



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 24, 1979

NRC PDR

Docket No. 50-309.

Emil G. Garrett, Lt./Col. USA Ret.
P. O. Box 91
Stockton Springs, Maine 04981

Dear Colonel Garrett:

This is in response to your letter of July 11, 1979 requesting documents and information regarding Maine Yankee spent fuel storage.

The licensee's letter of November 22, 1978 and our response dated June 22, 1979 are enclosed. Other documents related to spent fuel storage at Maine Yankee, including the Final Safety Analysis Report and Amendment No. 11 to the license, are available for review at the NRC's Public Document Room in the Wiscasset Public Library.

Responses to your specific questions are as follows:

1. There are currently 433 spent fuel assemblies stored at Maine Yankee. There is approximately 1/2 ton of heavy metal per spent fuel assembly for a total of 216.5 tons. The estimated radioactive inventory is less than 3×10^8 curies. This estimate was determined using Table G.6 of NUREG 0404, "Draft Handling and Storage of Spent Light Water Power Reactor Fuels".
2. Total amounts of spent fuel to be stored may be estimated by assuming that approximately 1/3 of the core is discharged at each annual refueling outage. There are 217 fuel assemblies in the core and the next refueling outage is currently scheduled for the end of this year. The radioactive inventory of spent fuel in the storage pool at 30 days after shutdown for refueling outages through 1982 will be less than 6×10^8 curies. The activity of 72 assemblies at core shutdown is about 5.5×10^8 curies. This decays to about 2.8×10^8 curies at 30 days after shutdown.
3. There is no regulatory requirement for a full core discharge capability nor is the NRC staff aware of any compelling safety basis for requiring maintenance of this capability. Therefore Maine Yankee could operate without a full core discharge capability.

Lack of this discharge capability could, however be costly in terms of extended reactor outage time and man-rem exposure during repairs and inspections.

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4. Enclosure 3 presents the status of spent fuel storage at nuclear power plants as of June 30, 1979. The New England plants are:

Maine Yankee
Vermont Yankee
Yankee Rowe

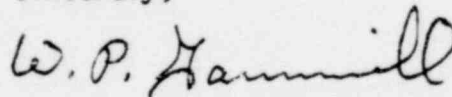
Pilgrim 1
Connecticut Yankee (Haddam Neck)
Millstone 1 & 2

From this table and the information provided in the table notation and response number 2 above, you can estimate the future spent fuel storage capacity at New England plants. At present storage of spent fuel from Maine Yankee is not authorized at any other reactor facility. Should a proposal be made to store Maine Yankee fuel at another reactor site, the NRC would review the proposal in accordance with the regulations.

5. Since the licensee has not proposed to construct a new spent fuel storage pool at Maine Yankee, we have not reviewed such a modification.
6. The NRC has not approved the Maine Yankee modified spent fuel pin storage concept for any operating power reactor. Please note that this concept was not proposed for NRC review by Yankee Atomic Electric Company or any other licensee.

We trust this information is responsive to your request.

Sincerely,



William P. Gammill, Acting Assistant Director
for Operating Reactor Projects
Division of Operating Reactors

Enclosures:

1. MYAPC ltr. dtd. 11/22/78
2. NRC ltr. to YAEC dtd. 6/22/79
3. Status of Spent Fuel Storage
Capability as of 6/30/79

cc: Mr. Robert H. Groce
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