

POWER AUTHORITY OF THE STATE OF NEW YORK

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January 12, 1983
IPN-83-3

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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 Tav_g 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.

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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,

J.P.
C. M. Wilvonding
J. P. Bayne
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
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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 Tav_g 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 Tav_g 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, pursuant 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 area-wide 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 pedestrian 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-lb carbon dioxide extinguishers in the zone and one immediately outside of the west door

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

Total Combustibles, BTU: 1.4×10^6

Area, Sq. Ft.: 3,510

Fire Hazard, BTU/Sq. Ft.: 389

Fire Loading: Low

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 Protection:

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

EVALUATION FOR EACH
SAFE SHUTDOWN FUNCTIONS

FUNCTION FIRE AREA	I. UNIT TRIP	2.I		3 PRESSURE CONTROL	4 REACTOR COOLANT SYSTEM MAKEUP	5 HOT TO COLD SHUTDOWN	
		Altn. I	Altn. II				
7A-W1	Y	Y	NOT REQUIRED	Y	Y	Y	
7A-W2	Y	Y	"	Y	Y	Y	
8	Y	Y	"	Y	Y	Y	
9	Y	Y	"	Y	Y	Y	
9A	Y	Y	"	Y	Y	X	
10	Y	Y	"	Y	Y	Y	
11	Y	Y	"	X	X	X	
12	Y	Y	"	Y	Y	Y	
12A	Y	Y	"	Y	Y	X	
13	Y	Y	"	Y	Y	Y	
13A	Y	Y	"	Y	Y	X	
14A	Y	Y	"	Y	Y	Y	
15	Y	Y	"	X	X	X	
16	Y	Y	"	Y	Y	Y	
17	Y	Y	"	Y	Y	Y	
18	Y	Y	"	Y	Y	Y	
17A-E1	Y	Y	"	Y	Y	Y	
17A-N1	Y	Y	"	Y	Y	Y	
17A-NE1	Y	Y	"	Y	Y	Y	
17A-NE2	Y	Y	"	Y	Y	Y	
17A-S1	Y	Y	"	Y	Y	Y	
17A-SE1	Y	Y	"	Y	Y	Y	
17A-SW1	Y	Y	"	Y	Y	Y	

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

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.

ATTACHMENT C

REPLACEMENT PAGES
FOR 11/22/82 SUBMITTAL

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

TABLE I.
TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY
8.	PAB ELEV. 55'	<u>COMPONENTS:</u> BORIC ACID TRANSFER PUMP NOS. 31 AND 32 (P), (C) <u>FUNCTIONS:</u> REACTOR COOLANT SYSTEM MAKEUP	BORATED WATER CAN BE SUPPLIED TO THE SUCTION OF THE CHARGING PUMPS FROM THE R.W.S.T.
9.	PAB ELEV. 34'	<u>COMPONENTS:</u> 1) SAFETY INJECTION SYSTEM MOTOR OPERATED VALVES (P), (C) 2) SAFETY INJECTION PUMP NOS. 31, 32 AND 33 (P) <u>FUNCTIONS:</u> REMOVAL OF REACTOR HEAT - ALTERNATE II	ALL SHUTDOWN FUNCTIONS AVAILABLE.
9A.	PAB ELEV. 15'	<u>COMPONENTS:</u> RHR PUMP NOS. 31 AND 32 (P) <u>FUNCTIONS:</u> REMOVAL OF REACTOR HEAT, HOT TO COLD SHUTDOWN	REMOVE RESIDUAL HEAT BY OPERATING WITH SECONDARY SIDE OF STEAM GENERATORS FLOODED.
10.	D.G. 31 ROOM	<u>COMPONENTS:</u> 1) BATTERY NO. 33 (P) 2) DC-DG 31 CONTROL PANEL (P) 3) 480-480V SWGR BUS 2A(P)(C) 4) DG 31 CONTROLS (C) 5) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER AND REACTOR COOLANT MAKEUP <u>FUNCTIONS:</u> ELECTRICAL DISTRIBUTION AND SERVICE WATER TO REACTOR COOLANT SYSTEM MAKEUP	ELECTRICAL POWER CAN BE SUPPLIED BY AN OFF-SITE POWER SOURCE OR BY THE REMAINING DIESEL GENERATORS (NOS. 32 AND 33). AND DC POWER VIA BATTERY CHARGER 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION.
11.	CONTROL BLDG. ELEV. 33' CABLE SPREADING ROOM	<u>COMPONENTS:</u> 1) PRESS. HEATERS NOS. 31 (P) (C), 32 (P) (C), 33 (P) (C), 34 (P) (C) 2) COMPONENT COOLING PUMP NOS. 31 (P) (C), 32 (P) (C), 33 (P) (C)	USE SECONDARY SIDE HEAT REMOVAL TO MAINTAIN PLANT IN THE HOT SHUTDOWN CONDITION. DIESEL GENERATOR 31 AND 480V BUSES 2A AND 3A CAN BE ISOLATED FROM THIS FIRE AREA TO PROVIDE POWER FOR ONE

