



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

April 20, 1994

Docket No. 50-286

Mr. William J. Cahill, Jr.
Executive Vice President - Nuclear Generation
Power Authority of the State of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Cahill:

SUBJECT: ISSUANCE OF AMENDMENT FOR INDIAN POINT NUCLEAR GENERATING
UNIT NO. 3 (TAC NO. M86057)

The Commission has issued the enclosed Amendment No. 146 to Facility Operating License No. DPR-64 for the Indian Point Nuclear Generating Unit No. 3. The amendment consists of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated March 12, 1993.

The amendment revises the TS to incorporate the changes listed below:

- (1) The frequency of high pressure water fire protection system testing (specified in TS Section 4.12.A.1) has been changed to accommodate operation on a 24-month cycle.
- (2) The frequency of fire pump diesel engine testing (specified in TS Section 4.12.A.2) has been changed to accommodate operation on a 24-month cycle.
- (3) The frequency of electrical tunnel, diesel generator building, and containment fan cooler fire protection spray and/or sprinkler system testing (specified in TS Section 4.12.B.1) has been changed to accommodate operation on a 24-month cycle.
- (4) The frequency of fire barrier penetration seal inspection (specified in TS Section 4.12.C.1) has been changed to accommodate operation on a 24-month cycle.
- (5) The frequency of fire detection system testing (specified in TS Section 4.12.D.1) has been changed to accommodate operation on a 24-month cycle.
- (6) The frequency of fire hose station testing (specified in TS Section 4.12.E.1) has been changed to accommodate operation on a 24-month cycle.
- (7) The frequency of CO₂ fire protection system testing (specified in TS Section 4.12.G.1) has been changed to accommodate operation on a 24-month cycle and a new requirement has been added to exercise the fire dampers on an annual basis.

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Mr. William J. Cahill, Jr.

- 2 -

April 20, 1994

These changes followed the guidance provided in Generic Letter 91-04, "Changes in TS Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," as applicable.

In addition, TS Section 4.12 has been reformatted, in its entirety, and several administrative changes have been made to improve clarity.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,



Nicola F. Conicella, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 146 to DPR-64
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. William J. Cahill, Jr.

- 2 -

April 20, 1994

These changes followed the guidance provided in Generic Letter 91-04, "Changes in TS Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," as applicable.

In addition, TS Section 4.12 has been reformatted, in its entirety, and several administrative changes have been made to improve clarity.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

Original signed by:

Nicola F. Conicella, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 146 to DPR-64
2. Safety Evaluation

cc w/enclosures:
See next page

Distribution:
See attached sheet

*See previous concurrence

LA:PDI-1	PM:PDI-1 <i>gmm</i>	SPLB	OGC	D:PDI-1	
CVogan <i>CV</i>	NConicella:smm	*CMcCracken	*AJorgensen	RACapra <i>RC</i>	
4/19/94	4/19/94	04/07/94	04/14/94	4/20/94	

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Mr. William J. Cahill, Jr.
Power Authority of the State
of New York

Indian Point Nuclear Generating
Station Unit No. 3

cc:

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DATED: April 20, 1994

AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-64-INDIAN POINT UNIT 3

Docket File

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cc: Plant Service list



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

POWER AUTHORITY OF THE STATE OF NEW YORK
DOCKET NO. 50-286
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 146
License No. DPR-64

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 March 12, 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-64 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 146, 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: April 20, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 146

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Revise Appendix A as follows:

Remove Pages

4.12-1
4.12-2
4.12-3
4.12-4
4.12-5
4.12-6
4.12-7

Insert Pages

4.12-1
4.12-2
4.12-3
4.12-4
4.12-5
4.12-6
4.12-7

4.12 FIRE PROTECTION AND DETECTION SYSTEMS

Applicability

This specification applies to the surveillance requirements of fire protection and detection systems provided for protection of safe shutdown systems.

Objective

To verify the operability of fire protection and detection systems.

