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2006

Mr. Harold R. Denton Director of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D. C. 20555

Subject: Indian Point 3 Nuclear Power Plant Docket No. 50-286 Appendix R

Dear Mr. Denton:

By letter dated July 1, 1982 the Authority provided the NRC with Indian Point 3 Appendix R evaluations. The Authority's letter dated October 12, 1982 (IPN-82-66) provided to the NRC the Authority's schedule for submitting information requested by Mr. Varga's September 21, 1982 letter. The Authority's October 29, 1982 (IPN-82-72) and November 22, 1982 (IPN-82-75) letters provided responses to the September 21, 1982 request for information.

During conversations with the Staff regarding the submittal of this additional information, the Staff noted that certain assumptions made by the Authority in its earlier submittal were, in effect, contrary to the NRC Staff's interpretation of the regulations and should be viewed as requests for exemptions from the regulations, i.e., instrumentation required for safe shutdown does not include reactor coolant system hot leg temperature, cold leg temperature or Tavg and source range flux instrumentation. The Authority does not concur with the Staff's interpretation of the regulations in these areas. However, the Authority would like to bring issues related to fire protection to a close as expeditiously as possible. Accordingly, to the extent the NRC Staff considers such assumptions as requests for exemptions pursuant to 10 CFR 50.48(c), the Authority has included in Attachment A to this letter additional information requested by the Staff to assist in review of such "exemption requests". In addition, an exemption is being requested from the requirements of Section III.G.2 and III.G.3 of Appendix R, specifically, for the requirements for an area-wide fixed suppression system in the Indian Point 3 control room.

8301180249 830112 PDR ADOCK 05000284 F PDR Attachments B and C to this letter provide replacement pages for the Authority's aforementioned July 1, 1982 and November 22, 1982 submittals, respectively. These replacement pages include clarifications and corrections of typographical and transcription errors.

In addition, procedural changes will be made to indicate that should spurious operation of the Power Operated Relief Valves (PORVs) occur, the appropriate control power fuses will be pulled in the control room, as necessary, to close the PORVs.

Should you or your staff have any questions, please contact Mr. P. Kokolakis of my staff.

Very truly yours,

M. Wilvuding J. P. Bayne

L Executive Vice President Nuclear Generation

Att.

cc: Mr. Steven A. Varga, Chief Operating Reactors Branch No. 1 Division of Licensing U.S. Nuclear Regulatory Commission Washington, D. C. 20555

> Resident Inspector's Office Indian Point Unit 3 U.S. Nuclear Regulatory Commission P.O. Box 38 Buchanan, New York 10511

ATTACHMENT A

EXEMPTION REQUESTS

POWER AUTHORITY OF THE STATE OF NEW YORK INDIAN POINT 3 NUCLEAR POWER PLANT DOCKET NO. 50-286 January, 1983

I. Additional Information Regarding 10 C.F.R. §50.48 "Exemption Request" Related to Safe Shutdown Equipment

In recent conversations with the NRC Staff, the Authority has been made aware of the Staff position that Commission regulations set forth in Appendix R require that the RCS hot leg, cold leg, or Tavg temperature and source range flux instrumentation are required to be considered as safe shutdown equipment. The Authority does not concur with the Staff interpretation. The Staff has stated that any deviation from this position requires a request for exemption from those regulations.

While the Authority does not consider such a request for exemption to be a legal requirement for compliance with the rule, the Authority would like to bring the fire protection issues to a close. Accordingly, to the extent that the Staff views the Authority's position on this issue as a request for exemption pursuant to 10 C.F.R. §50.48, the Authority reiterates as its basis for an "exemption request" that at Indain Point 3, the RCS's hot leg, cold leg or Tavg temperature and source range flux instrumentation are not required to be available in order for the operator to shutdown the plant safely. Thus, an exemption from the Staff's interpretation of the regulations in this area should be granted and approval of this request will not endanger life or property and is in the public interest. Denial of this exemption request will not enhance fire protection safety in the facility.

II. Exemption Request Regarding Control Room Suppression.

The Authority requests an exemption, puruant to Section 50.12 (a) and 50.48 (c) of 10 CFR, from the requirement of Section III.G.2 and III.G.3 of Appendix R. Specifically, exemption is requested to the extent that an areawide fixed suppression system is required to be installed in the Control Room of Indian Point 3.

This requirement is unnecessary to assure the capability to safely shutdown the plant in the event of a fire in the Control Room for the following reasons:

- (1) The plant can be safely shutdown, even in the highly unlikely event of the total loss of the Control Room utilizing existing and/or proposed alternate capability.
- (2) The Control Room is occupied continuously by licensed operators.
- (3) Combustibles such as furniture and books are kept to a minimum...suspended ceiling consists of transite panels.
- (4) Area-wide fire detection is provided in the Control Room.
- (5) CO₂ fire extinguishers are provided in the Control Room.

The following data are provided from the original fire hazards report submitted by the Authority but updated to represent the present protection features:

Fire Zone:	15 - Control Room
Building:	Control
Elevation:	53'
Safety Related:	Yes
Construction:	
North Wall:	2'-0" concrete
East Wall:	2'-0" concrete
South Wall:	2'-0" concrete
West Wall:	2'-0" concrete and pedes- trian door
Ceiling:	2'-0" concrete and hung ceiling
Floor:	2'-0" concrete and stairwell
Drainage:	Runoff into Turbine Building or down the stairwell
Ventilation:	Locker room exhaust fan
Fire Detection:	Ionization detectors (7) in panels and (16) in ceiling
Fire Protection:	Hose station in the Turbine Building. Three 15-1b carbon dioxide extinguishers in the zone and one immediately outside of the west door
Cofoty Polatod	

Safety Related Components:

Control Panels. Electric cables (control) for: RHR pumps, component cooling pumps, SIS pumps, Aux. feedwater pumps, charging pumps, containment spray pumps, Containment fan coolers, service water pumps

Electric cables (power & control) for: Pressurizer relief valves, atmospheric relief valves, remote operated valves in shutdown systems, and RCS instrumentation.

