



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

September 23, 1992

Docket No. 50-286

Mr. Ralph E. Beedle
Executive Vice President - Nuclear Generation
Power Authority of the State of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Beedle:

SUBJECT: ISSUANCE OF AMENDMENT FOR INDIAN POINT NUCLEAR GENERATING
UNIT NO. 3 (TAC NO. M82786)

The Commission has issued the enclosed Amendment No. 126 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 in response to your application transmitted by letter dated February 6, 1992.

The amendment revises Technical Specifications Section 4.1 (Operational Safety Review) Tables 4.1-1 and 4.1-3 to change the frequency of analog rod position indication system calibration and control rod drop time testing, respectively, to accommodate operation on a 24-month fuel cycle. These changes follow the guidance provided in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle."

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. 126 to DPR-64
2. Safety Evaluation

cc w/enclosures:

See next page

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Mr. Ralph E. Beedle
Power Authority of the State
of New York

Indian Point Nuclear Generating
Station Unit No. 3

cc:

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

Resident Inspector
Indian Point 3 Nuclear Power Plant
U.S. Nuclear Regulatory Commission
Post Office Box 337
Buchanan, New York 10511

Mr. Gerald C. Goldstein
Assistant General Counsel
Power Authority of the State
of New York
1633 Broadway
New York, New York 10019

Mr. Charles W. Jackson
Manager, Nuclear Safety and
Licensing
Consolidated Edison Company
of New York, Inc.
Broadway and Bleakley Avenues
Buchanan, New York 10511

Mr. John C. Brons, President
Power Authority of the State
of New York
123 Main Street
White Plains, New York 10601

Mayor, Village of Buchanan
236 Tate Avenue
Buchanan, New York 10511

Mr. Joseph E. Russell
Resident Manager
Indian Point 3 Nuclear Power Plant
Post Office Box 215
Buchanan, New York 10511

Mr. Peter Kokolakis
Director Nuclear Licensing - PWR
Power Authority of the State
of New York
123 Main Street
White Plains, New York 10601

Ms. Donna Ross
New York State Energy Office
2 Empire State Plaza
16th Floor
Albany, New York 12223

Charles Donaldson, Esquire
Assistant Attorney General
New York Department of Law
120 Broadway
New York, New York 10271

DATED: September 23, 1992

AMENDMENT NO. 126 TO FACILITY OPERATING LICENSE NO. DPR-64-INDIAN POINT UNIT 3

Docket File

NRC & Local PDRs

PDI-1 Reading

S. Varga, 14/E/4

J. Calvo, 14/A/4

R. Capra

C. Vogan

N. Conicella

OGC-WF

D. Hagan, 3302 MNBB

G. Hill (4), P-137

Wanda Jones, P-130A

C. Grimes, 11/F/23

ACRS (10)

OPA

OC/LFMB

T. Dunning, 11/E/22

PD plant-specific file

C. Cowgill, Region I

M. Fields, 13/H/14

cc: Plant Service list

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

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. 126
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 February 6, 1992, 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:

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P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 126, 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: September 23, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 126

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Revise Appendix A as follows:

Remove Pages

Table 4.1-1 (Sheet 1 of 5)
Table 4.1-1 (Sheet 5 of 5)
Table 4.1-3 (Sheet 1 of 2)
Table 4.1-3 (Sheet 2 of 2)

Insert Pages

Table 4.1-1 (Sheet 1 of 5)
Table 4.1-1 (Sheet 5 of 5)
Table 4.1-3 (Sheet 1 of 2)
Table 4.1-3 (Sheet 2 of 2)

TABLE 4.1-1 (Sheet 1 of 5)

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS
AND TESTS OF INSTRUMENT CHANNELS

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
1. Nuclear Power Range	S	D (1) M(3)*	Q (2)** Q (4)	1) Heat balance calibration 2) Bistable action (permissive, rod stop, trips) 3) Upper and lower chambers for axial offset 4) Signal to ΔT
2. Nuclear Intermediate Range	S (1)	N.A.	P (2)	1) Once/shift when in service 2) Verification of channel response to simulated inputs
3. Nuclear Source Range	S (1)	N.A.	P (2)	1) Once/shift when in service 2) Verification of channel response to simulated inputs
4. Reactor Coolant Temperature	S	18M	Q (1) Q (2)	1) Overtemperature - ΔT 2) Overpower - ΔT
5. Reactor Coolant Flow	S	18M	Q	
6. Pressurizer Water Level	S	18M	Q	
7. Pressurizer Pressure	S	18M	Q	High and Low
8. 6.9 KV Voltage & Frequency	N.A.	18M	Q	Reactor protection circuits only
9. Analog Rod Position	S	24M	M	

TABLE 4.1-1 (Sheet 5 of 5)

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
43. Reactor Trip Bypass Breakers	N.A.	N.A.	(1) 18M(2) 18M(3)	1) Manual shunt trip prior to each use 2) Independent operation of under-voltage and shunt trip from Control Room manual push-button 3) Automatic undervoltage trip
44. Reactor Vessel Level Indication System (RVLIS)	D	18M	N.A.	
45. Ambient Temperature Sensors Within the Containment Building	D	18M	N.A.	
46. River Water Temperature # (installed)	S	18M	N.A.	1) Check against installed instrumentation or another portable device
47. River Water Temperature # (portable)	S (1)	Q (2)	N.A.	2) Calibrate within 30 days prior to use and quarterly thereafter

* By means of the movable incore detector system

** Quarterly when reactor power is below the setpoint and prior to each startup if not done previous month.

*** If either an accumulator level or pressure instrument channel is declared inoperable, the remaining level or pressure channel must be verified operable by interconnecting and equalizing (pressure and/or level wise) a minimum of two accumulators and crosschecking the instrumentation.