Specification

A. High Pressure Water Fire Protection System Testing:

1. Testing Requirements:

	<u>Item</u>	<u>Frequency</u>
a.	<u>Fire Water Storage Tanks</u> <u>Minimum Water Volume.</u>	once/week
b.	<u>Main Fire Pump Operability -</u> Each pump operating for at least 15 minutes.	once/month
c.	<u>Valve Position Check -</u> Verification that each valve (manual, power operated or automatic) in the flow path necessary for proper functioning of any portion of this system required for protection of safe shutdown systems is in its correct position. If the valve has an installed monitoring system, the valve position can be checked via that monitoring system.	once/month
d.	<u>Valve Cycling Test -</u> Exercise each valve necessary for proper functioning of any portion of this system required for protection of safe shut- down systems through at least one complete cycle.	
	(i) Valves testable with plant on-line.	once/12 months
	(ii) Valves not testable with plant on-line.	once/24 months

- e. System Functional Test - once/24 months
Verification of proper actuation of this system throughout its operating sequence, and
 - (i) Verification that each automatic valve in the flow path actuates to its correct position, and
 - (ii) Verification that each fire suppression pump starts (sequentially) to maintain fire water suppression system pressure.
- f. Main Fire Pump Capacity and System Flow Check - once/24 months
Verification that each pump develops a flow of 2350 gpm at a system head of 250 feet.
- g. System Flow Test - once/3 years
Performance of a flow test in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association for any portion of this system required for protection of safe shutdown systems.
- h. System Flush - (may be done concurrent with System Flow Test). once/3 years

2. Fire Pump Diesel Engine Testing Requirements:

<u>Item</u>	<u>Frequency</u>
a. Verify that the Fuel Oil Storage Tank contains at least 120 gal. of fuel.	once/month
b. Test diesel fuel sample to verify conformance with diesel manufacturer's recommended minimum requirements for viscosity, water, and sediment.	once/3 months

- c. Verify diesel starts from ambient conditions and operates for at least 30 minutes (may be done concurrent with 15 minute diesel pump test). once/month
- d. Conduct a thorough inspection of the diesel in accordance with procedures prepared in conjunction with the manufacturer's recommendations. once/18 months
- e. Verify that the diesel starts from ambient conditions on the auto-start signal and is operated for greater than or equal to 30 minutes while loaded with the fire pump. once/24 months

3. Fire Pump Diesel Starting 24-Volt Battery Bank and Charger Requirements:

<u>Item</u>	<u>Frequency</u>
a. Verify electrolyte level of each battery is above the plates and that the overall battery voltage is greater than or equal to 24 volts. Also verify that the specific gravity is appropriate for continued service of the battery.	once/month
b. Verify that the batteries and battery racks show no visual indication of physical damage or abnormal deterioration and that the battery terminal connections are clean, tight, and free of corrosion.	once/18 months

B. Electrical Tunnel, Diesel Generator Building and Containment Fan Cooler Fire Protection Spray and/or Sprinkler System Testing:

1. Testing Requirements:

<u>Item</u>	<u>Frequency</u>
a. Verify that each valve	once/month

(manual, power operated or automatic) in the flow path and which is accessible is in the correct position.

- b. Valve Cycling Test -
Exercise each valve necessary for proper functioning of any portion of this system required for protection of safe shutdown systems through at least one complete cycle:
- (i) Valves testable with plant on-line. once/12 months
 - (ii) Valves not testable with plant on-line. once/24 months
- c. System Functional Test -
Includes simulated automatic actuation of spray system and verification that automatic valves in the flow path actuate to their correct position.
- (i) Electrical Tunnel and Diesel Generator Building. once/18 months
 - (ii) Containment Fan Cooler Spray. once/24 months
- d. Spray Header Visual Inspection -
To verify integrity.
- (i) Electrical Tunnel and Diesel Generator Building. once/18 months
 - (ii) Containment Fan Cooler Spray. once/24 months
- e. Visual Inspection of Each Spray Nozzle -
To verify that each nozzle spray area is unobstructed.
- (i) Electrical Tunnel and Diesel Generator Building. once/18 months
 - (ii) Containment Fan Cooler Spray. once/24 months

- f. Air Flow Test - once/3 years
 Perform air flow test through each open spray/sprinkler header and verify each open spray/sprinkler nozzle is unobstructed.

