

ATTACHMENT I TO IPN-91-010

PROPOSED TECHNICAL SPECIFICATION CHANGES
RELATED TO
FIRE PROTECTION AND DETECTION SYSTEMS

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

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- d. If the requirement of 3.14.A.3.a cannot be satisfied within the time period specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the requirement of 3.14.A.3.a cannot be satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures.

B. Fire Protection Spray and/or Sprinkler Systems

1. The following spray and/or sprinkler systems shall be operable whenever equipment in the area is required to be operable in accordance with Section 3 of the Technical Specifications:
 - a. Electrical Tunnel Fire Protection Water Sprinkler System (E1-34' and E1-43').
 - b. Diesel Generator Building Water Sprinkler System (E1-15' in D.G. Building).
 - c. Containment Fan Cooler Charcoal Filter Dousing System (E1-68' in Containment).
2. If the requirements of 3.14.B.1 cannot be satisfied and the equipment in the area is required to be operable:
 - a. A continuous fire watch with backup fire suppression equipment shall be established for the accessible unprotected area(s) within 1 hour.
 - b. The inoperable spray and/or sprinkler system(s) shall be restored to operable status within 14 days or a Special Report shall be prepared and submitted to the Commission pursuant to specification 6.9.2.f within the next 30 days outlining the cause of inoperability and the plans for restoring the system(s) to operable status.

C. Penetration Fire Barriers

1. The following penetration fire barriers shall be functional at all times when the equipment in these areas are required to be operable in accordance with Section 3 of the Technical Specifications:
 - a. Penetration fire barriers between the central control room floor and the cable spreading room.
 - b. Penetration fire barriers between the 480 V switchgear room and the cable spreading room.
 - c. Penetration fire barriers separating the diesel generator compartments from each other and from the Control Building.

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- d. Penetration fire barriers separating the Control Building from the Turbine Building.
- e. Penetration fire barriers separating the Cable Spreading Room from the Electrical Tunnels.

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2. If the requirements of 3.14.C.1 are not met and the equipment in these areas are required to be operable:
 - a. within one (1) hour, either
 - i. Verify the operability of fire detectors on at least one side of the non-functional fire barrier and establish an hourly fire watch patrol, or
 - ii. establish a continuous fire watch on at least one side of the affected fire barrier penetration
 - b. Restore the non-functional fire barrier penetration(s) to functional status within 7 days or submit a report to the Commission pursuant to specification 6.9.2.f within the next 30 days outlining the action taken, the cause of the non-functional penetration and plans for restoring the fire barrier penetration(s) to functional status.

D. Fire Detection Systems

1. As a minimum, the fire detection instrumentation for each location shown in Table 3.14-1 shall be operable whenever equipment in that location is required to be operable in accordance with Section 3.0 of the Technical Specification.
2. With the number of operable fire detection instruments less than the minimum required by Table 3.14-1 and the equipment in that location is required to be operable:
 - a. A fire watch patrol shall be established within 1 hour where accessibility permits to inspect the location(s) with less than the minimum operable instrumentation at a frequency of at least once per hour.
 - b. The minimum operable instrumentation required in Table 3.14-1 shall be restored within 14 days or a Special Report shall be prepared and submitted to the Commission pursuant to specification 6.9.2.f within the next 30 days outlining the cause of the malfunction and the plans for restoring the instrumentation to operable status.

E. Fire Hose Stations

1. The fire hose stations shown in Table 3.14-2 shall be operable whenever equipment in the area is required to be operable in accordance with Section 3.0 of the Technical Specifications.

2. If the requirements of 3.14.E.1 cannot be satisfied and the equipment in the area is required to be operable, an additional equivalent capacity hose shall be routed to the affected area from an operable hose station within one hour or suitable portable fire fighting equipment made available at the location.
3. Should any fire hose station listed in Table 3.14-2 not be restored to operable status within 14 days, a special report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2.f within the next 30 days outlining the cause of the malfunction and the plans for restoring the fire station to operable status.

F. Yard Fire Hydrants and Hydrant Hose Houses

1. The yard fire hydrants and associated hydrant hose houses shown in Table 3.14-3 shall be operable while the unit is above cold shutdown.
2. With one or more of the yard fire hydrants or associated hydrant hose houses shown in Table 3.14-3 inoperable, within 1 hr. have sufficient additional lengths of 2 1/2 inch diameter hose located in an adjacent operable hydrant hose house to provide service to the unprotected area(s).
3. Restore the inoperable yard hydrants to service within 14 days or a Special Report shall be prepared and submitted to the commission pursuant to Specification 6.9.2.F within the next 30 days outlining the cause of inoperability and the plans for restoring the hydrant to operable status.