Combustible Loading: Paper and other miscellaneous combustibles

Low

Total Combustibles, BTU: 1.4 x 10⁶

Area, Sq. Ft.: 3,510

Fire Hazard, BTU/ Sq. Ft.: 389

Fire Loading:

Postulated Fire:

Localized fire of miscellaneous combustibles.

Consequences of Fire

Without Fire Protection:

Not applicable. The Control Room is continuously occupied by personnel who would detect a fire and extinguish it.

Consequences of Fire

With Fire Pro-

tection:

Smoke and heat generation. Suppression systems (liquid, foam or gas) could have an adverse effect on electrical components and/or plant personnel.

Based on the above the Authority requests an exemption from the requirements from those portions of Sections III.G.2 and III.G.3 of Appendix R which require that an area wide fixed suppression system be provided in the Control Room. The Authority maintains that approval of this exemption request will not endanger life or property and is in the public interest. Denial of this exemption request will not enhance fire protection safety in the facility and could be detrimental to safe operation of the plant.

ATTACHMENT B

REPLACEMENT PAGES FOR 7/1/82 SUBMITTAL

POWER AUTHORITY OF THE STATE OF NEW YORK INDIAN POINT 3 NUCLEAR POWER PLANT DOCKET NO. 50-286 January, 1983

SUMMARY OF FIRE AREAS

RESOLUTION OF

SAFE SHUTDOWN FUNCTIONS

FUNCTION	1	2.1	2.II	3	4	5
······································	,	Removal of Reactor Heat			Reactor Coolant	Hot To
Fire	Unit	Altn.	Alta.	Pressure	System	Cold
Area	Trip	<u> </u>	II .	Control	MakeUp	Shutdown
1 1	N/A	N/A	N/A	N/A	N/A	Note 2.c,f; 3.a,c,d
14	N/A	N/A	N/A	N/A	N/A	Note 4
2 A	N/A	N/A	N/A	N/A	N/A	Note 2c, f; 4
3	N/A	N/A	N/A	N/A	N/A	Note 2c, f
1996 4 - 1987	N/A	N/A	N/A	N/A	N/A	Note 2c, e, f
9 A	N/A	N/A	N/A	N/A	N/A	Note 2.f
11	N/A	N/A	N/A	Note 8	Note 8	Note 1, 2.g, 3.a,c,d
12A	N/A	N/A	N/A	N/A	N/A	Note 2.c, d, e, f
13A	N/A	N/A	N/A	N/A	N/A	Note 2.c, d
14A	N/A	N/A	N/A	N/A	N/A	Note 2.e
15	N/A	N/A	N/A	Note 8	Note 8	Note 1: 2.g; 3. c. d :8 Note 1; 2.g;
7A-60A	N/A	N/A	N/A	Note 7,8	Note 7,8	3a, c, d; 8
17A-N1	N/A	N/A	N/A	N/A	N/A	Note 1
17A-NW1	N/A	N/A	N/A	N/A	N/A	Note 1
17A-51	N/A	N/A	N/A	N/A	. N/A	Note 1
17A-SW1	N/A	N/A	N/A	N/A	N/A	Note 1, 2.a,
17A-5W2	N/A	N/A	N/A	N/A	N/A	Note 1, 2.a,
17A-W1	N/A	N/A	N/A	N/A	N/A	Note 1, 2.a,
-17A-W2	N/A	N/A	N/A	N/A	N/A	Note 1, 2.a,b
17A-W3	N/A	N/A	N/A	N/A	N/A	Note 1, 2.a,b
317A-W4	N/A	N/A	N/A	N/A	N/A	Note 1, 2.a,b

1.

SUMMARY OF FIRE AREAS

EVALUATION FOR EACH

SAFE SHUTDOWN FUNCTIONS

FUNCTION	I.	2.I	2.II	3	4	5	
FIRE	UNIT TRIP	REMOVA REACTOR Altn. I		PRESSURE CONTROL	REACTOR COOLANT SYSTEM MAKEUP	HOT TO COLD SHUTDOWN	
7A-W1	Y	Y	NOT REQUIRED	Y	Y	Y	
7A-W2	Y	Y	59	Y	Y	Y	
8	Y .	Y	ł9	Y	Y	Y	
9	Y	Ŷ	19	Y	Y	Y	
9A	Y	Y	18	Y	Y	X	
10	Y	Y	19	Y	Y	· y	
11	Y	Y	11	X	X	x	
12	Y	Y	18	Y	Y	Y	
12A	Y	Y	17	Y	Y	X	
13	Y	Y	t r	Y	Y	Y	
13A	Y	¥	t •	Y	Y	x	
14A	Y	Y	n	Y	Y	Y	
15 - 16	Y Y Y	Y Y	11 A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A	X Y		X Y	
18	Y	Y Y	11	Y	Y	X	
18	· Ý	Y	+0	Y	Y	Y	
17A-E1	Y	Y	••	Y	Y	Y	
17A-N1	Y	Y	11	Y	¥	Y	
17A-NEL	Y	Y	19	Y	Y	Y	
17A-NE2_	Y	Y	11	Y	¥	<u> </u>	
<u>17A-51</u>	Y	y	•	Ŷ	Y	<u>y</u>	
17A-SE1	Y	x	0	¥	Y		
17A-SW1	Y .	Ŷ	10	Y	Y	Y	

Page 2 of 8

The Authority initiated, as part of its fire protection program, strict administrative procedures. Combustible material control requires the following:

-18-

During normal watch rounds, checks for accumulations of combustible material which could constitute a serious fire hazard to vital equipment shall be conducted by the Nuclear Plant Operators and Control Room Operators.

