

INSERVICE TESTING PROGRAM

CALLAWAY NUCLEAR PLANT

REVISION 3

DECEMBER 10, 1984

PREPARED BY:

Warren A. Witt

WARREN A. WITT
ISI ENGINEER

REVIEWED BY:

R. D. Affolter

R. D. AFFOLTER
ISI SUPERVISING ENGINEER

INSERVICE TESTING PROGRAM
 ISI CLASS 1, 2 & 3 PUMPS
 CALLAWAY NUCLEAR PLANT

Rev. Date	Page
3 12/84	1 of 2

PUMP NUMBER	PUMP NAME	ISI CLASS	P&ID and Coordinates	TEST PARAMETERS					NOTES
				SPEED	INLET PRES.	DIFF. PRES.	FLOW RATE	VIBRATION	
PAL01 A	Motor Driven Auxiliary Feedwater Pump A	3	M-02AL01 E-4	N/A	YES	YES	YES	YES	Note 1 RR# P04 RR# P05
PAL01 B	Motor Driven Auxiliary Feedwater Pump B	3	M-02AL01 G-4	N/A	YES	YES	YES	YES	Note 1 RR# P05 RR# P04
PAL02	Turbine Driven Auxiliary Feedwater Pump	3	M-02AL01 B-4 & M-02FC02	YES	YES	YES	YES	YES	Note 1 RR# P04 RR# P05
PBG05 A	Centrifugal Charging Pump	2	M-02BG03 C-5	N/A	YES	YES	NO	YES	Note 1 RR# P06 RR# P03 RR# P04
PBG05 B	Centrifugal Charging Pump	2	M-02BG03 B-5	N/A	YES	YES	NO	YES	Note 1 RR# P06 RR# P03 RR# P04
PEF01 A	Essential Service Water Pump	3	M-U2EF01 G-6	N/A	YES	YES	YES	YES	Note 1 Note 2 RR# P04
PEF01 B	Essential Service Water Pump	3	M-U2EF01 C-6	N/A	YES	YES	YES	YES	Note 1 Note 2 RR# P04
PEG01 A	Component Cooling Water Pump	3	M-02EG01 G-4	N/A	YES	YES	YES	YES	Note 1 RR# P04
PEG01 B	Component Cooling Water Pump	3	M-02EG01 D-4	N/A	YES	YES	YES	YES	Note 1 RR# P04
PEG01 C	Component Cooling Water Pump	3	M-02EG01 E-4	N/A	YES	YES	YES	YES	Note 1 RR# P04
PEG01 D	Component Cooling Water Pump	3	M-02EG01 B-4	N/A	YES	YES	YES	YES	Note 1 RR# P04

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
	AE FCV0510	M-02AE01	E-7	-	B	14"	AG	AO	O	C	NA	-	-	-	12
	AE FCV0520	M-02AE01	C-7	-	B	14"	AG	AO	O	C	NA	-	-	-	12
	AE FCV0530	M-02AE01	B-7	-	B	14"	AG	AO	O	C	NA	-	-	-	12
	AE FCV0540	M-02AE01	G-7	-	B	14"	AG	AO	O	C	NA	-	-	-	12
	AE FCV0550	M-02AE01	E-7	-	B	4"	GL	AO	C	C	NA	-	-	-	12
	AE FCV0560	M-02AE01	C-7	-	B	4"	GL	AO	C	C	NA	-	-	-	12
	AE FCV0570	M-02AE01	A-7	-	B	4"	GL	AO	C	C	NA	-	-	-	12
	AE FCV0580	M-02AE01	G-7	-	B	4"	GL	AO	C	C	NA	-	-	-	12

IN SERVICE TESTING PROGRAM - M-02AL01

BY	VALU-NUMBER	#-P+ID-#	CRD	I	CAT	SIZE	TYP	AT	POS	DIR	TST	TM	MAX	AR/R	NOTES-#
AL	HV 0005	M-02AL01	H-6	2	B	4'	GL	MO	0	C	NA				
AL	HV 0006	M-02AL01	G-6	2	B	4'	GL	AO	0	0	NA				3
AL	HV 0007	M-02AL01	F-6	2	B	4'	GL	MO	0	C	NA				
AL	HV 0008	M-02AL01	E-6	2	B	4'	GL	AO	0	0	NA				3
AL	HV 0009	M-02AL01	D-6	2	B	4'	GL	MO	0	C	NA				
AL	HV 0010	M-02AL01	D-6	2	B	4'	GL	AO	0	0	NA				3
AL	HV 0011	M-02AL01	C-6	2	B	4'	GL	MO	0	C	NA				
AL	HV 0012	M-02AL01	B-6	2	B	4'	GL	AO	0	0	NA				3
AL	HV 0030	M-02AL01	F-3	3	B	6'	BT	MO	C	0	BT	OP	15		6
AL	HV 0030	M-02AL01	F-3	3	B	6'	BT	MO	C	0	PIT	RR			
AL	HV 0031	M-02AL01	E-3	3	B	6'	BT	MO	C	0	BT	OP	10		6
AL	HV 0031	M-02AL01	E-3	3	B	6'	BT	MO	C	0	PIT	RR			
AL	HV 0032	M-02AL01	C-3	3	B	6'	BT	MO	C	0	BT	OP	15		6
AL	HV 0032	M-02AL01	C-3	3	B	6'	BT	MO	C	0	PIT	RR			
AL	HV 0033	M-02AL01	B-3	3	B	6'	BT	MO	C	0	BT	OP	15		6
AL	HV 0033	M-02AL01	B-3	3	B	6'	BT	MO	C	0	PIT	RR			
AL	HV 0034	M-02AL01	H-3	3	B	8'	GA	MO	0	C	BT	OP	30		6
AL	HV 0034	M-02AL01	H-3	3	B	8'	GA	MO	0	C	PIT	RR			
AL	HV 0035	M-02AL01	D-3	3	B	8'	GA	MO	0	C	BT	OP	30		6
AL	HV 0035	M-02AL01	D-3	3	B	8'	GA	MO	0	C	PIT	RR			
AL	HV 0036	M-02AL01	B-3	3	B	10'	GA	MO	0	C	BT	OP	30		6
AL	HV 0036	M-02AL01	B-3	3	B	10'	GA	MO	0	C	PIT	RR			
AL	V 0001	M-02AL01	B-4	3	C	10'	CK	SA	C	0	CVP	OP			
AL	V 0001	M-02AL01	B-4	3	C	10'	CK	SA	C	0	CVT	CS		AL-1	
AL	V 0002	M-02AL01	D-4	3	C	8'	CK	SA	C	0	CVP	OP			
AL	V 0002	M-02AL01	D-4	3	C	8'	CK	SA	C	0	CVT	CS		AL-1	
AL	V 0003	M-02AL01	H-4	3	C	8'	CK	SA	C	0	CVP	OP			
AL	V 0003	M-02AL01	H-4	3	C	8'	CK	SA	C	0	CVT	CS		AL-1	
AL	V 0006	M-02AL01	F-4	3	C	6'	CK	SA	C	0	CVT	RR		AL-2	4, 5
AL	V 0009	M-02AL01	E-4	3	C	6'	CK	SA	C	0	CVT	RR		AL-2	4, 5
AL	V 0012	M-02AL01	C-4	3	C	8'	CK	SA	C	0	CVT	RR		AL-2	4
AL	V 0015	M-02AL01	B-4	3	C	8'	CK	SA	C	0	CVT	RR		AL-2	4
AL	V 0029	M-02AL01	G-5	3	C	2'	CK	SA	C	0	CVT	OP			
AL	V 0030	M-02AL01	H-5	3	C	6'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0033	M-02AL01	F-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0036	M-02AL01	H-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0041	M-02AL01	F-5	3	C	2'	CK	SA	C	0	CVT	OP			
AL	V 0042	M-02AL01	D-5	3	C	6'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0045	M-02AL01	C-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0048	M-02AL01	D-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0053	M-02AL01	B-5	3	C	2'	CK	SA	C	0	CVT	OP			
AL	V 0054	M-02AL01	B-5	3	C	8'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0057	M-02AL01	E-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0062	M-02AL01	G-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0067	M-02AL01	D-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5
AL	V 0072	M-02AL01	B-7	2	C	4'	CK	SA	C	0	CVT	CS		AL-1	5

