JUN 28 1974

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Docket No. 50-220

Niagara Mohawk Power Corporation
ATTN: Mr. Philip D. Raymond
Vice President - Engineering
300 Erie Boulevard West
Syracuse, New York 13202

Gentlemen:

Enclosed for your information is a copy of our evaluation dated February 8, 1972, of the Niagara Mohawk Power Corporation response to the AEC Policy Statement on Interim Acceptance Criteria for Emergency Core Cooling Systems for Light Water Reactors. As the enclosure shows, our evaluation of the Nine Mile Point Unit 1 conformance to these criteria was based on our evaluation of the Oyster Creek (Docket No. 50-219) conformance with these criteria. A review of our records shows that we did not provide a copy of our evaluation to you.

Sincerely,

/s/

Karl R. Goller, Assistant Director
for Operating Reactors
Directorate of Licensing

Enclosure:
Evaluation dtd. 2/8/72

cc w/encl:
See attached

MISC

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| SURNAME | CDeBevec:esp | DLZiemann | KRGoller | VStello | | |
| DATE | 6/28/74 | 6/28/74 | 6/28/74 | 6/28/74 | | |

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cc w/encl:
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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

FEB 3 1972

D. L. Ziemann

Files (Docket No. 50-220)
THRU: D. L. Ziemann, Chief, ORB #2, DRL

EVALUATION OF NIAGARA MOHAWK RESPONSE TO ECCS INTERIM POLICY STATEMENT REGARDING NINE MILE POINT

Introduction

In response to our letter dated July 22, 1971, Niagara Mohawk Power Corporation submitted, on August 20, 1971, the requested analysis of the performance of the emergency core cooling system (ECCS) presently installed in the Nine Mile Point (NMP) Unit 1 facility.

Evaluation

Since NMP was initially licensed to operate on August 22, 1969, the applicable Interim Acceptance Criteria consist of Sections IV A, B, and C1(a) of the Policy Statement. This is the same as that applicable to the Oyster Creek (OC) plant (Docket No. 50-219) and the NMP and OC licensees responded with similar reanalyses because of the overall similarity of the two facilities. The OC reanalysis was submitted by Jersey Central Power and Light Company on September 3, 1971, and subsequently evaluated by DRS in their report dated October 29, 1971. We requested DRS to simultaneously evaluate the NMP submittal on September 15, 1971 (Technical Assistance Request No. ORB-2-19). In view of the above, our evaluation of the NMP ECCS analysis is based on comparison with the OC reanalysis and the DRS evaluation which found it acceptable as listed below.

1. The NMP and OC plants are the same in all salient respects. They are non-jet pump BWRs having redundant core spray cooling systems, redundant ~~auto-relief~~ systems, redundant emergency condenser systems, and redundant onsite emergency power sources for their ECCS.

2. The operation of ~~these systems at~~ NMP and OC under normal and emergency conditions as required by the respective Technical Specification is the same in ~~all essentials~~.

3. The ECCS reanalyses for NMP and OC are the same in all respects regarding combinations of systems operating, range of break sizes and analytical models.

4. The calculated peak clad temperatures for both plants are 2237°F for the design basis loss-of-coolant accident and 2220°F for the worst case intermediate size break.

Conclusion

We conclude that the ECCS at NMP is acceptable for the current licensed power level of 1850 MWt.

C. J. DeBevec
Operating Reactors Branch #2
Division of Reactor Licensing

Enclosure:
DRS Review of OC

cc: DJSkovholt, DRL
RHVollmer, DRL
DLZiemann, DRL
CJDeBevec, DRL
RMDiggs, DRL

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

OCT 29 1971

Peter A. Morris, Director
Division of Reactor Licensing

OYSTER CREEK AMENDMENT 67 — ECCS REANALYSIS

Enclosed is our response to your request of August 8, 1971 for technical assistance on the ECCS reanalysis of Oyster Creek Amendment 67. Further details and discussion of our evaluation can be provided if needed.

Edson G. Case, Director
Division of Reactor Standards

Enclosure:
Oyster Creek Review

cc w/encl:
S. Hanauer, DR
D. Skovholt, DRL
R. Schemel, DRL
T. Wambach, DRL

The non-jet pump feature of the Oyster Creek plant requires that the spray cooling mode alone be sufficient to maintain a properly cooled core. In GE jet pump plants, flooding from ECCS water accumulation will also terminate the loss-of-coolant accident temperature transient. As a result of having only core spray, the temperatures are above 2000°F for a large range of the break spectrum and remain at these temperatures for relatively longer periods of time than jet pump plants. However, according to the calculations presented in the amendment, the estimated peak temperatures are within the permissible temperature limit of 2300°F. We have also evaluated the Oyster Creek reanalysis of the ECCS to determine conformance with the AEC Interim Policy Statement on ECCS. We find that the evaluation model is acceptable and that all of the criteria are met. We conclude that the ECCS at Oyster Creek is acceptable at the power level of 1930 MWt.