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY	
		3) CONTAINMENT SPRAY PUMP NOS. 31(P)(C) AND 32(P)(C)	TRAIN OF PUMPS. IN CONJUNCTION, IF NECESSARY, ALTERNATE CAPABILITY PROPOSED FOR CHARGING PUMP, COMPONENT COOLING PUMP AND PRESSURIZER HEATER CAN BE UTILIZED. THE AUTHORITY PROPOSES TO REPAIR OR INSTALL NEW FEED TO RHR PUMP FOR ABILITY TO GO TO COLD SHUTDOWN, IF REQUIRED.	
		4) CONTAINMENT RECIRC. FANS NOS. 31(P)(C), 32(P)(C), 33(P)(C), 34(P)(C) and 35(P)(C)		
		5) SAFETY INJECTION PUMP NOS. 31(P)(C), 32(P)(C) and 33(P)(C)		
		6) SERVICE WATER PUMP NOS. 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)		
		8) COMPONENT COOLING BOOSTER PUMP NOS. 31(C), 32(C), 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)		
		11) RESIDUAL HEAT REMOVAL PUMP NOS. 31(P)(C) AND 32(P)(C)		
		12) AUX. FEEDWATER PUMP NOS. 31(C), 32(C) AND 33(P)(C)		
		13) PRIMARY WATER MAKEUP PUMPS NOS. 31(C) AND 32(C)		MAKEUP OF BORATED WATER TO RCS CAN BE SUPPLIED FROM THE RWST.
		14) BORIC ACID TANK HEATERS NOS. 31(C) AND 32(C)		
		15) BORIC ACID TRANSFER PUMP NOS. 31(C) AND 32(C)		
		16) BATTERY CHARGERS NOS. 31(P)(C), 33(P)(C) AND 34(P)(C)		BATTERY 33 AND DISTRIBUTION PANEL NOT AFFECTED (FOR DIESEL AND SWGR 2A, 3A CONTROL POWER)
		17) BATTERIES NOS. 31(P), 32(P) and 34(P)		
		18) D.G. 31(C), 32(C) AND 33(C)		D.G. 31 CAN BE ISOLATED FROM THIS FIRE AREA
		19) MCC NOS. 32(C), 34(C), 36A(P)(C), 36B(P)(C), 36C(C) and 39(P)(C)		
		20) 480V SWGR BUS 2A(C), 3A(C), 5A(C) AND 6A(C)		BUSSES 2A AND 3A CAN BE ISOLATED. LOADS ISOLATED BY PULLING OF CONTROL FUSES
		21) REACTOR TRIP BREAKERS (P)(C)		
		22) 120V VITAL AC INVERTER NOS. 31(P)(C), 32(P)(C), 33(P)(C) and 34(P)(C)		POWER TRIPPED FROM 480V SWGR, IF NECESSARY INSTRUMENT POWER FOR ISOLATED INSTRUMENTATION PROVIDED BY INSTRUMENTATION ISOLATION CABINET

