



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001  
February 19, 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 AN EXEMPTION FROM THE REQUIREMENTS OF 10 CFR PART 50,  
APPENDIX J, PARAGRAPH III.D.3 - INDIAN POINT NUCLEAR GENERATING  
UNIT NO. 3 (TAC NO. M84137)

By letter dated July 17, 1992, as supplemented by letter dated December 23, 1992, you requested an amendment to the Technical Specifications and an exemption from the requirements of the Code of Federal Regulations for the Indian Point Nuclear Generating Unit No. 3. The amendment and the exemption would allow Type C local leak rate tests (LLRTs) to be performed at intervals up to 30 months, thus, permitting operation on a 24-month fuel cycle without having to shutdown during the cycle to conduct LLRTs. Indian Point Nuclear Generating Unit No. 3 commenced operating on a 24-month fuel cycle, instead of the previous 18-month fuel cycle, in August 1992.

The Commission, pursuant to 10 CFR 50.12, has issued the enclosed exemption from the requirements of 10 CFR Part 50, Appendix J, Paragraph III.D.3, to Indian Point Nuclear Generating Unit No. 3. This exemption extends the surveillance interval for Type C local leak rate tests beyond the 2-year limit specified in the regulations and would allow the interval to be a maximum of 30 months. Your request to amend the Technical Specifications is under review by the staff and will be addressed in separate correspondence.

250082

9302260316 930219  
PDR ADOCK 05000286  
P PDR

*QF01  
'11*

Mr. Ralph E. Beedle

- 2 -

February 19, 1993

A copy of the enclosed Exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

*Robert A. Capra*

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

Enclosure:  
Exemption

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

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

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

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

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

Indian Point Nuclear Generating  
Station Unit No. 3

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

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

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

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
POWER AUTHORITY OF THE STATE	)	Docket No. 50-286
OF NEW YORK	)	
	)	
(Indian Point Nuclear Generating	)	
Unit No. 3)	)	

EXEMPTION

I.

The Power Authority of the State of New York (the licensee) is the holder of Facility Operating License No. DPR-64, which authorizes operation of the Indian Point Nuclear Generating Unit No. 3 (IP3). The license provides, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

The facility consists of a pressurized water reactor at the licensee's site located in Westchester County, New York.

II.

By letter dated July 17, 1992, as supplemented December 23, 1992, the licensee requested an amendment to the Technical Specifications (TS) that would allow containment isolation valve local leak rate tests (LLRTs) to be performed at intervals up to 30 months. In addition, the licensee's letter requested an exemption from the requirements of the Code of Federal Regulations (CFR) since 10 CFR Part 50, Appendix J, Paragraph III.D.3,

requires that licensees perform Type C tests during each reactor shutdown for refueling but in no case at intervals greater than 2 years. Type C tests are LLRTs of containment isolation valves.

The licensee did not require an exemption from 10 CFR Part 50, Appendix J, Paragraph III.D.2.(a) for Type B tests (LLRTs of containment penetrations) since the licensee has a continuous leakage monitoring system installed. Specifically, the weld channel and containment penetration pressurization system provides a continuous monitoring function. The CFR at 10 CFR Part 50, Appendix J, Paragraph III.D.2.(a) allows Type B tests, except for air lock tests, to be performed every other reactor shutdown for refueling but in no case at intervals greater than 3 years if a continuous leakage monitoring system is installed. The licensee's TS currently allows this 3-year test interval, therefore, an exemption for Type B tests was not required to accommodate operation on a 24-month fuel cycle.

The licensee commenced operating on 24-month fuel cycles, instead of the previous 18-month fuel cycles, with fuel cycle 9. Fuel cycle 9 started in August 1992. In order to conform with the requirements of 10 CFR Part 50, Appendix J, Paragraph III.D.3, the licensee would have to shutdown IP3 and enter a forced outage prior to the next scheduled refueling outage. The next refueling outage is scheduled to commence in the September 1994 time frame.