These requirements are applicable when specification 3.3.F.5 is in effect only.

S - Each Shift

P - Prior to each startup if not done previous week

NA - Not Applicable

D - Daily

TM - At least every two months on a staggered test basis (i.e., one train per month)

24M - At least once per 24 months

W - Weekly

M - Monthly

Q - Quarterly

18M - At least once per 18 months

TABLE 4.1-3 (Sheet 1 of 2)

<u>FREQUENCIES FOR EQUIPMENT TESTS</u>		
	<u>Check</u>	<u>Frequency</u>
1. Control Rods	Rod drop times of all control rods	24M
2. Control Rods	Movement of at least 10 steps in any one direction of all control rods	Every 31 days during reactor critical operations
3. Pressurizer Safety Valves	Set Point	18M
4. Main Steam Safety Valves	Set Point	18M
5. Containment Isolation System	Automatic actuation	18M
6. Refueling System Interlocks	Functioning	Each refueling, prior to movement of core components
7. Primary System Leakage	Evaluate	5 days/week
8. Diesel Generators Nos. 31, 32 & 33 Fuel Supply	Fuel Inventory	Weekly
9. Turbine Steam Stop Control Valves	Closure	Yearly
10. L.P. Steam Dump System (6 lines)	Closure	Monthly
11. Service Water System	Each pump starts and operates for 15 minutes (unless already operating)	Monthly
12. City Water Connections to Charging Pumps and Boric Acid Piping	Temporary connections available and valves operable	18M

TABLE 4.1-3 (Sheet 2 of 2)

13.	RHR Valves 730 and 731	Automatic isolation and interlock action	18M*
14.	PORV Block Valves	Operability through 1 complete cycle of full travel	18M
15.	PORV Valves	Operability	18M
16.	Reactor Vessel Head Vents	Operability	18M

18M - At least once per 18 months

24M - At least once per 24 months

* If not done during the previous 18 months, the check will be performed next time plant is cooled down.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 126 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 February 6, 1992, 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 TS Section 4.1 (Operational Safety Review) Tables 4.1-1 and 4.1-3 to change the frequency of analog rod position indication system calibration and control rod drop time testing, respectively, to accommodate operation on a 24-month fuel cycle. These proposed changes follow the guidance provided in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle."

2.0 EVALUATION

2.1 Rod Position Indicator Calibrations

The control rod position indicators (RPI) are calibrated each refueling outage to ensure that the position of individual control rods can be accurately determined and that misalignment of an individual rod can be detected. An indicated rod misalignment of less than 12 steps will ensure that the power peaking factor limits are not exceeded.

Specifically, the RPI system is calibrated during the startup following each refueling outage with the reactor in the hot shutdown condition. The 24-month operating cycle will increase the time between RPI system calibrations, which are currently performed at intervals of at least every 18 months. However, the licensee concluded that the postulated increases in instrument drift associated with the longer time interval are expected to remain within system accuracies.

The licensee states that RPI operability is continuously ensured during operation by channel checks each shift, functional tests of the RPI rod bottom bistables each month, and observation of core instrumentation. These on-line surveillances supplement the once-per-cycle calibration and provide assurance that rod misalignment will be detected. If excessive instrument drift were to occur, it would be detected quickly by one or more of the RPIs not in agreement with the pulse counter (rod demand position). This condition would be indicated prior to exceeding any core safety limit.

The licensee has evaluated the effect of the increase in the surveillance interval on safety and has concluded that the effect is small. The licensee has confirmed that historical plant maintenance and surveillance data do not invalidate this conclusion. In addition, the increase in the surveillance interval 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 follow the guidance of Generic Letter 91-04. Therefore, the proposed changes are acceptable.

2.2 Control Rod Drop Test

The control rod drop times are verified each refueling outage to ensure that the drop times are consistent with the drop times assumed in the IP3 safety analysis. Specifically, during startup from each refueling outage, each control rod is drop tested at operating temperature and full core flow. The drop time is measured from the loss of stationary gripper coil voltage to the dashpot entry. Drop times must be verified to be no greater than 2.4 seconds.

During refueling, increased control rod friction may result from changes in core component clearances or alignments. Therefore, the licensee performs drop time testing after fuel handling when reactor reassembly has been completed. This ensures that the refueling activity itself has not affected rod drop times. The licensee states that fuel assembly design ensures that changes in component clearances will not occur during power operation and physical configuration changes cannot occur during power operations. Additionally, on-line surveillance testing includes movement of each control rod at least 10 steps in any one direction on a monthly basis. This ensures that a mechanically bound control rod is promptly detected.

The licensee has evaluated the effect of the increase in the surveillance interval on safety and has concluded that the effect is small. The licensee has confirmed that historical plant maintenance and surveillance data do not invalidate this conclusion. In addition, the increase in the surveillance interval 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 follow the guidance of Generic Letter 91-04. Therefore, 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 to the 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 (57 FR 13136). 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.

Principal Contributor:
Nicola F. Conicella

Date: September 23, 1992

Docket No. 50-286

September 23, 1992

Mr. Ralph E. Beedle
Executive Vice President - Nuclear Generation
Power Authority of the State of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Beedle:

SUBJECT: ISSUANCE OF AMENDMENT FOR INDIAN POINT NUCLEAR GENERATING
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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. 126 to DPR-64
2. Safety Evaluation

cc w/enclosures:
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