TABLE 1

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY
		<p>23) SOLENOID OPERATED VALVES (P)(C) FOR SERVICE WATER, REACTOR COOLANT MAKEUP, REMOVAL OF REACTOR HEAT PRESSURE CONTROL AND PRIMARY SAMPLING</p> <p>24) MOTOR OPERATED VALVES FOR HOT TO COLD SHUTDOWN, REMOVAL OF REACTOR HEAT AND COMPONENT COOLING</p> <p>25) INSTRUMENTATION FOR STEAM GENERATOR LEVEL AND PRESSURE, REACTOR COOLANT SYSTEM TEMPERATURE AND PRESSURE, TANK LEVELS, REACTOR CONTAINMENT BLDG. SUMP LEVEL, NUCLEAR INSTRUMENTATION, AND FLOW INDICATION FOR NUMEROUS SYSTEMS.</p> <p>26) CONTROLS FOR BREAKERS OF ELECTRICAL DISTRIBUTION SYSTEM 138KV to 6.9KV 13.8KV to 6.9KV, 6.9KV to 480V, D.G. to 480V BUSES</p> <p><u>FUNCTIONS:</u> PRESSURE CONTROL, REMOVAL OF REACTOR HEAT, REACTOR COOLANT SYSTEM MAKEUP, UNIT TRIP AND HOT TO COLD SHUT-DOWN</p>	<p>SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION</p> <p>MOTOR OPERATED VALVES CAN BE OPERATED MANUALLY, AS REQUIRED.</p> <p>INSTRUMENTATION ISOLATION CABINET WILL ISOLATE S.G. AND PRESSURIZER PRESSURE, LEVEL PROVIDE INSTRUMENTATION AT LOCAL PANELS IN AUXILIARY FEEDWATER PUMP ROOM AND PAB, ELEV. 55'</p> <p>THE AUTHORITY PROPOSES TO LOCALLY OPERATE NECESSARY BREAKERS TO ENERGIZE BUSES EXCEPT FOR D.G. 31 OUTPUT BREAKER WHICH IS ISOLATED FROM THIS FIRE AREA. OTHER BREAKERS WILL BE ISOLATED BY PULLING CONTROL FUSES, IF NECESSARY. ELECTRICAL POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE.</p> <p>NITROGEN SYSTEM CAN BE USED AS A BACKUP TO INSTRUMENT AIR SYSTEM</p>
12.	CONTROL BLDG. ELEV. 33'	<p><u>COMPONENTS:</u> BATTERY NO. 31(P)</p> <p><u>FUNCTIONS:</u> NOT APPLICABLE</p>	<p>ADEQUATE D.C. POWER REMAINS AVAILABLE FROM BATTERIES NOS. 32, 33 and 34, IF REQUIRED AND FROM BATTERY CHARGER 31.</p>