It is mandatory that this check be conducted in the vital areas identified, including the Electrical Penetration Area (Zone 73).

Based on the above, the Authority requests an exemption from the requirements of Section III.G.2 of Appendix R for the electrical penetration area outside containment (Fire Zone 73A). Approval of this exemption request is authorized by law, will not endanger life or property or the common defense and security and is in the public interest. Denial of this exemption request will not enhance fire protection safety in the facility.

January, 1983

POWER AUTHORITY OF THE STATE OF NEW YORK INDIAN POINT 3 NUCLEAR POWER PLANT DOCKET NO. 50-286

전력 1997년 1월 1997년 1월 1997년 1월 1998년 1월 1997년 1월 19 1997년 1월 19

REPLACEMENT PAGES FOR 11/22/82 SUBMITTAL

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ATTACHMENT C

TAELE I

TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

4 OF 26 PAGE

·. *	•		PAGE 4 OF 20
1		SHUTDOWN COMPONENTS	
i IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ZONE	INOTE. (P) - POWER CABLES	
FIRE		(C) - CONTROL CABLES	ALTERNATE SHUTDOWN CAPABILITY
I ZONE I	IDENTIFICATION	(I) - INSTRUMENT CABLES	
۱ <u>ا</u>			
<u> </u> *			
. 8 .	PAB ELEV. 55'	COMPONENTS:	DODATED WATER CAN BE SUDDITED IN
j		BORIC ACID TRANSFER PUMP	BORATED WATER CAN BE SUPPLIED
1		NOS. 31 AND 32 (P), (C)	TO THE SUCTION OF THE CHARGING
1		1 · · · · · · · · · · · · · · · · · · ·	PUMPS FROM THE R.W.S.T.
i i		1 · · · · · · · · · · · · · · · · · · ·	
· · ·		FUNCTIONS:	
1 1		REACTOR COOLANT SYSTEM	
1 1 		MAKEUP	
, I , I		1	a da ser en la ser en
. .9.	PAB ELEV. 34'	COMPONENTS:	$ \mathbf{f} = \mathbf{f} ^2$
1 7.	LUD DAA* 14	1) SAFETY INJECTION SYSTEM	ALL SHUTDOWN FUNCTIONS
		MOTOR OPERATED VALVES	
		(P), (C)	and the second secon
1		2) SAFETY INJECTION PUMP	the second s
		NOS. 31, 32 AND 33 (P)	
1		1 NOS. 21, 22 MM 23 (2)	
!		L DIDIOUS.	
$\Gamma_{\rm C} \sim 10$		FUNCTIONS:	
1		REMOVAL OF REACTOR HEAT -	
1° . '		ALTERNATE II	
1	Den se finis de Brazel e		
9A.	PAB ELEV. 15	COMPONENTS:	DENOTE DESTRICT DEST DY
1:		RHR PUMP NOS. 31 AND 32 (P)	OPERATING WITH SECONDARY SIDE
1. Starter	han da agunda a sharar ta		OF STEAM GENERATORS FLOODED.
1.	l service service service services s		OF STEAM GENERATORS FLOODED
17:			
I. S	1	FUNCTIONS:	
1		REMOVAL OF REACTOR HEAT,	
		I HOT TO COLD SHUTDOWN	
The second		$\left[\begin{array}{c} 2 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ $	
		COMPONENTS:	ELECTRICAL POWER CAN BE
1 10.	D.G. 31 ROOM	1) BATTERY NO. 33 (P)	SUPPLIED BY AN OFF-SITE POWER
1	1	2) DC-DG 31 CONTROL PANEL (P)	SOURCE OR BY THE REMAINING
		(1 3) 480-480V SWGR BUS 2A(P)(C)	DIESEL GENERATORS (NOS. 32 AND)
		(C) DG 31 CONTROLS (C)	33). AND DC POWER VIA BATTERY
	la de la constante	1 5) SOLENOID OPERATED VALVES	CHARGER 33. SOLENOID OPERATED
		(P) FOR SERVICE WATER AND	VALVES WILL REVERT TO "FAIL"
ા કે છે. સં		REACTOR COOLANT MAKEUP	POSITION.
1		FUNCTIONS:	
1		ELECTRICAL DISTRIBUTION AND	1. 二、注意的
		SERVICE WATER TO REACTOR	
		COOLANT SYSTEM MAKEUP	1
		I COULANT SISTEM MARLOF	n an
	1		USE SECONDARY SIDE HEAT
111.		COMPONENTS: 1) PRESS. HEATERS NOS. 31(P)	
	ELEV. 33'	(1) PRESS. HEATERS NOS. 31(P)	TN THE HOT CHIMANI CONTTAINS
	CABLE SPREADING		IN THE HOT SHUTDOWN CONDITION.
	ROOM		DIESEL GENERATOR 31 AND 480V
		2) COMPONENT COOLING PUMP	BUSSES ZA AND SA CAN BE
			ISOLATED FROM THIS FIRE AREA
		33(P)(C)	TO PROVIDE POWER FOR ONE