### III.

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50 when (1) the exemptions are authorized by law, will not present an undue risk to public health and safety, and are consistent

with the common defense and security and (2) when special circumstances are present. According to 10 CFR 50.12(a)(2)(iii), special circumstances are present when "Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated;..."

The CFR at 10 CFR Part 50, Appendix J, Paragraphs III.D.3 states: "Type C tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years...." This requirement to perform Type C LLRTs at intervals no greater than 2 years presumed the 2-year time interval was adequate to accommodate the 12-month fuel cycles which were common when Appendix J to 10 CFR Part 50 was published in 1973. However, IP3, along with several other facilities, is utilizing a core design which allows operation on a 24-month cycle.

The NRC staff recognized that the current 2-year intervals for Type C LLRTs would likely require a facility to shutdown to perform these LLRTs before completion of the facility's 24-month fuel cycle. Consequently the NRC staff issued Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle." This generic letter provides guidance to licensees on how to prepare requests for TS amendments and CFR exemptions which are needed to accommodate a 24-month fuel cycle. Enclosure 3 to Generic Letter (GL) 91-04 indicated, in part, that two issues should be addressed to justify extending the 2-year Type C LLRT interval: (1) a possible reduction in the combined leakage limit for Type B and C LLRTs and (2) the basis for concluding that the containment leakage rate

would be maintained within the acceptable limits with an LLRT interval increase of up to 30 months. The licensee's letter of July 17, 1992, as supplemented December 23, 1992, addressed both of these issues.

The first issue is a reduction in the combined containment penetration and isolation valve leakage rate limit for Type B and C LLRTs which increases the margin to the maximum allowable leakage rate. The maximum allowable leakage rate, which is referred to as  $L_a$ , is specified in the facility's TS. The acceptance criteria for Type B and C LLRTs is that the combined leakage rate shall be less than  $0.60 L_a$ . This constitutes a margin of  $0.40 L_a$  (40 percent of  $L_a$ ). Enclosure 3 to GL 91-04 states in part, that in order to justify an exemption to the Appendix J requirements and extend Type C LLRT intervals up to 30 months, licensees should either: (1) use LLRT data to demonstrate that the margin of  $0.40 L_a$  will not be reduced as a result of the test interval increase or (2) propose an acceptance criterion limit of less than  $0.60 L_a$  as a TS change. The licensee has proposed an acceptance criterion limit of  $0.50 L_a$  for IP3. This constitutes a 25 percent increase in margin (40 percent to 50 percent). The staff has reviewed the proposed reduction in the combined leakage rate limit to  $0.50 L_a$  and finds it is consistent with the recommendations of Enclosure 3 to GL 91-04 and is, therefore, acceptable.

The second issue is the basis for concluding that containment leakage would be maintained within acceptable limits with an LLRT interval increase of up to 30 months. Ten LLRTs have been performed at IP3 since the facility began commercial operation. The as-found results of the first two tests (1978 and 1979) did not meet the acceptable leakage limit due to excessive leakage

from one valve in 1978 and four valves in 1979. The as-found results of the next six tests were below the acceptable leakage limit. Finally, the as-found results of the two most recent tests (1989 and 1990) did not meet the acceptable leakage limit due to excessive leakage from three valves in 1989 and one valve in 1990. For each of the tests that did not meet the leakage limits, repairs to the noted valves were conducted and the as-left values were well below the limits. For example, the as-left leakage values from the 1989 and 1990 tests were  $0.031 L_a$  and  $0.041 L_a$ , respectively. The licensee reviewed the test results from these ten LLRTs and concluded that the leakage failures, except for one valve which was replaced in 1990, were random and nonrecurring. Therefore, the licensee concluded that these failures were not indicative of a poor performance trend and that there was no evidence that the containment leakage was a function of time. The NRC staff has reviewed the LLRT data provided by the licensee as well as the methodology used by the licensee to extrapolate LLRT data to a 30-month test interval and the staff concludes that there is reasonable assurance that the containment leakage rate would be maintained within acceptable limits with an LLRT interval increase to 30 months.

