August 7, 1986

Docket No. 50-286

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Mr. John C. Brons
Senior Vice President - Nuclear Generation
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Dear Mr. Brons:

The Commission has issued the enclosed Amendment No. 66 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 January 2, 1986.

This revision to the Technical Specifications reduces the reporting requirements for iodine spiking from a Special Report to an Annual Report, and eliminates the existing requirement to shutdown if the cummulative time for operation above the allowable primary coolant specific activity limit exceeds 10% of the Unit's total yearly operating time.

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

Sincerely,

/S/

Joseph D. Neighbors, Senior Project Manager
PWR Project Directorate #3
Division of PWR Licensing-A, NRR

Enclosures:
1. Amendment No. 66 to DPR-64
2. Safety Evaluation

cc: w/enclosures
See next page

PD#3	PD#3	OELD	PD#3
CVogan	DNeighbors	J. Moore	SVarga
7/25/86	7/28/86	7/31/86	8/1/86

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Indian Point Nuclear Generating
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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. 66
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 January 2, 1986, 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. 66 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Director
PWR Project Directorate #3
Division of PWR Licensing-A, NRR

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 7, 1986

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

ATTACHMENT TO LICENSE AMENDMENT NO. 66

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Revise Appendix A as follows:

Remove Pages	Insert Pages
3.1-14	3.1-14
3.1-15	3.1-15
3.1-16	3.1-16
4.9-4	4.9-4
6-16	6-16
6-17	6-17

D. Primary Coolant Activity

Specification

1. Whenever the reactor is critical or the average reactor coolant temperature is >500°F, the specific activity of the primary coolant shall be limited to:

   a. ≤1.0 μCi/cc Dose Equivalent I-131, and
   b. ≤100/$\bar{E}$ μCi/cc for all noble gases with half-lives greater than 10 minutes.

2. If the specific activity of the primary coolant is >1.0 μCi/cc Dose Equivalent I-131 but within the allowable limit (below and to the left of the line) shown on Figure 3.1-3, operation may continue for up to 48 hours.

3. If the specific activity of the primary coolant is >1.0 μCi/cc Dose Equivalent I-131 for more than 48 hours during one continuous time interval or exceeds the limit line shown on Figure 3.1-3, the reactor shall be immediately brought to the hot shutdown condition with T_{avg} ≤500°F utilizing normal operating procedures.

4. If the specific acitivity of the primary coolant is >100/$\bar{E}$ μCi/cc for all noble gases with half-lives greater than 10 minutes, the reactor shall be immediately brought to the hot shutdown condition with T_{avg} ≤500°F utilizing normal operating procedures.

Bases

The limitations on the specific activity of the primary coolant insure that the resulting 2-hour doses at the site boundary will not exceed 1.5 rem to the thyroid and 0.5 rem whole body following a steam generator tube rupture accident in conjunction with an assumed steady state primary-to-secondary steam generator leakage rate of 1.0 GPM and a resultant loss of offsite power. Accident meteorological conditions (5% χ/Q) are assumed to exist.

The action statement permitting Power Operation to continue for limited time periods with the primary coolant's specific activity >1.0 μCi/cc Dose Equivalent I-131, but within the allowable limit shown on Figure 3.1-3, accommodates possible iodine spiking phenomenon which may occur following changes in Thermal Power.

Reducing T_{avg} to <500°F prevents the release of activity, should a steam generator tube rupture, since the saturation pressure of the primary coolant is below the lift pressure of the atmospheric steam relief valves. The surveillance requirements provide adequate assurrance that excessive specific activity levels in the primary coolant will be detected in sufficient time to take corrective action. Increased surveillance for performing isotopic analyses for iodine is required whenever the Dose Equivalent I-131 exceeds 1.0μ Ci/cc and following a significant change in power level to monitor possible iodine spiking phenomenon.

D E L E T E D

The text previously appearing on this page has been revised and now appears on page 3.1-14.

D E L E T E D

The text previously appearing on this page has been revised and now appears on page 3.1-14.

4. Interval of Inspection

a. The first inservice inspection of steam generators should be performed after six effective full power months but not later than completion of the first refueling outage.

b. Subsequent inservice inspections should be not less than 12 or more than 24 calendar months after the previous inspection.

c. If the results of two consecutive inspections, not including the preservice inspection, all fall in the C-1 category, the frequency of inspection may be extended to 40-month intervals. Also, if it can be demonstrated through two consecutive inspections that previously observed degradation has not continued and no additional degradation has occurred, a 40-month inspection interval may be initiated.