TABLE 1

TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

PAGE 4a OF 26

	r	r	r	l
	 		SHUTDOWN COMPONENTS	рания (р. 1997) 1997 — Прила Паралия (р. 1997) 1997 — Прила Паралия (р. 1997)
	FIRE	ZONE	NOTE: (P) - POWER CABLES	
1	ZONE	IDENTIFICATION	(C) - CONTROL CABLES	ALTERNATE SHUTDOWN CAPBABILITY
•	20112		(I) - INSTRUMENT CABLES	
<u>.</u>				
			3) CONTAINMENT SPRAY PUMP NOS.	TRAIN OF PUMPS. IN CONJUNCTION
· .			31 (P) (C) AND 32 (P) (C)	IF NECESSARY, ALTERNATE
· .			4) CONTAINMENT RECIRC. FANS	CAPABILITY PROPOSED FOR
· .	4. K		NOS. 31(P)(C), 32(P)(C)	CHARGING PUMP, COMPONENT
· [33(P)(C),34(P)(C) and 35(P)	COOLING PUMP AND PRESSURIZER
1			(C)	HEATER CAN BE UTILIZED. THE
			5) SAFETY INJECTION PUMP NOS.	AUTHORITY PROPOSES TO REPAIR
			31(P)(C), $32(P)(C)$ and 33	OR INSTALL NEW FEED TO RHR
. 1			(P) (C)	PUMP FOR ABILITY TO GO TO COLD
			6) SERVICE WATER PUMP NOS.	SHUTDOWN, IF REQUIRED.
· 1				SHOIDOWN, IF REQUIRED.
· .			31 (C) , 32 (C) , 33 (C) , 34 (C).	
			35 (C) , 36 (C) , 37 (C) , 38 (C) ,	
			and 39(C)	
			7) RECIRCULATION PUMP NOS. 31	
			(P)(C) AND 32(P)(C)	
į			8) COMPONENT COOLING BOOSTER	
- 1			PUMP NOS. $31(C)$, $32(C)$,	
i			33 (C) AND 34 (C)	
			9) INST. AIR COMP. NOS. 31(C)	
			AND $32(C)$	
			10) CHARGING PUMP NOS. 31(P)(C)	
			32(P) (C) AND 33 (P) (C)	ang barang sa
. I			11) RESIDUAL HEAT REMOVAL	이가 있는 것 같은 사람이 있는 것 같은 사람이 있는 것 같은 것 같
			PUMP NOS. 31(P) (C) AND 32	
			(P) (C)	的,我们就是我们的问题,我们就是我们的问题,我们就是我们就能能。" 第二章 我们就是我们的问题,我们就是我们的问题,我们就是我们的问题,我们就是我们的问题,我们就是我们的问题,我们就是我们的问题,我们就是我们的问题。我们就是我们
			12) AUX. FEEDWATER PUMP NOS.	「「「」」「「」」」「」」」」」」」」」」」」」」」」」」」」」」」」」」
			31(C), $32(C)$ AND $33(P)(C)$	
			13) PRIMARY WATER MAKEUP PUMPS	MAKEUP OF BORATED WATED TO
			NOS. 31(C) AND 32(C)	RCS CAN BE SUPPLIED FROM
			14) BORIC ACID TANK HEATERS	THE RWST.
			NOS. 31(C) AND 32(C)	INE RWSI.
- 1			15) BORIC ACID TRANSFER PUMP	
			NOS. 31(C) AND 32(C)	한 사람이 있는 것이 있다. 같은 사람이 있는 것이 있는
4	- 10 A		•	
24			16) BATTERY CHARGERS NOS. $31(P)$	
				PANEL NOT AFFECTED (FOR DIESEL
$\left\{ \cdot \right\}$			17) BATTERIES NOS: 31(P),32(P)	AND SWGR 2A, 3A CONTROL POWER)
			and 34 (P)	D.C. 21 CAN DE TOOLAMED BOOM
		化合成增长 网络绿科	18) D.G. 31(C), 32(C) AND 33(C)	
			19) MCC NOS. 32(C), 34(C), 36A	THIS FIRE AREA
			(P) (C), 36B (P) (C), 36C (C)	
1			and 39(P)(C)	
ʻʻ [.			20) 480V SWGR BUS 2A(C), 3A(C),	BUSSES 2A AND 3A CAN BE ISOLATED
			5A (C) AND 6A (C)	LOADS ISOLATED BY PULLING OF
				CONTROL FUSES
			21) REACTOR TRIP BREAKERS (P)	POWER TRIPPED FROM 480V SWGR,
j.			(C)	IF NECESSARY
			22) 120V VITAL AC INVERTER NOS	
- F			31(P)(C), 32(P)(C), 33(P)	
i i			(C) and 34(P)(C)	INSTRUMENTATION ISOLATION
				CABINET
	- 11 () - 11		entre de la companya	

TABLE 1

TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

PAGE 4b OF 26

Merican Ma

		SHUTDOWN COMPONENTS	
FIRE ZONE IDEN	ZONE NC	OTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPBABILIT
	23	3) SOLENOID OPERATED VALVES	SOLENOID OPERATED VALVES WILL
		(P)(C) FOR SERVICE WATER, REACTOR COOLANT MAKEUP,	REVERT TO "FAIL" POSITION
		REMOVAL OF REACTOR HEAT	
		PRESSURE CONTROL AND	
		PRIMARY SAMPLING	
	24	4) MOTOR OPERATED VALVES FOR	MOTOR OPERATED VALVES CAN BE
		HOT TO, COLD SHUTDOWN,	OPERATED MANUALLY, AS REQUIRE
		REMOVAL OF REACTOR HEAT AND COMPONENT COOLING	
	2	5) INSTRUMENTATION FOR STEAM	INSTRUMENTATION ISOLATION
		GENERATOR LEVEL AND	CABINET WILL ISOLATE S.G.AND
		PRESSURE, REACTOR COOLANT	PRESSURIZER PRESSURE, LEVEL
		SYSTEM TEMPERATURE AND	PROVIDE INSTRUMENTATION AT
		PRESSURE, TANK LEVELS,	LOCAL PANELS IN AUXILIARY
		REACTOR CONTAINMENT BLDG.	FEEDWATER PUMP ROOM AND PAB, ELEV. 55'
		INSTRUMENTATION, AND FLOW	
		INDICATION FOR NUMEROUS	
		SYSTEMS.	
	26	5) CONTROLS FOR BREAKERS OF	THE AUTHORITY PROPOSES TO
		ELECTRICAL DISTRIBUTION SYSTEM 138KO to 6.9KV	LOCALLY OPERATE NECESSARY BREAKERS TO ENERGIZE BUSES
		13.8KV to 6.9KV, 6.9KV to	EXCEPT FOR D.G. 31 OUTPUT
		480V, D.G. to 480V BUSES	BREAKER WHICH IS ISOLATED FROM
			THIS FIRE AREA. OTHER
			BREAKERS WILL BE ISOLATED BY
			PULLING CONTROL FUSES, IF NECESSARY. ELECTRICAL POWER
일 수 있는 것 같은 것			CAN BE SUPPLIED FROM OFF-SITE
			POWER SOURCE.
		FUNCTIONS:	NITROGEN SYSTEM CAN BE. USED A
		PRESSURE CONTROL, REMOVAL OF	A BACKUP TO INSTRUMENT AIR
		REACTOR HEAT, REACTOR COOLANT SYSTEM MAKEUP, UNIT	SYSTEM
		TRIP AND HOT TO COLD SHUT-	
		DOWN	
	OL BLDG.	COMPONENTS:	ADEQUATE D.C. POWER REMAINS
ELEV.	. 33.	BATTERY NO. 31(P)	AVAILABLE FROM BATTERIES NOS. 32, 33 and 34, IF
			REQUIRED AND FROM BATTERY
		FUNCTIONS:	CHARGER 31.
		NOT APPLICABLE	
			에 가장 가장 가장 있다. 이 가지가 가지가 않았다. 이 가장 가장 가장 있는 것이 가지가 있는 것이 같은 것을 수 있다. 이 가장 가장 가장 있는 것이 가지 않는 것이 같은 것이 같이 있다. 않는 것이 같은 것이 있는 것이 있