TABLE 1
 TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) -- POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY
12A.	PAB ELEV. 15'	<p><u>COMPONENTS:</u> 1) CHARGING PUMP NO. 32 (P) 2) RHR PUMPS NOS. 31 & 32 (P) 3) COMPONENT COOLING PUMPS NOS. 32 & 33 (P) 4) SAFETY INJECTION PUMP NO. 33 (P)</p> <p><u>FUNCTIONS:</u> HOT TO COLD SHUTDOWN, REMOVAL OR REACTOR HEAT, REACTOR COOLANT SYSTEM MAKEUP</p>	<p>FUNCTIONS CAN BE MAINTAINED BY USING THE REDUNDANT PUMPS (I.E. CHARGING PUMP NO. 31 OR 33, COMPONENT COOLING PUMP NO. 31 AND SAFETY INJECTION PUMP NO. 31 OR 32).</p>
13.	CONTROL BLDG. ELEV. 33'	<p><u>COMPONENTS:</u> 1) BATTERY NO. 32 (P)</p> <p><u>FUNCTIONS:</u> NOT APPLICABLE</p>	<p>ADEQUATE D.C. POWER REMAINS AVAILABLE FROM BATTERIES NOS. 31, 33, AND 34, IF REQUIRED, AND FROM BATTERY CHARGER 32.</p>
13A.		<p><u>COMPONENTS:</u> NONE</p> <p><u>FUNCTIONS:</u> NOT APPLICABLE</p>	<p>NOT APPLICABLE</p>
14.	SWGR ROOM EL. 15'	<p><u>COMPONENTS:</u> 1) CHARGING PUMPS NO. 31(P)(C) 32 (P) (C) AND 33. (P) (C) 2) RHR PUMPS NOS. 31 (P) (C) AND 32 (P) (C) 3) CONT. RECIRC. FANS NOS. 31 (P) (C), 32 (P) (C), 33 (P) (C), 34 (P) (C), 35 (P) (C) 4) AUX. FEEDWATER PUMPS NO. 31 (P) (C) AND 33 (P) (C) 5) SERVICE WATER PUMPS NOS. 31 (P) (C), 32 (P) (C), 33 (P) (C), 34 (P) (C), 35 (P) (C), 36 (P) (C), 37 (P) (C), 38 (P) (C), 39 (P) (C). 6) COMPONENT COOLING PUMP NOS. 31 (P) (C), 32 (P) (C) AND 33 (P) (C).</p>	<p>USE SECONDARY SIDE HEAT REMOVAL TO MAINTAIN PLANT IN THE HOT SHUTDOWN CONDITION IN CONJUNCTION WITH ALTERNATE CAPABILITY FOR CHARGING PUMP, COMPONENT COOLING PUMP AND PRESSURIZER HEATER. THE AUTHORITY PROPOSES TO REPAIR OR INSTALL NEW FEED TO MOTOR DRIVEN AUX. FEEDWATER PUMP AND RHR PUMP FOR ABILITY TO GO TO COLD SHUTDOWN.</p> <p>MOTOR OPERATED VALVES CAN BE OPERATED MANUALLY, AS REQUIRED</p> <p>SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION.</p>

TABLE 1
TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY
		7) SAFETY INJECTION PUMP NOS. 31 (P) (C), 32 (P) (C) AND 33 (C) (P) 8) MCC NOS. 32 (P) (C), 34 (P) (C), 36A (P) (C), 36B (P) (C), 36C (P) (C) AND 39 (P) (C) 9) CONTAINMENT SPRAY PUMP NOS. 31 (P) (C) AND 32 (P) (C) 10) RECIRCULATION PUMP NOS. 31 (P) (C) AND 32 (P) (C) 11) D.G. 31 (P) (C), 32 (P) (C) AND 33 (P) (C) 12) BUS 2A, 3A AND 6A TIES (C) 13) MOTOR OPERATED VALVES (C) 14) SOLENOID OPERATED VALVES (P) 15) INSTRUMENTATION IN ISOLATION CABINET 16) PRESS. HEATER NOS. 31 (P) (C), 32 (P) (C), 33 (P) (C) AND 34 (P) (C) 17) BATTERY CHARGERS NOS. 32 (P) AND 33 (P) 18) INSTR. AIR COMP. NO. 31 (P) (C) AND 32 (P) (C) 19) COMPONENT COOLING BOOSTER PUMP NO. 31 (C) 20) 480V SWGR BUS 2A (P) (C), 3A (P) (C), 5A (P) (C) AND 6A (P) (C)	INSTRUMENTATION CAN BE READ FROM CONTROL ROOM. USE NITROGEN SYSTEM AS A BACK-UP TO THE INSTRUMENT AIR SYSTEM. ELECTRICAL POWER CAN BE SUPPLIED FROM AN OFF-SITE POWER SOURCE.
		<u>FUNCTIONS:</u> PRESSURE CONTROL, REMOVAL OF REACTOR HEAT, HOT TO COLD SHUTDOWN, REACTOR COOLANT SYSTEM MAKEUP AND UNIT TRIP. <u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE
15.	CONTROL BLDG. ELEV. 53' CONTROL ROOM	<u>COMPONENTS:</u> SAME AS FIRE ZONE II EXCEPT NO POWER CABLES TO LOADS ARE AFFECTED <u>FUNCTIONS:</u> SAME AS FIRE ZONE II <u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	SAME AS FIRE ZONE II EXCEPT THAT LOCAL CONTROL OF ALL LOADS WILL BE UTILIZED. IF REQUIRED, ISOLATION WILL BE ACHIEVED BY PULLING CONTROL POWER FUSES. NOT APPLICABLE
16.		<u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE

TABLE 1
TABLE OF SAFE SHUTDOWN CAPABILITY FOR FIRE ZONES

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY
59A.	FAN HOUSE ELEV. 41' AND 51'	<p><u>COMPONENTS:</u></p> <p>1) MOTOR OPERATED VALVES (P) (C) FOR REMOVAL OF REACTOR HEAT AND COMPONENT COOLING</p> <p>2) SOLENOID OPERATED VALVES (P) FOR PRIMARY SAMPLING REACTOR COOLANT SYSTEM MAKEUP, COMPONENT COOLING AND SERVICE WATER</p> <p>3) COMPONENT COOLING BOOSTER PUMP NOS. 31 AND 32 (P) (C)</p> <p>4) INSTRUMENTATION (I) FOR SERVICE WATER SYSTEM</p>	<p>MOTOR OPERATED VALVES CAN BE OPERATED MANUALLY, AS REQUIRED.</p> <p>SOLENOID OPERATED VALVES WILL REVERT "FAIL" POSITION</p>
60A.	UPPER ELEV. TUNNEL	<p><u>COMPONENTS:</u></p> <p>1) BORIC ACID TRANSFER PUMP NOS. 31(C) AND 32(C)</p> <p>2) COMPONENT COOLING BOOSTER PUMP NOS. 31(C) AND 32(C)</p> <p>3) CHARGING PUMP NOS. 31 (P) (C), AND 33 (P) (C)</p> <p>4) COMPONENT COOLING PUMP NOS. 31(P) AND 33(P)</p> <p>5) SAFETY INJECTION PUMP NOS. 31(P) AND 33(P)</p> <p>6) CONTAINMENT SPRAY PUMP NOS. 31 (P) AND 32 (P)</p> <p>7) CONTAINMENT RECIRC. FAN NOS. 31(P), 33(P) AND 35 (P)</p> <p>8) RECIRC. PUMP NO. 31 (P) AND 32(P)</p> <p>9) RHR PUMP NO. 32 (P)</p> <p>10) AUX. FEED PUMP NO. 33 (P) (C)</p> <p>11) MCC NOS. 36A(P), 36B(P) AND 37(P)</p> <p>12) BATTERY CHARGER NO. 32(P)</p> <p>13) MOTOR OPERATED VALVES (P) (C) FOR REMOVAL OF REACTOR HEAT, HOT TO COLD SHUTDOWN, COMPONENT COOLING.</p>	<p>FUNCTIONS CAN BE MAINTAINED BY REMOTE AND/OR LOCAL OPERATION OF THE REDUNDANT PUMPS AND FANS (I.E., LOCAL OPERATION OF BORIC ACID TRANSFER PUMP NO. 32 AND REMOTE OPERATION OF CHARGING PUMP NO. 32, COMPONENT COOLING PUMP NO. 32, SAFETY INJECTION PUMP NO. 32, RHR PUMP NO. 31 AUX. FEED PUMP NO. 31 AND CONT. RECIRC. FAN NOS. 32 AND 34). MOTOR OPERATED VALVES CAN BE OPERATED MANUALLY, AS REQUIRED. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION.</p> <p>INDICATION OF S.G. LEVEL AND PRESSURE AND PRESSURIZER PRESSURE AND LEVEL CAN BE OBTAINED LOCALLY BY WAY OF THE INSTRUMENT ISOLATION CABINET. READOUT OF OTHER INSTRUMENTATION CAN BE OBTAINED LOCALLY.</p>