2. The requirements of 4.12.B.1 shall not apply to self-actuated type spray nozzles which are capable of only one actuation and cannot be periodically cycled or tested. These self-actuated spray nozzles shall be visually inspected at least once per 18 months to verify that no nozzle damage exists and that the nozzles are unobstructed.

C. Penetration Fire Barrier Inspection:

1. The penetration fire barriers listed in specification 3.14.C.1 shall be verified to be functional by visual inspection:
- a. At least once per 24 months.
 - b. Prior to declaring a fire penetration barrier functional following repairs or maintenance.

D. Fire Detection Systems Testing:

1. The operability of the fire detection instruments utilized in satisfying the requirements of specification 3.14.D.1 including the actuation of appropriate alarms (Channel Functional Test) shall be verified as follows:

<u>Item</u>	<u>Frequency</u>
a. <u>Smoke Detectors</u> -	once/6 months
b. <u>Heat Detectors</u> -	
(i) Those associated with the Diesel Generator Building (item 5 in Table 3.14-1).	once/6 months
(ii) Those associated with the Electrical Tunnels (item 3 in Table 3.14-1).	once/12 months
(iii) Those associated with the Containment Fan Cooler Units (item 6 in Table 3.14-1).	once/24 months
c. Flame Detectors	once/6 months

E. Fire Hose Stations Testing:

1. Fire hose stations described in specification 3.14.E.1 shall be demonstrated operable by the following surveillance testing requirements:

<u>Item</u>	<u>Frequency</u>
a. <u>Visual Inspection Test</u> - Visual inspection of the hose stations to assure all required equipment is at the station.	once/month
b. <u>Hose Removal Check</u> - Removal of the hose for inspection and replacement of all degraded gaskets in couplings.	once/24 months
c. <u>Hose Flow Test</u> - Partial opening of each hose station valve to verify valve operability and no flow blockage.	once/3 years
d. <u>Hose Hydrostatic Test</u> - Conduct a hose hydrostatic test at a pressure at least 50 psig greater than the maximum pressure available at that hose station.	once/3 years

F. Yard Hydrants and Hydrant Hose House Inspection:

- | | |
|--|--------------------------------|
| 1. Visually inspect those hose houses associated with hydrants listed under Table 3.14-3 in order to assure that all required equipment is inside. | once/month |
| 2. Visually inspect those hydrants listed under Table 3.14-3 to verify that the hydrant barrel is dry and undamaged. | once/6 months
(Spring/Fall) |
| 3. For those hydrants serving safety related areas, specifically Hydrants #31, 32, 35, 36, 38, 39 and 310, flow check each hydrant to demonstrate its operability. | once/year |
| 4. Conduct a hose hydrostatic test at a pressure at least 50 psi greater than the maximum pressure available at any yard hydrant. Also, inspect all gaskets and replace any degraded gaskets in the couplings. | once/year |

G. CO₂ Fire Protection System

1. Those portions of the CO₂ System required to be operable by specification 3.14.G.1 and 3.14.G.2 shall be demonstrated operable by the following surveillance requirements.

<u>Item</u>	<u>Frequency</u>
a. Verify Level and Pressure Indication for CO ₂ Supply Units 3-1 or 3-2 for that unit which is lined up to the Control and Diesel Generator Buildings.	once/week
b. Verify that each valve (manual, power operated or automatic) in the flow path is in its correct position.	once/month
c. System Functional Test:	
(i) Verify that system valves and associated ventilation dampers and fire door release mechanisms actuate upon receipt of a simulated actuation signal.	once/24 months
(ii) Exercise fire dampers.	once/12 months
d. Verify flow from nozzles during a "Puff Test."	once/24 months

Basis

These specifications establish the surveillance program for Fire Protection and Detection Systems provided to protect equipment utilized for safe shutdown of the unit. This surveillance program is intended to verify the operability of these systems and will identify for corrective action any conditions which could prevent any portion of the systems performing its intended function.

