

REQUEST FOR ADDITIONAL INFORMATION

**ECCS REPORTS (F-47)**

**TMI ACTION PLAN REQUIREMENTS**

**POWER AUTHORITY OF THE STATE OF NEW YORK  
INDIAN POINT 3 NUCLEAR POWER PLANT**

**NRC DOCKET NO. 50-286**

**FRC PROJECT C5506**

**FRC ASSIGNMENT 7**

**NRC CONTRACT NO. NRC-03-81-130**

**FRC TASK 279**

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## INTRODUCTION

This Request for Additional Information (RAI) is the result of an evaluation of the information contained in the Power Authority of the State of New York's (PASNY) letter dated December 30, 1980 [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 5 years of plant operation through 1980. The purpose of the request was to obtain a quantitative history of the unreliability 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 the 5 years of plant operation through 1980: (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.

PASNY responded to this request in a letter to the NRC dated December 30, 1980 [1].

## 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 the 5 years of plant operation through 1980, 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.

PASNY's response [1] lists only outages of components which place the plant in a limiting condition allowed by the Technical Specifications. It does not appear to include test and maintenance outages or those outages of lesser impact which did not place the plant in a limiting condition but contributed to cumulative ECC system unavailability. The PASNY 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 PASNY's response to NUREG-0737, Item II.K.3.17, additional information is required.

A complete summary of each component outage in the ECC and diesel generator systems for the 5 years of plant operation through 1980. For each outage, include the date, duration, and cause, the ECC or diesel generator system, train, and component involved, and corrective action taken. Include outages for surveillance testing and planned, unplanned, or preventive maintenance.

REFERENCES

1. J. P. Bayne  
Letter to D. G. Eisenhut (NRR)  
Subject: Post-TMI Requirements  
December 30, 1980
  
2. "Clarification of TMI Action Plan Requirements"  
NRC, January 1980  
NUREG-0737