

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
NEW YORK WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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May 7, 1979

Docket No. 50-336

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Director of Nuclear Reactor Regulation
Attn: Mr. R. Reid, Chief
Operating Reactors Branch #4
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) W. G. Council letter to R. Reid, dated April 26, 1979.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
Additional Information, CEA Guide Tube Inspections

In Reference (1), Northeast Nuclear Energy Company (NNECO) presented the results of the guide tube sleeve pull tests which had been conducted, and concluded that the fuel assemblies were suitable for continued use during Cycle 3 operation. That conclusion remains unchanged, however, some additional information has been obtained and is presented below.

One sleeve out of a total of 45 tested to date failed to meet the criterion that there should be no axial sleeve movement at cold conditions when subjected to the pull force previously identified. Specifically, a sleeve in a discharge fuel assembly moved approximately 0.25 inches when the pull force was four pounds less than the specified test criterion.

The test criterion was established as a conservative upper limit for CEA drag force and on the axial force due to flow. However, recent site tests with fuel assemblies containing sleeves and CEA's irradiated for 2 cycles indicated a maximum CEA drag force of only 20% of the test force (for all 5 fingers) corroborating data previously obtained at Combustion Engineering. This drag force value is considerably lower than the present requirement for a single sleeve. Therefore, the fact that one sleeve moved at a force four pounds less than the criterion is considered to be technically acceptable in view of the conservative limit which was established relative to the actual CEA drag force. Further, the load required for movement in the hot condition would be expected to increase significantly since differential thermal expansion causes an intimate contact between the sleeve and guide tube that was not present in the test.

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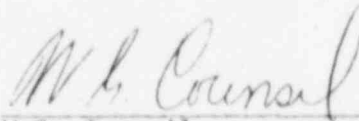
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It is also noted that the force was increased an additional 30 pounds beyond the force at which the small axial displacement occurred. No further axial movement was noted.

In summary, both NNECO and Combustion Engineering have concluded that the fuel assemblies are acceptable for use through Cycle 3.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in cursive script, appearing to read "W.G. Council", written over a horizontal line.

W.G. Council
Vice President