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS	ALTERNATE SHUTDOWN CAPABILITY
		NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	
94A.		<u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE
95A.		<u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE
96A.		<u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE
97A.	WASTE HOLDUP TANK	<u>COMPONENTS:</u> LT-920 (I) <u>FUNCTIONS:</u> REMOVAL OF REACTOR HEAT REACTOR COOLANT SYSTEM MAKEUP, HOT TO COLD SHUTDOWN	R.W.S.T. HAS LOCAL LEVEL GAUGE
98A.		<u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE
101A.	D.G. BLDG. ELEV 15'	<u>COMPONENTS:</u> 1) D.C.-DG #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) <u>FUNCTIONS:</u> REACTOR COOLANT SYSTEM MAKEUP, REMOVAL OF REACTOR HEAT	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATORS NOS. 31 AND 33. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION

FIRE ZONE	ZONE IDENTIFICATION	SHUTDOWN COMPONENTS NOTE: (P) - POWER CABLES (C) - CONTROL CABLES (I) - INSTRUMENT CABLES	ALTERNATE SHUTDOWN CAPABILITY
102A.	D.G. BLDG. ELEV. 15'	<u>COMPONENTS:</u> 1) D.C.-DG #33 CONTROL PANEL (P) 2) 480-480V SWGR BUS 5A (P) (C) 3) SOLENOID OPERATED VALVES (P) FOR SERVICE WATER, REMOVAL OF REACTOR HEAT AND RCS MAKEUP 4) DG 33 AUTO START (I) (C) <u>FUNCTIONS:</u> REACTOR COOLANT SYSTEM MAKEUP, REMOVAL OF REACTOR HEAT	POWER CAN BE SUPPLIED FROM OFF-SITE POWER SOURCE OR DIESEL GENERATOR NOS. 31 AND 32. SOLENOID OPERATED VALVES WILL REVERT TO "FAIL" POSITION.
105A.	WASTE HOLDUP TANK	<u>COMPONENTS:</u> LT-920 (I) <u>FUNCTIONS:</u> REMOVAL OF REACTOR HEAT, REACTOR COOLANT SYSTEM MAKEUP AND HOT TO COLD SHUTDOWN	R.W.S.T. HAS LOCAL LEVEL GAUGE
106A.	WASTE HOLDUP TANK	<u>COMPONENTS:</u> LT-920 (I) <u>FUNCTIONS:</u> REMOVAL OF REACTOR HEAT, REACTOR COOLANT SYSTEM MAKEUP AND HOT TO COLD SHUTDOWN	R.W.S.T. HAS LOCAL LEVEL GAUGE
119.		<u>COMPONENTS:</u> NONE <u>FUNCTIONS:</u> NOT APPLICABLE	NOT APPLICABLE
222.	BACK-UP SERVICE WATER PUMP AREA	<u>COMPONENTS:</u> 1) SERVICE WATER PUMP NOS. 37, 38 AND 39 (P) 2) SERVICE WATER STRAINERS (C) <u>FUNCTIONS:</u> NOT APPLICABLE	SERVICE WATER CAN BE MAINTAINED USING SERVICE WATER PUMPS NOS. 31, 32, 33, 34, 35 AND 36. SERVICE WATER STRAINERS CAN BE OPERATED LOCALLY.

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 - Smoke	Note 4, Note 6	Note 1, Note 10, Note 3
17A-W5	Yes - Smoke	Note 4, Note 6	Note 2 (Zone 17A-W4, SN1), Note 13 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	Not 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% foam protection in area

- Notes:
1. Zone Detection
 2. Area Detection
 3. Hose Station in Fire Protection Tech. Spec.
 4. Area Hose Station
 5. CO₂ Bottle Stored in Zone
 6. Area CO₂ Bottle
 7. Automatic Sprinkler System
 8. Cable Tray Detect. & Protec.
 9. Automatic CO₂ System
 10. Detection and/or Protection Systems in Fire Protection Tech. Spec.
 11. Fire Hydrant
 12. Appendix R Shutdown Model Redundant Components or Cables Not Present in Zone
 13. The Authority is filing an exemption request for providing detection and/or fixed suppression in this fire area.