

May 9, 1996

The Honorable Christopher J. Dodd  
United States Senator  
100 Great Meadow Road  
Wethersfield, CT 06109

Dear Senator Dodd:

I am responding to your letter to Mr. Dennis Rathbun, dated April 17, 1996, in which you forwarded a letter dated April 10, 1996, from your constituent, Rosemary Bassilakis of Haddam, Connecticut. Ms. Bassilakis expressed concerns about the level of tritium releases from the Haddam Neck Nuclear Plant, operated by Connecticut Yankee Atomic Power Company (the licensee). Since she is most concerned that large liquid tritium releases have had and will have adverse health effects on residents living along the effluent pathway, you requested the U.S. Nuclear Regulatory Commission (NRC) to advise you as to the reason why Haddam Neck has had high levels of tritium releases into the Connecticut River during its operating life.

On April 16, 1996, the NRC staff sent a letter to Ms. Bassilakis (enclosed) that answered her letter of March 9, 1996, regarding the tritium releases from Haddam Neck. In this letter, the NRC staff stated that the levels of tritium from Haddam Neck were generally higher than those of other plants because Haddam Neck fuel cladding has been made of stainless steel rather than zirconium alloys. Stainless steel is more permeable to hydrogen, of which tritium is an isotope, than zirconium. However, the tritium releases have remained within NRC's regulatory requirements under 10 CFR Part 20. The NRC staff also informed Ms. Bassilakis that the licensee is changing to fuel cladding that uses a zirconium alloy. This change is occurring in one-third core increments that began with operating cycle 17 in March 1992. The plant is currently in operating cycle 19, which began in March 1995, and only four stainless steel-clad fuel elements remain in the core. The NRC expects the effluent release statistics at Haddam Neck to show a decrease in tritium levels upon completion of this change.

I trust that this information responds to your request.

Sincerely,

Original Signed by  
James L. Milhoan  
James M. Taylor for  
Executive Director  
for Operations

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Enclosure: As stated

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