



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

August 31, 1993

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. M84755)

The Commission has issued the enclosed Amendment No.138 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 October 19, 1992, as supplemented by letter dated March 5, 1993.

The amendment revises Technical Specifications Section 4.6.A.2 (Emergency Power System Periodic Tests) to change the frequency of emergency diesel generator (EDG) capacity testing to accommodate operation on a 24-month fuel cycle. In addition, TS Section 4.6.A.2 and its associated Bases have been revised to add an EDG overload testing requirement and to clearly specify the EDG ratings. 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

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Enclosures:

- 1. Amendment No. 138 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:

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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. 138 to DPR-64
2. Safety Evaluation

cc w/enclosures:
See next page

OFFICE	PDI-1:LA	PDI-1:PM <i>for</i>	EELB <i>C/B</i>	OGC <i>OGC</i>	PDI-1:D
NAME	CVogan <i>CV</i>	NConicella:avl	CBerlinger	<i>OGC</i>	RACapra <i>RA</i>
DATE	8/11/93	8/11/93	8/11/93	8/11/93	8/31/93

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FILENAME: G:\IP3\IP384755.AMD

DATED: August 31, 1993

AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. DPR-64-INDIAN POINT UNIT 3

Docket File

NRC & Local PDRs

PDI-1 Reading

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C. Cowgill, Region I

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. 138
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 October 19, 1992, as supplemented March 5, 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 138, 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: August 31, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 138

FACILITY OPERATING LICENSE NO. DPR-64

DOCKET NO. 50-286

Revise Appendix A as follows:

Remove Pages

4.6-1
4.6-3

Insert Pages

4.6-1
4.6-3

4.6 EMERGENCY POWER SYSTEM PERIODIC TESTS

Applicability

Applies to periodic testing and surveillance requirements of the emergency power system.

Objective

To verify that the emergency power system will respond promptly and properly when required.

Specification

The following tests and surveillance shall be performed as stated:

A. Diesel Generators

1. Each month each diesel generator shall be manually started and synchronized to its bus or buses and shall be allowed to assume the normal bus load and run for a period of time sufficient to reach stable operating temperatures.
2. At least once per 24 months each diesel generator shall be manually started, synchronized and loaded up to its 2 hour rating and run for a period of at least 105 minutes.
3. At least once per 18 months to assure that each diesel generator will automatically start and assume the required load within 60 seconds after the initial start signal the following shall be accomplished by simulating a loss of all normal AC station service power supplies and simultaneously simulating a Safety Injection signal observations shall verify automatic start of each diesel generator, required bus load shedding and restoration to operation of particular vital equipment. To prevent Safety Injection flow to the core, certain safeguard valves will be closed and made inoperable.

Amendment No. ~~128~~, 138

The testing frequency specified will be often enough to identify and correct any mechanical or electrical deficiency before it can result in a system failure. The fuel supply is continuously monitored. An abnormal condition in these systems would be signaled without having to place the diesel generators themselves on test.

Each diesel generator has a continuous rating of 1750 kw and a 2 hour rating of 1950 kw. Two diesels can power the minimum safeguards loads. To ensure that each diesel can operate at its 2 hour rating (as required by specification 4.6.A.2.), each diesel will be loaded to 1900-1950 kw and run for at least 105 minutes.

Station batteries will deteriorate with time, but precipitous failure is extremely unlikely. The surveillance specified is that which has been demonstrated over the years to provide an indication of a cell becoming unserviceable long before it fails. The periodic equalizing charge will ensure that the ampere-hour capability of the batteries is maintained.

The load test for each battery, together with the visual inspection of the plates, will assure the continued integrity of the batteries. The batteries are of the type that can be visually inspected, and this method of assuring the continued integrity of the battery is proven standard power plant practice.

Reference

FSAR, Section 8.2

Amendment No. ~~123~~, 138



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 138 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 October 19, 1992, as supplemented March 5, 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 TS Section 4.6.A.2 (Emergency Power System Periodic Tests) to change the frequency of emergency diesel generator (EDG) capacity testing to accommodate operation on a 24-month fuel cycle. In addition, the requested changes would revise TS Section 4.6.A.2 and its associated Bases to clearly specify the EDG ratings and testing requirements. The March 5, 1993, letter provided clarifying information that did not change the initial no significant hazards consideration determination. 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 follows the guidance provided in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle."

2.0 EVALUATION

The licensee considered the following factors in evaluating the surveillance interval extension from 18 to 24 months:

- Does on-line testing adequately demonstrate operability or are failures only being detected during these refueling tests?
- Did past equipment performance have an effect on system safety functions?
- Does performing the surveillance test at power present an unacceptable burden?

The IP3 onsite Class 1E electric power system supports the operation of safety class systems and instrumentation needed to establish and maintain safe shutdown following a plant transient, up to and including the design basis accident, where the normal source of electrical power is not available. The Class 1E power system consists of four 480 VAC buses, designated 2A, 3A, 5A, and 6A. There are three EDGs which provide backup power to these 480 VAC buses. Bus 5A is powered by EDG 31, bus 6A is powered by EDG 32, and buses 2A and 3A automatically connect and are both powered by EDG 33. Any two of the three EDGs can support operation of the minimum safeguards loads.

The EDG surveillance testing specified in the TS were designed to demonstrate that the EDGs will provide a reliable source of backup power for operation of equipment when required. The proposed EDG capacity test, which is performed at refueling intervals, demonstrates that the EDGs will operate at the overload rating. The EDGs have a continuous rating of 1750 kW and a 2-hour overload rating of 1950 kW. For the refueling capacity test, an EDG is considered operable if it starts and maintains between 1900 and 1950 kW, while jacket water and lubricating oil temperatures are stabilized in the normal operating range. The EDG must be operated at the 2-hour overload rating for at least 105 minutes. Although TS 4.6.A.2 does not presently require the 2-hour overload test, the licensee has been performing this test as part of the refueling capacity test. The present TS only requires the EDGs to be tested to the nameplate rating once per refueling interval. Therefore, the licensee has proposed adding the 2-hour overload testing requirement to reflect the actual testing being performed. Adding the overload testing requirement is an enhancement to the licensee's present TS.

The licensee's on-line testing includes the following. Monthly operability tests involve starting and operating the EDG for 1 hour. The licensee states that the only differences between the monthly operability test and the refueling capacity test are the required kW loading and the total EDG run time. The overall acceptance criteria for minimum starting air pressure, maximum fuel oil strainer differential pressure, and maximum lubricating oil filter differential pressure are the same for both the monthly operability test and the refueling capacity test. Weekly surveillance includes inspection of the jacket water, lubricating oil, starting air, and fuel oil systems. In addition, the preventive maintenance program includes quarterly, semiannual, and annual inspections.

Performing the refueling test on-line would present a burden to the licensee. The EDGs are rated at the overload limit of 1950 Kw for 2 hours during a 24-hour period. Therefore, an EDG would have to be declared inoperable for a 22-hour period after performance of the test.

The licensee reviewed EDG surveillance test records and operating occurrence reports from 1985 to 1991. Based on this review, no cycle dependent or past performance problems with the EDG capacity test were noted. The licensee stated that EDG operability problems were being detected during normal operation (via operator's rounds or system alarms), through preventive maintenance, or by on-line testing.

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 are an enhancement to the present TS, have a positive effect on safety, and follow the guidance of Generic Letter 91-04. Therefore, the proposed changes are acceptable. In addition, the staff has reviewed the conforming Bases changes and offers no objection.

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 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 53789). 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: August 31, 1993