

May 8, 1989

Docket No. 50-247

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Mr. Stephen B. Bram
Vice President, Nuclear Power
Consolidated Edison Company
of New York, Inc.
Broadway and Bleakley Avenue
Buchanan, New York 10511

Dear Mr. Bram:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 71777)

The Commission has issued the enclosed Amendment No. 139 to Facility Operating License No. DPR-26 for the Indian Point Nuclear Generating Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated December 29, 1988.

The amendment revises the operability requirements for the service water system to require three operable service water pumps on the essential feedwater and two operable service water pumps on the non-essential header whenever the reactor is above 350°F. The amendment also adds a requirement to maintain isolation between the essential and non-essential headers.

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,

ORIGINAL SIGNED BY

Donald S. Brinkman, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects, I/II

Enclosures:

1. Amendment No.139 to DPR-26
2. Safety Evaluation

cc: w/enclosures
See next page

[AMEND 247 - TAC 71777]

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OFC : PDI-1	: PDI-1	: SPLB <i>JSW for</i>	: OGC	: PDI-1	:	:
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DATE : 4/25/89	: 4/25/89	: 4/25/89	: 5/1/89	: 1/89	:	:

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

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

DOCKET NO. 50-247

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 139
License No. DPR-26

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consolidated Edison Company of New York, Inc. (the licensee) dated December 29, 1988, 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-26 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. 139, 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

Robert A. Capra

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 8, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 139

FACILITY OPERATING LICENSE NO. DPR-26

DOCKET NO. 50-247

Revise Appendix A as follows:

Remove Pages

i
3.3-6
3.3-7

Insert Pages

i
3.3-6
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TECHNICAL SPECIFICATIONS

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- a. One of the two operable component cooling pumps may be out of service provided the pump is restored to operable status within 24 hours.
- b. One auxiliary component cooling pump may be out of service provided the pump is restored to operable status within 24 hours and the other pump is demonstrated to be operable.
- c. One component cooling heat exchanger or other passive component may be out of service for a period not to exceed 48 hours provided the system may still operate at design accident capability.

F. Service Water System

1. DESIGNATED ESSENTIAL HEADER

- a. The reactor shall not be above 350°F unless three service water pumps with their associated piping and valves are operable on the designated essential header.
- b. When the reactor is above 350°F and one of the three service water pumps or any of its associated piping or valves is found inoperable, and an essential service water header that meets the requirements of 3.3.F.1.a. cannot be restored within 12 hours, place the reactor in hot shutdown within the next 6 hours and in cold shutdown within the next 30 hours.

2. DESIGNATED NON-ESSENTIAL HEADER

- a. The reactor shall not be above 350°F unless two service water pumps with their associated piping and valves are operable on the designated non-essential header.
- b. When the reactor is above 350°F and one of the two service water pumps or any of its associated piping or valves is found inoperable, and a non-essential service water header that meets the requirements of 3.3.F.2.a cannot be restored within 24 hours, place the reactor in hot shutdown within the next 6 hours and in cold shutdown within the next 30 hours.

3. INTERCONNECTION OF HEADERS

Isolation shall be maintained between the essential and non-essential headers at all times when the reactor is above 350°F except for a period of up to 8 hours when the headers may be connected to facilitate safety-related activities.

G. Hydrogen Recombiner System and Post Accident Containment Venting System

1. The reactor shall not be made critical unless the following conditions are met:
 - a) Both hydrogen recombining units together with their associated piping, valves, oxygen supply system and control system are operable, with the exception of one recombining unit's equipment located outside of the containment which may be inoperable, provided it is under repair and can be made operable if needed.
 - b) The post accident containment venting system is operable.
 - c) Hydrogen and oxygen supplies shall not be connected to the hydrogen recombining units except under conditions of an accident or those specified in specification 4.3.C.1.

2. During power operation, the requirements of 3.3.G.1 may be modified to allow any one of the following components to be inoperable. If the system is not restored to meet the requirements of 3.3.G.1 within the time specified, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures.

- a) One hydrogen recombining unit or its associated flow path, or oxygen supply system or control system may be inoperable for a period not to exceed thirty days, provided the other recombining unit and the post accident containment venting system are operable.
- b) The post accident containment venting system may be inoperable for a period not to exceed thirty days provided that both hydrogen recombiners are operable.

H. Control Room Air Filtration System

1. The control room air filtration system shall be operable at all times when containment integrity is required.
2. From the date that the control room air filtration system becomes and remains inoperable for any reason, operations requiring containment integrity are permissible only during the succeeding 3.5 days. At the end of this 3.5 days period if the conditions for the control room air filtration system cannot be met, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the conditions are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures..