G. CO₂ Fire Protection System

1. As a minimum, one CO₂ Storage Tank shall be available with a minimum level of 60% and a minimum pressure of 275 psi to supply safety related areas whenever equipment in these areas are required to be operable in accordance with Section 3.0 of the Technical Specifications.
2. CO₂ System Fire Protection shall be available to the following safety related areas whenever equipment in those areas are required to be operable in accordance with Section 3.0 of the Technical Specifications.
 - a. Control Building (EL-33') - Cable Spreading Room
 - b. Control Building (EL-15') - Switchgear Room
 - c. Diesel Generator Building (EL-15')
3. If the requirements of 3.14.G.1 and 3.14.G.2 cannot be satisfied and the equipment in the areas is required to be operable:
 - a. A continuous fire watch with backup fire suppression equipment shall be established for the accessible unprotected area(s) within 1 hour.
 - b. If the requirement of 3.14.G.1 and 3.14.G.2 are not satisfied within 14 days, a special report shall be prepared and submitted to the commission pursuant to specification 6.9.2.f within the next 30 days outlining the cause of inoperability and the plans for restoring the CO₂ system to operable status.

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Basis

Containment is not considered normally accessible during plant operation.

These specifications are established to assure the operability of fire protection and detection systems provided to protect equipment utilized for safe shutdown of the unit. The fire protection and detection systems installed at IP3, conform to Appendix A of Branch Technical Position (BTP) APCS 9.5.1 "Fire Protection for Nuclear Power Plants", as approved by the NRC Regulatory Staff on March 6, 1979 as Amendment No. 24 to facility operating license No. DPR-64, and supplements thereto. Also, the CO₂ System Fire Protection availability by definition shall be interpreted to mean with the system in either the automatic or manual mode of operation with the automatic mode as the primary mode of operation.

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TABLE 3.14-1 (Sheet 1 of 2)

FIRE DETECTION INSTRUMENTS			
Instrument Location	Minimum Instruments Operable		
	Heat	Smoke (ionization detectors)	Flame (Ultra violet)
1. Cable Spreading Room (Control Building: El-33')		7	
2. Switchgear Room (Control Building: El-15')		7	
3. Electrical Tunnels Upper (El-43') Lower (El-34')	69* 66*	4 4	
4. Electrical Penetration Areas: Upper (Fan House: El-46') Lower (Fan House: El-34')	33* 17*	3 4	
5. Diesel Generator Building (El-15')	4 per D.G.		
6. Containment Fan Cooler Units (Containment: El-68')	4 per FC Unit		
7. Primary Auxiliary Building a. Corridor: El 55' b. MCC Nos. 36A, 36B, 37, El 55' (Underfloor Area) c. CS Pump Area El 41' d. Component Cooling Pump Area e. RHR Pumps El 15' f. Charging Pump Rooms		7 5 2 4 1 per RHR Pump cubicle 2	
8. Aux. Feed Pump Building		1	
9. Battery Room No. 31 " " 32 Battery Area 33			1 1 1
10. Fan House: El 41' and 51' (Pipe Penetration Area)		5	

TABLE 3.14-1 (Sheet 2 of 2)

FIRE DETECTION INSTRUMENTS			
Instrument Location	Minimum Instruments Operable		
	Heat	Smoke (ionization detectors)	Flame (Ultra violet)
11. Control Room Supervisory Panel Flight Panel Ceiling Area Ductwork		2 1 8 3	
12. Containment Building		4	
13. Intake Structure Building/ Service Water Pump Enclosure		22	

*Temperature Detector/Trip Devices

TABLE 3.14-2

FIRE HOSE STATIONS		
<u>Building</u>	<u>Location</u>	<u>Elevation</u>
Turbine Building	Control Bldg. Entrance	15'
Turbine Building	Control Bldg. Entrance	33'
Turbine Building	Control Bldg. Entrance	53'
Aux. Feed Pump Bldg.	Outside Stairwell	18' - 6"
Primary Aux. Bldg.	West Stairwell	55'
Primary Aux. Bldg.	West Stairwell	34'
Primary Aux. Bldg.	West Stairwell	15'
Primary Aux. Bldg.	East Stairwell	73'
Primary Aux. Bldg.	East Stairwell	55'
Primary Aux. Bldg.	East Stairwell	41'
Primary Aux. Bldg.	West Side of Bldg.	73'
Intake Structure Bldg.	North End of Bldg.	15'
Intake Structure Bldg.	South End of Bldg.	15'

