

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Seiden Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 666-6911

June 26, 1984

Docket No. 50-423
B11248

Director of Nuclear Reactor Regulation
Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

- References:
- (1) B. J. Youngblood to W. G. Council, Millstone Nuclear Power Station, Unit No. 3, Draft Safety Evaluation Report (DSER), dated December 20, 1983.
 - (2) B. J. Youngblood to W. G. Council, Request for Additional Information for Millstone Nuclear Power Station, Unit No. 3, dated January 16, 1984.
 - (3) W. G. Council to B. J. Youngblood, Transmittal of Responses to Requests for Additional Information and Draft SER Open Items (Geotechnical Issues), dated March 27, 1984.

Dear Mr. Youngblood:

Millstone Nuclear Power Station, Unit No. 3
Technical Review Meeting Summary
Geotechnical Confirmatory Items

On June 13, 1984 representatives from Northeast Utilities Service Company (NUSCO) and Stone & Webster Engineering Corporation (SWEC) met with your Mr. John Chen, Structural and Geotechnical Engineering Branch (SGEB) to discuss the status and resolution of all remaining open and confirmatory geotechnical items, as identified in FSAR review questions, the Draft SER and/or in subsequent meetings with Mr. Chen (References 1, 2 and 3).

Attachment I is a summary of the meeting, outlining items requiring NUSCO action. NUSCO has committed to provide the additional information requested as it becomes available, and on this basis it was agreed that these items shall be defined as confirmatory.

B407090160 B40626
PDR ADOCK 05000423
E PDR

13001
11

ATTACHMENT I

STRUCTURAL AND GEOTECHNICAL ENGINEERING BRANCH GEOTECHNICAL OPEN AND CONFIRMATORY ITEMS MEETING SUMMARY - JUNE 13, 1984

- I. Soil Structure Interaction (Question 241.5)
 - A. Documentation to determine the as-built conditions of the extent of fill placed under the EGE building will be checked.
 - B. At the request of Mr. Chen the center footing of the EGE will be assumed to be founded on structural fill to elevation 3.5 feet. As a sensitivity study, the effect of this assumption will be examined to verify that the calculated soil amplification will not be affected.
- II. West Retaining Wall (Question 241.18)
 - A. For the existing analysis the following will be provided:
 1. the shear capacity and shear stress at the base of the wall
 2. the coefficient of friction between concrete and rock
 3. the factor of safety against overturning and sliding
 - B. A sensitivity analysis based on the following will be performed:
 1. $K_0 = 0.7$ for soil from the bottom of the wall to the top of counterforts (bottom of wall footing at elevation -25'0" actual condition).
 2. $K_0 = K_a$ for soil from top of counterforts to grade.
 3. neglecting hydrostatic pressure (both sides).
 - C. From the above analysis the following information will be provided:
 1. the shear capacity and shear stress at the base of the wall
 2. the coefficient of friction used between concrete and rock
 3. the factor of safety against overturning and sliding.
- III. Liquefaction Analysis of Sloping Shorefront (Question 241.8)
 - A. A two-dimensional dynamic analysis was performed and submitted to NRC as requested in Q241.8 to confirm the stability of the beach sand deposits. This analysis concludes that liquefaction of the shorefront slopes will not occur and that liquefaction of the intake channel bottom would not affect the integrity of the shorefront slopes adjacent to the circulating and service water pumphouse.

Mr. Chen has requested that NUSCO demonstrate that even if liquefaction of the shorefront slopes occurs that this would not impact safe shutdown. NUSCO has committed to provide a sensitivity study demonstrating that even if liquefaction occurred the flow of water into the service water inlet would not be restricted and would not result in a condition that would make the service water system inoperable.

- IV. Based on NUSCO's commitment to supply the additional information requested on all issues listed above it was agreed that these items shall be defined as confirmatory.

Geotechnical Review Meeting

June 13, 1984

List of Attendees

<u>Name</u>	<u>Organization</u>
Carol J. Shaffer	NUSCO - Licensing
E. L. Doolittle	NRC - Project Manager
John T. Chen	NRC - NRR - SGEB
Nilesh C. Choksi	NRC - NRR - SGEB
W. R. Rotherforth	NUSCO - Gen. Civil Engineering
Paul F. Martin	SWEC - Structural Engineering
Frank S. Vetere	SWEC - Geotechnical Engineering
Lyman Heller (part-time attending)	NRC - NRR - SGEB
Jeff Kimball	NRC - NRR - GSB