B. Corrective Measures

All leaking tubes and defective tubes should be: (1) plugged, or (2) repaired.

C. Reports

1. Following each inservice inspection of steam generator tubes, the number of tubes plugged and repaired in each steam generator shall be reported to the Commission within 15 days.

2. The complete results of the steam generator tube inservice inspection shall be reported in writing on an annual basis for the period in which the inspection was completed per Specification 6.9.2. This report shall include:

a. Number and extent of tubes inspected.

b. Location and percent of wall-thickness penetration for each indication of an imperfection.

c. Identification of the tubes plugged and the tubes repaired.

ANNUAL REPORTS

6.9.1.6 A summary of any challenges to the pressurizer power-operated relief valve and (or) safety valves shall be submitted to the Regional Administrator of Region 1 on an annual basis.

6.9.1.7 A report of specific activity analysis results in which the primary coolant exceeded the limits of Specification 3.1.D. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Data providing the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific acitivity of the primary coolant exceeded the radioiodine limit.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator-Region 1 within the time period specified for each report. These reports shall be submitted covering the activities idientified below pursuant to the requirements of the applicable reference specification;

a. Sealed source leakage on excess of limits (Specification 3.9)

b. Inoperable Seismic Monitoring Instrumentation (Specification 4.10)

c. Seismic event analysis (Specification 4.10)

d. Inoperable plant vent sampling, main steam line radiation monitoring or effluent monitoring capability (Table 3.5-4, items 5, 6 and 7)

e. The complete results of the steam generator tube inservice inspection (Specification 4.9.C)

f. Inoperable fire protection and detection equipment (Specification 3.14)

g. Release of radioactive effluents in excess of limits (Appendix B Specifications 2.3, 2.4, 2.5, 2.6)

h. Inoperable containment high-range radiation monitors (Table 3.5-5, Item 24)

SPECIAL REPORTS (Cont'd)

i. Radioactive environmental sampling results in excess of reporting levels (Appendix B Specifications 2.7, 2.8, 2.9)

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of facility operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to Operating Procedures.

f. Records of radioacitive shipments.

g. Records of sealed source and fission detector leak tests and results.

h. Records of annual physical inventory of all source material of record.

i. Records of reactor tests and experiments.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records of any drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of facility radiation and contamination surveys.

d. Records of radiation exposure for all individuals entering radiation control areas.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 66 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

INTRODUCTION

By letter dated January 2, 1986, the Power Authority of the State of New York (the licensee) requested an amendment to Facility Operating License DPR-64 which would revise the Technical Specifications to reduce the reporting requirements for iodine spiking and eliminate the requirement to shutdown the plant if coolant iodine activity limits are exceeded for 800 hours in a 12-month period.

DISCUSSION AND EVALUATION

NRC Generic Letter 85-19 requested that the licensee take the proposed action as stated below:

> As part of our continuing program to delete unnecessary reporting requirements, we have reviewed the reporting requirements related to primary coolant specific activity levels, specifically primary coolant iodine spikes. We have determined that the reporting requirements for iodine spiking can be reduced from a short-term report (Special Report or Licensee Event Report) to an item which is to be included in the Annual Report. The information to be included in the Annual Report is similar to that previously required in the Licensee Event Report but has been changed to more clearly designate the results to be included from the specific activity analysis and to delete the information regarding fuel burnup by core region.
>
> In our effort to eliminate unnecessary Technical Specification requirements, we have also determined that the existing requirements to shut down a plant if coolant iodine activity limits are exceeded for 800 hours in a 12-month period can be eliminated. The quality of nuclear fuel has been greatly improved over the past decade with the result that normal coolant iodine activity (i.e. in the absence of iodine spiking) is well below the limit. Appropriate actions would be initiated long before

accumulating 800 hours above the iodine activity limit. In addition, 10 CFR 50.72(b)(1)(ii) requires the NRC to be immediately notified of fuel cladding failures that exceed expected values or that are caused by unexpected factors. Therefore, this Technical Specification limit is no longer considered necessary on the basis that proper fuel management by licensees and existing reporting requirements should preclude ever approaching the limit.

In addition to the iodine limit, changes were made to Technical Specification 4.9 to delete requirements which were related to Cycle 4 operation and have now expired.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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 this amendment.

CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 7, 1986

PRINCIPAL CONTRIBUTOR:

J. D. Neighbors