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JHeltemes, AEOD

NSIC

TERA

Docket No. 50-219

Mr. I. R. Finfrock, Jr.  
Vice President  
Jersey Central Power & Light Company  
Post Office Box 388  
Forked River, New Jersey 08731

Dear Mr. Finfrock:

The Commission has issued the enclosed Amendment No. <sup>52</sup> to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station. This amendment consists of changes to the Technical Specifications in response to your applications dated October 18, 1977 and October 6, 1980.

This amendment (1) revises the procedure for testing for radioactive methyl iodine removal efficiency of carbon samples removed from the Standby Gas Treatment System (SGTS), (2) eliminates the air flow distribution tests on the high efficiency particulate and charcoal filters of the SGTS, and (3) corrects the Bases Section of Technical Specification 4.5 so that it is consistent with the Provisions of Technical Specification.

During our review of your application we found it necessary to modify these proposed Technical Specifications. We have discussed the change with your representative and have mutually agreed upon it.

Copies of our related Safety Evaluation and the Notice of Issuance are also enclosed.

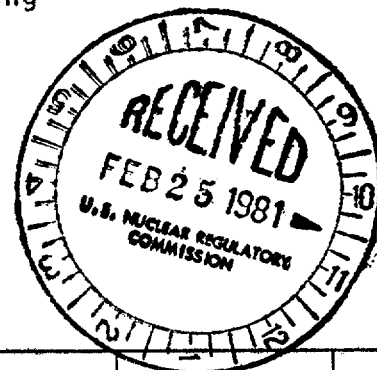
Sincerely,

*15*

Dennis M. Crutchfield, Chief  
Operating Reactors Branch #5  
Division of Licensing

Enclosures:

1. Amendment No. <sup>52</sup> to License No. DPR-16
2. Safety Evaluation
3. Notice of Issuance



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OFFICE	DL: ORB #5	DL: ORB #5	OELD	DL: ORB #5	DL: AD/SA		
SURNAME	WPaulson:cc	HSmith	DCrutchfield	GLianas			
DATE	2-5-81	2/5/81	2/9/81	2/11/81	2/11/81		



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

February 11, 1981

Docket No. 50-219  
LS05-81-02-034

Mr. I. R. Finfrock, Jr.  
Vice President  
Jersey Central Power & Light Company  
Post Office Box 388  
Forked River, New Jersey 08731

Dear Mr. Finfrock:

The Commission has issued the enclosed Amendment No. 52 to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station. This amendment consists of changes to the Technical Specifications in response to your applications dated October 18, 1977 and October 6, 1980.

This amendment (1) revises the procedure for testing for radioactive methyl iodine removal efficiency of carbon samples removed from the Standby Gas Treatment System (SGTS), (2) eliminates the air flow distribution tests on the high efficiency particulate and charcoal filters of the SGTS, and (3) corrects the Bases Section of Technical Specification 4.5 so that it is consistent with the Provisions of Technical Specification.

During our review of your application we found it necessary to modify these proposed Technical Specifications. We have discussed the change with your representative and have mutually agreed upon it.

Copies of our related Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

*Dennis M. Crutchfield*  
Dennis M. Crutchfield, Chief  
Operating Reactors Branch #5  
Division of Licensing

Enclosures:

1. Amendment No. 52 to License No. DPR-16
2. Safety Evaluation
3. Notice of Issuance

Mr. I. R. Finfrock, Jr.

- 2 -

February 11, 1981

cc

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U. S. Environmental Protection  
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Region II Office  
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26 Federal Plaza  
New York, New York 10007



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

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 52  
License No. DPR-16

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Jersey Central Power and Light Company (the licensee) dated October 18, 1977 and October 6, 1980, comply 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 applications, 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.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 3.B. of Provisional License No. DPR-16 is hereby amended to read as follows:

3.B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 52, 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



Dennis M. Crutchfield, Chief  
Operating Reactors Branch #5  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 11, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 52

PROVISIONAL OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-219

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by captioned amendment number and contain vertical lines indicating the area of change.

PAGES

4.5-5a

4.5-5b\*

4.5.9a

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\* There is no change to the provisions contained on this page; it is included for format and pagination purposes only.

pressure of not less than 1.0 psi, the differential pressure decay rate shall not exceed the equivalent of air flow through a 2-inch orifice.

