



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 11, 1992

Docket No. 50-285

LICENSEE: Omaha Public Power District
FACILITY: Fort Calhoun Station, Unit 1
SUBJECT: SUMMARY OF MEETING HELD ON APRIL 23, 1992, WITH OMAHA PUBLIC
POWER DISTRICT TO DISCUSS ALTERNATE SEISMIC CRITERIA METHODOLOGY
(ASCM) FOR FORT CALHOUN STATION

The staff met with Omaha Public Power District (OPPD) on April 23, 1992, at One White Flint North to discuss the remaining unresolved issues for NRC approval of OPPD's ASCM for Fort Calhoun Station. The list of meeting attendees is enclosed.

OPPD began the meeting by reviewing their proposed solution to six previously resolved items to ensure that both sides still agree on the resolution. OPPD then discussed the last mechanical engineering issue, heating, ventilation, and air conditioning Design Basis Criteria and the staff agreed with OPPD's proposed solution of supplying more detail and quantitative information and comparisons of the ASCM to the original design basis for normal, upset, emergency, and faulted conditions.

The next issue discussed was Seismic Response Spectrum Peak Broadening. OPPD's proposal will have as input the ground motion time history whose spectrum envelopes the Housner Spectrum anchored at a Peak Ground Acceleration of 0.17g for Safe-Shutdown Earthquake. For the three cases of soil properties, the Best Estimate (BE), the Lower Bound (LB) (.7BE) and Upper Bound (UB) (1.3BE), the Floor Response Spectra (FRS) used will be obtained from the envelope of the UB FRS, the LB FRS, and the BE FRS broadened by +15% and -15% of the BE FRS. New Time Histories (T-H), for use in calculating FRS for OPPD's ASCM, will be acceptable to the NRC provided that they envelope the Design Basis Ground Response Spectra and have an acceptable Power Spectral Density and that documented evidence of this be submitted to the NRC for review. The previously used T-Hs, which were already documented to be acceptable, can also be used again by OPPD.

The next item was Overturning and Sliding and the staff was satisfied with OPPD's presentation to demonstrate that the pile system design accounted for overturning and sliding.

OPPD then discussed where they will provide additional information regarding accidental torsion and the method of generating spectra for the ASCM. NRC accepted their proposal; however, the staff requested that the final report include an explanation and statement that there is no soil variation around the site which could affect this issue.

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The last item was soil liquefaction. OPPD agreed to provide additional information on soil compaction and liquefaction. The NRC also requested the results of the last inspection for settling and for OPPD to verify whether a surveillance program exists to check elevation levels for subsidence. Also, OPPD agreed to verify that there have not been any changes in conditions since the NRC Safety Evaluation Report (SER) written in 1973. This included no changes in soil properties, structural or underground construction which would affect the SER.

OPPD has proposed sending in the final report by May 29, 1992, for NRC evaluation.

Paul W. Wigginton
for David L. Wigginton, Senior Project Manager
Project Directorate IV-1
Division of Reactor Project - III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
Meeting Summary

cc w/enclosure:
See next page

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Fort Calhoun Station, Unit No. 1

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ENCLOSURE

MEETING BETWEEN NRC STAFF AND OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION, UNIT 1

ALTERNATE SEISMIC CRITERIA METHODOLOGY (ASCM)

April 23, 1992

MEETING PARTICIPANTS

<u>NAME</u>	<u>ORGANIZATION</u>
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R. Rothman	NRR/DET/ESGB
R. Pichumani	NRR/DET/ESGB
S. Bloom	NRR/PDIV-1
A. Lee	NRR/DET/EMEB
R. Phelps	OPPD/Manager - Design Engineering Nuclear
R. Short	OPPD/Manager - Nuclear Licensing/Industry Affairs
R. Lewis	OPPD - Mechanical
M. Manrique	ABB Impell
S. Dermitzakis	ABB Impell
A. Banerjee	Stone & Webster

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ORIGINAL SIGNED BY: *Paul O'Connor*
David L. Wigginton, Senior Project Manager
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Division of Reactor Project - III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
Meeting Summary

cc w/enclosure:
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