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

November 25, 1981

DISTRIBUTION
Docket
NRC PDR
Local PDR
ORB Reading
NSIC
DCrutchfield
HSmith (2)
JLombardo
OELD
OI&E (5#
BScharf (10)
GDeegan (4)
ACRS (10)
SEPB
RDiggs
EFrahm

Docket No. 50-219
LS05-81-11-065

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. 57 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 application dated November 24, 1981, as supported by your letter dated November 23, 1981.

The amendment approves changes to the Appendix A Technical Specifications to allow credit to be taken for an acoustical monitor on an adjacent valve to provide sufficient warning of an open safety valve whose primary or secondary position indicating instrumentation is inoperable.

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

Sincerely,
ORIGINAL SIGNED BY
Thomas V. Wambach for/

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

Enclosures:
1. Amendment No. 57 to License No. DPR-16
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

RECEIVED
DEC 1 1981
U.S. NUCLEAR REGULATORY COMMISSION

8112040119 811125
PDR ADOCK 05000219
P PDR

F.R NOTICE + AMENDMENT JZM

OFFICE	DL: ORB #5	DL: ORB #5	OELD	DL: ORB #5	DL: AD/SA	DL: ORAB	
SURNAME	HSmith:cc	JLombardo	KARMAN	DCrutchfield	GLainas	RFrahm	
DATE	11/25/81	11/25/81	11/25/81	11/25/81	11/25/81	11/25/81	

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-960

cc
G. F. Trowbridge, Esquire
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N. W.
Washington, D. C. 20036

J. B. Lieberman, Esquire
Berlack, Israels & Lieberman
26 Broadway
New York, New York 10004

Natural Resources Defense Council
917 15th Street, N. W.
Washington, D. C. 20006

J. Knubel
BWR Licensing Manager
GPU Nuclear
100 Interplace Parkway
Parsippany, New Jersey 07054

Deputy Attorney General
State of New Jersey
Department of Law and Public Safety
36 West State Street - CN 112
Trenton, New Jersey 08625

Ocean County Library
Brick Township Branch
401 Chambers Bridge Road
Brick Town, New Jersey 08723

Mayor
Lacey Township
818 Lacey Road
Forked River, New Jersey 08731

Commissioner
Department of Public Utilities
State of New Jersey
101 Commerce Street
Newark, New Jersey 07102

U. S. Environmental Protection Agency
Region II Office
ATTN: Regional Radiation Representative
26 Federal Plaza
New York, New York 10007

Gene Fisher
Bureau Chief
Bureau of Radiation Protection
380 Scotts Road
Trenton, New Jersey 08628

Commissioner
New Jersey Department of Energy
101 Commerce Street
Newark, New Jersey 07102

Licensing Supervisor
Oyster Creek Nuclear Generating Station
P. O. Box 388
Forked River, New Jersey 08731

Resident Inspector
c/o U. S. NRC
P. O. Box 445
Forked River, New Jersey 08731

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. 57
License No. DPR-16

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Jersey Central Power & Light Company (the licensee) dated November 24, 1981, as supported by letter dated November 23, 1981, 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 3.B of Provisional Operating 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. 57, 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

for Thomas V. Wambach
Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 25, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 57

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

3.13-1

3.13-2

3.13-3

3.13 ACCIDENT MONITORING INSTRUMENTATION

Applicability: Applies to the operating status of accident monitoring instrumentation.

Objective: To assure operability of accident monitoring instrumentation.

Specification:

A. Relief Valve Position Indicators

1. The accident monitoring instrumentation channels shown in Table 3.13.1 shall be operable when the mode switch is in the Startup or Run positions.

2. With the number of operable accident monitoring instrumentation channels less than the Total Number of Channels shown in Table 3.13.1, either restore the inoperable channels to operable status within 7 days, or place the reactor in the shutdown position within 24 hours.

3. With the number of operable accident monitoring instrumentation channels less than the Minimum Channels Operable requirements of Table 3.13.1, either restore the inoperable channel(s) to the operable status within 48 hours, or place the reactor in the cold shutdown condition within 24 hours.

B. Safety Valve Position Indicators

1. During power operation, both primary* and backup** safety valve monitoring instruments are required to be operable except as provided in 3.13.B.2 and 3.13.B.3.

2. If either the primary* or backup** accident monitoring instruments on a valve become inoperable, the primary* accident monitoring instrument on an adjacent valve must be operable, and its set point appropriately reduced.

3. If both the primary* and backup** accident monitoring instruments on a valve become inoperable and the primary* accident monitoring instrument on an adjacent valve is operable, either restore the inoperable channel(s) to an operable status within 7 days, or place the Reactor in the cold shutdown condition within 24 hours.

4. If the requirements of Section 3.13.B.2 or 3.13. B.3 cannot be met within 48 hours, place the reactor in the cold shutdown condition within 24 hours.

C. In the event that any of these monitoring channels become inoperable, they shall be made operable prior to startup following the next cold shutdown.