J. Reactor Building

1. Secondary containment capability tests shall be conducted after isolating the reactor building and placing either Standby Gas Treatment System filter train in operation.
2. The tests shall be performed at least once per operating cycle and shall demonstrate the capability to maintain a 1/4 inch of water vacuum under calm wind conditions with a Standby Gas Treatment System Filter train flow rate of not more than 4000 cfm.
3. A secondary containment capability test shall be conducted at each refueling outage prior to refueling.
4. The results of the secondary containment capability tests shall be in the subject of a summary technical report which can be included in the reports specified in Section 6.

K. Standby Gas Treatment System

1. The capability of each Standby Gas Treatment System circuit shall be demonstrated by:
  - a. At least once per 18 months, after every 720 hours of operation, and following significant painting, fire, or chemical release in the reactor building during operation of the Standby Gas Treatment System by verifying that:
    - (1) The charcoal absorbers remove  $\geq 99\%$  of a halogenated hydrocarbon refrigerant test gas and the HEPA filters remove  $\geq 99\%$  of the DOP in a cold DOP test when tested in accordance with ANSI N510-1975.
    - (2) Results of laboratory carbon sample analysis show  $\geq 90\%$  radioactive methyl iodine removal efficiency when tested in accordance with ASTM D 3803-79 (30° C, 95% relative humidity).
  - b. At least once per 18 months by demonstrating:

- (1) That the pressure drop across a HEPA filter is equal to or less than the maximum allowable pressure drop indicated in Figure 4.5.1.
  - (2) The inlet heater is capable of at least 10.9 KW input.
  - (3) Operation with a total flow within 10% of design flow.
- c. At least once per 30 days on a STAGGERED TEST BASIS by operating each circuit for a minimum of 10 hours.
- d. Anytime the HEPA filter bank or the charcoal adsorbers have been partially or completely replaced, the test for 4.5.k.1.a will be performed prior to returning the system to OPERABLE STATUS.
- e. Automatic initiation of each circuit every 18 months.



chamber pressure must not exceed a rate equivalent to the rate of air flow from the drywell to the suppression chamber through a 2-inch orifice. In the event the rate of change of pressure exceeds this value, then the source of leakage will be identified and eliminated before power operation is resumed.

The drywell-suppression chamber vacuum breakers are exercised monthly and immediately following termination of discharge of steam into the suppression chamber. This monitoring of valve operability is intended to assure that valve operability and position indication system performance does not degrade between refueling inspections. When a vacuum breaker valve is exercised through an opening-closing cycle, the position indicating lights are designed to function as follows:

Full Closed	2 Green - On
(Closed to 0.10" open)	2 Red - Off
Open 0.10"	2 Green - Off
(0.10" open to full open)	2 Red - On

During each refueling outage, four suppression chamber-drywell vacuum breakers will be inspected to assure components have not deteriorated. Since valve internals are designed for a 40-year lifetime, an inspection program which cycles through all valves in about one-tenth of the design lifetime is extremely conservative. The alarm systems for the vacuum breakers will be calibrated during each refueling outage. This frequency is based on experience and engineering judgement.

Initiating reactor building isolation and operation of the standby gas treatment system to maintain a 1/4 inch of water vacuum, tests the operation of the reactor building isolation valves, leakage tightness of the reactor building and performance of the standby gas treatment system. Checking the initiating sensors and associated trip channels demonstrates the capability for automatic actuation. Performing the reactor building in leakage test prior to refueling demonstrates secondary containment capability prior to extensive fuel handling operations associated with the outage. Verifying the efficiency and operation of charcoal filters once per 18 months gives sufficient confidence of standby gas treatment system performance capability. A charcoal filter efficiency of 99% for halogen removal is adequate.

The in-place testing of charcoal filters is performed using Freon-112\* which is injected into the system upstream of the charcoal filters. Measurement of the Freon concentration upstream and downstream of the charcoal filters is made using a gas chromatograph. The ratio of the inlet and outlet concentrations gives an overall indication of the leak tightness.

