



CONNECTICUT YANKEE ATOMIC POWER COMPANY

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July 29, 1981

Docket No. 50-213  
B10238

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



Reference: (1) T. M. Anderson letter to D. G. Eisenhower, dated  
June 17, 1981.

Gentlemen:

Haddam Neck Plant  
Asymmetric LOCA Loads

By Reference (1), the Owners Group of Operating Utilities participating in the evaluation of the effects of asymmetric LOCA loads on the integrity of the primary reactor coolant system provided the NRC Staff with the following reports:

1. WCAP 9558, Revision 2, "Mechanistic Fracture Evaluation of Reactor Coolant Pipe Containing a Postulated Circumferential Through Wall Crack," May, 1981, Proprietary.
2. WCAP 9570, Revision 2, "Mechanistic Fracture Evaluation of Reactor Coolant Pipe Containing a Postulated Circumferential Through Wall Crack," May, 1981, Non-Proprietary.
3. WCAP 9787, Revision 0, "Tensile and Toughness Properties of Primary Piping Weld Metal for Use in Mechanistic Fracture Evaluation," May, 1981, Proprietary.
4. WCAP 9788, Revision 0. "Tensile and Toughness Properties of Primary Piping Weld Metal for Use in Mechanistic Fracture Evaluation," 1981, Non-Proprietary.

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The information provided in WCAP-9558, Revision 2 demonstrates that under the worst combination of loadings, including the effects of safe shutdown earthquake, a realistically postulated flaw will not propagate around the circumference of the pipe and cause a quillotine break.

WCAP-9787 presents the results of an investigation to determine the tensile and fracture toughness of representative reactor coolant system weld samples. It has been determined that the weld material properties fall within or above the scatter band of the properties of the base metal. Therefore, the conclusions presented in WCAP-9558, Revision 2 for base metal are equally applicable to weld material.

Connecticut Yankee Atomic Power Company (CYAPCO), on behalf of the Haddam Neck Plant, is a member of the Owners Group for Operating Utilities. CYAPCO has determined that the reports submitted by Reference (1) are applicable to the Haddam Neck Plant docket and should be regarded as our response to NRC Task Action Plan NRC-TAP-TOPIC-A-2.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY



W. G. Council  
Senior Vice President