

ATTACHMENT 3-50
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 1a

COMPONENTS	DECAY HEAT RIVER WATER																												REMARKS					
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	I	A	C	C	C	C	C	C	C	C	C		C	C	C	C	
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	I	T	B	B	B	B	B	B	B	B	B	B		B	B	B	B	
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F	F	F	F	F	F	F		F	F	F	F	
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	F		A	A	A	A	A	A	A	A	A		A	A	A	Z	Z
1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5
			a	b	c					a				0	1	1	a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b	
DR-P-1A																X		X	X	P		X		S		X		X	X		X		Train A	
DR-P-1B																	X			X	X		X	P	X		X	R	R		R		Train B	
																				X	X							S	S		S			
DR-S-1A																S		S	S			S		S		S		S	S		S		Train A	
DR-S-1B																	S			S	S		S		S		S						Train B	
DR-V-1A																X		X	X			S		S		X			X		X		Train A	
DR-V-1B																		X			X	X		X	P	X		S	R	R		R		Train B
																													S	S		S		

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

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SHEET 1b

COMPONENTS	7DECAY HEAT RIVER WATER																											
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	I	I	R	R	R	R	R	R	R	T	
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	S	S	S	S	B	B	B	B	B	B	B	
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	F	
COMPONENTS	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z					Z	Z	Z	Z	Z	Z	A	
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F	F	F	F	1	1	1	1	1	2	3	1
																	A	Z	Z	Z	a	b	c	d	e			
																	2	1	2	3								
DR-P-1A	S		X					X									X	R										Train A
DR-P-1B		S	P	X			X										R	X										Train B
DR-S-1A	S		S				S										X											Train A
DR-S-1B		S		S			S											X										Train B
DR-V-1A	S		X				X										X	M										Train A
DR-V-1B		S	P	X			X										M	X										Train B

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SHEET 1a

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS									
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	A	A	A					
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B	B					
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F	F					
	1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5		
	a			a	b	c					a				0	1			a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b			
NI-11																					X	X	P		S		X					X	X		X			Train A
NI-12																							S	X		X		X				RSD	RSD		RSD			Train B – Control Room & RSD
RC4A-TE-1																					S			X	S		X					X	X		X			Train X
RC4A-TE-4																					S				S		S	X				X		X			Train X	
RC4B-TE-1																					S			X	S		S					X	X		X			Train X
RC4B-TE-4																					S				S		S					X		X			Train X	
RC-TE-958																					S	X			X		X		X	X	X	RSD		RSD			Train A – Control Room & RSD	
RC-TE-960																							X	X		X		X				RSD	RSD		RSD			Train B – Control Room & RSD
RC5A-TE-2																					S			X	S		S					X	X		X			Train X
RC5A-TE-4																					S				S		S					X		X			Train X	
RC5B-TE-2																					S			X	S		S	X				X	X		X			Train X
RC5B-TE-4																					S				S		X					X		X			Train X	
RC-TE-959																					S	X			X		X		X	X	X	RSD		RSD			Train A – Control Room & RSD	
RC-TE-961																							X	X		X		X				RSD	RSD		RSD			Train B – Control Room & RSD
RC3A-PT3																					S	X	P		X		X		X	P	X	X		X			Train A	
RC-PT-963																					S	X		X	X		X		X	X	X	RSD		RSD			Train A – RSD Only	
RC-PT-949																							X	X		X		X				RSD	RSD		RSD			Train B – Control Room & RSD

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SHEET 2a

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

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SHEET 3a

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS					
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	A	A	A	
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B		
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F		
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	A	A	A	A	A	A	A		A	A	A	Z	Z
1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5
			a	b	c					a				0	1		a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b	
MS-PT-1184																			S	S			S		X	X			X		X		Train A	
DH-DPT-802	X							X	X										S	X			X		X		X	X	X	RSD	RSD		Train A – Control Room & RSD	
DH-DPT-803		X						X	X												S	X		X		X			RSD	RSD		Train B – Control Room & RSD		
DH-FI-299A																																	Train A – Local Indication	
DH-FI-299B																																	Train B – Local Indication	
DH2-TE-1	X							X	X										S	X			X		X		X	X	X	RSD	RSD		Train A – Control Room & RSD	
DH2-TE-2		X						X	X										S			X	S	X	S	X			RSD	RSD	RSD		Train B – Control Room & RSD	
DH6-TE-1	X							X	X										S	X			X		X		X	X	X	RSD	RSD		Train A – Control Room & RSD	
DH6-TE-2		X						X	X										S			X	S	X	S	X			RSD	RSD	RSD		Train B – Control Room & RSD	
CO-LI-1004																																	Local Indication	
CO-LI-1005																																	Local Indication	
MU14-LT									X										S			X	S		S				X	X		X		Train X
MU-LT-778																					X	X		X		X			RSD	RSD	RSD		Train B – Control Room & RSD	
DH-LT-808								P	X										S	X			X		X		X	X	X	X		X		Train A – Control Room & RSD
DH-LT-809								X	P													X		X		X			RSD	RSD				Train B – Control Room & RSD