IN SERVICE TESTING PROGRAM - M-028804

SY	ULV-NUMBER	#-P+TD-*	CRD	I	CAT	*SIZE	TYP	HT	POS	DIR	TST	TK	MAX	*R/R	*NOTES-*
BB	HV 8001A	M-028804	F-4	2	B	1'	GL	90	C	O/C	BT	CS	10	BB-5	5
BB	HV 8001A	M-028804	F-4	2	B	1'	GL	90	C	O/C	FST	CS			5
BB	HV 8001A	M-028804	F-4	2	B	1'	GL	90	C	O/C	PIT	HA		BB10	
BB	HV 8001B	M-028804	F-4	2	B	1'	GL	90	C	O/C	BT	CS	10	BB-5	5
BB	HV 8001B	M-028804	F-4	2	B	1'	GL	90	C	O/C	FST	CS			5
BB	HV 8001B	M-028804	F-4	2	B	1'	GL	90	C	O/C	PIT	HA		BB10	
BB	HV 8002A	M-028804	F-3	2	B	1'	GL	90	C	O/C	BT	CS	10	BB-5	5
BB	HV 8002A	M-028804	F-3	2	B	1'	GL	90	C	O/C	FST	CS			5
BB	HV 8002A	M-028804	F-3	2	B	1'	GL	90	C	O/C	PIT	HA		BB10	
BB	HV 8002B	M-028804	F-3	2	B	1'	GL	90	C	O/C	BT	CS	10	BB-5	5
BB	HV 8002B	M-028804	F-3	2	B	1'	GL	90	C	O/C	FST	CS			5
BB	HV 8002B	M-028804	F-3	2	B	1'	GL	90	C	O/C	PIT	HA		BB10	

IN SERVICE TESTING PROGRAM - 4-028003

BY	ULU-NUMBER	S-PAID-N	CRD	I	CNT	ASIDE	TYP	AT	POS	DIR	TST	TH	MAX	NR/R	NOTES-N
88	8118	M-028003	E-4	2	C	1.5'	RV	SA	C	0	RVT				2
88	8120	M-028003	E-8	2	C	3'	RV	SA	C	0	RVT				2
88	8123	M-028003	H-3	2	C	2'	RV	SA	C	0	RVT				2
88	8124	M-028003	E-7	2	C	.75'	RV	SA	C	0	RVT				2
88	8440	M-028003	E-6	2	C	4'	CK	SA	0	0	NA				3
88	8481A	M-028003	C-4	2	C	1'	CK	SA	C	0	CVT	RR		88-4	0
88	8481B	M-028003	E-4	2	C	4'	CK	SA	C	0	CVT	RR		88-4	0
88	8497	M-028003	E-4	2	C	3'	CK	SA	0	0	NA				3
88	8546A	M-028003	C-7	2	C	8'	CK	SA	C	0	CVT	RR		88-5	5
88	8546B	M-028003	B-7	2	C	8'	CK	SA	C	0	CVT	RR		88-5	5
88	FCV0111B	M-028003	E-5	2	B	2'	DI	HO	C	0	NA				3
88	FCV0121	M-028003	F-4	2	B	3'	GL	HO	0	0	NA				3
88	HCV0162	M-028003	E-3	2	B	3'	GL	HO	0	0	NA				3
88	HV 8105	M-028003	E-2	2	A	3'	SA	HO	0	0	AT	RR			
88	HV 8105	M-028003	E-2	2	A	3'	SA	HO	0	0	BT	CS	10	88-6	4-3
88	HV 8105	M-028003	E-2	2	A	3'	SA	HO	0	0	PIT	RR			
88	HV 8106	M-028003	E-2	2	B	3'	SA	HO	0	0	BT	CS	10	88-6	4-3
88	HV 8106	M-028003	E-2	2	B	3'	SA	HO	0	0	PIT	RR			
88	HV 8109	M-028003	E-5	2	B	3'	GL	HO	C	0	NA				12
88	HV 8110	M-028003	E-3	2	B	2'	GL	HO	0	0/C	BT	OP	10		6
88	HV 8110	M-028003	E-3	2	B	2'	GL	HO	0	0/C	PIT	RR			
88	HV 8111	M-028003	E-4	2	B	2'	GL	HO	0	0/C	BT	OP	10		6
88	HV 8111	M-028003	E-4	2	B	2'	GL	HO	0	0/C	PIT	RR			
88	HV 8357A	M-028003	C-4	2	B	1'	GL	SO	C	0/C	BT	OP	10	88-8	
88	HV 8357B	M-028003	B-4	2	B	1'	GL	SO	C	0/C	BT	OP	10	88-8	
88	LCV0112B	M-028003	F-6	2	B	4'	SA	HO	0	0	BT	CS	10	88-7	5+6
88	LCV0112B	M-028003	F-6	2	B	4'	SA	HO	0	0	PIT	RR			
88	LCV0112C	M-028003	F-6	2	B	4'	SA	HO	0	0	BT	CS	10	88-7	5+6
88	LCV0112C	M-028003	F-6	2	B	4'	SA	HO	0	0	PIT	RR			
88	V 0091	M-028003	C-4	2	C	2'	CK	SA	C	0	CVT	OP			
88	V 0095	M-028003	B-4	2	C	2'	CK	SA	C	0	CVT	OP			
88	V 0207	M-028003	B-4	3	B	3'	RV	SA	C	0	RVT	RR			2
88	V 0524	M-028003	C-6	3	C	.75'	RV	SA	C	0	RVT				2
88	V 0525	M-028003	A-6	3	C	.75'	RV	SA	C	0	RVT				2
88	V 0545	M-028003	D-5	3	C	.75'	RV	SA	C	0	RVT				2
88	V 0589	M-028003	B-4	2	C	1'	CK	SA	C	0	NA				3
88	V 0590	M-028003	C-4	2	C	1'	CK	SA	C	0	NA				3

