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R. Boyd, F. Schroeder
R. DeYoung, S. Hanauer
ACRS (3)
Change No. 6
License No. DPR-16

MAR 18 1971

Docket No. 50-219

Jersey Central Power & Light Company
ATTN: Mr. R. H. Sims, Vice President
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960

Gentlemen:

By application dated March 3, 1971, you submitted Change Request No. 6 to the Technical Specifications appended to Provisional Operating License No. DPR-16 for your Oyster Creek Reactor. Your application requests that Limiting Conditions for Operation be changed to establish interim measures to provide core flux monitoring capability when a few permanently installed neutron detectors are inoperable. We note that a more comprehensive analysis of the protective functions of the APRM system is being performed and its results, and proposed specification changes, will be submitted in the near future.

We have reviewed your application and we have evaluated your analysis of pertinent safety considerations. We conclude that the measures you describe are adequate to provide reactor protection, and that operation of the reactor in the manner proposed does not present significant hazards considerations not described or implicit in the Final Safety Analysis Report and that there is reasonable assurance that the health and safety of the public will not be endangered.

Accordingly, pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specifications appended to Provisional Operating License No. DPR-16 are hereby changed as indicated in Attachment A.

Sincerely,

Original Signed by
Peter A. Morris

Peter A. Morris, Director
Division of Reactor Licensing

Enclosure:
Attachment A - Changes to
Technical Specifications

cc: George F. Trowbridge, Esquire

Dispatched 3/19/71

OFFICE ▶	DRL	DRS	DRL	DRL	DRL
SURNAME ▶	RJSchemel:rpd		DJSkovholt	FSchroeder	PAMorris
DATE ▶	3/9/71	3/ /71	3/ /71	3/17/71	3/18/71

Form AEC-318 (Rev. 9-53)
U.S. GOVERNMENT PRINTING OFFICE : 1969— O-364-598

April 15

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

MAR 18 1971

File

SAFETY REVIEW FOR CHANGE REQUEST NO. 6, OYSTER CREEK REACTOR

The pertinent safety considerations associated with the proposed change were addressed by the applicant and are summarized below:

1. The neutron detectors used in both the LPRM channels and the TIP channels are essentially identical. The channel time constants will not be affected by an interchange and the difference in neutron sensitivity can easily be accommodated by means of channel gain adjustment.

2. In the event a detector interchange is necessary, the situation is such that the required number of channels, monitoring for a possible rod-block condition, will not be available in the interval between failure of the LPRM detector and operability of TIP detector. Since this time may be several hours, the licensee will reduce power during this interval, by means of recirculating flow adjustments, to a point where withdrawal of a control rod will not present a situation where a rod-block would be required. (APRM scram protection will be preserved). I consider this administrative measure adequate.

3. During times when the detector interchange situation exists, relief is required from the requirement that a trip be inserted for a channel under test or calibration if the plant is to remain at power. When the interval during which a channel is under test is less than one hour, the requirement that no control rod be moved outward during the interval provides adequate rod-block protection. (APRM scram protection will be preserved).

The above considerations were discussed informally with DRS who concurred with my viewpoint.

R. J. Schemel

R. J. Schemel, Chief
Operating Reactor Branch #1
Division of Reactor Licensing

cc: D. Skovholt
R. Vollmer
R. Schemel
S. MacKay
S. Teets
M. Jinks (2)

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

March 18, 1971

Docket No. 50-219

Jersey Central Power & Light Company
ATTN: Mr. R. H. Sims, Vice President
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960

Change No. 6
License No. DPR-16

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By application dated March 3, 1971, you submitted Change Request No. 6 to the Technical Specifications appended to Provisional Operating License No. DPR-16 for your Oyster Creek Reactor. Your application requests that Limiting Conditions for Operation be changed to establish interim measures to provide core flux monitoring capability when a few permanently installed neutron detectors are inoperable. We note that a more comprehensive analysis of the protective functions of the APRM system is being performed and its results, and proposed specification changes, will be submitted in the near future.

We have reviewed your application and we have evaluated your analysis of pertinent safety considerations. We conclude that the measures you describe are adequate to provide reactor protection, and that operation of the reactor in the manner proposed does not present significant hazards considerations not described or implicit in the Final Safety Analysis Report and that there is reasonable assurance that the health and safety of the public will not be endangered.

Accordingly, pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specifications appended to Provisional Operating License No. DPR-16 are hereby changed as indicated in Attachment A.

Sincerely,

Peter A. Morris

Peter A. Morris, Director
Division of Reactor Licensing

Enclosure:
Attachment A - Changes to
Technical Specifications

cc: George F. Trowbridge, Esquire

ATTACHMENT A

CHANGE NO. 6 TO TECHNICAL SPECIFICATIONS

LICENSE NO. DPR-16

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

1. On Page 3.1.1, paragraph 3.1.B.2, add the following sentences:

   A Travelling In-core Probe (TIP) chamber may be used as an APRM input if all LPRM's in a radial location have failed and the TIP is positioned in close proximity to one of the failed LPRM's. If all LPRM's in a radial location used for the APRM system have failed, power operation may continue below 70% of rated power until the TIP can be connected, positioned and satisfactorily tested, as long as Specification 3.1.B.1 and Table 3.1.1 are satisfied.

2. Change Note: C. on Page 3.1.12 to read:

   Two APRM's in the same quadrant shall not be concurrently bypassed or inoperable with the following exception:

   If one APRM in a quadrant cannot satisfy Technical Specification 3.1.B.2, the other APRM channel in that quadrant may be removed from service for up to one hour for test or calibration without inserting trips in its trip systems only if the first APRM is unbypassed and meets Technical Specification 3.1.B.1, and no control rod is moved outward during the calibration and/or test.

3. On Page 3.1.6, add the following paragraph after the last paragraph of the bases:

   Specification 3.1.B.1 defines the minimum number of APRM channel inputs required to permit accurate average core power monitoring. Specification 3.1.B.2 further defines the distribution of the operable chambers to provide monitoring of local power changes that might be caused by a single rod withdrawal. Any nearby, operable LPRM chamber can provide the required input for average core monitoring. If all four chambers in an LPRM string used in the APRM system fail, a Travelling In-core Probe can be used temporarily in that location to provide an APRM input until LPRM replacement is possible. Since APRM rod block protection is not

required below 70% of rated power[1], as discussed in Section 2.3, Limiting Safety System Settings, operation may continue below 70% as long as Specification 3.1.B.1 and the requirements of Table 3.1.1 are met. In order to maintain reliability of core monitoring in that quadrant where an APRM is inoperable, it is permitted to remove the operable APRM from service for calibration and/or test provided that the same core protection is maintained by alternate means.

4. Add the following reference after the last paragraph on Page 3.1.6:

(1) NEDO-10189 "An Analysis of Functional Common Mode Failures in GE BWR Protection and Control Instrumentation," L. G. Frederick, et al, July 1970.