

December 18, 1979

Docket No. 50-213

Director of Nuclear Reactor Regulation Attn: Mr. D. L. Ziemann, Chief Operating Reactors Branch #2 U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Reference: (1) D. L. Ziemann letter to W. G. Counsil dated November 13, 1979.

Gentlemen:

Haddam Neck Plant
SEP Topic III-8.C
Irradiation Damage, Use of Sensitized Steel and Fatigue Resistance

In Reference (1), the NRC Staff transmitted the draft evaluation of SEP Topic III-8.C, and requested review of this material. CYAPCO's review has determined that the following portion of the evaluation, concerning brazes on the control rod "spider", requires revision to maintain factual correctness:

"The breakage of the control rod cluster assemblies was traced to a manufacturing defect. In each case, the break occurred in a brazed joint which connects a vane, from which control rods are suspended, to a central hub called a spider. The brazed joint in one assembly was examined in detail in a hot cell and found to have no braze material inside the joint, probably due to improper cleaning of the joint prior to brazing. The second failed joint had a similar appearance. It is not feasible to inspect these joints on all control rod assemblies for brazing deficiencies but all joints were visually inspected to verify the integrity of the assemblies before the reactor was restarted. Only two such joints have failed in all the operating reactors and there is no evidence that this condition is prevalent in these assemblies."

The last sentence in this paragraph should be deleted, and revised as follows:

In November, 1977, a third vane to hub failure was discovered on a RCCA. The mode of failure was concluded to be a poor braze bond between the vane and hub as experienced in earlier failures.

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Subsequent to these failures and similar failures experienced by other operating reactors, the manufacturer has revised its manufacturing and testing processes to assure that a quality braze is obtained at each vane to hub joint. There is no evidence that this condition is prevalent in these assemblies."

All other information is correct as gritten.

We trust you find the above information responsive to your request.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

W. G. Counsil Vice President

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