IN SERVICE TESTING PROGRAM - H-025N01

SY	MLV-NUMBER	*-PAID-*	CRD.	I	CAT	*SIZE	TYP	AT	POB	DIR	TGT	TH	MAX	*R/R	NOTES-#
BN	HCV8800A	H-025N01	E-5	2	B	3"	GL	AO	C	C	NA				3
BN	HCV8800B	H-025N01	E-5	2	B	3"	GL	AO	C	C	NA				3
BN	HV 0003	H-025N01	C-3	2	B	12"	GA	HO	O	C	BT	OP	65		6
BN	HV 0003	H-025N01	C-3	2	B	12"	GA	HO	O	C	FIT	RR			6
BN	HV 0004	H-025N01	A-3	2	B	12"	GA	HO	O	C	BT	OP	65		6
BN	HV 0004	H-025N01	A-3	2	B	12"	GA	HO	O	C	FIT	RR			6
BN	HV 8806A	H-025N01	B-5	2	B	8"	GA	HO	O	C	BT	OP	10		6
BN	HV 8806A	H-025N01	B-5	2	B	8"	GA	HO	O	C	FIT	RR			6
BN	HV 8806B	H-025N01	E-3	2	B	8"	GA	HO	O	C	BT	OP	10		6
BN	HV 8806B	H-025N01	E-3	2	B	8"	GA	HO	O	C	FIT	RR			6
BN	HV 8812A	H-025N01	B-3	2	B	14"	GA	HO	O	C	BT	OP	17		6
BN	HV 8812A	H-025N01	B-3	2	B	14"	GA	HO	O	C	FIT	RR			6
BN	HV 8812B	H-025N01	B-3	2	B	14"	GA	HO	O	C	BT	OP	17		6
BN	HV 8812B	H-025N01	B-3	2	B	14"	GA	HO	O	C	FIT	RR			6
BN	HV 8813	H-025N01	B-7	2	B	2"	GL	HO	O	C	BT	OB	10	BN-2	613
BN	HV 8813	H-025N01	B-7	2	B	2"	GL	HO	O	C	FIT	RR			613
BN	LCV0112D	H-025N01	A-5	2	B	8"	GA	HO	C	O/C	BT	OB	10	BN-1	613
BN	LCV0112D	H-025N01	A-5	2	B	8"	GA	HO	C	O/C	FIT	RR			613
BN	LCV0112E	H-025N01	E-3	2	B	8"	GA	HO	C	O/C	BT	OB	10	BN-1	613
BN	LCV0112E	H-025N01	E-3	2	B	8"	GA	HO	C	O/C	FIT	RR			613

IN SERVICE TESTING PROGRAM - X-02EG01

BY	ULU-NUMBER	X-PAID-N	CRD	I	CAT	#SIZE	TYP	WT	POB	DIA	TST	TR	MAX	#R/R	NOTES-N
EG	HV 0011	M-02EG01	F-8	3	B	1.5"	GL	NO	C	0	BT	OP	23		6
EG	HV 0011	M-02EG01	F-8	3	B	1.5"	GL	NO	C	0	PIT	RR			
EG	HV 0012	M-02EG01	C-8	3	B	1.5"	GL	NO	C	0	BT	OP	23		6
EG	HV 0012	M-02EG01	C-8	3	B	1.5"	GL	NO	C	0	PIT	RR			
EG	HV 0013	M-02EG01	F-7	3	B	1.5"	GL	NO	C	0	BT	OP	23		6
EG	HV 0013	M-02EG01	F-7	3	B	1.5"	GL	NO	C	0	PIT	RR			
EG	HV 0014	M-02EG01	C-7	3	B	1.5"	GL	NO	C	0	BT	OP	23		6
EG	HV 0014	M-02EG01	C-7	3	B	1.5"	GL	NO	C	0	PIT	RR			
EG	HV 0015	M-02EG01	D-6	3	B	18"	BT	NO	0	O/C	BT	OP	60		6
EG	HV 0015	M-02EG01	D-6	3	B	18"	BT	NO	0	O/C	PIT	RR			
EG	HV 0016	M-02EG01	D-6	3	B	18"	BT	NO	0	O/C	BT	OP	60		6
EG	HV 0016	M-02EG01	D-6	3	B	18"	BT	NO	0	O/C	PIT	RR			
EG	LV 0001	M-02EG01	G-7	3	B	3"	GL	NO	C	0	NA				3
EG	LV 0002	M-02EG01	C-7	3	B	3"	GL	NO	C	0	NA				3
EG	RV 0009	M-02EG01	G-6	3	B	2"	GL	NO	0	0	BT	OP	5		
EG	RV 0009	M-02EG01	G-6	3	B	2"	GL	NO	0	0	FST	OP			
EG	RV 0009	M-02EG01	G-6	3	B	2"	GL	NO	0	0	PIT	RR			
EG	RV 0010	M-02EG01	C-6	3	B	2"	GL	NO	0	0	BT	OP	5		
EG	RV 0010	M-02EG01	C-6	3	B	2"	GL	NO	0	0	FST	OP			
EG	RV 0010	M-02EG01	C-6	3	B	2"	GL	NO	0	0	PIT	RR			
EG	V 0003	M-02EG01	G-3	3	C	20"	CK	SA	C	0	CVT	OP			
EG	V 0007	M-02EG01	E-3	3	C	20"	CK	SA	C	0	CVT	OP			
EG	V 0012	M-02EG01	D-3	3	C	20"	CK	SA	C	0	CVT	OP			
EG	V 0016	M-02EG01	C-3	3	C	20"	CK	SA	C	0	CVT	OP			
EG	V 0130	M-02EG01	D-6	3	C	18"	CK	SA	C	0	CVT	OP			
EG	V 0131	M-02EG01	D-6	3	C	18"	CK	SA	C	0	CVT	OP			
EG	V 0159	M-02EG01	G-6	3	C	2"	RV	SA	C	0	RVT				2
EG	V 0170	M-02EG01	C-6	3	C	2"	RV	SA	C	0	RVT				2
EG	V 0305	M-02EG01	G-6	3	C	1"	RV	SA	C	0	RVT				2
EG	V 0306	M-02EG01	C-6	3	C	1"	RV	SA	C	0	RVT				2

