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OCT 6 - 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

✓ Docket File  
 DR Reading  
 DRL Reading  
 Branch Reading  
 ACRS (3)  
 R. Boyd, R. Vollmer  
 R. DeYoung, R. Schemel  
 F. Schroeder, T. Wambach  
 D. Skovholt, S. Teets  
 R-Change No. 8  
 License No. DPR-16

Gentlemen:

Your letter dated September 28, 1971, submitted Proposed Change No. 8 to the Technical Specifications of Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Power Plant Unit No. 1. The proposed change would allow two APRM's in the same quadrant to be removed from service in the "Refuel" mode during replacement of detectors.

Based on our review of the proposed change, we made certain modifications to it to meet our licensing requirements. We have concluded that implementation of the change, as modified, will not present significant hazards considerations not described or implicit in the Safety Analysis Report and that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the manner proposed.

Accordingly, pursuant to Section 50.59 of 10 CFR Part 50, the Technical Specifications of 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  
 Shaw, Pittman, Potts, Trowbridge & Madden  
 910 - 17th Street, N. W.  
 Washington, D. C. 20006

OFFICE ▶	DRL	DRL	DRL	DRL	DRL	DRL
SURNAME ▶	TVWambach:pd1	BATeets	RJSchemel	DJSkovholt	FSchroeder	PAMorris
DATE ▶	10/6/71	10/6/71	10/ /71	10/6/71	10/6/71	10/6/71



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

OCT 6 - 1971

File (Docket No. 50-219)

THRU: R. J. Schemel, Chief, ORB #1, DRL

*R. P. Singer for R. J. Schemel*  
SAFETY REVIEW OF CHANGE REQUEST NO. 8, OYSTER CREEK REACTOR

By Change Request No. 8 dated September 28, 1971, the licensee has requested a change in the Technical Specifications to permit the replacement of detectors for the APRM's without violating a Limiting Condition for Operation of the Technical Specifications. The proposed change would allow two APRM's in the same quadrant of the core to be inoperable while in the "Refuel" mode during replacement of an LPRM assembly that contains the detectors for these two APRM's. Monitoring of the core in this condition is maintained by the Source Range Channels, one of which is in the same quadrant as the inoperable APRM's, and by the Intermediate Range Channels, two of which are in the same quadrant as the inoperable APRM's.

In order to replace faulty LPRM detectors, the LPRM Detector Assembly that contains all four detectors in that radial location of the core must be removed. The LPRM assemblies in sixteen of the radial core locations contain the LPRM detectors that are assigned as inputs to the APRM channels. Two of the detectors in each of these assemblies feed one APRM channel and two feed another. Therefore, removal of an LPRM assembly removes two detectors from one radial core location in two APRM channels. The present Technical Specifications that apply to this condition are as follows:

3.1.B.2 Failure of two detectors from one radial core location in any one APRM shall make that APRM inoperable.

Table 3.1.1 Protective Instrumentation Requirements

Item A.8 requires Note (c) to apply in the "Refuel", "Startup", and "Run" modes of operation.

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

The exception stated does not apply in this case.

The licensee desires to perform the detector replacement while in the "Refuel" mode of operation. This would violate Note c to Table 3.1.1. Therefore, the licensee proposes another exception to Note c that will cover this operation.

OCT 6 - 1971

The conditions that should exist during the performance of this operation are: all control rods are fully inserted, the reactor vessel is flooded and open to secondary containment, and fuel assemblies adjacent to the LPRM assembly to be replaced are removed. Under these conditions, the Source Range Monitors and Intermediate Range Monitors provide the necessary monitoring of the core. Scram actuation, if needed, would be provided by the Source Range Monitors and the Intermediate Range Channels.

The APRM's do not provide effective monitoring since they would not respond until the power level in the core reached about 20 MWt, and they would not alarm or scram until the power level reached about 800 MWt.

In fact, the Technical Specifications for more recent BWR's do not require the APRM's when in the "Refuel" mode if the reactor is subcritical and the reactor water temperature is less than 212<sup>o</sup>F.

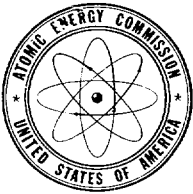
In our discussion with the licensee concerning this proposed change, a modification was agreed upon that incorporated operability requirements for the Source Range Monitors and Intermediate Range Monitors to assure acceptable monitoring of the core during this operation.

Based on the above evaluation, we have concluded that the implementation of the proposed change will not present significant hazards considerations not described or implicit in the Safety Analysis Report and that there is reasonable assurance that the health and safety of the public will not be endangered.



T. V. Wambach  
Operating Reactors Branch #1  
Division of Reactor Licensing

cc: D. J. Skovholt  
R. H. Vollmer  
R. J. Schemel  
T. V. Wambach  
S. A. Teets  
M. Jinks (2)



UNITED STATES  
ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545  
October 6, 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. 8  
License No. DPR-16

Gentlemen:

Your letter dated September 28, 1971, submitted Proposed Change No. 8 to the Technical Specifications of Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Power Plant Unit No. 1. The proposed change would allow two APRM's in the same quadrant to be removed from service in the "Refuel" mode during replacement of detectors.

Based on our review of the proposed change, we made certain modifications to it to meet our licensing requirements. We have concluded that implementation of the change, as modified, will not present significant hazards considerations not described or implicit in the Safety Analysis Report and that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the manner proposed.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Peter A. Morris".

Peter A. Morris, Director  
Division of Reactor Licensing

Enclosure:  
Attachment A - Changes to  
Technical Specifications

cc: George F. Trowbridge, Esquire  
Shaw, Pittman, Potts, Trowbridge & Madden  
910 - 17th Street, N. W.  
Washington, D. C. 20006

ATTACHMENT A

CHANGE NO. 8 TO THE TECHNICAL SPECIFICATIONS

PROVISIONAL OPERATING LICENSE NO. DPR-16

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

1. In Table 3.1.1, page 3.1-12, change Note c in the following manner:
  - a. In the first sentence, change the word "exception" to "exceptions".
  - b. Add the following paragraph:

"When in the Refuel Mode, two APRM's in the same quadrant may be made inoperable during replacement of an LPRM assembly, provided that the Source Range Channel and both Intermediate Range Channels in that quadrant are operable and provided that the Removable Jumpers for Refueling Non-Coincidence have been removed."

2. On page 3.1-6, add the following paragraph after the last paragraph of the bases:

"Whenever it is necessary to replace an LPRM assembly, the operation requires the removal of fuel bundles in order to eliminate interference with the LPRM assembly. During the operation, the reactor mode switch will be locked in the REFUEL position in accordance with Technical Specification 3.9.B. In addition, the initial fuel loading non-coincidence jumpers in the Reactor Protective System will be removed. This provides additional protection for the core because any one out of four Source Range Monitor (SRM) channels, any one of eight Intermediate Range Monitor (IRM) channels, or any one of eight APRM channels can produce a full scram (i.e., trip both Protection System Channels) if the flux reaches their respective setpoints."