



CONNECTICUT YANKEE ATOMIC POWER COMPANY

BERLIN, CONNECTICUT

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September 15, 1980

Docket No. 50-213
A01161

Director of Nuclear Reactor Regulation
Attn: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

- References: (1) D. G. Eisenhower letter to W. G. Council dated August 4, 1980.
(2) W. G. Council letter to D. M. Crutchfield dated August 5, 1980.
(3) W. G. Council letter to D. L. Ziemann dated January 17, 1980.

Gentlemen:

Haddam Neck Plant
Seismic Reevaluation Program

In Reference (1), Connecticut Yankee Atomic Power Company (CYAPCO) was requested to provide programmatic details of the seismic evaluation effort and to provide justification for continued operation in the interim until the program is complete. CYAPCO has reviewed the specific requests delineated in Reference (1) and has concluded that all aspects of the seismic reevaluation program were addressed in Reference (2). The scope, schedule, and status of CYAPCO's program regarding:

- (1) The integrity of the reactor coolant pressure boundary,
- (2) The integrity of fluid and electrical distribution systems related to safe shutdown and engineered safety features, and
- (3) The integrity and functionability of mechanical and electrical equipment and engineered safety features, including containment, were presented.

It is reiterated that significant progress has been achieved, in that modeling of structures is approximately 75% complete, modeling of the reactor coolant system is approximately 70% complete, and the results of a study by Weston Geophysical to develop a site-dependent response spectra for the Haddam Neck Plant were docketed.

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A comparison of the Staff requests of Reference (1) with CYAPCO's program discussed in Reference (2) reveals two issues which merit further attention at this time. As currently formulated, the analytical portion of CYAPCO's program is scheduled for completion by January 1, 1982, in conformance with Reference (1). Furthermore, CYAPCO intends to initiate certain structural modifications aimed at increased factors of safety in the primary auxiliary building and the screenwell prior to the end of 1980. Should other modifications be found necessary to upgrade seismic capabilities or facilitate seismic evaluations, these will also be implemented as soon as practical rather than waiting for completion of the analytical program.

However, Reference (2) noted that all modifications cannot be scheduled for completion until the early, 1983 refueling outage. CYAPCO maintains that this is the earliest viable date for ultimate resolution of the seismic issue, primarily because of the timing of refueling outages. The Staff has previously recognized the desirability of coordinating major upgrading projects in conjunction with planned refueling outages. Current projections indicate that a refueling outage is not planned in the calendar year 1982, but one is scheduled for early 1983. This schedular delay of several months beyond the request of Reference (1) is justified in light of the significant financial impact of lengthy outages independent of refuelings.

The second issue which merits further discussion is that of the site-specific spectra. Reference (2) provided a detailed basis for CYAPCO's proposed spectrum. The conservatism inherent in the methodology used to develop this spectrum are extensive, and conformance of plant structures, systems, and components to it provides adequate assurance that the facility will be maintained in a safe condition in the event of seismic occurrence. To facilitate comparison of the Staff's recommended spectrum provided in Attachment 1 to Reference (1), and CYAPCO's spectra presented in Reference (2), Attachment 1 to this letter is provided. It can be readily observed that the two are not significantly different; for certain frequencies, CYAPCO's ground response spectrum is more conservative. Reference (1) noted that the Staff first requested development of a seismic reevaluation program some 20 months ago. After protracted meetings, discussions, evaluation of input from consultants, etc., Reference (1) forwarded a spectrum characterized as "not finalized". At the same time, the Staff continues to press for completion of this effort, even though the ground rules are not established. CYAPCO's evaluation of these conflicts resulted in a decision to utilize the Reference (2) spectra data in analytical work beginning March 28, 1980. It is acknowledged that the differences in the spectra are not substantial. Nonetheless, use of the NRC's spectrum would require a considerable amount of rework with respect to finalizing calculations, report preparation, generation of time histories, etc. This rework would, therefore, invalidate the schedules presented above; approximately six months of analytical work would require reevaluation. Resources are not available to accomplish this task, especially in light of the minimal differences in spectra.

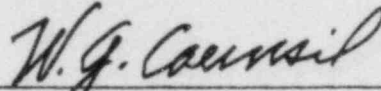
CYAPCO intends to continue implementation of the program detailed in Reference (2), and requests written concurrence with the spectra which have been in use for many months. Should this letter, in conjunction with Reference (2), not be sufficient to obtain that written concurrence, we request prompt identification of Staff concerns such that they can be resolved.

CYAPCO concludes that the inherent seismic resistance of a well designed industrial facility such as the Haddam Neck Plant, in conjunction with the progress made to date with the seismic reassessment, the plans for expeditious completion of that reassessment, and the extremely remote possibility for an earthquake of damaging size in the Haddam Neck area constitute justification for continued reactor operation until program completion.

We trust you find the above information responsive to your request pursuant to 10CFR50.54(f), and sufficient to concur that the provisions of DPR-61 continue to be fulfilled.

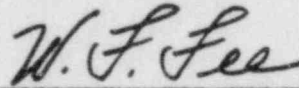
Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY



W. G. Council
Senior Vice President

By:



W. F. Fee
Executive Vice President

Attachment

STATE OF CONNECTICUT)

) ss. Berlin

Sept. 15, 1980

COUNTY OF HARTFORD)

Then personally appeared before me W. F. Fee, who being duly sworn, did state that he is Executive Vice President of Connecticut Yankee Atomic Power Company, a Licensee herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Licensees herein and that the statements contained in said information are true and correct to the best of his knowledge and belief.

Sheila M. Oates
Notary Public

My Commission Expires March 31, 1981

ATTACHMENT 1

HADDAM NECK

