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Regulatory

File Cy.

1114 CIVIL ENGINEERING BUILDING  
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Received with 5-1-71

7 May 1971

DRAFT  
OF  
FINAL SAFETY ANALYSIS REPORT  
FOR

THREE MILE ISLAND NUCLEAR STATION -- UNIT 1

METROPOLITAN-EDISON COMPANY AND JERSEY CENTRAL POWER AND LIGHT COMPANY

AEC Docket No. 50-289

by

N. M. Newmark and W. J. Hall



After our review of the FSAR, including Amendments through No. 19, and with information made available to us concerning Amendment 20, we believe that the design of the Three Mile Island Nuclear Station, Unit 1, can be considered adequate in terms of provision for safe shutdown for a Design Basis Earthquake of 0.12g maximum horizontal ground acceleration, and capable otherwise of withstanding the effects of an Operating Basis Earthquake of half this intensity.

Our review was based on consideration, among other things, of the design criteria and results of analyses presented by the applicant for Reactor Internals, Reactor Buildings, Buried Piping, Other Nuclear Piping and Equipment, and Critical Items of Control and Instrumentation.

The Aircraft Impact Design described by the applicant was also taken into account in our review.

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In general, the procedures used and the designs developed are in accord with the state of the art. We conclude that the design incorporates an acceptable

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range of margins of safety for the hazards considered, although final statements on some matters must remain open until further documentation is made available to us for review, including Amendment 20, Appendix 4C, and BAW Topical Report 1003.

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