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-26

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

INDIAN POINT NUCLEAR GENERATING UNIT NO. 2

DOCKET NO. 50-247

INTRODUCTION

By letter dated December 29, 1988, Consolidated Edison Company, Inc., (the licensee) proposed changes and additions to the Indian Point Unit 2 Technical Specifications. The proposed amendment would require (1) three operable service water pumps on the essential header, (2) two operable service water pumps on the non-essential header, and (3) isolation between the essential and non-essential headers whenever the reactor is above 350°F.

EVALUATION

Six service water pumps are provided to supply water to two separate service water system headers with each header being supplied by three of the six pumps. Either of the two headers can be designated the essential header and supply the essential loads; the other header then supplies the non-essential loads. Essential loads can be transferred to the non-essential header and vice versa by operation of manual valves. The essential header provides cooling water to loads requiring an assured supply of cooling water immediately (during injection phase) in the event of a loss of offsite power and/or a loss-of-coolant accident. Cooling loads not required during the injection phase following an accident but required during the recirculation phase are normally supplied by the non-essential header.

Technical Specification (TS) 3.3.F.1. requires three service water pumps and associated piping and valves to be operable on the essential header whenever the reactor is critical. The licensee has proposed to expand the applicability requirements of this TS to require three service water pumps and associated piping and valves to be operable on the essential header whenever the reactor is above 350°F. The proposed expansion in applicability would make the operability requirements of this TS consistent with the assumptions used in the steam line break analyses presented in Section 14.2.5 of the FSAR and with the licensee's commitments in its March 11, 1982 letter to Ronald C. Haynes from Charles W. Jackson. Since this proposed change would make the TS

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operability requirements for the service water system consistent with the assumptions used in the steam line break accident analyses and with the licensee's commitments, the staff finds the proposed change to expand the acceptability of this TS acceptable.

TS 3.3.F.2. requires the operator to take immediate action to restore the essential service water system to within the operability requirements of TS 3.3.F.1. if one of the required service water pumps or associated piping or valves is found inoperable. If the essential service water system is not restored within eight hours (allowable out-of-service time) the reactor is to be placed in cold shutdown. TS 3.3.F.2. does not specify a time for achieving cold shutdown. The proposed change would change the allowable out-of-service time to 12 hours. The proposed change would also establish time limits to be in hot shutdown within the next six hours and in cold shutdown within the next 30 hours if the service water system has not been restored to an operable status. Increasing the allowable out-of-service time to 12 hours provides additional operational and maintenance flexibility. The proposed 12 hours out-of-service time is considered to be a reasonable extension for performance of maintenance activities and is less than that permitted in the Westinghouse Standard Technical Specification (STS) for similar applications. Therefore, this extension is considered acceptable by the staff. The establishment of time limits to be in hot shutdown and then in cold shutdown if the service water system is not restored to its required status are appropriate additions to the TS since these are the times required to perform the shutdown operations in an orderly manner and are therefore acceptable to the staff.

The current TS do not require operability of the service pumps and associated piping and valves on the non-essential service water system header. The licensee has proposed an additional TS which would require two service water pumps and associated piping and valves be operable on the non-essential header whenever the reactor is above 350°F. The additional TS would also provide a allowable out-of-service time of 24 hours for one service water pump or any of its associated piping or valves as well as specify the times required to achieve hot shutdown and then cold shutdown if the inoperable equipment is not restored to an operable status within the allowable out-of-service time. Although the non-essential header is not required during the injection phase of an accident, cooling water from one pump and associated piping and valves of the non-essential header is required during the recirculation phase. Requiring two service water pumps and associated piping and valves be operable provides for single failure considerations. Therefore, the staff concludes that the addition of this TS is acceptable since it would be consistent with the assumptions of the accident analyses in Section 14 of the FSAR.

The proposed allowable out-of-service time of 24 hours provides a reasonable time for performing maintenance, is less than that permitted in the Westinghouse STS for similar applications and is therefore considered acceptable.

The time limits specified to be in hot shutdown (within 6 hours) and then in cold shutdown (within the next 24 hours) if the non-essential service water

system is not restored to its required status are appropriate since they are the times required to perform the shutdown operations in an orderly manner and are therefore acceptable to the staff.

The licensee also proposed to add a TS requiring that isolation be maintained between the essential and non-essential headers whenever the reactor is above 350°F except for a period of up to eight hours when the headers may be connected to facilitate safety-related activities. The addition of this proposed TS ensures that the essential portions of the service water system will be isolated from the non-essential portions of the service water system as required by Section 9.2.1 of the SRP. Therefore, the staff finds this proposed addition acceptable.

SUMMARY

Based on the above, the staff concludes that the licensee's proposed service water TS changes are consistent with the Westinghouse STS for similar applications, the assumptions of the accident analyses in Chapter 14 of the FSAR, and the requirements of Section 9.2.1 of the SRP, and are, therefore acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to 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 this amendment involves no significant change in the types or significant increase in the amounts 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: May 8, 1989

PRINCIPAL CONTRIBUTOR:

D. S. Brinkman