

SAFETY EVALUATION REPORT
SUSCEPTIBILITY OF SAFETY-RELATED
SYSTEMS TO FLOODING FROM FAILURE OF
NON-CATEGORY I SYSTEMS FOR
INDIAN POINT NUCLEAR POWER STATION UNIT 2

I. INTRODUCTION

By letter to the Consolidated Edison Company of New York (CECNY) dated September 26, 1972 the Nuclear Regulatory Commission (NRC) requested a review of nuclear generating plants to determine whether the failure of any non-category I (seismic) system could result in a condition, such as flooding, that might adversely affect the performance of safety-related equipment. By letter dated October 31, 1972, and subsequent letters (see References in enclosure), the Consolidated Edison Company submitted the additional information requested by the NRC as well as descriptions of various plant changes implemented to mitigate the effects of failure of non-Category I systems on safety-related equipment.

A continuing review of potential sources and consequences of flooding at Indian Point Unit 2 was conducted by the CECNY between 1972 and 1975. Initially, at the request of NRC in September 1972, the CECNY reviewed several water systems as sources of flooding. Following the issuance of more descriptive guidelines for review of flooding from failure of non-Category I systems in December 1974, the facilities were again reviewed on a broader bases. The potential sources of flooding were described; and safety-related equipment which could be damaged by flooding were identified, and measures taken to minimize the effects of flooding and to protect safety-related equipment were reviewed.

II. EVALUATION

The enclosed technical evaluation was prepared by us by Lawrence Livermore National Laboratory as part of our technical assistance program.

III. CONCLUSION

The consultant has reviewed the licensee's submittals for Indian Point Unit 2 to determine if postulated failures of non-Category I (seismic) components could adversely affect the operability of safety-related equipment. The consultant's findings, with which we agree, indicate a degree of vulnerability of some safety-related equipment due to postulated flooding from some non-Category I (seismic) sources. To minimize this vulnerability, the licensee has performed modifications in the form of installing water level switches/alarm installing flap panels in doors to the primary auxiliary building and the auxiliary feed pump room, installing an alternate safe shutdown capability, and has instituted operating procedures to provide assurance of proper operator action in the event of flooding.

8101150 670