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COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS							
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	A					
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B					
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F					
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z						
	1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4	5	5		
				a	b	c					a				0	1		a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b		
EF-FT-788																						S	X		X		X			R	R		R		Train B – Control Room & RSD	
EF-FT-779																				S	S			X		X	X			X	R	R		S		Train C – Control Room & RSD
EF-FT-782																													R	R		R			Train B – Control Room & RSD	
EF-FT-791																				S	S			X		X	X			X	R	R		S		Train C – Control Room & RSD
FW-LT-1044 (1)																										X	X			X		X			HSPS- Not required.	
FW-LT-1040 (2)																											X			X		X			HSPS- Not required.	
FW-LT-1045 (3)																														X					HSPS- Not required.	
FW-LT-1041 (4)																															X				HSPS- Not required.	
FW-LT-1046 (1)																									X	X				X		X			HSPS- Not required.	
FW-LT-1042 (2)																										X				X		X			HSPS- Not required.	
FW-LT-1047 (3)																														X					HSPS- Not required.	
FW-LT-1043 (4)																															X				HSPS- Not required.	
FW-LT-1052 (1)																									X	X				X		X			HSPS. Required in CB-FA-3b.	
FW-LT-1048 (2)																										X				X		X			HSPS- Not required.	
FW-LT-1053 (3)																															X				HSPS- Not required.	
FW-LT-1049 (4)																															X				HSPS- Not required.	
FW-LT-1054 (1)																								X	X					X		X			HSPS- Not required.	
FW-LT-1050 (2)																										X					X		X			HSPS- Not required.
FW-LT-1055 (3)																															X					HSPS- Not required.
FW-LT-1051 (4)																																X				HSPS- Not required.

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SHEET 5a

COMPONENTS	INSTRUMENTATION AND CONTROLS																																REMARKS	
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C	C	C	C		C
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	A	A	A	A	A	A	A	A	A	A	A	Z		Z
1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5
				a	b	c				a				0	1		a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b	
CO-LT-1060 (1)																			S				S		X	X				X		X		HSPS- Not required.
CO-LT-1061 (2)								X	X														S		X				X	X			HSPS- Not required.	
CO-LT-1062 (1)																			S				S		X	X				X	X			HSPS- Not required.
CO-LT-1063 (2)								X	X														S		X				X	X			HSPS- Not required.	
MS-PT-950 (1)																			S	X	P	P	X		X				X	R S D	R S D			
MS-PT-1180 (2)																										X				X	X			HSPS- Not required.
MS-PT-1182 (3)																													X					HSPS- Not required.
MS-PT-1181 (4)																														X				HSPS- Not required.
MS-PT-1184 (1)																									X	X				X	X			HSPS- Not required.
MS-PT-951 (2)																					X	X		X		X			R S D	R S D	R S D			
MS-PT-1185 (3)																														X				HSPS- Not required.
MS-PT-1183 (4)																														X				HSPS- Not required.
FW-TE-1046 (1)																									X	X								HSPS- Not required.
FW-TE-1044 (2)																										X								HSPS- Not required.
FW-TE-1047 (3)																														X				HSPS- Not required.
FW-TE-1045 (4)																															X			HSPS- Not required.
FW-TE-1050 (1)																									X	X								HSPS- Required in CB-FA-3b.
FW-TE-1048 (2)																										X								HSPS- Not required.
FW-TE-1051 (3)																														X				HSPS- Not required.
FW-TE-1049 (4)																															X			HSPS- Not required.
IC5-DPT									X										S				X	S				X	X		X			
IC9-TE																			S				S	X					X	X			Interlock to Close MU-V-1A/1B	
MU5-TE							X	X	X																				X	X				Interlock to Close MU-V-3