TABLE 1 SAFE SHUTDOWN CAPABILITY FOR FI

ZONES. TABLE

			PAGE 5 OF 26	
		SHUTDOWN COMPONENTS	1	•
FIRE	ZONE	NOTE: (P) - POWER CABLES		
ZONE	IDENTIFICATION		ALTERNATE SHUTDOWN CAPABILITY	٠.
·		(I) - INSTRUMENT CABLES		;
				. •
1 12A.	PAB ELEV. 15'	COMPONENTS:		- ¹ .
•			FUNCTIONS CAN BE MAINTAINED BY	
	1	2) RHR PUMPS NOS. 31 & 32(P) 3) COMPONENT COOLING PUMPS	(I.E. CHARGING PUMP NO. 31 OR	
1			33, COMPONENT COOLING PUMP	
i			NO. 31 AND SAFETY INJECTION	
1			PUMP NO. 31 OR 32).	;
i i	• • • • • • • • • • • • • • • • • • • •			,
1		FUNCTIONS:		•
$\mathbf{T} = \mathbf{T}$		HOT TO COLD SHUTDOWN,		
1	l de la constant de l	REMOVAL OR REACTOR HEAT,	1	E.
1	• • • • • • • • • • • • • • • • • • •	REACTOR COOLANT SYSTEM .	here and the second	
	Les and the second second second	MAKEUP	la de la companya de	•
1	I construction of the second	I serve a state of the server	E State State	
				*
13.		COMPONENTS:	L	
	ELEV. 33'	1) BATTERY NO. 32 (P)	ADEQUATE D.C. POWER REMAINS	
			AVAILABLE FROM BATTERIES	
		FUNCTIONS:	NOS. 31, 33, AND 34, IF	. '
		NOT APPLICABLE	REQUIRED, AND FROM BATTERY	
		 It is a second seco	CHARGER 32.	i Ta
13A.		COMPONENTS:	NOT APPLICABLE	
		NONE		
i -				۰.
		FUNCTIONS:		
1		NOT APPLICABLE	1	
1	$\left[\left[\left$		Γ $=$ Γ	
14.	SWGR ROOM EL. 15'	COMPONENTS:	$1 \qquad \qquad$	Ĩ.
		1) CHARGING PUMPS NO. 31(P)(C)	• • •	ŧ,
			REMOVAL TO MAINTAIN PLANT	
1			IN THE HOT SHUTDOWN CONDITION	
			IN CONJUNCTION WITH ALTERNATE	
		•	CAPABILITY FOR CHARGING PUMP,	1 2 4
			COMPONENT COOLING PUMP AND	
		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	PRESSURIZER HEATER.THEAUTHORITY PROPOSES TO REPAIR	
	· 한국 전 사망 등 가지 않는 것 같아요. 가격 등 - 19 - 이 것은 이 가지 않는 것 같아요. 이 같아.		OR INSTALL NEW FEED TO MOTOR	
			DRIVEN AUX. FEEDWATER PUMP AND	
		33 (P) (C)	RHR PUMP FOR ABILITY TO GO TO	Ē
1	1	5) SERVICE WATER PUMPS		1.
1		NOS. 31 (P) (C), 32 (P) (C)		
1		33 (P) (C) , 34 (P) (C) ,	For the second	
		35 (P) (C), 36 (P) (C),	MOTOR OPERATED VALVES CAN BE	
		37 (P)(C), 38 (P)(C),	OPERATED MANUALLY, AS REQUIRED	
		39 (P) (C) •		
			SOLENOID OPERATED VALVES WILL	
		AND 33 (P) (C) , 32 (P) (C)	REVERT TO "FAIL" POSITION.	
		1 ΒΗ Ψ 33 (Γ) (C) •		

TABLE 1 TABLE OF SAFE SHUTDOWN CAPABILITY FOR FILE ZONES.