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TABLE 3.14-3

YARD FIRE HYDRANT AND ASSOCIATED HYDRANT HOSE HOUSES	
<u>Location</u>	<u>Hydrant No.</u>
1. Screenwell Area	#31 or #32
2. Aux. Feed Pump Bldg.	#35
3. Primary Aux. Bldg.	#36, 38, 39
4. Diesel Gen Bldg.	#310

3.14-11

Amendment No. 47,

ATTACHMENT II TO IPN-91-010

SAFETY EVALUATION
RELATED TO
FIRE PROTECTION AND DETECTION SYSTEMS
TECHNICAL SPECIFICATION CHANGES

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

Section I - Description of Changes

This application seeks to amend the Indian Point 3 (IP3) technical specifications, Tables 3.14-1 and 3.14-2, to include smoke detectors and hose stations for the enclosed intake structure. This application also seeks to make miscellaneous corrections to specification 3.14.C.2., Table 3.14-1, and re-paginate all section 3.14 pages except 3.14-1.

Section II - Evaluation of Changes

The Authority is building a single story structural steel-framed building to cover the IP3 intake structure area. The enclosure will provide for easier all weather maintenance of the Circulating Water Pumps, the Service Water Pumps, and the Travelling Screens. The Service Water Pumps are safe shutdown equipment, so the hose station and detection system operability requirements for the intake structure are commensurate with the operability requirements for the areas already listed in Tables 3.14-1 and 3.14-2. By letter dated November 26, 1979 (IPN-79-84), the Authority informed the NRC staff that the proposed intake structure building would include smoke detectors and two manual hose stations. The NRC staff found the fire protection measures for the intake structure building acceptable, as documented in the supplement to the Fire Protection SER dated May 2, 1980.

This amendment seeks to make miscellaneous changes to section 3.14 of the IP3 technical specifications. The outline number and letter pattern of Specification 3.14.C.2. is being changed to be consistent with the rest of section 3.14. Item 7.b of Table 3.14-1 is being changed as follows: MCC nos. 36A and 36B are being included, because they were inadvertently omitted from the original issue of this table; MCC no. 38 is being deleted, because it is located in the containment building, and is therefore covered by item 12 of Table 3.14-1; MCC no. 39 is being deleted, because it is located in the cable spreading room, and is therefore covered by item 1 of Table 3.14-1. Finally, all pages (except for page 3.14-1) in section 3.14 are being re-paginated.

Section III - No Significant Hazards Evaluation

Consistent with the requirements of 10 CFR 50.92, the enclosed application is judged to involve no significant hazards based on the following information:

- (1) Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response:

The proposed changes do not involve an increase in the probability of a previously-analyzed accident. The proposed changes add smoke detectors and hose stations for the intake structure building to the lists of equipment required to be operable by Tables 3.14-1 and 3.14-2. Tables 3.14-1 and 3.14-2 provide operability requirements for smoke detectors and hose stations in areas that contain safe shutdown equipment. The intake structure area includes safe shutdown equipment (the service water pumps), so the smoke detectors and hose stations protecting the service water pumps need to be included in Tables 3.14-1 and 3.14-2. The fire protection measures for the

enclosed intake structure were found acceptable by the NRC staff. (See Fire Protection SER supplement dated May 2, 1980.)

The miscellaneous changes do not affect plant operation.

- (2) Does the proposed license amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response:

The proposed changes do not create the possibility of a new or different kind of accident. The smoke detectors and hose stations provide protection against a fire for equipment used for safe shutdown of the plant. This level of protection has been previously approved by the NRC staff.

The miscellaneous changes do not affect plant operation.

- (3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response:

The proposed amendment does not involve a significant reduction in a margin of safety. The amendment provides control for new smoke detectors and hose stations in the newly enclosed intake structure. These tech. spec. changes are necessary because the intake structure area includes equipment used for safe shutdown of the plant (the service water pumps).

The miscellaneous changes do not affect plant operation.

In the April 6, 1983 Federal Register, Vol. 048, No. 67, Page 14870, the NRC published a list of examples of amendments that are not likely to involve a significant hazards concern. Example (ii) of that list applies to the proposed change and states

A change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications: for example, a more stringent surveillance requirement.

Section IV - Impact of Changes

These changes will not adversely impact the following:

ALARA Program
Security and Fire Protection Programs
Emergency Plan
FSAR or SER Conclusions
Overall Plant Operations and the Environment

Section V - Conclusions

The incorporation of these changes: a) will not increase the probability nor the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Safety Analysis Report; b) will not increase the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report; c) will not reduce the margin of safety as defined in the bases for any Technical Specification; d) does not constitute an unreviewed safety question; and e) involves no significant hazards considerations as defined in 10 CFR 50.92.

Section VI - References

- a) IP-3 Final Safety Analysis Report
- b) IP-3 Safety Evaluation Report