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 6a

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS					
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C		C	C	C		
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B		
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F		
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	A	A	A	A	A	A	A	A		A	A	A	Z	Z
	1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5
				a	b	c				a					0	1	1	a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b
MU42-DPT							X	X	X										S				X		S					X		X		Auto Control for MU-V-32
RC3A-PT-1																									X					X	X			
SP10A-PT-1																														X	X			
SP10A-PT-2																														X	X			
SP10B-PT-1																														X	X			
SP10B-PT-2																														X	X			
DF-LS-244A																																		
DF-LS-244B																																		
RM-L-1																			S				X	X	S					X	X		Interlock to Close MU-V-2A/2B	
RC3A-PT-3																			S	X	P		X		X		X	P	X	X	X		Train A	
RC3A-PT-4																							S	S		X		S	X	X			Train B	
RC3B-PT-3																			S				S		S				X	S			Train C	
BS-PT-282							X	X	X		X								X	X	X	X	X	X	X		X	X	X				Train A	
BS-PT-285							X		X												X	X	X	X		X		S	X	S			Train B	
BS-PT 288							X		X										S				S	X	X				X	X			Train C	
BS-PS-932									X	X			X						S	S	S		S		S				X				Train A	
BS-PS-933									X	X			X											S		S			X	S			Train B	
BS-PS-934									X	X			X						S	S			S		S		S	S	X				Train C	
BS-PS-935									X										S			S	S	S					X				Train A	
BS-PS-936									X													S		S		S			X				Train B	
BS-PS-937									X													S		S		S			X				Train D	
IC-LT-802																			S	X			X		X		X	X	X				Train A. ICCW Tank Level Only	
IC-LT-803																					X	X		X		X		X	X				Train B. ICCW Tank Level Only	
BS-PS-283							X	X	X		X								X	X	X						X		X				Auto Start for BS-P-1A	
BS-PS-286							X	X	X		X								X	X	X						X		X				Auto Start for BS-P-1A	
BS-PS-289							X	X	X		X								X	X	X						X		X				Auto Start for BS-P-1A	

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 7a

INSTRUMENTATION AND CONTROLS																																		
COMPONENTS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C	C	C	C		
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B			
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F			
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	A	A	A	A	A	A	A	A	A	A	A	Z	Z	
	1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5
				a	b	c					a				0	1	1	a	a	b	c	d	e	f	g	a	b	c	d	a	b	a	b	
BS-PS-284										X		X															X	X						Auto Start for BS-P-1B
BS-PS-287										X		X															X	X						Auto Start for BS-P-1B
BS-PS-290										X		X															X	X						Auto Start for BS-P-1B
IM-SPND-5, 31, 34, 52 (BIRO)																													X		X			Train A
IM-SPND-3, 4, 9, 24 (BIRO)																													X		X			Train B
IM-SPND-12, 13, 21, 38 (BIRO)																													X		X			Train C
IM-SPND-17, 42, 48, 49 (BIRO)																													X		X			Train D
MJ-FT-1126																			S	X			X		X		X	X	X	X		X		Train A
MU-FT-1127																			S	X			X		X		X	X	X	X		X		Train A
MU-FT-1128										X											S	X			X				X		X			Train B
MU-FT-1129										X											S	X			X				X		X			Train B

LEGEND

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M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 1b

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS
	D G	D G	F H	F H	F H	F H	F H	F H	I B	I B	I B	I B	I B	I B	I B	I B	I S	I S	I S	I S	R B	R B	R B	R B	R B	R B	R B	T B	Y A R D
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F A	F Z	F Z	F Z	1 a	1 b	1 c	1 d	1 e	2	3	1	
NI-11			X					P															X				p		Train A
NI-12			P	X			X	X															P				P		Train B -Control Room & RSD
RC4A-TE-1			P					X															X	X		X			Train X
RC4A-TE-4			X																				X	X		X			Train X
RC4B-TE-1			X																				X		X	X			Train X
RC4B-TE-4			X																				X		X	X			Train X
RC-TE-958			X					X														X	X	X		X			Train A – Control Room & RSD
RC-TE-960			X																				P		P				Train B – Control Room & RSD
RC5A-TE-2			P																				X	X	X				Train X
RC5A-TE-4			P																				X	X	X				Train X
RC5B-TE-2			X																				X		X				Train X
RC5B-TE-4			X					X															X		X				Train X
RC-TE-959			X					X														X	X	X		X	X		Train A – Control Room & RSD
RC-TE-961			X																				P		P				Train B – Control Room & RSD
RC3A-PT3			P					X													X	X	X		X	X			Train A
RC-PT-963			X					X														X	X		X	X			Train A – RSD Only
RC-PT-949			X																				P		P	P			Train B – Control Room & RSD
RC1-LT-1			X																			X	X						Train X
RC1-LT-3			P																			P	P						Train X
RC-LT-777			X				S														X	X	X						Train B – Control Room & RSD
RC2-TE-1			X																				X	P	X	X			Train X
RC2-TE-2			P				X																P	X		P			Train B
FW-LT-775			P					P													P	P	P		P				Train A – Control Room & RSD
FW-LT-789			X																			X	X						Train B – Control Room & RSD
FW-LT-788			X					X															X						Train A – Control Room & RSD