PAGE 6 OF 26

					PAGE 6 OF 26
	-		I	SHUTDOWN COMPONENTS	
<u></u> .	FIRE	ZONE	INOTI	E: (P) - POWER CABLES	je se
· · ·			· .		ALTERNATE SHUTDOWN CAPABILITY
	ZUNE	IDENTIFICATION	1		ADIERAATE SHOTDOWN CAPADIDITI
			ľ	(I) - INSTRUMENT CABLES	
1	. I				
1			1.75	SAFETY INJECTION PUMP	INSTRUMENTATION CAN BE READ
				NOS. 31 (P) (C), 32 (P) (C)	
		•		·	
				AND 33 (C) (P)	
. 1			8)	MCC NOS. $32(P)(C)34(P)(C)$	USE NITROGEN SYSTEM AS A
1			ľ.	36A (P) (C) 36B (P) (C) 36C(P)(C)	BACK-UP TO THE INSTRUMENT AIR
. 1					SYSTEM.
i				CONTAINMENT SPRAY PUMP	
1					FIFOTETCAL DOWED CAN DE
1	*				
			1 .		SUPPLIED FROM AN OFF-SITE
I			10)	RECIRCULATION PUMP NOS.	POWER SOURCE.
1			1	31(P) (C)AND 32 (P) (C)	
t i				D.G. 31 (P) (C) 32 (P) (C)	
				· · · · · · · · · · · · · · · · · · ·	
1				AND 33 (P) (C)	
				BUS 2A, 3A AND 6A TIES(C)	
` _ []			113)	MOTOR OPERATED VALVES (C)	
. 1			114)	SOLENOID OPERATED VALVES	
1 . I					and the second
· · · · ·					
<u> </u>				INSTRUMENTATION IN	
i 1		l'anna an tha	1	ISOLATION CABINET	
1 - I		Herris and a state of the second	116)	PRESS. HEATER NOS. 31	, رئي المركز (المركز
1			i i	(P) (C) , 32 (P) (C) , 33 (P)(C)	
				AND 34 (P) (C)	
15 J					
, i				BATTERY CHARGERS NOS.	
		1		32 (P) AND 33 (P)	
			118)	INSTR. AIR COMP.	
				NO. 31 (P) (C) AND	
			1		
· ·]				32 (P) (C)	
				COMPONENT COOLING BOOSTER	
			1.	PUMP NO. 31 (C)	[1] 1 · · · · · · · · · · · · · · · · · ·
			20)	480V SWGR BUS 2A (P) (C)	
			1.0	3A(P) (C) 5A(P) (C)AND 6A (P)	
			ing at	(C)	
				NCTIONS:	
		1	PR	ESSURE CONTROL, REMOVAL OF	이 가지 않는 것이 있는 것이 있는 것이 있는 것이 있는 것이 있다. 가지 않는 것이 있는 것이 없는 것이 있는 것이 있 것이 있는 것이 있 것이 있는 것이 있다. 것이 있는 것이 있다. 것이 있는 것이 있는 것이 있 것이 있는 것이 있다. 것이 있는 것이 있 않이 않이 않는 것이 있는 것이 있는 것이 있는 것이 있 않이 않은 것이 있는 것이 없이 않이 않은 것이 없이 않이 않은 것이 없이 않이 않은 것이 없이 않이
			RE	ACTOR HEAT, HOT TO COLD	
1				UTDOWN, REACTOR COOLANT	
		n sen en sen En sen en sen		STEM MAKEUP AND UNIT TRIP.	and the second
	la, en la la La transferencia	1. A set of the set			
				MPONENTS:	NOT APPLICABLE
			I NO	NE	
.		I see the second second second	1 FU	NCTIONS	
:		1		T APPLICABLE	
÷		t	1		· · · · · · · · · · · · · · · · · · ·
	15.	CONTROL BLDG.	<u> </u>	MPONENTS:	SAME AS FIRE ZONE II EXCEPT
	NA SANA SANA SANA SANA SANA SANA SANA S	ELEV. 53	SA	ME AS FIRE ZONE IL EXCEPT	THAT LOCAL CONTROL OF ALL
	111 点。 有人,这一个人。	CONTROL ROOM	1.1	POWER CABLES TO LOADS ARE	LOADS WILL BE UTILIZED. IF
				FECTED	REQUIRED, ISOLATION WILL BE
	1				
	最適合する		1	<u>NCTIONS</u>	ACHIEVED BY PULLING CONTROL
	1		SA	ME AS FIRE ZONE II	POWER FUSES.
	l.		CO	MPONENTS	NOT APPLICABLE
	16.		i —	NE	
	IS с		i		
				<u>NCTIONS</u> :	
•			NO	T APPLICABLE	
			el de la	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
1 T T T	7. I	and the second			

e e la seconda de la second	T	ABLE 1			
TABLE OF SAFE	SHUTDOWN	CAPABILITY	FOR	FIRE	ZONES