IN SERVICE TESTING PROGRAM - N-02E002

BY	ULU-NUMBER	N-P-ID-N	CRD	I	CAT	*SIZE	TYP	AT	POS	DIF	TST	TM	MAX	NR/R	NOTES-R
EG	HV 0053	N-02E002	G-5	3	B	18"	BT	HO	0	0	BT	OP	60		6
EG	HV 0053	N-02E002	G-5	3	B	18"	BT	HO	0	0	PIT	RR			
EG	HV 0054	N-02E002	F-5	3	B	18"	BT	HO	0	0	BT	OP	60		6
EG	HV 0054	N-02E002	F-5	3	B	18"	BT	HO	0	0	PIT	RR			
EG	HV 0072	N-02E002	G-2	3	B	2"	GA	HO	0	0/0	BT	OP	23		6
EG	HV 0072	N-02E002	G-2	3	B	2"	GA	HO	0	0/0	BT	OP	23		6
EG	HV 0074	N-02E002	G-1	3	B	2"	GA	HO	0	0/0	BT	OP	23		6
EG	HV 0075	N-02E002	G-1	3	B	2"	GA	HO	0	0/0	BT	OP	23		6
EG	HV 0101	N-02E002	G-4	3	B	18"	BT	HO	0	0	BT	OP	60		6
EG	HV 0101	N-02E002	G-4	3	B	18"	BT	HO	0	0	PIT	RR			
EG	HV 0102	N-02E002	G-4	3	B	18"	BT	HO	0	0	BT	OP	60		6
EG	HV 0102	N-02E002	G-4	3	B	18"	BT	HO	0	0	PIT	RR			
EG	TV 0029	N-02E002	G-6	3	B	20"	BT	HO	0	0	BT	OP	50		
EG	TV 0029	N-02E002	G-6	3	B	20"	BT	HO	0	0	PIT	RR			
EG	TV 0030	N-02E002	G-6	3	B	20"	BT	HO	0	0	BT	OP	50		
EG	TV 0030	N-02E002	G-6	3	B	20"	BT	HO	0	0	PIT	RR			
EG	V 0024	N-02E002	G-6	3	C	1"	RV	SA	0	0	RVT	RR			2
EG	V 0027	N-02E002	G-5	3	C	1"	RV	SA	0	0	RVT	RR			2
EG	V 0026	N-02E002	G-5	3	C	18"	CK	SA	0	0	NA				3
EG	V 0049	N-02E002	G-6	3	C	1"	RV	SA	0	0	RVT	RR			2
EG	V 0052	N-02E002	G-5	3	C	1"	RV	SA	0	0	RVT	RR			2
EG	V 0061	N-02E002	F-5	3	C	18"	CK	SA	0	0	NA				3
EG	V 0200	N-02E002	H-4	3	B	12"	BT	H	0	0	HA				1,3
EG	V 0201	N-02E002	D-4	3	B	12"	BT	H	0	0	NA				1,3

IN SERVICE TESTING PROGRAM - M-02EM01

BY	ULV-NUMBER	M-F-ID-N	CRD	I	QAT	*SIZE	TYP	AT	POS	DIR	TST	TM	HAX	*R/R	*NOTES-N
EM	8922A	M-02EM01	E-5	2	C	4"	CK	SA	C	0	CVT	RR		EM-1	5
EM	8922B	M-02EM01	D-5	2	C	4"	CK	SA	C	0	CVT	RR		EM-1	5
EM	8926A	M-02EM01	E-7	2	C	8"	CK	SA	C	0	CVP	OP		EM-5	
EM	8926A	M-02EM01	E-7	2	C	8"	CK	SA	C	0	CVT	RR		EM-5	
EM	8926B	M-02EM01	D-7	2	C	8"	CK	SA	C	0	CVP	OP		EM-5	
EM	8926B	M-02EM01	D-7	2	C	8"	CK	SA	C	0	CVT	RR		EM-5	
EM	HV 8802A	M-02EM01	E-4	2	B	4"	GA	HO	C	0	BT	OP	10		6
EM	HV 8802A	M-02EM01	E-4	2	B	4"	GA	HO	C	0	PIT	RR			5,6
EM	HV 8802B	M-02EM01	D-4	2	B	4"	GA	HO	C	0	BT	OP	10		
EM	HV 8802B	M-02EM01	D-4	2	B	4"	GA	HO	C	0	PIT	RR			
EM	HV 8807A	M-02EM01	G-7	2	B	6"	GA	HO	C	0	BT	OP	15		6
EM	HV 8807A	M-02EM01	G-7	2	B	6"	GA	HO	C	0	PIT	RR			
EM	HV 8807B	M-02EM01	F-7	2	B	6"	GA	HO	C	0	BT	OP	15		6
EM	HV 8807B	M-02EM01	F-7	2	B	6"	GA	HO	C	0	PIT	RR			
EM	HV 8814A	M-02EM01	B-6	2	B	1.3"	GL	HO	0	C	BT	OP	10		6
EM	HV 8814A	M-02EM01	B-6	2	B	1.5"	GL	HO	0	C	PIT	RR			
EM	HV 8814B	M-02EM01	B-5	2	B	1.3"	GL	HO	0	C	BT	OP	10		6
EM	HV 8814B	M-02EM01	B-5	2	B	1.5"	GL	HO	0	C	PIT	RR			
EM	HV 8821A	M-02EM01	E-4	2	B	4"	GA	HO	0	C	BT	OP	10		6
EM	HV 8821A	M-02EM01	E-4	2	B	4"	GA	HO	0	C	PIT	RR			
EM	HV 8821B	M-02EM01	D-4	2	B	4"	GA	HO	0	C	BT	OP	10		6
EM	HV 8821B	M-02EM01	D-4	2	B	4"	GA	HO	0	C	PIT	RR			
EM	HV 8823	M-02EM01	C-4	2	B	.75"	GL	AO	C	C	BT	OP	10		
EM	HV 8823	M-02EM01	C-4	2	B	.75"	GL	AO	C	C	FST	OP			
EM	HV 8823	M-02EM01	C-4	2	B	.75"	GL	AO	C	C	PIT	RR			
EM	HV 8824	M-02EM01	D-3	2	B	.75"	GL	AO	C	C	BT	OP	10		
EM	HV 8824	M-02EM01	D-3	2	B	.75"	GL	AO	C	C	FST	OP			
EM	HV 8824	M-02EM01	D-3	2	B	.75"	GL	AO	C	C	PIT	RR			
EM	HV 8835	M-02EM01	B-4	2	B	4"	GA	HO	0	C	BT	CS	10		6,5
EM	HV 8835	M-02EM01	B-4	2	B	4"	GA	HO	0	C	PIT	RR			
EM	HV 8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	AT	RR			11
EM	HV 8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	BT	OP	10		
EM	HV 8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	FST	OP			
EM	HV 8871	M-02EM01	G-5	2	A	.75"	GL	AO	C	C	PIT	RR			
EM	HV 8881	M-02EM01	G-4	2	B	.75"	GL	AO	C	C	BT	OP	10		
EM	HV 8881	M-02EM01	G-4	2	B	.75"	GL	AO	C	C	FST	OP			
EM	HV 8881	M-02EM01	G-4	2	B	.75"	GL	AO	C	C	PIT	RR			
EM	HV 8888	M-02EM01	F-6	2	A	1"	GL	AO	C	C	AT	RR			9,10
EM	HV 8889A	M-02EM01	G-2	1	B	.75"	GL	AO	C	C	NA				3
EM	HV 8889B	M-02EM01	G-3	1	B	.75"	GL	AO	C	C	NA				3
EM	HV 8889C	M-02EM01	G-2	1	B	.75"	GL	AO	C	C	NA				3
EM	HV 8889D	M-02EM01	G-2	1	B	.75"	GL	AO	C	C	NA				3
EM	HV 8923A	M-02EM01	E-7	2	B	6"	GA	HO	0	0	NA				3
EM	HV 8923B	M-02EM01	D-7	2	B	6"	GA	HO	0	0	NA				3
EM	HV 8924	M-02EM01	G-8	2	B	6"	GA	HO	0	0	NA				3
EM	HV 8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	AT	RR			11
EM	HV 8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	BT	OP	10		
EM	HV 8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	FST	OP			
EM	HV 8964	M-02EM01	G-6	2	A	.75"	GL	AO	C	C	PIT	RR			
EM	V 0001	M-02EM01	F-3	1	A.C	2"	CK	SA	C	G/C	AT	CS			7
EM	V 0001	M-02EM01	F-3	1	A.C	2"	CK	SA	C	G/C	CVT	RR		EM-2	5
EM	V 0002	M-02EM01	E-3	1	A.C	2"	CK	SA	C	G/C	AT	CS			7
EM	V 0002	M-02EM01	E-3	1	A.C	2"	CK	SA	C	G/C	CVT	RR		EM-2	5
EM	V 0003	M-02EM01	D-3	1	A.C	2"	CK	SA	C	G/C	AT	CS			7

