

Jersey Central Power & Light Company



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MEMBER OF THE

General



Public Utilities Corporation

July 3, 1975



Mr. George Lear, Chief
Operating Reactors Branch #3
Division of Reactor Licensing
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Lear:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
ECCS Performance Single Failure Sensitivity

In compliance with the provisions of 10 CFR 50.46, the Oyster Creek Nuclear Generating Station ECCS performance was evaluated. The documentation containing these analyses is referenced in the Commission Safety Evaluation supporting Amendment No. 8 to the Oyster Creek Provisional Operating License, dated May 24, 1975.

Condition 2-D.1 of License Amendment No. 8 required that an ECC system modification be proposed to provide automatic core spray initiation in the unlikely event of a core spray line break simultaneous with a diesel bus fault. Condition 2-D.2 required that a complete reassessment of all elements of the electrical systems associated with ECCS performance be completed within 30 days to verify that no single passive electrical failure would adversely affect the ability of the ECCS to conform to our evaluation submitted to demonstrate compliance with 10 CFR 50.46.

In compliance with conditions 2-D.1 and 2-D.2 of Amendment No. 8, we submitted our evaluations in a letter dated June 24, 1975.

Our purpose in writing this letter is to provide the Staff with a detailed assessment of the effects on ECCS performance which result from our June 24, 1975 considerations regarding single passive electrical failure and our proposed modification to overcome the diesel bus fault single passive failure. In addition, we will describe our plans to accommodate any degradation of ECCS performance in the operation of Oyster Creek.

The recent Single Failure Analysis resulted in additional single failures not considered in our 10 CFR 50.46 evaluation. The majority of these are being corrected as discussed in our June 24, 1975 submittal. The

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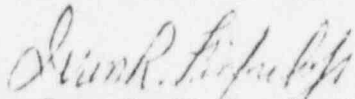
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worst combinations of ECC systems available involve a single failure that renders either an ADS valve or an isolation condenser inoperable at the same time as the break renders a core spray system or an emergency condenser inoperable. These combinations are listed in the attached Table.

It can be seen from the Table that the combinations of ECC systems available for the core spray line break and recirculation line break are less effective than those available in our 10 CFR 50.46 evaluation by virtue of the additional considerations mentioned above. We have listed the worst combinations of systems available in order to provide a meaningful ECCS performance sensitivity analysis for comparison with our previous analyses. The limiting break peak cladding temperature has increased by a maximum of 25°F for the ECC systems available in the worst case. In order to account for this, we will immediately reduce our present MAPLHGR limits by 2.0%, which more than compensates for the 25°F increase in PCT.

We will provide revised analyses and Technical Specifications based on the new analyses for both General Electric and Exxon fuel as soon as possible. The schedule for submission of this additional information will be provided to you by July 15, 1975.

Very truly yours,



Ivan R. Finfrock, Jr.
Vice President

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Attachment

SINGLE FAILURE SENSITIVITY RESULTS

<u>BREAK ASSUMPTIONS</u>		<u>SINGLE FAILURE</u>	<u>ECCS AVAILABLE</u>	<u>CHANGE IN PCT</u>
<u>LOCATION</u>	<u>SIZE (FT²)</u>			
Recirculation Line	0.35	ADS Valve	2 CS, 1 EC, 4 ADS	+25°F
Recirculation Line	4.69	ADS Valve	2 CS, 1 EC, 4 ADS	No change
Recirculation Line	0.35	1 EC	2 CS, 0 EC, 5 ADS	+21°F
Recirculation Line	4.69	1 EC	2 CS, 0 EC, 5 ADS	No change
Core Spray Line	0.181	ADS Valve	1 CS, 2 EC, 4 ADS	1800°F *
Core Spray Line	0.181	1 EC	1 CS, 1 EC, 5 ADS	1800°F *

* Previous PCT based on operator action.
 This value reflects automatic availability
 of Core Spray System.