DISTRIBUTION
W. Dooly, DR
R. Engelken, CO (2)
H. K. Shapar, OGC
N. Dube, DRL (5)
J. Buchanan, ORNL
T. Laughlin, DTIE
PDR
Docket File
DR Reading
DRL Reading
Branch Reading
R. Boyd
R. DeYoung
F. Schroeder
D. Skovholt
R. Vollmer, ACRS (3)
R. Schemel, S. MacKay
E. Fleury, S. Teets

OCT 16 1970

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. 4
License No. DPR-16

Gentlemen:

Your letter dated September 30, 1970, submitted Proposed Change No. 4 to the Technical Specifications of Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Power Plant Unit No. 1. The purpose of the proposed change is to allow the temporary deactivation of the Containment Spray System and all drywell pressure instrumentation during performance of the integrated primary containment leakage rate test.

Modifications to your proposed change have been discussed with members of your staff, and we understand that the revision is acceptable to Jersey Central Power & Light Company. We have concluded that implementation of the 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 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 set forth below.

1. In Table 3.1.1, add "(k)" after the number in columns entitled "Min. No. of Operable Instrument Channels Per Operable Trip Systems" and "Min. No. of Operable or Operating (Tripped) Trip Systems" on the following lines:

   Page 3.1-9, Function D.2
   Function E.1
   Function F.1
   Function G.1

   Page 3.1-10 Function J.3

d

2. On page 3.1-12, add the following note to the bottom of the page:

"k. All four (4) drywell pressure instrument channels may be made inoperable during the integrated primary containment leakage rate test (See Specification 4.5), provided that the plant is in the cold shutdown condition and that no work is performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the top of the active fuel."

3. On page 3.4-2, paragraph 3.4.C.1, change the last line to read "specified in Specifications 3.4.C.3, 3.4.C.4 and 3.4.C.7". On page 3.4-3, add new paragraph 3.4.C.7:

"7. The containment spray system may be made inoperable during the integrated primary containment leakage rate test required by Specification 4.5, provided that the reactor is maintained in the cold shutdown condition and that no work is performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the top of the active fuel."

Also, the bases for these specifications are hereby changed as set forth below.

1. Add the following paragraph after the second paragraph on page 3.1-4:

"It is permissible to make the drywell pressure instrument channels inoperable during performance of the integrated primary containment leakage rate test provided the reactor is in the cold shutdown condition. The reason for this is that the Engineered Safety Features, which are effective in case of a LOCA under these conditions, will still be effective because they will be activated by low-low reactor water level."

2. On page 3.4-4, add to the end of paragraph 5 after "cooling description":

"Since the loss-of-coolant accident while in the cold shutdown condition would not require containment spray, the system may be deactivated to permit integrated leak rate testing of the primary containment while the reactor is in the cold shutdown condition."

Sincerely,

Original Signed by
Peter A. Morris

Peter A. Morris, Director
Division of Reactor Licensing

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

Dispatched 10/19/70

OFFICE ▶	DRL	DRL	DRL	DRL	DRL	DRL
SURNAME ▶	SDMacKay:pdl SATeets	ERFleury	RJSchemel	DJSkovholt	FSchroeder	PAMorris
DATE ▶	10/15/70	10/16/70	10/16/70	10/16/70	10/16/70	10/16/70

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

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

OCT 16 1970

Sent Copy of this memo to Reg. I 11-27-70 S.T.

File (Docket No. 50-219)
THRU: R. J. Schemel, Chief, ORB-1, DRL

SAFETY REVIEW OF PROPOSED CHANGE REQUEST NO. 4 FOR OYSTER CREEK UNIT I

By Change Request No. 4 dated September 30, 1970, the applicant has requested a change in the Technical Specifications in order to avoid the unnecessary actuation of core spray, containment spray, and other engineered safety features during the performance of the Integrated Primary Containment Leakage Rate Test.

The change would:

1. Allow temporary disablement of the Containment Spray System during the Integrated Primary Containment Leakage Rate Test, and

2. Allow all of the drywell pressure instrument channels to be made inoperable while performing the Integrated Primary Containment Leakage Rate Test.

We have reviewed the accidents presented in the SAR and find that only the LOCA is pertinent. Therefore, we consider the possibility that a LOCA might occur in the cold shutdown condition. We have therefore examined the function of the engineered safety features associated with the loss-of-coolant accident.

The function of the containment spray in a LOCA is to: (1) reduce containment pressure by condensing steam and cooling the containment atmosphere, and (2) to provide long-term cooling of emergency cooling system water. The first function would not be necessary in the cold shutdown condition and the second can be accomplished by manually putting part of the containment spray system in service to cool torus water. Therefore, containment spray need not be immediately operable under cold shutdown conditions. (BWR's after Oyster Creek and Nine Mile do not have automatic initiation of containment spray.)

