

50-346

AUG 29 1975

Voss A. Moore, Assistant Director
for Light Water Reactors, Group 2, RL

SER INPUT - GEOLOGY, SEISMOLOGY, AND FOUNDATION ENGINEERING

PLANT NAME: Davis-Besse Unit No. 1
LICENSING STAGE: OL
DOCKET NUMBER: 50-436
MILESTONE NO.: 24-32
RESPONSIBLE BRANCH: LWR 2-3
REQUESTED COMPLETION DATE: 8/29/75
APPLICANTS RESPONSE DATE NECESSARY FOR
NEXT ACTION PLANNED ON PROJECT: N/A
DESCRIPTION OF RESPONSE: N/A
REVIEW STATUS: N/A

Our input to the SER on the geology, seismology, and foundation engineering for the Davis-Besse Unit No. 1 follows:

The geology, seismology, and foundation engineering for the Davis-Besse Nuclear Plant site was reviewed at the construction permit stage of licensing for Unit No. 1 by NRC staff and their advisors in the U. S. Geological Survey. The results of the reviews are included in our Safety Evaluation Report dated November 2, 1970, in U. S. G. S. report dated August 4, 1970, and in the Coast and Geodetic Survey report dated July 15, 1970, which are appended to the Safety Evaluation Report.

The Tymochtee Formation upon which the plant structures were constructed was, during initial site exploration, found to contain solution cavities in the vicinity of the site. Although cavities were not encountered in the plant area, the applicant committed to perform a bedrock verification and remedial treatment program. Based on 71 borings and 198 rock probes in the plant area, on bedrock surface mapping during construction, and on the absence of geophysical anomalies in the bedrock foundations, the applicant concluded that there is no solutioning activity that would be a hazard to safe plant operation. The remedial treatment part of the program was not found necessary.

No further geological or seismological information has been received since the 1970 safety evaluation report was written, in which we and

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our U. S. G. S. advisors concluded that a ground acceleration of 0.15g for the safe shutdown earthquake and 0.08g for the operating basis earthquake are acceptable, and that there are no known faults within the site boundary. There is no reason to change our earlier conclusion stated above.

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Harold R. Denton, Assistant Director
for Site Safety
Division of Technical Review
Office of Nuclear Reactor Regulation

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DATE →	8/28/75	8/28/75	8/29/75	8/29/75	