\*Trade name of E. I. duPont de Nemours & Company



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

FOR OYSTER CREEK NUCLEAR GENERATING STATION

SUPPORTING AMENDMENT NO. 52 TO PROVISIONAL OPERATING LICENSE NO. DPR-16

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated October 6, 1980, Jersey Central Power & Light Company (the licensee) requested an amendment to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station. This amendment would provide a change in procedures for testing for radioactive methyl iodine removal efficiency of carbon samples removed from the Standby Gas Treatment System (SGTS). This change would be consistent with ASTM D 3803-79 instead of ANSI N510-1975 as is specified in the existing Technical Specifications. In addition, the amendment would eliminate the air-flow distribution tests on the high efficiency particulate (HEPA) and charcoal filters of the SGTS.

By letter dated October 18, 1977, the licensee also requested a correction to the Bases of Technical Specification 4.5. This correction would clarify the Bases Section so that it would be consistent with the intent of the Technical Specification provision which requires reactor building inleakage testing prior to refueling, and charcoal efficiency and performance testing at 18-month intervals.

2.0 DISCUSSION AND EVALUATION

Oyster Creek Technical Specification 4.5.K.1.a(2) requires that laboratory analysis be performed on carbon samples removed from the SGTS in accordance with ANSI N510-1975 (at 130 C, 95% relative humidity) to determine the system's radioactive methyl iodine removal efficiency. The licensee has proposed to use ASTM D3803-79, "Radioiodine Testing of Nuclear Grade Gas Phase Adsorbents," for determining the systems radioactive methyl iodine removal efficiency. ASTM D3803-79 has been endorsed by latest revisions of ANSI N509-1980 and ANSI N510-1980 for determining the systems iodine removal efficiency. These ANSI Standards have been found acceptable by the NRC staff. The change in the Technical Specification will allow the licensee to perform the test at 30°C with 95% relative humidity. Based on the above reason, we conclude that the proposed change in Technical Specification 4.5.K.1.a(2) is acceptable.

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Present Technical Specification 4.5.K.1.a(3) requires that an air-flow distribution test be performed at least once every 18 months on the HEPA and charcoal filters of SGTS. The SGTS has a designed air-flow rate of about 1200 cfm. The filters used in this system are small units with one HEPA filter which should ensure uniform flow distribution. The air-flow distribution test requirement is not warranted for these small units. Based on our evaluation of SGTS filters, we conclude that the proposed deletion of the air-flow distribution test requirement in Section 4.5.K.1.a(3) is acceptable.

By letter dated October 18, 1977, the licensee proposed a correction to the bases of Specification 4.5 of the Oyster Creek Technical Specifications.

In Specification 4.5.K, the surveillance period for the charcoal filters in the SGTS is stated as at least once per 18 months. However, in the Bases Section of Specification 4.5, the charcoal filter test requirements appear to be combined with the reactor building inleakage test required prior to refueling. The proposed change to the Bases Section of Specification 4.5 will clarify this section so that it is consistent with the intent of Specification 4.5 to require reactor building inleakage testing prior to refueling and charcoal filter efficiency and performance testing at 18-month intervals. Based on this, we find the proposed change acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Date: February 11, 1981

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-219JERSEY CENTRAL POWER & LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 52 to Provisional Operating License No. DPR-16, issued to Jersey Central Power & Light Company (the licensee), which revised the Technical Specifications for operation of the Oyster Creek Nuclear Generating Station (the facility) located in Ocean County, New Jersey. The amendment is effective as of its date of issuance.

This amendment (1) revises the procedure for testing for radioactive methyl iodine removal efficiency of carbon samples removed from the Standby Gas Treatment System (SGTS), (2) eliminates the air flow distribution tests on the high efficiency particulate and charcoal filters of the SGTS, and (3) corrects the Bases Section of Technical Specification 4.5 so that it is consistent with the Provisions of Technical Specification.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the applications for amendment dated October 18, 1977, and October 6, 1980, (2) Amendment No. 52 to License No. DPR-16, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Ocean County Library, Brick Township Branch, 401 Chambers Bridge Road, Brick Town, New Jersey 08723. A single copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 11th day of February, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Dennis M. Crutchfield, Chief  
Operating Reactors Branch #5  
Division of Licensing