Strict compliance with the testing periodicity required by the current regulations would require mid-cycle outages which would result in undue hardship or other costs that would be significantly in excess of those contemplated when the regulations were adopted. Thus, there are special circumstances present which satisfy the requirements of 10 CFR 50.12 (a)(2)(iii).



IV.

Accordingly, the Commission has determined, pursuant to 10 CFR 50.12, that (1) the exemptions as described in Section III are authorized by law, will not endanger life or property, and are otherwise in the public interest and (2) special circumstances exist pursuant to 10 CFR 50.12(a)(2)(iii).

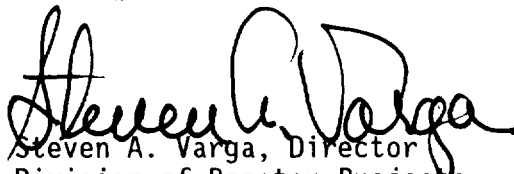
Therefore, the Commission hereby grants the following exemption:

The Power Authority of the State of New York is exempt from the requirement of 10 CFR Part 50, Appendix J, Paragraph III.D.3, in that the interval for Type C tests may be extended greater than 2 years but in no case greater than 30 months for the Indian Point Nuclear Generating Unit No. 3.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of these exemptions will have no significant impact on the quality of the human environment (58 FR 5424).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Steven A. Varga, Director  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,  
this 19th day of February 1993

IV.

Accordingly, the Commission has determined, pursuant to 10 CFR 50.12, that (1) the exemptions as described in Section III are authorized by law, will not endanger life or property, and are otherwise in the public interest and (2) special circumstances exist pursuant to 10 CFR 50.12(a)(2)(iii).

Therefore, the Commission hereby grants the following exemption:

The Power Authority of the State of New York is exempt from the requirement of 10 CFR Part 50, Appendix J, Paragraph III.D.3, in that the interval for Type C tests may be extended greater than 2 years but in no case greater than 30 months for the Indian Point Nuclear Generating Unit No. 3.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of these exemptions will have no significant impact on the quality of the human environment (58 FR 5424).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By:

Steven A. Varga, Director  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,  
this 19th day of February 1993

\*See previous concurrence

PDI-1:LA	PDI-1:PM <i>in</i>	NRR/SCSB	OGC	PDI-1:D	DRPE:AD	DRPE:D
CVogan <i>CV</i>	NConicella:smm	*RBarrett	*EHoller	RACapra <i>ROC</i>	JCalvo <i>JA</i>	SVarga
2/16/93 <i>2/18</i>	2/16/93 <i>2/18/93</i>	01/28/93	02/02/93	2/17/93	2/18/93	2/19/93

OFFICIAL RECORD COPY  
FILENAME: IP384137.EXE

Mr. Ralph E. Beedle

- 2 -

February 19, 1993

A copy of the enclosed Exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original Signed By:

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

Enclosure:  
Exemption

Distribution:

Docket File  
NRC & Local PDRs  
PDI-1 Reading  
T. Murley/F. Miraglia, 12/G/18  
J. Partlow, 12/G/18  
E. Rossi, 9/A/2  
J. Lieberman, 12/G/18  
S. Varga  
J. Calvo  
R. A. Capra  
C. Vogan  
N. Conicella

OGC  
E. Jordan, 3701 MNBB  
G. Hill (2)  
ACRS (10)  
OPA  
OC/LFDCB  
Plant File  
V. McCree, 17/G/21  
C. Cowgill, RGN-I  
B. Holian, 13/H/15  
T. Dunning, 11/E/22  
R. Barrett, 8/H/7  
J. Pulsipher, 8/C/21

\*See previous concurrence

PDI-1:LA	PDI-1:PM <i>mm</i>	NRR/SCSB	OGC	PDI-1:D	DRPE:AD	DRPE:D
CVogan <i>mm</i>	NConicella:smm	*RBarrett	*EHoller	RACapra <i>mm</i>	JCalvo	<i>mm</i> SVarga
2/16/93	2/16/93	01/28/93	02/02/93	2/17/93	2/18/93	2/19/93

OFFICIAL RECORD COPY  
FILENAME: IP384137.EXE