



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555-0001

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 206  
License No. DPR-59

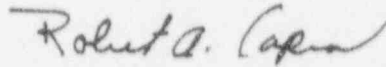
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Power Authority of the State of New York (the licensee) dated December 22, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 206, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Capra, Director  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 28, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 206

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A as follows:

Remove Pages

244h  
244i  
244j  
244q

Insert Pages

244h  
244i  
244j  
244q

### 3.12 and 4.12 BASES

The Fire Protection System specifications provide pre-established minimum levels of operability to assure adequate fire protection during any operating condition including a design basis accident or safe shutdown earthquake.

- A. The high pressure water fire protection system is supplied by redundant vertical turbine pumps, one diesel driven and one electric motor driven, each design rated 2500 gpm at 125 psig discharge pressure. Both pumps take suction from the plant intake cooling water structures from Lake Ontario. The high pressure water fire protection header is normally maintained at greater than 115 psig by a pressure maintenance subsystem. If pressure decreases, the fire pumps are automatically started by their initiation logic to maintain the fire protection system header pressure. Each pump, together with its manual and automatic initiation logic combined makes up a redundant high pressure water fire pump.

A third fire pump, diesel-driven, has been installed and is set to automatically actuate upon decreasing pressure after the actuation of the first two fire pumps. No credit is taken for this pump in any analyses and the requirements of Technical Specifications 3.12 and 4.12 do not apply.

Pressure Maintenance subsystem checks, valve position checks, system flushes and comprehensive pump and system flow and/or performance tests including logic and starting subsystem tests provide for the early detection and correction of component failures thus ensuring high levels of operability.

- B. Safety related equipment areas protected by water spray or sprinklers are listed in Table 3.12.1. Whenever any of the

protected areas, spray or sprinklers are inoperable continuous fire detection and backup fire protection equipment is available in the area where the water spray and/or sprinkler protection was lost.

Table 4.12.1 specifies tests and inspections to detect nozzle blockage or breakage, to verify header integrity, and to ensure valve operability. Surveillance for flow alarm check valves in wet pipe sprinkler systems is performed by providing sufficient flow through the valve to activate the alarm. Full cycling is not required since the flow alarm check valves are not designed to latch open.

- C. The carbon dioxide systems provide total flood protection for eight different safety related areas of the plant from either a 3 ton or 10 ton storage unit as indicated in Table 3.12.2. Both CO<sub>2</sub> storage units are equipped with mechanical refrigeration units to maintain the storage tank content at 0°F with a resultant pressure of 300 psig. Automatic smoke and heat detectors are provided in the CO<sub>2</sub> protected areas and initiation is automatic and/or manual as indicated in Table 3.12.2. For any area in which the CO<sub>2</sub> protection is made or found to be inoperable, continuous fire detection is available and one or more large wheeled CO<sub>2</sub> fire extinguisher is also available for each area in which protection was lost.

Weekly checks of storage tank pressure and level verify proper operation of the tank refrigeration units and availability of sufficient volume of CO<sub>2</sub> to extinguish a fire in any of the protected areas.

### 3.12 and 4.12 BASES (continued)

Performance of the periodic tests and inspections listed in Table 4.12.2 are in accordance with NFPA-12, 1973, will verify the integrity of system nozzles and distribution headers as well as detect and remove any accumulation of rust or scale. The use of "puff test" rather than full flow tests will demonstrate proper valve operation without the attendant potential equipment and personnel hazards associated with full flow tests.

- D. Manual hose stations provide backup fire protection throughout the Plant. Those hose stations that are in or near areas with safety related equipment are listed in Table 3.12.3. Hose station location and hose length selection provides the capability of reaching any fire in a safety related area with the hose stream. When any of the hose stations listed in Table 3.12.3 is inoperable, providing additional hose lengths from other operable hose stations assures maintenance of this capability. Periodic inspection and tests are in accordance with NFPA Code guidelines and assures prevention, detection and correction of hose, nozzle, valve and/or gasket damage or deterioration to maintain high levels of operability.
- E. Early fire detection and fire fighting activity is essential to ensuring that any fire will result in minimum damage to safety related equipment. Since each area monitored utilizes a number of smoke and/or heat detectors when more than one detector is inoperable, early fire detection is assured by establishing a patrolling fire watch which check the area where the detectors are inoperable at least hourly. Wet pipe flow alarms are not depended upon for fire detection. Fire detection surveillance testing is therefore not required for wet pipe flow alarms by the Technical Specification.

