

JUL 22 1971

Niagara Mohawk Power Corp.

ATTN: Mr. Thomas J. Brosnam

Vice President and Chief Engineer

300 Erie Boulevard, W.

Syracuse, New York 13202

Gentlemen:

On June 19, 1971, the AEC adopted interim acceptance criteria for the performance of emergency core cooling systems (ECCS) in light-water nuclear power plants. A copy of the Commission's interim policy statement on this matter is enclosed for your information. In accordance with Section IV C.1(a) of the policy statement, you are requested to submit an analysis of the performance of the ECCS presently installed in Nine Mile Point using methods equivalent to the evaluation model in Appendix A, Part 2 of the policy statement as soon as practicable, but not later than October 1, 1971, to confirm that the performance of the ECCS is in compliance with the criteria of Section IV.A and B of the statement. We have discussed this request with representatives of the General Electric Company and we understand that analyses using this model have been or are being performed for your plant.

The information that we need regarding these analyses is outlined below.

1. Provide curves of peak clad temperature and percent clad metal-water reaction as a function of break size for the various combinations of ECC subsystems evaluated by using single failure criteria equivalent to those indicated in Table 2-1 of the topical report; "Loss-of-Coolant Accident and Emergency Core Cooling Models for General Electric Boiling Water Reactors", NEDO-10329. A discussion should be included showing the justification for the ECC subsystem combinations used in the evaluation.
2. For several breaks that typify small, intermediate and large breaks, provide curves of (a) peak fuel clad temperature for various rod groups, (b) core flow, (c) fuel channel inlet and outlet quality, (d) heat transfer coefficients, (e) reactor vessel water level, and (f) minimum critical heat flux ratio (MCHFR), all as functions of time. Indicate the time that rated core cooling flow is initiated, the time the fuel channel becomes wetted based upon item 4 of Appendix A, Part 2, and the time that the temperature transient is terminated.

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3. For the analyses performed in 1 and 2 above, discuss the range of peaking factors studied and the basis for selecting the combination that resulted in the most severe thermal transient. Curves of peak clad temperature vs time for the range of peaking factors studied should be included.
4. Discuss in detail any deviations in the evaluation model used in the foregoing studies from that described in Appendix A, Part 2 of the Commission's interim policy statement.

When this information has been prepared please send us 60 copies. When we have completed our review of the Nine Mile Point ECCS we will contact you regarding the results of our evaluation.

Sincerely,

Original Signed by
Peter A. Morris

Peter A. Morris, Director
Division of Reactor Licensing

Enclosure:
AEC Interim Policy Statement

cc: Arvin E. Upton, Esq.
LeBoeuf, Lamb, Leiby & MacRae
1821 Jefferson Place, N.W.
Washington, D. C. 20036

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