

JAN 05 1984

- 1 -

The Honorable Judy C. Kany
Maine State Senate
Augusta, Maine 04333

Dear Ms. Kany:

Thank you for your letter of November 16, 1983 regarding alternatives for managing low-level radioactive waste. In view of your reference to our letter to Governor Earl of Wisconsin, we believe it is imperative to note that our response to Governor Earl was not a blanket endorsement of engineered above-ground storage but merely a clarification that it is not a prohibited activity. We will address each of your concerns individually.

1. Since over 90% of our waste is generated by our single nuclear power plant, we are considering as one option the possibility of on-site storage of the low-level waste for the life of the nuclear power plant. Would an amendment to Maine Yankee's license become necessary if it were to build such a long-term storage facility?

This question cannot be answered without actually reviewing the specifics of the proposal. If the proposed low-level waste storage facility is separate from the nuclear power facility, that is, if it has no impact on the safe operation of the reactor and is sited relatively remotely from the reactor, it would not require an amendment to the reactor license. Such a storage facility could be licensed and regulated by a State, if it is an Agreement State, or by NRC as a materials license in a non-Agreement state. If the proposed storage activity could impact on the safety of reactor operations or on an existing license condition or technical specification limit on the amount of waste storage, Maine Yankee's license may have to be amended. A copy of our Generic Letter 81-38 to reactor license holders and applicants has been enclosed to provide you additional information on storage of reactor-generated low-level radioactive wastes at power reactor sites. Please note that our Generic Letter does not support life of plant storage as a planned activity in lieu of off-site disposal as low-level waste is generated. Rather, the Generic Letter provides authority to temporarily store low-level waste in the event that disposal capacity is temporarily unavailable.

8404110536 840316
PDR COMMS NRCC
CORRESPONDENCE PDR

2. Would long-term storage be deemed to be suitable management for our commercial waste?

Even assuming that the wastes will be permanently disposed of after storage, this question cannot be answered without reference to proposals for specific storage facilities. As we noted in our recent letter to Governor Earl the technology for construction of structures lasting for decades is well established, and the general engineering and safety principles involved are well known. However, the duration of intended storage, and the quantities, radioactive half-lives and other characteristics of the waste to be stored are extremely important considerations in facility design and facility siting, and in establishment of institutional controls and regulatory criteria. All of these considerations as well as plans for final disposal of the waste would have to be taken into account to assure "suitable management" of at-reactor, life-of-plant storage with subsequent retrieval and transfer to a disposal site.

3. If Maine Yankee were allowed to store its low-level wastes on-site until decommissioning, perhaps the waste generated from operating the plant could be transported to a shallow-land burial facility at the same time as the dismantled nuclear power plant. Will NRC allow such a scenario?

A scenario such as the one you describe is allowable provided that all NRC licensing requirements are met as specified in our Generic Letter 81-38. This question is also addressed in our response to Question 2.

4. Will the NRC allow entombment as an option for "permanent" disposal of a nuclear power plant and its low-level waste?

This question is particularly timely as the Commission is currently conducting a rulemaking on decontamination and decommissioning of nuclear power plants. The Commission anticipates promulgation of the proposed rule in the spring of 1984.

An NRC Draft Generic Environmental Impact Statement on decommissioning nuclear facilities (NUREG-0586, January 1981) concluded that entombment was less desirable than either immediately removing all radioactive materials down to levels which are considered acceptable to permit the property to be released for unrestricted use or temporary storage and subsequent decontamination to levels which permit release of the facility

for unrestricted use. A copy of NUREG-0586 has been enclosed for your information. Chapter 4.5 compares the decommissioning alternatives for pressurized water reactors.

5. If Maine prefers the on-site storage-for-the-life-of-the-facility option, can the state require Maine Yankee to build such a facility? Can a state force a nuclear power plant to store other generators' wastes for any length of time? For health and safety reasons? For economic reasons?

No, the state cannot require a nuclear power plant operator to build such a facility or to store wastes on the reactor site because the NRC has exclusive jurisdiction and NRC cannot force an operator to take such actions unless there is a health or safety concern relating to reactor operation. The operator must first decide to submit an application to be licensed to pursue these endeavors, and then must meet the applicable requirements for licensing. NRC licensing jurisdiction will be retained in Agreement States in accordance with 10 CFR 150.15(a)(1) for storage of low-level waste generated and stored onsite.

Please do not hesitate to call us if we may be of further assistance in your efforts.

Sincerely,

(Signed) John G. Davis

John G. Davis, Director
Office of Nuclear Material
Safety and Safeguards

Enclosures:

1. Generic Letter 81-38
2. NUREG-0586