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	ş. •			PAGE 16 OF 26
. 1			SHUTDOWN COMPONENTS	
	FIRE	ZONE	NOTE: (P) - POWER CABLES	
 	ZONE	IDENTIFICATION	(C) - CONTROL CABLES	ALTERNATE SHUTDOWN CAPABILITY
1			(I) - INSTRUMENT CABLES	
I		l	1	
1	59A.	FAN HOUSE ELEV. 41'	COMPONENTS:	$\mathbf{F} = \mathbf{F}$
ļ		AND 51'	1) MOTOR OPERATED VALVES	MOTOR OPERATED VALVES CAN BE
- 1	• •	l · · · · ·	(P)(C) FOR REMOVAL OF	OPERATED MANUALLY, AS.
	-	· · · ·	REACTOR HEAT AND	REQUIRED.
ł		· · · · · ·	COMPONENT COOLING	SOLENOID OPERATED VALVES WILL
			2) SOLENOID OPERATED VALVES	REVERT "FAIL" POSITION
:			(P) FOR PRIMARY SAMPLING	
ł			REACTOR COOLANT SYSTEM	
			MAKEUP, COMPONENT COOLING	
			AND SERVICE WATER	
· 1			3) COMPONENT COOLING BOOSTER	land a start of the second
1			PUMP NOS. 31 AND 32	
1	· ·			
1			4) INSTRUMENTATION (I) FOR	
1			SERVICE WATER SYSTEM	
1	603 1	UPPER ELEV. TUNNEL	COMPONENTS:	
1		OTTER EDEV. TORRED	1) BORIC ACID TRANSFER PUMP	FUNCTIONS CAN BE MAINTAINED
i	·. ·			BY REMOTE AND/OR LOCAL
	. 1		2) COMPONENT COOLING BOOSTER	
i	·			PUMPS AND FANS (I.E., LOCAL
1	· · · · ·		3) CHARGING PUMP NOS. 31 (P)	
4	1. j		· ·	TRANSFER PUMP NO. 32 AND
ļ	11 - 1 - 1 - 1 - 1			REMOTE OPERATION OF CHARGING
1			NOS. 31(P) AND 33(P)	PUMP NO. 32, COMPONENT COOLING
1	·		5) SAFETY INJECTION PUMP	PUMP NO. 32, SAFETY INJECTION
ļ	1			PUMP NO. 32, RHR PUMP NO. 31
1	I		6) CONTAINMENT SPRAY PUMP	AUX. FEED PUMP NO. 31 AND
1			· · · · · · · · · · · · · · · · · · ·	CONT. RECIRC. FAN NOS. 32 AND
1			7) CONTAINMENT RECIRC. FAN	
ļ	•			CAN BE OPERATED MANUALLY, AS
Í				REQUIRED. SOLENOID OPERATED
ł				VALVES WILL REVERT TO "FAIL"
I I			AND 32(P)	POSITION.
4 1.1	1		$ 10 \rangle \Delta IIY FIFT DIMO 22 (P)$	INDICATION OF S.G. LEVEL AND
-1			(P) (C)	PRESSURE AND PRESSURIZER PRESSURE AND LEVEL CAN BE
			(1) MCC NOS. $36A(P)$. $36B(P)$	OBTAINED LOCALLY BY WAY OF
i				THE INSTRUMENT ISOLATION
Ì	1		12) BATTERY CHARGER NO.	CABINET. READOUT OF OTHER
Ì			32(P)	INSTRUMENTATION CAN BE
ſ			13) MOTOR OPERATED VALVES	OBTAINED LOCALLY.
1	. S		(P)(C) FOR REMOVAL OF	
-1	~ 1		REACTOR HEAT, HOT TO COLD	
I			SHUTDOWN, COMPONENT	an an Araba (Araba). A start a start
1			COOLING.	
			an a	
		· · · · · · · · · · · · · · · · · · ·		
	•			

TABLE 1 TABLE SAFE SHUTDOWN CAPABILITY FOR FI

26

ZONES

			PAGE 24 OF 26
		SHUTDOWN COMPONENTS	
FIRE	ZONE	NOTE: (P) - POWER CABLES	
		•	
ZONE	IDENTIFICATION		ALTERNATE SHUTDOWN CAPABILITY
		(I) - INSTRUMENT CABLES	
1	and the second		· · ·
94A.		COMPONENTS:	NOT · APPLICABLE
		NONE	
1		FUNCTIONS:	
·	l	NOT APPLICABLE	
95A.	1	COMPONENTS:	NOT APPLICABLE
1		NONE	
		1	· · · · · · · · · · · · · · · · · · ·
1.		FUNCTIONS:	
		NOT APPLICABLE	
1			
96A.	1	COMPONENTS:	NOT APPLICABLE
i i		NONE	La serie de la companya de
t i t		FUNCTIONS:	
1 A.		NOT APPLICABLE	l de la companya de l
		l e la construcción de la construcc	l i i i i i i i i i i i i i i i i i i i
97A.	WASTE HOLDUP TANK	COMPONENTS:	R.W.S.T. HAS LOCAL LEVEL
· · · ·		LT-920 (I)	GAUGE
.		FUNCTIONS:	
1 j. 1	a fa shekara ta shekara ta shekara t	REMOVAL OF REACTOR HEAT	
' . I '		REACTOR COOLANT SYSTEM	l i station de la company d
С. П [.]		MAKEUP, HOT TO COLD	
i i		SHUTDOWN	
· · ·			n an
· · ·			
		CONDONENIES -	
98A.		COMPONENTS:	NOT APPLICABLE
98A. 		NONE	NOT APPLICABLE
98A. 			NOT APPLICABLE
98A. 		NONE	NOT APPLICABLE
		NONE FUNCTIONS:	NOT APPLICABLE
		NONE FUNCTIONS:	NOT APPLICABLE
		NONE FUNCTIONS: NOT APPLICABLE	NOT APPLICABLE
	D.G. BLDG. ELEV 15	NONE FUNCTIONS: NOT APPLICABLE	
	D.G. BLDG. ELEV 15	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL	POWER CAN BE SUPPLIED FROM
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P)	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C])	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C) 3) SOLENOID OPERATED VALVES	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33.
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C])	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33.
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER,	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33.
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A (P(C)) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(PIC) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I)(C)	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I)(C)	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(PIC) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I)(C)	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE COMPONENTS: 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A(P[C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I)(C)	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE I) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A (P[C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I) (C) FUNCTIONS: REACTOR COOLANT SYSTEM	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE NOT APPLICABLE 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A (P[C)) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I) (C) FUNCTIONS: REACTOR COOLANT SYSTEM MAKEUP, REMOVAL OF REACTOR	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE I) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A (P[C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I) (C) FUNCTIONS: REACTOR COOLANT SYSTEM	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE NOT APPLICABLE 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A (P[C)) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I) (C) FUNCTIONS: REACTOR COOLANT SYSTEM MAKEUP, REMOVAL OF REACTOR	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION
	D.G. BLDG. ELEV 15'	NONE FUNCTIONS: NOT APPLICABLE NOT APPLICABLE 1) D.CDG #32 CONTR. PANEL (P) 2) 480-480V SWGR. BUS 6A (P[C)) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG. 32 AUTO START (I) (C) FUNCTIONS: REACTOR COOLANT SYSTEM MAKEUP, REMOVAL OF REACTOR	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION

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TABLE

TABLE 1 SAFE SHUTDOWN CAPABILITY FOR F.