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 2b

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS
	D G	D G	F H	F H	F H	F H	F H	F H	I B	I B	I B	I B	I B	I B	I B	I B	I S	I S	I S	I S	R B	R B	R B	R B	R B	R B	R B	T B	Y A R D
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F A	F Z	F Z	F Z	1 a	1 b	1 c	1 d	1 e	2	3	1	
FW-LT-776			P																			P							Train B – Control Room & RSD
SP6A-PT-1			P																		X	X			X				Train X – Also for MS-V-3D, E, F
SP6A-PT-2			P																		X	X			X				Train X – Also for MS-V-3D, E, F
MS-PT-950			P				D	P														P			P				Train A – Control Room & RSD
MS-PT-1180			X				X														X	X			X				Train B
SP6B-PT-1			P																			X			X				Train X – Also for MS-V-3A, B, C
SP6B-PT-2			P																			X			X				Train X – Also for MS-V-3A, B, C
MS-PT-951			P				D															P			P				Train B – Control Room & RSD
MS-PT-1184			X				X	X														X			X				Train A
DH-DPT-802			X					X																					Train A – Control Room & RSD
DH-DPT-803			X																										Train B – Control Room & RSD
DH-FI-299A																													Train A – Local Indication
DH-FI-299B																													Train B – Local Indication
DH2-TE-1			X				X	X																					Train A – Control Room & RSD
DH2-TE-2			X	X			X																						Train B – Control Room & RSD
DH6-TE-1			X				X	X																					Train A – Control Room & RSD
DH6-TE-2			X	X			X																						Train B – Control Room & RSD
CO-LI-1004																													Local Indication
CO-LI-1005																													Local Indication
MU14-LT			X	X			X																						Train X
MU-LT-778			X																										Train B – Control Room & RSD
DH-LT-808			X					X																				X	Train A – Control Room & RSD
DH-LT-809			P																									X	Train B – Control Room & RSD
EF-FT-788			X								X					X													Train B – Control Room & RSD
EF-FT-779			X				X				X					X													Train C – Control Room & RSD

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 3b

COMPONENTS	INSTRUMENTATION AND CONTROLS																											REMARKS	
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	R	R	R	R	R	R	R	T	Y			
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	S	S	S	S	R	R	R	B	B	A	R		
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	D		
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	Z	Z	Z	Z	Z	Z	Z	Z	A			
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	2	1	2	3	a	b	c	d	e	1	2	3	1
EF-FT-782			X								X					X												Train B – Control Room & RSD	
EF-FT-791			X				X				X					X												Train C – Control Room & RSD	
FW-LT-1044 (1)			X				X	X														X	X					HSPS- Not required.	
FW-LT-1040 (2)			X				X															X	X					HSPS- Not required.	
FW-LT-1045 (3)			X				X															X	X					HSPS- Not required.	
FW-LT-1041 (4)			X				X															X	X					HSPS- Not required.	
FW-LT-1046 (1)			X				X	X														X	X					HSPS- Not required.	
FW-LT-1042 (2)			X				X															X	X					HSPS- Not required.	
FW-LT-1047 (3)			X				X															X	X					HSPS- Not required.	
FW-LT-1043 (4)			X				X															X	X					HSPS- Not required.	
FW-LT-1052 (1)			X				X	X															X					HSPS- Required in CB-FA-3b.	
FW-LT-1048 (2)			X				X																X					HSPS- Not required.	
FW-LT-1053 (3)			X				X														X		X					HSPS- Not required.	
FW-LT-1049 (4)			X				X																X					HSPS- Not required.	
FW-LT-1054 (1)			X				X	X															X					HSPS- Not required.	
FW-LT-1050 (2)			X				X																X					HSPS- Not required.	
FW-LT-1055 (3)			X				X														X		X					HSPS- Not required.	
FW-LT-1051 (4)			X				X																X					HSPS- Not required.	
CO-LT-1060 (1)			X				X	X			X	X				X												HSPS- Not required.	
CO-LT-1061 (2)			X				X					X				X												HSPS- Not required.	
CO-LT-1062 (1)			X				X	X			X	X				X												HSPS- Not required.	
CO-LT-1063 (2)			X				X					X				X												HSPS- Not required.	
MS-PT-950 (1)			P				D															P			P				
MS-PT-1180 (2)			X				X															X	X			X		HSPS- Not required.	
MS-PT-1182 (3)			X				X				X			X		X												HSPS- Not required.	