IN SERVICE TESTING PROGRAM - M-02EM02

SY	ULU-NUMBER	K-PAID-N	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TH	MAX	#P/R	*NOTES-N
EM	8815	M-02EM02	D-3	1	A.C	3'	CK	SA	C	O/C	AT	CS			7
EM	8815	M-02EM02	D-3	1	A.C	3'	CK	SA	C	O/C	CVT	RR		EM-3	5
EM	8852	M-02EM02	E-5	3	C	.75'	RV	SA	C	O	RVT	RR			2
EM	HV 8801A	M-02EM02	D-4	2	B	4'	GA	HO	C	O	BT	OP	10		6
EM	HV 8801A	M-02EM02	D-4	2	B	4'	GA	HO	C	O	PIT	RR			6
EM	HV 8801B	M-02EM02	D-4	2	B	4'	GA	HO	C	O	BT	OP	10		6
EM	HV 8801B	M-02EM02	D-4	2	B	4'	GA	HO	C	O	PIT	RR			6
EM	HV 8803A	M-02EM02	C-7	2	B	4'	GA	HO	C	O	BT	OP	10		6
EM	HV 8803A	M-02EM02	C-7	2	B	4'	GA	HO	C	O	PIT	RR			6
EM	HV 8803B	M-02EM02	A-7	2	B	4'	GA	HO	C	O	BT	OP	10		6
EM	HV 8803B	M-02EM02	A-7	2	B	4'	GA	HO	C	O	PIT	RR			6
EM	HV 8837A	M-02EM02	C-7	2	B	1'	GL	SO	C	O	BT	OP	10		
EM	HV 8837A	M-02EM02	C-7	2	B	1'	GL	SO	C	O	FST	OP			
EM	HV 8837A	M-02EM02	C-7	2	B	1'	GL	SO	C	O	PIT	RR		EM-4	
EM	HV 8837B	M-02EM02	E-7	2	B	1'	GL	SO	C	O	BT	OP	10		
EM	HV 8837B	M-02EM02	E-7	2	B	1'	GL	SO	C	O	FST	OP			
EM	HV 8837B	M-02EM02	E-7	2	B	1'	GL	SO	C	O	PIT	RR		EM-4	
EM	HV 8843	M-02EM02	C-4	2	B	.75'	GL	AO	C	C	BT	OP	10		
EM	HV 8843	M-02EM02	C-4	2	B	.75'	GL	AO	C	C	FST	OP			
EM	HV 8843	M-02EM02	C-4	2	B	.75'	GL	AO	C	C	PIT	RR			
EM	HV 8870A	M-02EM02	E-5	2	B	1'	GL	AO	O	C	BT	OP	5		
EM	HV 8870A	M-02EM02	E-5	2	B	1'	GL	AO	O	C	FST	OP			
EM	HV 8870A	M-02EM02	E-5	2	B	1'	GL	AO	O	C	PIT	RR			
EM	HV 8870B	M-02EM02	E-5	2	B	1'	GL	AO	O	C	BT	OP	5		
EM	HV 8870B	M-02EM02	E-5	2	B	1'	GL	AO	O	C	FST	OP			
EM	HV 8870B	M-02EM02	E-5	2	B	1'	GL	AO	O	C	PIT	RR			
EM	HV 8882	M-02EM02	C-3	2	B	.75'	GL	AO	C	C	NA				3
EM	HV 8883	M-02EM02	D-6	2	B	1'	GL	AO	O	C	BT	OP	5		
EM	HV 8883	M-02EM02	D-6	2	B	1'	GL	AO	O	C	FST	OP			
EM	HV 8883	M-02EM02	D-6	2	B	1'	GL	AO	O	C	PIT	RR			
EM	V 0014	M-02EM02	E-6	2	C	1'	CK	SA	C	C	NA				12
EM	V 0017	M-02EM02	D-6	2	C	1'	CK	SA	C	C	NA				12
EM	V 0240	M-02EM02	C-7	2	C	1'	CK	SA	C	O	CVT	RR		EM-3	5
EM	V 0241	M-02EM02	B-7	2	C	1'	CK	SA	C	O	CVT	RR		EM-3	5