PAGE 25 OF 26

ZONES

·				PAGE 25 OF 20
1			SHUTDOWN COMPONENTS	l l
. 1	FIRE	ZONE	NOTE: (P) - POWER CABLES	
	ZONE	IDENTIFICATION	(C) - CONTROL CABLES	ALTERNATE SHUTDOWN CAPABILITY
1			(I) - INSTRUMENT CABLES	la de la companya de
i				
i	102A.	D.G. BLDG. ELEV. 15'	COMPONENTS:	
· i				POWER CAN BE SUPPLIED FROM
: i	1.14			OFF-SITE POWER SOURCE OR
1				DIESEL GENERATOR NOS. 31 AND
			3) SOLENOID OPERATED VALVES	
				SOLENOID OPERATED VALVES WILL
1			REMOVAL OF REACTOR HEAT	
				REVERT TO FAIL FOSTITION.
·			AND RCS MAKEUP	
1			4) DG 33 AUTO START (I) (C)	
1				
			FUNCTIONS:	
1			REACTOR COOLANT SYSTEM	
1			MAKEUP, REMOVAL OF REACTOR	그는 그는 것 같은 것 같은 것 같이 많이 했다.
1			HEAT	ない 一般的ななな 人名法法 常体
1 I		그는 사람은 승규는 것을 가운 것을 가지?	[1] · · · · · · · · · · · · · · · · · · ·	
1	105A.	WASTE HOLDUP TANK	COMPONENTS:	2011年1月1日日 二月二十日日日日日
· 1	- 94 - - 1		LT-920 (I)	R.W.S.T. HAS LOCAL LEVEL
· 1	1			GAUGE
1			FUNCTIONS:	la de la companya de
1	- i i i		REMOVAL OF REACTOR HEAT,	
1	1. St. 1		REACTOR COOLANT SYSTEM	
. 1			MAKEUP AND HOT TO COLD	
Ì			SHUTDOWN	
i				
i	106A I	WASTE HOLDUP TANK	COMPONENTS:	
i	Reference a			R.W.S.T. HAS LOCAL LEVEL
. i				GAUGE
. 1			FUNCTIONS :	
1			REMOVAL OF REACTOR HEAT,	
1			REACTOR COOLANT SYSTEM	
- 4 - 12			MAKEUP AND HOT TO COLD	
1				
			SHUTDOWN	
	· · · · · ·			
1	119.			NOT APPLICABLE
1			NONE	
. !				
1	1		FUNCTIONS:	
I			NOT APPLICABLE	
	State in 1			아님 이 이 것 같아. 이 이 가 있는 것 같아.
1	222.	BACK-UP SERVICE WATER	COMPONENTS:	
$\cdot $	 	PUMP AREA		SERVICE WATER CAN BE
1			37, 38 AND 39 (P)	MAINTAINED USING SERVICE
1	- 7. J 1		2) SERVICE WATER STRAINERS	WATER PUMPS NOS. 31, 32, 33, 1
1			(C)	34, 35 AND 36.
1				SERVICE WATER STRAINERS CAN
. 1	1		FUNCTIONS:	BE OPERATED LOCALLY.
1	87 F - 1		NOT APPLICABLE	
1	1			
÷				
•.				



TABLE 3

DETECTION AND SUPPRESSION SYSTEMS

INDIAN POINT #3

	· · · · · · · · · · · · · · · · · · ·		-	
	FIRE AREA	DETECTION	SUPPRESSION	REMARKS
	15	Yes	Note 5, Note 6, Note 4	Detectors in Panels and Ceiling, Note 13
	16	Yes	Note 4, Note 7	3% foam protection in area
	17	Yes	Note 4, Note 6, Note 7	3% foam protection in area
	18	Yes	Note 4, Note 7	
	17A-E1	Yes - Smoke	Note 4, Note 5	Note 1, Note 10, Note 3
	17A-N1	Yes - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
	17A-NE1	Yes - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
	17A-NE2	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17A-E1, 8), Note 10, Note 3, Note 13
	17A-S1	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17-NE1, N1) Note 10, Note 3, Note 13
	17A-SE1	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17A-NE1), Note 13 Note 10, Note 3
	17A-SW1	Yes - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
	17A-SW2	Yes - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
	17A-W1	Yes - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
	17A-W2	Yes - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
	17A-W3	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17A-W2, W4), Note 13 Note 10, Note 3
	17A-WA	Yes - Smokë	Note 4, Note 6	Note 1, Note 10, Note 3 Note 2 (Zone 17A-W4, SN1), Note 13
	17A-W5	Yes - Smoke	Note 4, Note 6	Note 10, Note 3
	18	Yes	Note 4, Note 6, Note 7	
	18A	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17A-N1), Note 13 Note 3
	19	Not required	Nöt Required	Note 12, Note 7
	19A	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17A-N1), Note 13 Note 3
	20	Yes	Note 6, Note 7	3% foat protection in area
Notes	1. Zone Detection 9. Automatic CO ₂ System			
	2. Area Detection 310. Detection and/or Protection Systems in Fire			
م مورد میشود مورد مورد		ation in Fire	Protection T	
		ion Tech. Spec.	11. Fire Hydrant	
	Contraction of the second s	se Station		hutdown Model Redundant Components t Present in Zone
		tle Stored in Zone	13. The Authorit	y is filing an exemption request

6. Area CO₂ Bottle
7. Automatic Sprinkler System
8: Cable Tray Detect. & Protec.