LEGEND

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M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 4b

COMPONENTS	INSTRUMENTATION AND CONTROLS																											REMARKS
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	I	R	R	R	R	R	R	R	T	Y	
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	S	S	S	S	B	B	B	B	B	B	A	
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	F	
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	Z	Z	Z	1	1	1	1	1	2	3	1
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F	F	F	F	a	b	c	d	e			
																	2	1	2	3								
MS-PT-1181 (4)			X				X				X			X		X												HSPS- Not required.
MS-PT-1184 (1)			X				X	X													X				X			HSPS- Not required.
MS-PT-951 (2)			P				D														P			P				
MS-PT-1185 (3)			X				X				X			X		X												HSPS- Not required.
MS-PT-1183 (4)			X				X			X				X		X												HSPS- Not required.
FW-TE-1046 (1)			X				X	X													X	X	X		X	X		HSPS- Not required.
FW-TE-1044 (2)			X				X														X	X	X		X			HSPS- Not required.
FW-TE-1047 (3)			X				X														X	X	X		X			HSPS- Not required.
FW-TE-1045 (4)			X				X														X	X	X		X			HSPS- Not required.
FW-TE-1050 (1)			X				X	X													X	X	X	X	X			HSPS- Required in CB-FA-3b.
FW-TE-1048 (2)			X				X														X	X	X	X	X			HSPS- Not required.
FW-TE-1051 (3)			X				X														X	X	X	X	X			HSPS- Not required.
FW-TE-1049 (4)			X				X														X	X	X	X	X			HSPS- Not required.
IC5-DPT			X	X			X																					
IC9-TE			X					X												X					X	X		Interlock to Close MU-V-1A/1B
MU5-TE			X	X			X																					Interlock to Close MU-V-3
MU42-DPT			X	X			X																					Auto Control for MU-V-32
RC3A-PT-1			P					X												X	X	X			X	X		
SP10A-PT-1																										X		
SP10A-PT-2																										X		
SP10B-PT-1																										X		
SP10B-PT-2																										X		
DF-LS-244A	X																											
DF-LS-244B		X																										
RM-L-1			X	X			X																					Interlock to Close MU-V-2A/2B

LEGEND

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M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
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RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 5b

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS
	D G	D G	F H	F H	F H	F H	F H	F H	I B	I B	I B	I B	I B	I B	I B	I B	I S	I S	I S	I S	R B	R B	R B	R B	R B	R B	R B	T B	Y A R D
	F A	F A	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F H	F H	F H	F H	F Z	F Z	F Z	F Z	F Z	F Z	F Z	F A	
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F A	F Z	F Z	F Z	1 a	1 b	1 c	1 d	1 e	2	3	1	
																	2	1	2	3									
RC3A-PT-3			P					X													X	X	X			X	X		Train A
RC3A-PT-4			X																		X	X	X			X	X		Train B
RC3B-PT-3			X																				X			X	X		Train C
BS-PT-282			X				X	X				X	X	X		X													Train A
BS-PT-285			X	X			X																						Train B
BS-PT-288			X				X																				X		Train C
BS-PS-932			X	X			X																						Train A
BS-PS-933			X	X			X																						Train B
BS-PS-934			X	X			X																						Train C
BS-PS-935				X			X																						Train A
BS-PS-936				X			X																						Train B
BS-PS-937				X			X																						Train D
IC-LT-802			X		X			X																					Train A; ICCW Tank Level Only
IC-LT-803			X		X																								Train B; ICCW Tank Level Only
BS-PS-283			X					X																					Auto Start for BS-P-1A
BS-PS-286			X					X																					Auto Start for BS-P-1A
BS-PS-289			X					X																					Auto Start for BS-P-1A
BS-PS-284			X	X			X																						Auto Start for BS-P-1B
BS-PS-287			X	X			X																						Auto Start for BS-P-1B
BS-PS-290			X	X			X																						Auto Start for BS-P-1B
IM-SPND-5, 31, 34, 52 (BIRO)			X	X			X														F	F	F	F	F	F	F		Train A
IM-SPND-3, 4, 9, 24 (BIRO)			X	X			X														F	F	F	F	F	F	F		Train B
IM-SPND-12, 13, 21, 38 (BIRO)			X	X			X														F	F	F	F	F	F	F		Train C

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5P
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 6b