* Acoustic Monitor
** Thermocouple

BASES

The purpose of the safety/relief valve accident monitoring instrumentation is to alert the operator to a stuck open safety/relief valve which could result in an inventory threatening event.

As the safety valves present distinctly different concerns than those related to relief valves, the technical specifications are separated as to the actions taken upon inoperability. Clearly, the actuation of a safety valve will be immediately detectable by observed increase in drywell pressure. Further confirmation can be gained by observing reactor pressure and water level. Operator action in response to these symptoms would be taken regardless of the acoustic monitoring system status. Acoustic monitors act only to confirm the reseating of the safety valve. In actuality, the operator actions in response to the lifting of a safety valve will not change whether or not the safety valve reseats. Therefore, the actions taken for inoperable acoustic monitors on safety valves are significantly less stringent than that taken for those monitors associated with relief valves.

Should an acoustic monitor on a safety valve become inoperable, setpoints on adjacent monitors will be reduced to assure alarm actuation should the safety valve lift, since it is of no importance to the operator as to which valves lift but only that one has lifted. Analyses, using very conservative blowdown forces and attenuation factors, show that reducing the alarm setpoint on adjacent monitors to $<1.4g$ will assure alarm actuation should the adjacent safety valve lift. Minimum blowdown force considered was 30g with a maximum attenuation of 27dB. In actuality, a safety valve lift would result in considerably larger blowdown force. The maximum attenuation of 27 dB was determined based on actual testing of a similar monitoring system installed in a similar configuration.

TABLE 3.13.1

ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT	TOTAL NO. OF CHANNELS	MINIMUM CHANNELS OPERABLE
1. Relief Valve Position Indicator (Primary Detector*)	1/valve	1/valve
or		
Relief Valve Position Indicator (Backup Indications**)	1/valve	

* Acoustic Monitor
** Thermocouple

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. 57 TO PROVISIONAL OPERATING LICENSE NO. DPR-16

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated November 24, 1981, as supported by letter dated November 23, 1981, Jersey Central Power & Light Company (the licensee) requested an amendment to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station. The proposed amendment would approve changes to Appendix A Technical Specifications to allow credit to be taken for an acoustical monitor on an adjacent valve to provide sufficient warning of an open safety valve whose primary or secondary position indicating instrumentation is inoperable.

2.0 DISCUSSION AND EVALUATION

The existing Technical Specification 3.13 requires that sufficient accident monitoring instrumentation is available during and following an accident. The requirement for a reliable position indicating system for relief and safety valves was based on the need to provide the operator with a diagnostic capability to detect an open relief or safety valve. The licensee presently has installed accoustical position monitors on each of the sixteen safety valves and each of the five relief valves, as well as thermocouple backup indicators on each valve.

The licensee has proposed a change to the Technical Specification that would allow credit to be taken for an acoustical monitor on an adjacent valve to provide sufficient warning of an open safety valve whose primary or secondary position indicating instrumentation is inoperable. Ordinarily, valve monitoring systems (VMS) are set so that the individual alarm will not initiate on blowdown of an adjacent valve. The alarm setpoint may be reduced such that the monitor will alarm if an adjacent valve is lifted dependent on local background noise levels, and available system crosstalk. The current Technical Specifications require the plant to shutdown if any of the 21 VMS channels are inoperable. The proposed change would allow continued reactor operation with a safety valve VMS channel inoperative by using the adjacent valve VMS channel. On a General Electric plant, similiar in physical valve and VMS channel arrangement, the worst or maximum crosstalk to an adjacent valve

was 27 dB. This value was determined based on actual testing of a similiar monitoring system installed in a similiar configuration. The minimum blowdown force considered was 30g with a maximum attenuation of 27 dB. In actuality, a safety valve lift would result in a considerably larger blowdown force.

The licensee's November 23 and 24, 1981 submittals provide supporting information regarding the capability of adjacent safety valve position monitors to detect opening of an adjacent valve.

Based on the above discussion and the information provided by the licensee, we find that the proposed change to Technical Specification, Section 3.13, Accident Monitoring Instrumentation, is acceptable. However, we believe that all failed acoustical monitors should be made operable during the first cold shutdown following their failure. We discussed this matter with the licensee and we mutually agreed to modify the proposed change accordingly.

Based on our review, we conclude that the change to the Technical Specification meets our requirements and is 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.

Dated: November 25, 1981

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-219

JERSEY CENTRAL POWER & LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 57 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.

The amendment approves changes to the Appendix A Technical Specifications to allow credit to be taken for an acoustical monitor on an adjacent valve to provide sufficient warning of an open safety valve whose primary or secondary position indicating instrumentation is inoperable.

The application for the amendment complies 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.

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 application for amendment dated November 24, 1981, and supporting information transmitted by letter dated November 23, 1981, (2) Amendment No. 57 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 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 25th day of November, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas V. Wambach

Thomas V. Wambach, Acting Chief
Operating Reactors Branch #5
Division of Licensing