IN SERVICE TESTING PROGRAM - H-02EN01

BY	ULV-NUMBER	#-P-ID-#	CRD	I	CAT	KSIZ	TYP	AT	POS	DIR	TST	TW	MAX	NR/R	NOTED-#
EN	HV 0001	H-02EN01	G-7	2	B	12"	GA	HO	C	C/O	BT	RR	30	EN-4	6+5
EN	HV 0001	H-02EN01	G-7	2	B	12"	GA	HO	C	C/O	FIT	RR			
EN	HV 0006	H-02EN01	G-4	2	B	10"	GA	HO	C	0	BT	OP	15		6
EN	HV 0006	H-02EN01	G-4	2	B	10"	GA	HO	C	0	FIT	RR			
EN	HV 0007	H-02EN01	B-7	2	B	12"	GA	HO	C	C/O	BT	RR	30	EN-4	6+5
EN	HV 0007	H-02EN01	B-7	2	B	12"	GA	HO	C	C/O	FIT	RR			
EN	HV 0012	H-02EN01	B-4	2	B	10"	GA	HO	C	0	BT	OP	15		6
EN	HV 0012	H-02EN01	B-4	2	B	10"	GA	HO	C	0	FIT	RR			
EN	HV 0015	H-02EN01	E-6	2	B	3"	GA	HO	C	0	BT	OP	5		
EN	HV 0015	H-02EN01	E-6	2	B	3"	GA	HO	C	0	FIT	RR			
EN	HV 0016	H-02EN01	D-6	2	B	3"	GA	HO	C	0	BT	OP	5		
EN	HV 0016	H-02EN01	D-6	2	B	3"	GA	HO	C	0	FIT	RR			
EN	V 0002	H-02EN01	G-7	2	C	12"	CK	SA	C	0	CVT	RR		EN-1	5
EN	V 0003	H-02EN01	G-7	2	C	12"	CK	SA	C	0	CVP	OP		EN-2	
EN	V 0004	H-02EN01	G-5	2	C	10"	CK	SA	C	0	CVP	OP		EN-2	
EN	V 0008	H-02EN01	B-7	2	C	12"	CK	SA	C	0	CVT	RR		EN-1	5
EN	V 0009	H-02EN01	B-7	2	C	12"	CK	SA	C	0	CVP	OP		EN-2	
EN	V 0010	H-02EN01	B-5	2	C	10"	CK	SA	C	0	CVP	OP		EN-2	
EN	V 0013	H-02EN01	G-4	2	C	10"	CK	SA	C	0	CVT	RR		EN-3	5
EN	V 0017	H-02EN01	B-4	2	C	10"	CK	SA	C	0	CVT	RR		EN-3	5
EN	V 0057	H-02EN01	F-5	2	C	.75"	RV	SA	C	0	RVT				2
EN	V 0058	H-02EN01	F-5	2	C	1"	RV	SA	C	0	RVT				2
EN	V 0099	H-02EN01	F-6	2	C	3"	CK	SA	C	0	CVT	OP			
EN	V 0101	H-02EN01	C-6	2	C	3"	CK	SA	C	0	CVT	OP			
EN	V 0106	H-02EN01	F-5	2	C	1"	RV	SA	C	0	RVT				2

IN SERVICE TESTING PROGRAM - M-07/P01

SY	WLV-NUMBER	K-P/ID-N	CRD	I	DAT	SIZE	TYP	AT	POS	DIR	TST	TH	HAX	NR/R	NOTES-N
EP	8818A	M-02EP01	G-3	1	A.C	6"	CK	SA	C	O/C	AT	CS			7
EP	8818A	M-02EP01	G-3	1	A.C	6"	CK	SA	C	O/C	DVT	CS		EP-1	5
EP	8818B	M-02EP01	F-3	1	A.C	6"	CK	SA	C	O/C	AT	CS			7
EP	8818B	M-02EP01	F-3	1	A.C	6"	CK	SA	C	O/C	DVT	CS		EP-1	5
EP	8818C	M-02EP01	D-3	1	A.C	6"	CK	SA	C	O/C	AT	CS			7
EP	8818C	M-02EP01	D-3	1	A.C	6"	CK	SA	C	O/C	DVT	CS		EP-1	5
EP	8818D	M-02EP01	C-3	1	A.C	6"	CK	SA	C	O/C	AT	CS			7
EP	8818D	M-02EP01	C-3	1	A.C	6"	CK	SA	C	O/C	DVT	CS		EP-1	5
EP	8800A	M-02EP01	H-7	2	C	1"	RV	SA	C	O	RVT				2
EP	8800B	M-02EP01	F-7	2	C	1"	RV	SA	C	O	RVT				2
EP	8800C	M-02EP01	D-7	2	C	1"	RV	SA	C	O	RVT				2
EP	8800D	M-02EP01	C-7	2	C	1"	RV	SA	C	O	RVT				2
EP	8956A	M-02EP01	G-4	1	A.C	10"	CK	SA	C	O	AT	CS			7
EP	8956A	M-02EP01	G-4	1	A.C	10"	CK	SA	C	O	DVP	RR		EP-2	5
EP	8956B	M-02EP01	E-4	1	A.C	10"	CK	SA	C	O	AT	CS			7
EP	8956B	M-02EP01	E-4	1	A.C	10"	CK	SA	C	O	DVP	RR		EP-2	5
EP	8956C	M-02EP01	D-4	1	A.C	10"	CK	SA	C	O	AT	CS			7
EP	8956C	M-02EP01	D-4	1	A.C	10"	CK	SA	C	O	DVP	RR		EP-2	5
EP	8956D	M-02EP01	B-4	1	A.C	10"	CK	SA	C	O	AT	CS			7
EP	8956D	M-02EP01	B-4	1	A.C	10"	CK	SA	C	O	DVP	RR		EP-2	5
EP	HV 8808A	M-02EP01	G-5	2	B	10"	GA	HD	O	O	NA				1,3
EP	HV 8808B	M-02EP01	E-5	2	B	10"	GA	HD	O	O	NA				1,3
EP	HV 8808C	M-02EP01	C-5	2	B	10"	GA	HD	O	O	NA				1,3
EP	HV 8808D	M-02EP01	B-5	2	B	10"	GA	HD	O	O	NA				1,3
EP	HV 8875A	M-02EP01	H-6	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8875B	M-02EP01	F-6	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8875C	M-02EP01	D-6	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8875D	M-02EP01	C-6	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8877A	M-02EP01	F-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8877B	M-02EP01	E-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8877C	M-02EP01	D-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8877D	M-02EP01	A-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8878A	M-02EP01	G-5	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8878B	M-02EP01	E-5	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8878C	M-02EP01	D-5	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8878D	M-02EP01	B-5	2	B	1"	GL	AD	C	C	NA				3
EP	HV 8879A	M-02EP01	G-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8879B	M-02EP01	E-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8879C	M-02EP01	D-4	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8879D	M-02EP01	C-2	2	B	.75"	GL	AD	C	C	NA				3
EP	HV 8880	M-02EP01	A-4	2	A	1"	GL	AD	C	C	AT	RR			9,11
EP	HV 8950A	M-02EP01	H-7	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
EP	HV 8950A	M-02EP01	H-7	2	B	1"	GL	SO	C	O	FIT	RR			
EP	HV 8950B	M-02EP01	F-8	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
EP	HV 8950B	M-02EP01	F-8	2	B	1"	GL	SO	C	O	FIT	RR			
EP	HV 8950C	M-02EP01	F-7	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
EP	HV 8950C	M-02EP01	F-7	2	B	1"	GL	SO	C	O	FIT	RR			
EP	HV 8950D	M-02EP01	D-8	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
EP	HV 8950D	M-02EP01	D-8	2	B	1"	GL	SO	C	O	FIT	RR			
EP	HV 8950E	M-02EP01	D-7	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
EP	HV 8950E	M-02EP01	D-7	2	B	1"	GL	SO	C	O	FIT	RR			
EP	HV 8950F	M-02EP01	C-8	2	B	1"	GL	SO	C	O	BT	RR	10	EP-4	5
EP	HV 8950F	M-02EP01	C-8	2	B	1"	GL	SO	C	O	FIT	RR			
EP	V 0010	M-02EP01	G-3	1	A.C	2"	CK	SA	C	O/C	AT	CS			7