COMPONENTS	INSTRUMENTATION AND CONTROLS																												REMARKS			
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	S	S	S	S	R	R	R	R	R	R	T		Y		
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	B	P	P	P	P	B	B	B	B	B	B	B		A		
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	F	F				
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	Z	Z	Z	Z	1	1	1	1	1	2	3		1		
																	2	1	2	3	a	b	c	d	e							
IM-SPND-17, 42, 48, 49 (BIRO)			X	X			X														F	F	F	F	F	F	F		Train D			
MU-FT-1126			X					X																					Train A			
MU-FT-1127			X					X																					Train A			
MU-FT-1128			X	X																									Train B			
MU-FT-1129			X	X																									Train B			

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
F – One or Other is Available

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5Q
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 1a

COMPONENTS	AUXILIARY ELECTRICAL POWER SYSTEM																												REMARKS							
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C		C	C	C				
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	B	B				
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	F	F				
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	A	A	A	A	A	A	A	A		A	A	Z	Z			
1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5		
			a	b	c				a					0	1		a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b			
EE-SWG-4160V-1D																			X	X			X		S		X		S	X		X		Train A		
EE-SWG-4160V-1E																			P		X			X		S		X		R S D	R S D		R S D		Train B	
EG-Y-1A																			X	X	P		X		S		X	P	X	X		X		Train A		
EG-Y-1B																			P		X			S		S	P	X		R S D	R S D		R S D		Train B	
EE-SWG-480V-1P																			X	X	P		X		S		X	P	X	X		X		Train A		
EE-SWG-480V-1S																			P		X			X	P	X		X		R S D	R S D		R S D		Train B	
EE-SWG-480V-1R																	X		X	X			X		S		X	P	X	X		X		Train A		
EE-SWG-480V-1T																		X		P		X	X		X	P	X		X		R S D	R S D		R S D		Train B
EE-MCC-ES-1A																			X	X			X		S		S		S	X		X		Train A		
EE-MCC-ES-1B																					X			X	P	X		S		R S D	R S D		R S D		Train B	
EE-MCC-ESV-1A							X		X										X	X			S		S		S		S	S		S		Train A		
EE-MCC-ESV-1B									X	X									P		X			S		S		S		R S D	R S D		R S D		Train B	
EE-MCC-ESV-1C-EX1 (1C ESV MCC Transfer Switch)																						X	P	X					R S D	R S D	R S D		R S D		Train C	
EE-MCC-ESV-1C																			P			X		S						R S D	R S D		R S D		Train C	
EE-MCC-SH-1A																	X		X	X			S		S		X		S	X		X		Train A		

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
B – Use “ES” Bypass in Control Room

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

T1 – Crosstie 1P and 1S 480V Switchgear
T2 – Crosstie 1A and 1B DC Panels

Note 1: For fire areas where the DC cross tie (T2) is used to energize Train A, manual action is taken to lockout inverter 1E.
Note 2: Signal conditioning cabinet B3 is not available in CB-FA-2b.

ATTACHMENT 3-5Q
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 2a

AUXILIARY ELECTRICAL POWER SYSTEM																																		
COMPONENTS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C	C	C	C		
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B			
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F			
	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	A	A	A	A	A	A	A	A	A	A	A	Z	Z	
	1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5
				a	b	c					a				0	1	1	a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b
																																		REMARKS
EE-MCC-SH-1B																		X			X	X		X	P	X		S	R	R	R		Train B	
EE-PNL-ATA																			X				X	S									Train X	
EE-PNL-ATB																			X				X	S									Train X	
EE-PNL-VBA																			X	T2			X	S		T2		T2	T2		T2		Train A	
EE-PNL-VBB																			P		T2	S		X	S		T2						Train B	
EE-PNL-VBC																			X	T2			X	S		T2		T2	T2		T2		Train C	
EE-PNL-VBD																			P		T2	S		X	S		T2						Train D	
EE-INV-1A																			X	T2			X	S		T2		T2	T2		T2		Train A	
EE-INV-1B																			P		T2	X		X	S		T2						Train B	
EE-INV-1C																			X	T2			X	S		T2		T2	T2		T2		Train C	
EE-INV-1D																			P		T2	X		X	S		T2						Train D	
EE-INV-1E (Note 1)																			X	T2			X	S		S		S	S		S		Train C	
EE-INV-1F																					S		X	S									Train B or D	
EED-BC-1A																			X	X			X	S		S		S	S		S		Train A	
EED-BC-1B																			P		X			X	S		S						Train B	
EED-BC-1C																			X	X			X	S		S		S	S		S		Train C	
EED-BC-1D																			P		X			X	S		S						Train D	
EED-PNL-1A																			X	T2			X		X		T2		T2	T2		T2		Train A
EED-PNL-1B																			P		T2			X		X		T2					Train B	
EED-PNL-1M																			X		X	X	X	X									Train C	
EED-PNL-1E																			X				X	S									Train A	
EED-PNL-1F																			P					X	S								Train B	
EED-PNL-1P																			X				X	S									Train A	
EED-PNL-1Q																			P					X	S								Train B	

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
B – Use “ES” Bypass in Control Room

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

T1 – Crosstie 1P and 1S 480V Switchgear
T2 – Crosstie 1A and 1B DC Panels

Note 1: For fire areas where the DC cross tie (T2) is used to energize Train A, manual action is taken to lockout inverter 1E.
Note 2: Signal conditioning cabinet B3 is not available in CB-FA-2b.

