

REQUEST FOR ADDITIONAL INFORMATION

ECCS REPORTS (F-47)

CONSOLIDATED EDISON COMPANY OF NEW YORK
INDIAN POINT NUCLEAR POWER PLANT UNIT 2

NRC DOCKET NO. 50-247

FRC PROJECT C5506

FRC ASSIGNMENT 7

NRC CONTRACT NO. NRC-03-81-130

FRC TASK 278

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INTRODUCTION

This Request for Additional Information (RAI) is the result of an evaluation of the information contained in the Consolidated Edison Company of New York (Con Ed) letter dated May 12, 1981 [1] to the Nuclear Regulatory Commission (NRC) in response to NUREG-0737 [2], Item II.K.3.17, "Report on Outages of Emergency Core-Cooling Systems Licensee Report and Proposed Technical Specification Changes." The evaluation revealed an item of concern. Additional information relating to this concern is needed before a final evaluation can be made.

Item II.K.3.17

Report on Outages of Emergency Core Cooling Systems
Licensee Report and Proposed Technical Specification Changes

BACKGROUND

In NUREG-0737, Item II.K.3.17, the NRC requested that a licensee submit a report detailing dates, lengths, and causes of outages for all emergency core cooling (ECC) systems for the last five years of operation. The purpose of the request was to obtain a quantitative history of the unavailability of the ECC systems to help the NRC determine if cumulative outage limitations are required in technical specifications.

To clarify the issue, the report was to contain the following details on outages that occurred during a continuous 5-year period of recent operation: (1) dates and durations; (2) causes, including test and maintenance; (3) ECC systems or components involved; and (4) corrective actions taken. In addition, a licensee was to propose changes to improve the availability of ECC system equipment, if necessary.

CONCERN

Evaluation of calculated small-break transients, with the assumptions of proper operator actions and the worst single failure in the ECC systems, has shown that some small breaks will result in partial uncovering of the core. However, technical specifications permit several components of the ECC systems to have substantial outage times. In addition, there are no cumulative outage limitations for ECC systems. Thus, the unavailability of an ECC system train for extended periods is not precluded.

For an evaluation of the responses to NUREG-0737, Item II.K.3.17, to be meaningful and to produce significant conclusions, the responses must be complete and accurate. They must include, for a continuous 5-year period of recent operation, not only the outage dates, durations, and causes, ECC system equipment involved, and corrective actions taken, but also outages of the

diesel generators and identification of the ECC system trains affected by the outages. Outages for surveillance testing and for planned, unplanned, and preventive maintenance should also be reported. This information will be used to determine the cumulative outage time of each ECC system train per reactor year and the need for cumulative outage limitations in the technical specifications.

Con Ed's response [1] does not include any evaluation of centrifugal charging pumps (CCP), accumulators, boron injection tank (BIT), or refueling water storage tank (RWST) ECC systems. The Con Ed response does not provide sufficient information to satisfy the objective of NUREG-0737, Item II.K.3.17.

REQUEST

In order for the staff to continue its review of Con Ed's response to NUREG-0737, Item II.K.3.17, additional information is required.

A complete summary of each component outage in the CCP's, accumulators, BIT and RWST ECC systems for a continuous 5-year period of recent operation. For each outage, include the date, duration, and cause, the diesel generator train and component involved, and corrective action taken. Include outages for surveillance testing and planned, unplanned, or preventive maintenance. In lieu of a complete outage summary for the components indicated above, data from your Probabilistic Risk Assessment may be substituted.

REFERENCES

1. J. D. O'Toole (Con Ed)
Letter to D. G. Eisenhut (NRR)
Subject: Response to NUREG-0737
May 12, 1981
2. NUREG-0737
"Clarification of TMI Action Plan Requirements"
NRC
November 1980