Testing of smoke and heat detectors and associated circuitry every 6 months, in accordance with manufacturers and NFPA 72E-1974 recommendations ensures a high level of operability.

- F. The functional integrity of the fire barrier penetrations ensure that fire will be confined or adequately retarded from spreading to adjacent portion of the facility. This design feature minimizes the possibility of a single fire rapidly involving several areas of the facility prior to detection and extinguishment. The fire barrier penetrations are a passive element in the facility fire protection program and are subject to periodic inspections.

The barrier penetrations, including cable penetration barriers, fire doors and dampers are considered functional when the visually observed condition is the same as the as-designed condition.

During periods of time when the barriers are not functional, either, 1) a continuous fire watch is required to be maintained in the vicinity of the affected barrier, or 2) the fire detectors on at least one side of the affected barrier must be verified operable and a hourly fire watch patrol established until the barrier is restored to functional status.

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TABLE 3.12.1

WATER SPRAY/SPRINKLER PROTECTED AREAS

AREA	FIRE DETECTION	TYPE PROTECTION(3)	TYPE INITIATION
1) West Cable Tunnel	Ionization Device	Fusible Link Sprinklers/ Frangible Element Nozzles	Automatic
2) East Cable Tunnel	Ionization Device	Fusible Link Sprinklers/ Frangible Element Nozzles	Automatic
3) Recirculation MG Room	Electric Heat Activated Device	Fusible Link Sprinklers	Automatic/Manual
4) Emergency Diesels(1)	Electric Heat Activated Device	Fusible Link Sprinklers	Automatic/Manual
5) HPCI	Electric Heat Activated Device	Water Spray	Manual
6) RCIC	Electric Heat Activated Device	Water Spray	Manual
7) Standby Gas Treatment Trains(2)	Electric Heat Activated Device	Water Spray	Manual
8) West Diesel Fire Pump Room	Ionization Device	Fusible Link Sprinklers	Automatic
9) Battery Room Corridor	Ionization Device	Fusible Link Sprinklers	Automatic

Notes for Table 3.12.1

1. Each of two (2) Emergency Diesel Generator Systems is a separate protected area, each system contains two (2) separate rooms.
2. Each of two (2) Standby Gas Treatment trains is a separate area.
3. All areas are also protected by fire hoses and portable dry chemical and/or CO<sub>2</sub> fire extinguishers.

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TABLE 4.12.1

WATER SPRAY/SPRINKLER SYSTEM TESTS

AREA	CYCLING EACH VALVE	SPRAY NOZZLE INSPECTION	HEADER INTEGRITY INSPECTION	NOZZLE AIR FLOW TEST
1) West Cable Tunnel	Once/6 Months <sup>(1)</sup>	N/A	Once/1.5 Years	N/A
2) East Cable Tunnel	Once/6 Months <sup>(1)</sup>	N/A	Once/1.5 Years	N/A
3) Recirculation MG Room	Once/6 Months	N/A	Once/1.5 Years	N/A
4) Emergency Diesel Rooms	Once/6 Months	N/A	Once/1.5 Years	N/A
5) HPCI	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
6) RCIC	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
7) Standby Gas Treatment Trains	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
8) West Diesel Fire Pump Room	None	N/A	Once/1.5 Years	N/A
9) Battery Room Corridor	Once/6 Months <sup>(1)</sup>	N/A	Once/1.5 Years	N/A

Notes for Table 4.12.1

1. These are wet pipe systems which contain flow alarm check valves. The surveillance for flow alarm check valves is performed by providing sufficient flow through the valve to activate the alarm. Full valve cycling is not required.