[9]The 1987 outage is the 2nd refueling after the 1984-85 outage.

[10]The 1988 outage is the 3rd refueling after the 1984-85 outage.