



UNITED STATES
NUCLEAR REGULATORY COMMISSION -
WASHINGTON, D. C. 20545

FEB 9 1977

MEMORANDUM FOR: Domenic B. Vassallo, Assistant Director for Light
Water Reactors, DPM

FROM: William P. Gammill, Assistant Director for Site
Technology, DSE

SUBJECT: SUPPLEMENT NO. 4 TO THE SER

PLANT NAME: Indian Point No. 3
LICENSING STAGE: OL
PROJECT NUMBER: 50-286

The decision of the Atomic Safety and Licensing Appeal Board to grant the licensees' request for postponement of installation of the expanded microearthquake monitoring network until a hearing can be convened on the matter has required the staff to consider whether, in view of the conditions placed on the operating license for the Indian Point Unit 3, continued operation of the unit in the interim poses any undue threat to the health and safety of the public. We have considered the impact of continued operation.

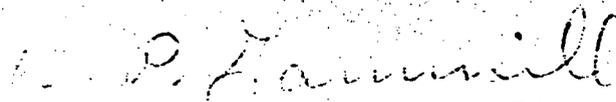
In Supplement No. 3 to the SER, published in April, 1976, we took the position that the lack of evidence of geologically young movement on the Ramapo Fault system and the absence of preferential clustering of historic earthquake activity in the region, along the fault system supported the conclusion that the fault is not capable within the meaning of Appendix A to 10 CFR Part 100. We considered our original position that the design of the Indian Point units for the largest historic earthquake within the Piedmont-New England tectonic province that is not associated with tectonic structure provides reasonable conservatism. We also took the position that a confirmatory program directed toward a better definition of the fault system, a determination of the history of movement on it, and a clearer understanding of the tectonics in its vicinity was needed. We took this position because of the location of the March 11, 1976, New Jersey and the 1951 Rockland County, New York earthquakes near the fault, and because serious questions had been raised by respected and knowledgeable seismologists about the possibility that the fault may localize earthquake activity.

Data to satisfactorily resolve this question were not available. Accordingly, we requested that the operating license for Unit 3 be conditioned to require the licensees to conduct additional geologic

seismologic investigations. Conditions were imposed to require additional geologic studies and an expansion of existing micro-earthquake monitoring network. The results of the geologic studies were to be submitted for NRC review by April 1, 1977. Microearthquake studies were to be completed within three years following the granting of operating licensing permit for Unit 3.

We concluded that the units could be operated during the interim investigation period without undue risk to the health and safety of the public. We based this conclusion on our assessment that the probability is extremely remote that during the period of investigation the units would experience earthquake ground motion larger than that for which they were designed, even if our conclusion that the Ramapo fault is not capable should be incorrect. The level of earthquake activity in the region of the site is relatively low and the maximum regional earthquake is an Intensity VII, which is used to establish the seismic design basis for Unit 3.

In our reconsideration of this position, we have informally reviewed the investigations completed by the licensees to date. We found no evidence that would alter our previous conclusion that the Ramapo fault is not capable within the meaning of Appendix A to 10 CFR Part 100. We, therefore, continue to consider it unlikely that the design ground motion for the Indian Point units will be exceeded in any short time interval. Accordingly, we recommend that Unit 3 be continued in operation during the interval required to resolve the matter of whether or not the microearthquake network should be expanded.



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