With regard to the drywell pressure signal, if a LOCA were to occur under cold shutdown conditions, little or no pressure would be generated in the drywell and, therefore, the drywell pressure instrumentation would be ineffective in actuating any engineered safety features. Therefore, there should be no reason for not disabling this instrumentation under cold shutdown conditions. This has been verified by considering all of the functions of this instrumentation. The following tabulation shows all of the actions initiated by high drywell pressure (SAR Figure VII-7-2) and indicates why the drywell pressure signal is unnecessary to mitigate the consequences of a LOCA during cold shutdown conditions.

1. <u>Reactor Scram</u>

   The reactor is already in the scrammed condition during cold shutdown.

2. <u>Core Spray</u>

   This will be initiated by Low-Low Reactor Water Level.

3. <u>Containment Spray</u> - (requires simultaneous signal from high drywell pressure and Low-Low Reactor Water Level.)

   The preceding paragraph argues that containment spray is unnecessary under these conditions.

4. <u>Isolate Drywell Pressure Maintenance System and Sump and Vent to Emergency Gas Treatment System</u>

   This will be initiated by Low-Low Reactor Water Level.

5. <u>Isolate Building and Start Gas Treatment System</u>

   This will be initiated by Low-Low Reactor Water Level.

6. <u>Start Diesel</u>

   This will be initiated by Low-Low Reactor Water Level.

7. <u>Initiate Auto Relief</u>

   The primary system will be vented to the drywell; therefore, this action is of no consequence.

The licensee has stated that detailed written procedures will be used to effect this change and to restore the instruments to operability following completion of the test.

Based on our review, we have concluded that the temporary disablement of the containment spray system and all of the drywell pressure sensors will not prevent the appropriate engineered safety features from being actuated in case a LOCA should occur while performing the Integrated Primary

Containment Leakage Rate Test. We have also 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.

Sam. D. MacKay

Samuel D. MacKay
Operating Reactor Branch #1
Division of Reactor Licensing

cc: D. J. Skovholt
R. H. Vollmer
R. J. Schemel
S. D. MacKay
S. A. Teets
Mary Jinks (2)

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

October 16, 1970

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. 4
License No. DPR-16

Gentlemen:

Your letter dated September 30, 1970, submitted Proposed Change No. 4 to the Technical Specifications of Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Power Plant Unit No. 1. The purpose of the proposed change is to allow the temporary deactivation of the Containment Spray System and all drywell pressure instrumentation during performance of the integrated primary containment leakage rate test.

Modifications to your proposed change have been discussed with members of your staff, and we understand that the revision is acceptable to Jersey Central Power & Light Company. We have concluded that implementation of the 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 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 set forth below.

1. In Table 3.1.1, add "(k)" after the number in columns entitled "Min. No. of Operable Instrument Channels Per Operable Trip Systems" and "Min. No. of Operable or Operating (Tripped) Trip Systems" on the following lines:

   Page 3.1-9, Function D.2
   Function E.1
   Function F.1
   Function G.1

   Page 3.1-10 Function J.3

2. On page 3.1-12, add the following note to the bottom of the page:

   "k. All four (4) drywell pressure instrument channels may be made inoperable during the integrated primary containment leakage rate test (See Specification 4.5), provided that the plant is in the cold shutdown condition and that no work is performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the top of the active fuel."

3. On page 3.4-2, paragraph 3.4.C.1, change the last line to read "specified in Specifications 3.4.C.3, 3.4.C.4 and 3.4.C.7". On page 3.4-3, add new paragraph 3.4.C.7:

   "7. The containment spray system may be made inoperable during the integrated primary containment leakage rate test required by Specification 4.5, provided that the reactor is maintained in the cold shutdown condition and that no work is performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the top of the active fuel."

Also, the bases for these specifications are hereby changed as set forth below.

1. Add the following paragraph after the second paragraph on page 3.1-4:

   "It is permissible to make the drywell pressure instrument channels inoperable during performance of the integrated primary containment leakage rate test provided the reactor is in the cold shutdown condition. The reason for this is that the Engineered Safety Features, which are effective in case of a LOCA under these conditions, will still be effective because they will be activated by low-low reactor water level."

2. On page 3.4-4, add to the end of paragraph 5 after "cooling description":

"Since the loss-of-coolant accident while in the cold shutdown condition would not require containment spray, the system may be deactivated to permit integrated leak rate testing of the primary containment while the reactor is in the cold shutdown condition."

Sincerely,

Frank Schroeder

for Peter A. Morris, Director
Division of Reactor Licensing

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