The Fire Protection and Detection Systems installed at IP3 conform to Appendix A to 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, Amendment No. 24 to facility operating license No. DPR-64, and supplements thereto.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 146 TO FACILITY OPERATING LICENSE NO. DPR-64
POWER AUTHORITY OF THE STATE OF NEW YORK
INDIAN POINT NUCLEAR GENERATING UNIT NO. 3
DOCKET NO. 50-286

1.0 INTRODUCTION

By letter dated March 12, 1993, the Power Authority of the State of New York (the licensee) submitted a request for changes to the Indian Point Nuclear Generating Unit No. 3 (IP3), Technical Specifications (TS). The requested changes would revise the TS to incorporate the following fire protection system changes:

- (1) The frequency of high pressure water fire protection system testing (specified in TS Section 4.12.A.1) would be changed to accommodate operation on a 24-month cycle.
- (2) The frequency of fire pump diesel engine testing (specified in TS Section 4.12.A.2) would be changed to accommodate operation on a 24-month cycle.
- (3) The frequency of electrical tunnel, diesel generator building, and containment fan cooler fire protection spray and/or sprinkler system testing (specified in TS Section 4.12.B.1) would be changed to accommodate operation on a 24-month cycle.
- (4) The frequency of fire barrier penetration seal inspection (specified in TS Section 4.12.C.1) would be changed to accommodate operation on a 24-month cycle.
- (5) The frequency of fire detection system testing (specified in TS Section 4.12.D.1) would be changed to accommodate operation on a 24-month cycle.
- (6) The frequency of fire hose station testing (specified in TS Section 4.12.E.1) would be changed to accommodate operation on a 24-month cycle.
- (7) The frequency of CO₂ fire protection system testing (specified in TS Section 4.12.G.1) would be changed to accommodate operation on a 24-month cycle. The licensee also proposed adding a new requirement to exercise the fire dampers on an annual basis.

The requested changes are needed to accommodate operation on a 24-month fuel cycle. Specifically, the requested changes would eliminate the need for a separate surveillance outage or an extended mid-cycle outage. The licensee

commenced operating on a 24-month fuel cycle, instead of the previous 18-month fuel cycle, with fuel cycle 9. Fuel cycle 9 started in August 1992. The proposed changes follow the guidance provided in Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle," as applicable.

In addition, TS Section 4.12 would be reformatted, in its entirety, and several administrative changes would be made to improve clarity.

2.0 EVALUATION

The licensee considered the following factors in evaluating the fire protection system surveillance interval extensions from 18 to 24 months:

- The function of the tests in determining overall system operability
- The integrated effect of testing and maintenance activities on system operability
- The burden of performing the surveillance tests at power

2.1 High Pressure Fire Water Valve Testing

TS 4.12.A.1.d requires testing of valves in the high-pressure fire water system, whose proper functioning is required for protection of safe shutdown systems. These valves are exercised every 12 months unless they are not testable with the plant on-line, in which case, they are tested on a refueling interval.

The licensee's proposed surveillance interval extension applies only to those valves which are inaccessible during normal plant operation and can only be tested when shutdown. These valves are located in containment and performing this testing at power would present a burden since there would be a significant radiation exposure to the personnel conducting the testing.

The licensee reviewed data from 1986 to 1992 related to high-pressure fire water valve (off-line) performance. The data indicated that these valves routinely met the operability requirements and that valve reliability was not a function of the surveillance interval. Therefore, the licensee concluded that the high-pressure fire water valve (off-line) surveillance testing interval could be safely extended to accommodate a 24-month operating cycle.

The NRC staff has reviewed the information presented by the licensee regarding high-pressure fire water valve testing and concludes that the requested change is acceptable.

2.2 Fire Pump Testing

The licensee's fire protection system has two diverse pumps that are capable of supplying sufficient flow to suppress a design basis fire. One pump is operated by an electrical motor with redundant power supplies and the other is operated by a diesel engine. The system also has two jockey pumps but these

pumps are designed only to maintain the fire header pressurized while the system is in standby. TSs 4.12.A.1.e and 4.12.A.1.f contain the fire pump surveillance testing requirements and TS 4.12.A.2.b contains the fire pump diesel engine surveillance testing requirements.