INSERVICE TESTING PROGRAM

SY	VLV-NUMBER	*-P+ID-*	CRD	I	CAT	*SIZE	TYP	AT	POS	DIR	TST	TM	MAX	*R/R	*NOTES-*
FC	FV	0310	M-02FC02	D-7	3 B	1"	GL	AO	O	C	BT	OP	5		
FC	FV	0310	M-02FC02	D-7	3 B	1"	GL	AO	O	C	FST	OP			
FC	HV	0312	M-02FC02	F-5	3 B	4"	GA	MO	C	O	BT	OP	10	6	
FC	HV	0312	M-02FC02	F-5	3 B	4"	GA	MO	C	O	PIT	RR			
FC	LV	0010	M-02FC02	D-6	3 B	1"	GL	AO	C	C	NA			3	
FC	V	0001	M-02FC02	G-6	2 C	4"	CK	SA	C	O	CVT	OP			
FC	V	0002	M-02FC02	G-6	2 C	4"	CK	SA	C	O	CVT	OP			
FC	V	0003	M-02FC02	G-6	3 C	4"	CK	SA	C	C	NA			3	
FC	V	0024	M-02FC02	G-6	2 C	4"	CK	SA	C	O	CVT	OP			
FC	V	0025	M-02FC02	G-6	2 C	4"	CK	SA	C	O	CVT	OP			
FC	V	0999	M-02FC02	E-3	3 C	.5"	RV	SA	C	O	RVT	RR		2	

IN SERVICE TESTING PROGRAM - H-02KA01

SY	VLV-NUMBER	*P-ID*	ORD	I	DAT	*SIZE	TYP	AT	POS	DIR	TST	TR	MAX	*R/R	*NOTES*
KA	FV 0029	H-02KA01	D-2	2	A	2"	GL	AO	0	C	AT	RR			11
KA	FV 0029	H-02KA01	D-2	2	A	2"	GL	AO	0	C	BT	CS	7	KA-1	5
KA	FV 0029	H-02KA01	D-2	2	A	2"	GL	AO	0	C	FST	CS		KA-1	
KA	FV 0029	H-02KA01	D-2	2	A	2"	GL	AO	0	C	PIT	RR			
KA	HV 0030	H-02KA01	C-1	2	B	1.5"	GA	HO	C	0	BT	CS	12	KA-1	5
KA	HV 0030	H-02KA01	C-1	2	B	1.5"	GA	HO	C	0	PIT	RR			
KA	V 0204	H-02KA01	C-2	2	A.C	1.5"	CK	BA	0	C	AT	RR		VO-1	2-11

IN SERVICE TESTING PROGRAM - M-02KJ01

SY	VAL-NUMBER	*-PAID-*	CRD	I	CAT	*SIZE	TYP	AT	POB	DIR	TST	TM	MAX	*R/R	*NOTES-*
KJ.	HV 0001	M-02KJ01	A-6	3	B	1*	GA	HO	G	C	BT	GP	12		

IN SERVICE TESTING PROGRAM - W-02KJ03

BY	WLV-NUMBER	*PAID*	CRD	I	CAT	*SIZE	TYP	AT	POB	DIR	TST	TH	MAX	*R/R
KJ	WV 0002	W-02KJ03	A-6	3	B	1*	GA	HO	0	C	BT	OF	12	

IN SERVICE TESTING PROGRAM - H-02KJ04

SY	ULU-NUMBER	*-P-ID-*	CRD	I	DAT	RSIZE	TYP	MT	POS	DIR	TST	TH	HAX	XR/R
KJ.	HV 0101	H-02KJ04	A-6	3	B	1*	GA	HQ	0	C	BT	OP	12	

IN SERVICE TESTING PROGRAM - H-02KJ06

BY	WLU-NUMBER	#-PAID-*	CRD	I	CAT	#SIZE	TYP	AT	POS	DIR	TST	TM	HAX	#R/R
KJ	HV 0102	H-02KJ06	A-6	3	S	1*	GA	MO	D	C	BT	GP	12	

6

RELIEF REQUEST #P01

SYSTEM: Residual Heat Removal System

COMPONENT: PEJ01A and PEJ01B

CLASS: 2

FUNCTION: To provide low head safety injection and residual heat removal.

TEST REQUIREMENT: The full-scale range of each instrument shall be three times the reference value or less. Instrument accuracy shall be within the limits of Table IWP-4110-1. Station instruments meeting these requirements shall be acceptable.

BASIS FOR RELIEF: Reference values for discharge pressures for these pumps are between 200 psig and 300 psig. This would require a discharge pressure gauge of 0-600 psig maximum. The accuracy required for this gauge would be 2% of 600 psig which is ± 12 psig. The permanent discharge pressure gauges we have installed are 0-700 psig ± 5 psig. Although the permanent instruments are above the maximum range limits they are within the accuracy requirements and are therefore suitable for the test.

ALTERNATE TESTING: Use permanently installed discharge pressure gauges.

