

August 8, 1983

Docket No. 50-29
LS05-83-08-008

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Mr. James A. Kay
Senior Engineer - Licensing
Yankee Atomic Electric Company
1671 Worcester Street
Framingham, Massachusetts 01701

Dear Mr. Kay:

SUBJECT: REVIEW OF TMI ITEM II.K.3.17, REPORT ON OUTAGES OF ECCS SYSTEMS
Yankee Nuclear Power Station

The TMI Action Item II.K.3.17 required that licensees submit a report detailing outage dates and length of outage for all ECC systems for the last five years of operation. We have completed our review of your submittal and a copy of our Safety Evaluation is enclosed for your information.

We have concluded that the requirements of NUREG-0737, Item II.K.3.17 have been met. Therefore, this completes our review of TMI Action Item II.K.3.17 for your facility.

Sincerely,

Original signed by

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
Safety Evaluation

cc w/enclosure:
See next page

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OFFICE	DL: ORB #5	DL: ORB #5					
SURNAME	JLyons:cc	DCrutchfield					
DATE	8/5/83	8/8/83					

Mr. James A. Kay

- 2 -

August 8, 1983

cc

Mr. James E. Tribble, President
Yankee Atomic Electric Company
1671 Worcester Road
Framingham, Massachusetts 01701

Chairman
Board of Selectmen
Town of Rowe
Rowe, Massachusetts 01367

U. S. Environmental Protection
Agency
Region I Office
ATTN: Regional Radiation Representative
JFK Federal Building
Boston, Massachusetts 02203

Resident Inspector
Yankee Rowe Nuclear Power Station
c/o U.S. NRC
Post Office Box 28
Monroe Bridge, Massachusetts 01350 -

Dr. Thomas E. Murley, Regional Administrator
Nuclear Regulatory Commission, Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Robert M. Hallisey, Director
Radiation Control Program
Massachusetts Department of Public Health
600 Washington Street, Room 770
Boston, Massachusetts 02111



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

YANKEE NUCLEAR POWER STATION

TMI ACTION PLAN ITEM II.K.3.17

REPORT ON OUTAGES OF EMERGENCY CORE COOLING SYSTEMS

1.0 INTRODUCTION

The TMI Action Item II.K.3.17 states that the licensees (of all light water reactors) should submit a report detailing outage dates and lengths of outages for all ECC systems for the last five years of operation. The report should also include the causes of the outages. The clarification of this requirement states that the information provided will be used by the staff to determine if a need exists for cumulative outage time requirements in the Technical Specifications, and also states that licensees should propose Technical Specifications or changes to improve availability of ECCS equipment if needed.

2.0 EVALUATION

The licensee's report has been reviewed by our consultant, Franklin Research Center (FRC), under a technical assistance contract. FRC has compared the licensee's historical unavailability of ECCS equipment with performance throughout the industry. A copy of FRC's Technical Evaluation Report is attached. Based on the reports from all light water reactors, FRC has developed a characterization of ECC system unavailability for the entire industry. FRC then compared the ECC system unavailability for individual plants with the average for all plants. FRC has concluded that this licensee has met the requirements of Item II.K.3.17. We agree with this conclusion.

We have considered the results of the FRC review in order to determine the need for cumulative outage time Technical Specifications. We have not determined definitely whether there is need for a cumulative outage time requirement in the Technical Specifications. The determination of any need for modification of allowed ECCS equipment outage periods should be most rationally based on the risk reduction produced by a change to allowed ECCS equipment outage periods in the Technical Specifications, together with the impacts produced by the change. These considerations are part of a generic technical activity (B-61) and will be pursued separately by the NRC staff.

However, we have attempted to determine, on an interim basis, whether there is a need for cumulative outage time requirement, by comparing the ECCS unavailability of a particular plant to the average of that of all plants. If the ECCS unavailability of a particular plant did not significantly exceed the average, then we considered it acceptable, and did not require modifications to the Technical Specifications. If, on the other hand, a plant exhibited a cumulative ECCS outage time appreciably in excess of the average, it was looked at more closely.

3.0 CONCLUSION

We conclude that for this plant the requirements of NUREG-0737, Item II.K.3.17 have been met. We further conclude that for this plant there is no need for cumulative outage time Technical Specifications at this time.

4.0 ACKNOWLEDGEMENT

The principal contributor to this Safety Evaluation was E. Chow.

Attachment:

Technical Evaluation Report (TER)
by Franklin Research Center (FRC)

Dated: August 8, 1983