ATTACHMENT 3-5Q
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 3a

COMPONENTS	AUXILIARY ELECTRICAL POWER SYSTEM																																REMARKS		
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C	C	C	C		C	
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B		B	
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	
	1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5	
				a	b	c					a				0	1	1	a		a	b	c	d	e	f	g	a	b	c	d	a	b	a	b	
EE-PNL-TRA																			X	X			X	X	S		S		S	S		S			Train X
EE-PNL-TRB																			X		X		X	X		S		S						Train X	
SCC-A1, A2, A3																			S	X	P		X		S				X					Train A	
SCC-B1, B2, B3																						X		X		S								Train B (Note 2)	
RSP-A																			S		X	S		S				X						Train A; RSD	
RSP-B																				S	X		S		S									Train B; RSD	
RSTSP-A																				X	X	X	X						X	RSD		RSD		Train A, X; RSD	
RSTSP-B																					X		X						RSD	RSD		RSD		Train B, C, X; RSD	
RSTSP-C																					X	X	X						RSD	RSD		RSD		Train C; RSD	
ESAS Bistable Cabinets																			S				X		S				X	X					
ESAS Relay Cabinets "A"																			S	X			X		S				X	X					
ESAS Defeat "A"																			S	S			S		S		X	X	X	X		X			
ESAS Relay Cabinets "B"																			B			X	B	X	B	S			X	X					
ESAS Defeat "B"																						S		S		S		X	X	X		X			
Emergency Control Room Lighting (AC)																			X	X			S		S		S		S	S	X	X		Train A: EED-PNL-CT-2 (Upper)	
Normal Control Room Lighting (AC)																					X	X		S		S		S	X	S	X	X		Train B: EED-PNL-CT-2 (Lower)	
Emergency Control Room Lighting (DC)																			S		S	X	S	X							X		Train C: EED-PNL-1M		
FS-PNL-CB-1 (CARDON)																													O					Train X. O = Open CT-5 Switch 32 at 1A ES MCC Unit 8A	

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
B – Use "ES" Bypass in Control Room

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

T1 – Crosstie 1P and 1S 480V Switchgear
T2 – Crosstie 1A and 1B DC Panels

Note 1: For fire areas where the DC cross tie (T2) is used to energize Train A, manual action is taken to lockout inverter 1E.
Note 2: Signal conditioning cabinet B3 is not available in CB-FA-2b.

ATTACHMENT 3-5Q
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 1b

COMPONENTS	AUXILIARY ELECTRICAL POWER SYSTEM																											
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	I	R	R	R	R	R	R	R	T		
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	S	S	S	S	S	B	B	B	B	B	B	
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	F	
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	A	Z	Z	Z	1	1	1	1	1	2	3	1
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F	F	F	F	a	b	c	d	e			REMARKS
																	2	1	2	3								
EE-SWG-4160V-1D	X																											Train A
EE-SWG-4160V-1E		X																										Train B
EG-Y-1A	X																											Train A
EG-Y-1B		X																										Train B
EE-SWG-480V-1P	S																											Train A
EE-SWG-480V-1S		S																										Train B
EE-SWG-480V-1R	S		X					X									X	P										Train A
EE-SWG-480V-1T		S	P	X			X										P	X										Train B
EE-MCC-ES-1A	S																											Train A
EE-MCC-ES-1B		S																										Train B
EE-MCC-ESV-1A	S		X					X																				Train A
EE-MCC-ESV-1B		S		X																								Train B
EE-MCC-ESV-1C-EX1 (1C ESV MCC Transfer Switch)																												Train C
EE-MCC-ESV-1C			X					P																				Train C
EE-MCC-SH-1A	S		X					X									X	P										Train A
EE-MCC-SH-1B		S	P	X			X										P	X										Train B
EE-PNL-ATA																												Train X
EE-PNL-ATB																												Train X
EE-PNL-VBA	T1																											Train A
EE-PNL-VBB		T1																										Train B
EE-PNL-VBC	T1																											Train C
EE-PNL-VBD		T1																										Train D
EE-INV-1A	T1																											Train A
EE-INV-1B		T1																										Train B

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
B – Use “ES” Bypass in Control Room

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

Note 1: For fire areas where the DC cross tie (T2) is used to energize Train A, manual action is taken to lockout inverter 1E.