The licensee reviewed the adequacy of on-line testing to verify equipment performance. The licensee stated that a fire pump functional test is performed on a monthly basis. This test checks the manual and automatic actuation of each pump, verifies full-flow capability for each pump, and verifies operability of the diesel engine. The licensee states that the only difference between the monthly test and the refueling test is that the refueling test verifies the ability of each pump to deliver 150% of system design flow. Therefore, the licensee concluded that pump degradation or control system failures could be adequately detected during monthly surveillance testing.

The licensee reviewed data from 1986 to 1992 related to fire pump and system performance. The data indicated that the fire pumps and system routinely met the operability requirements and that system reliability was not a function of the surveillance interval. Therefore, the licensee concluded that the fire pump surveillance tests could be safely extended to accommodate a 24-month operating.

The NRC staff has reviewed the information presented by the licensee regarding fire pump surveillance testing and concludes the requested changes are acceptable.

2.3 Fan Cooler Unit Charcoal Filter Dousing System Testing

TS 4.12.B.1. contains the electrical tunnel, diesel generator building, and containment fan cooler unit (FCU) fire protection spray and/or sprinkler systems testing requirements. The refueling interval surveillances associated with TS 4.12.B.1. include valve cycling for valves not testable with the plant on-line, system functional tests, spray header visual inspections, and spray nozzle visual inspections. The licensee's proposed revision would extend the surveillance intervals for the testing associated only with the FCU spray fire protection system (i.e., FCU charcoal filter dousing system).

The licensee reviewed data from 1987 to 1992 related to FCU charcoal filter dousing system performance. Based on this review, the licensee concluded that the FCU dousing system surveillance tests could be safely extended to accommodate a 24-month operating cycle. The data indicated the following:

- Although there two valve discrepancies, both discrepancies occurred during the same refueling outage.
- There was no correlation between the length of the surveillance interval and the valve discrepancies that occurred. Therefore, dousing system valve degradation was not a function of surveillance interval length.

- A review of occurrence reports and the work history found no discrepancies related to the FCU charcoal filter dousing system other than the two valve discrepancies.

In addition, performance of these FCU charcoal filter dousing system surveillances requires access to the containment. Performing this testing at power would present a burden since there would be a significant radiation exposure to the personnel conducting the testing.

The NRC staff has reviewed the information presented by the licensee regarding containment FCU charcoal filter dousing system testing and concludes the requested changes are acceptable.

2.4 Penetration Fire Barrier Inspection

TS 4.12.C.1.a requires visual inspection of certain penetration fire barriers to ensure they are functional. The licensee states that the actual surveillance testing performed inspects the penetrations for damage and/or conditions which would enable fire, smoke, or fire gases to pass through the seal to the adjoining fire area. There are approximately 1120 fire barrier penetration seals that are inspected.

The licensee reviewed the adequacy of on-line testing to verify penetration seal performance. The licensee stated that penetration seal inspections are performed on a quarterly basis. The quarterly inspection verifies the integrity of the penetration fire barriers between: the central control room floor and the cable spreading room, the 480Vac switchgear room and the cable spreading room, the diesel generator compartments from each other and from the control building, the control building and the turbine building, and the cable spreading room and the electrical tunnels. These are also all the penetrations required to be inspected for the refueling surveillance. Therefore, the licensee concluded that penetration fire barrier degradation could be adequately detected during quarterly surveillance testing.

The licensee reviewed data from 1986 to 1992 related to fire barrier penetration seal performance. The data indicated that the integrity of the penetration seals has been good. Although there were several minor violations of fire barrier integrity, these violations typically were a result of an incomplete modification of resealing penetrations. The licensee noted that the refueling surveillance test is used as the final closeout for any penetration modification work. The data also indicated that penetration seal reliability was not a function of the surveillance interval. Therefore, the licensee concluded that the penetration fire barrier surveillance tests could be safely extended to accommodate a 24-month operating.

The NRC staff has reviewed the information presented by the licensee regarding fire barrier penetration seal inspection and concludes the requested change is acceptable.

2.5 Fire Detection System Testing

TS 4.12.D.1.b.(iii) requires testing of the containment fan cooler unit (FCU) heat detectors. These heat detectors are intended to detect a fire starting in the charcoal filters of the FCUs. Each of the 5 FCUs has 6 heat detectors (30 total), and each detector has a separate control room alarm, therefore, there is ample redundancy.