RELIEF REQUEST #P05

SYSTEM: Auxiliary Feedwater System

COMPONENT: PAL01A, PAL01B, and PAL02

CLASS: 3

FUNCTION: Provide a means to remove reactor decay heat when the principal heat sinks are unavailable.

TEST REQUIREMENT: The full-scale range of each instrument shall be three times the reference value or less. Instrument accuracy shall be within the limits of Table IWP-4110-1. Station instruments meeting these requirements shall be acceptable.

BASIS FOR RELIEF: Reference values for suction pressures for these pumps are about 15 psig. This would require suction pressure gauges of 0-45 psig maximum. The accuracy required for these gauges would be 2% of 45 psig which is ± 0.9 psig. The permanent suction pressure gauges we have installed are 0-60 psig ± 0.5 psig. Although the permanent instruments are above the maximum range limits, they are within the accuracy requirements and are therefore suitable for the test.

ALTERNATE TESTING: Use permanently installed suction pressure gauges.

RELIEF REQUEST #P06

SYSTEM: Chemical and Volume Control System

COMPONENT: PBG05A and PBG05B

CLASS: 2

FUNCTION: To provide high head safety injection to the reactor.

TEST REQUIREMENT: The full-scale range of each instrument shall be three times the reference value or less. Instrument accuracy shall be within limits of Table IWP-4110-1. Station instruments meeting these requirements shall be acceptable.

BASIS FOR RELIEF: Reference values for suction pressures for these pumps are between 30 psig and 40 psig. This would require suction pressure gauges of 0-90 psig maximum. The accuracy required for this gauge would be 2% of 90 psig which is ± 1.8 psig. The permanent suction pressure gauges we have installed are 0-150 psig ± 1.0 psig. Although the permanent instruments are above the maximum range limits, they are within the accuracy requirements and are therefore suitable for the test.

ALTERNATE TESTING: Use permanently installed suction pressure gauges.

DELETE

RELIEF REQUEST #AE 1

VALVE: AE-FCV-510, 520, 530, 540

CATEGORY: B

CLASS: -

FUNCTION: Main feedwater control valves. Close upon receipt of a feed-water isolation signal.

TEST REQUIREMENT: Exercise valve (full stroke) to the position required to fulfill its function, stroke time and verify fail safe actuation every 3 months.

BASIS FOR RELIEF: Closing these valves during power operation is considered impractical from an operating viewpoint. Closure would isolate feedwater to the steam generator which may result in a severe transient in the steam generator, possibly causing a unit trip.

ALTERNATE TESTING: Valve will be exercised (full stroke) to the position required to fulfill its function, stroke timed, and fail safe actuation verified during cold shutdown.

DELETE

RELIEF REQUEST #AE 2

VALVE: AE-FCV-550, 560, 570, 580

CATEGORY: B

CLASS: -

FUNCTION: Bypass feedwater control valves. Close upon receipt of a feedwater isolation signal.

TEST REQUIREMENT: Exercise valve (full stroke) to the position required to fulfill its function, stroke time and verify fail safe actuation every 3 months.

BASIS FOR RELIEF: Exercising these valves during power operation is considered impractical from an operating viewpoint. Opening the valves could result in a loss of steam generator level control on the affected steam generator, possibly causing a unit trip.

ALTERNATE TESTING: Valve will be exercised (full stroke) to the position required to fulfill its function, stroke timed, and fail safe actuation verified during cold shutdown.

RELIEF REQUEST #P07

SYSTEM: Safety Related

COMPONENT: All pumps listed in the program

CLASS: 2 & 3

FUNCTION: To provide flow to safety related systems

TEST REQUIREMENT: The full-scale range of each instrument shall be three times the reference value or less.

BASIS FOR RELIEF: Vibration analyzers generally have multiple over-lapping scales rather than a single full-scale range. Also, for vibrations in the lowest range of Table IWP-3100-2, when $0 < V_r < 0.5$ mil, if a gauge of $3 V_r$ were used we would not be able to reach the Required Action Range of > 1.5 mil. It is not feasible, for example, to require a meter with a range of 0-0.6 mils for a reference vibration of 0.2 mils when Alert Range is 1.0-1.5 mils.

ALTERNATE TESTING: Will use vibration meters with multiple over-lapping scales, the actual scale used will be determined by the amplitude of vibration for each test.

INSERVICE TESTING PROGRAM
 ISI CLASS 1, 2 & 3 PUMPS
 CALLAWAY NUCLEAR PLANT

Rev.	Date	Page
3	12/84	1 of 2

PUMP NUMBER	PUMP NAME	ISI CLASS	P&ID and Coordinates	TEST PARAMETERS					NOTES
				SPEED	INLET PRES.	DIFF. PRES.	FLOW RATE	VIBRATION	
PAL01 A	Motor Driven Auxiliary Feedwater Pump A	3	M-02AL01 E-4	N/A	YES	YES	YES	YES	Note 1 RR# P07 RR# P04 RR= P05
PAL01 B	Motor Driven Auxiliary Feedwater Pump B	3	M-02AL01 G-4	N/A	YES	YES	YES	YES	RR# P07 Note 1 RR# P05 RR# P04
PAL02	Turbine Driven Auxiliary Feedwater Pump	3	M-02AL01 B-4 & M-02FC02	YES	YES	YES	YES	YES	Note 1 RR# P07 RR# P04 RR= P05
PBG05 A	Centrifugal Charging Pump	2	M-02BG03 C-5	N/A	YES	YES	NO	YES	Note 1 RR= P06, P07, P03, P04
PBG05 B	Centrifugal Charging Pump	2	M-02BG03 B-5	N/A	YES	YES	NO	YES	Note 1 RR# P06, P07, P03, P04
PEF01 A	Essential Service Water Pump	3	M-U2EF01 G-6	N/A	YES	YES	YES	YES	Note 1 Note 2 RR# P07 RR# P04
PEF01 B	Essential Service Water Pump	3	M-U2EF01 C-6	N/A	YES	YES	YES	YES	Note 1 Note 2 RR# P07 RR# P04
PEG01 A	Component Cooling Water Pump	3	M-02EG01 G-4	N/A	YES	YES	YES	YES	Note 1 RR# P04 RR# P07
PEG01 B	Component Cooling Water Pump	3	M-02EG01 D-4	N/A	YES	YES	YES	YES	Note 1 RR# P04 RR# P07
PEG01 C	Component Cooling Water Pump	3	M-02EG01 E-4	N/A	YES	YES	YES	YES	Note 1 RR# P04 RR# P07
PEG01 D	Component Cooling Water Pump	3	M-02EG01 B-4	N/A	YES	YES	YES	YES	Note 1 RR# P04 RR# P07