SHEET 2b

LEGEND		
X – Component Not Available	D – Design Modification	Note 1: For fire areas where the DC cross tie (T2) is used to energize Train A, manual action is taken to lockout inverter 1E.
S – Support Not Available	RSD – Remote Shut Down	
P – Available–Cable Protected	O – Open Switch or Breaker	
M – Available–Manual Operation	R – Repair	
A – Manual Op. Due to Loss of Inst. Air		
B – Use "ES" Bypass in Control Room		

ATTACHMENT 3-5Q
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 3b

COMPONENTS	AUXILIARY ELECTRICAL POWER SYSTEM																											
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	I	I	R	R	R	R	R	R	R	T	
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	S	S	S	S	B	B	B	B	B	B	B	
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	F	
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z					Z	Z	Z	Z	Z	Z	A	
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F	F	F	F	1	1	1	1	1	2	3	1
																	A	Z	Z	Z	a	b	c	d	e			
																	2	1	2	3								
ESAS Relay Cabinets "A"																												
ESAS Defeat "A"																												
ESAS Relay Cabinets "B"																												
ESAS Defeat "B"																												
Emergency Control Room Lighting (AC)	S			X			X																					Train A: EE-PNL-CT-2(Upper)
Normal Control Room Lighting (AC)		S																										Train B: EE-PNL-CT-2(Lower)
Emergency Control Room Lighting (DC)							X																					Train C: EED-PNL-1M
FS-PNL-CB-1 (CARDOX)							X																					Train X. O = Open CT-5 Switch 32 at 1A ES MCC Unit 8A.

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air
B – Use "ES" Bypass in Control Room

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

Note 1: For fire areas where the DC cross tie (T2) is used to energize Train A, manual action is taken to lockout inverter 1E.

ATTACHMENT 3-5R
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 1a

COMPONENTS	INSTRUMENT AIR																												REMARKS						
	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	C	C	C	C	C	C	C	C		C	C				
	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	I	I	B	B	B	B	B	B	B	B	B		B	B				
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	T	T	F	F	F	F	F	F	F	F	F		F	F				
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	F	F	A	A	A	A	A	A	A	A	A		A	A	Z	Z		
1	2	1	2	2	2	3	4	5	6	6	7	8	9	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	3	4	4	5	5	
			a	b	c					a								a	a	a	b	c	d	e	f	g	a	b	c	d	a	b	a	b	
IA-P-1A																			X	X			X		S		S		S	X		X			
IA-P-1B																			X		X		X	S	X	S		S		R	S	D	R	S	D
Normal Instrument Air Line (Copper)	X	X					X	X	X	X		X		X	X				X																
2-Hour Backup Instrument Air System																																		Steel Tubing; Except at Valve Location (Copper)	

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air

D – Design Modification
RSD – Remote Shut Down
O – Open Switch or Breaker
R – Repair

ATTACHMENT 3-5R
APPENDIX R EVALUATION REPORT – THREE MILE ISLAND UNIT 1
COMPONENT AVAILABILITY FOR A FIRE IN FIRE AREA/ZONE

SHEET 1b

COMPONENTS	INSTRUMENT AIR																											
	D	D	F	F	F	F	F	F	I	I	I	I	I	I	I	I	I	S	S	S	S	R	R	R	R	R	R	T
	G	G	H	H	H	H	H	H	B	B	B	B	B	B	B	B	B	P	P	P	P	B	B	B	B	B	B	B
	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	H	H	H	H	F	F	F	F	F	F	F
	A	A	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z					Z	Z	Z	Z	Z	Z	A
	1	2	1	2	3	4	5	6	1	2	3	4	5	6	7	8	F	F	F	F	1	1	1	1	1	2	3	1
																	A	Z	Z	Z	a	b	c	d	e			
																	2	1	2	3								
IA-P-1A	S									X				X	X													X
IA-P-1B		S							X	X	S			X														X
Normal Instrument Air Line (Copper)		X	X	X	X	X			X	X	X	X	X	X		X		X	X	X								X
2-Hour Backup Instrument Air System		X								X	X																	Steel Tubing; Except at Valve Location (Copper)

LEGEND

X – Component Not Available
S – Support Not Available
P – Available–Cable Protected
M – Available–Manual Operation
A – Manual Op. Due to Loss of Inst. Air

D – Design Modification
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