The licensee reviewed data from 1986 to 1992 related to FCU heat detector performance. Based on this review, the licensee concluded that the FCU heat detector system functional test could be safely extended to accommodate a 24-month operating cycle. The data indicated the following:

- Although there were individual heat detector failures (6 out of 150 tests), the operability criterion of four detectors for each FCU was consistently met.
- There was no correlation between the length of the surveillance interval and heat detector degradation, therefore, accelerated degradation of the detectors over the longer cycle is not expected.
- A review of occurrence reports and the work history found no discrepancies related to the heat detectors other than the infrequent problems found during functional testing.

In addition, performance of this FCU heat detector testing requires access to the containment. Performing this testing at power would present a burden since there would be a significant radiation exposure to the personnel conducting the testing.

The NRC staff has reviewed the information presented by the licensee regarding fire detection system testing and concludes the requested change is acceptable.

2.6 Fire Hose Testing

TS 4.12.E.1.b. requires removal of fire hoses for inspection and replacement of all degraded gaskets in couplings. The surveillance test inspects fire hose stations in the primary auxiliary, control, auxiliary feed pump, and fuel storage buildings along with the fan house and the containment. Each rack contains 100 feet of 1 ½ inch cotton/dacron neoprene-lined hose.

The licensee reviewed data from 1986 to 1992 related to fire hose performance. Based on this review, the licensee concluded that the fire hose surveillance test could be safely extended to accommodate a 24-month operating cycle. The basis for the licensee's conclusion includes the following:

- There was no evidence of equipment degradation indicating the hoses are reliable.
- The hoses are not subject to harsh environments such as rain or snow which could damage the hose material.

- There is low likelihood of accelerated degradation with the longer cycle since the hoses are in a stored state during normal plant operation.
- The licensee's practice is to replace fire hoses more frequently than required.

In addition, performance of containment fire hose surveillance testing requires access to the containment. Performing this testing at power would present a burden since there would be a significant radiation exposure to the personnel conducting the testing.

The NRC staff has reviewed the information presented by the licensee regarding fire hose testing and concludes the requested change is acceptable.

2.7 CO₂ Fire Protection System Testing

TS 4.12.G.1.c requires a CO₂ fire protection system test that verifies that system valves, dampers, and fire door release mechanisms actuate upon receipt of a simulated actuation signal. TS 4.12.G.1.d. requires a flow verification from the CO₂ nozzles during a "Puff Test" of the system. The surveillance tests the CO₂ system in the cable spreading, 480Vac switchgear, and the three emergency diesel generator rooms.

The licensee reviewed data from 1987 to 1992 related to CO₂ fire protection system performance. The data indicated that except for damper failures, system performance was good. Based on this review, the licensee concluded that the CO₂ fire protection system surveillance test could be safely extended to accommodate a 24-month operating cycle if the dampers were tested more often. Therefore, the licensee proposed adding a new TS requirement to exercise the fire dampers on a 12-month periodicity.

The NRC staff has reviewed the information presented by the licensee regarding CO₂ fire protection system testing and concludes the requested changes are acceptable.

2.8 Administrative Changes

The licensee proposed reformatting TS Section 4.12, in its entirety, and proposed several administrative changes to improve clarity. The NRC staff has reviewed the administrative changes proposed by the licensee and concludes that these changes enhance the quality of the TS. Therefore, the proposed administrative changes are acceptable.

2.9 Summary

The licensee has evaluated the effect of the increase in the surveillance interval on safety for each of the proposed changes and has concluded that the effect is small. The licensee has confirmed that historical plant maintenance

and surveillance data do not invalidate this conclusion. The increase in each of the surveillance intervals to accommodate a 24-month fuel cycle does not invalidate any assumption in the IP3 licensing basis.

The staff has reviewed the information presented by the licensee and concludes that the proposed changes do not have a significant effect on safety and they follow the guidance of GL 91-04, as applicable. Therefore, all the proposed changes are acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 25862). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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