

the issue of no significant hazards consideration. The staff has reviewed the licensee's analysis against the standards of 10 CFR 50.92(c). The NRC staff's review is presented below:

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change does not result in an increase in the probability of an accident previously evaluated because no change is being made to any accident initiator. The proposed change does not result in an increase in the consequences of an accident previously evaluated because TS 3/4.2.4, "Quadrant Power Tilt," continues to ensure the radial power distribution of the core is within the limits assumed in the accident analyses. In addition, compensatory actions will continue to be required should a single channel of RPS High Flux or Flux-Flux-Flow become inoperable. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed changes affect the TS requirements for the RPS instrumentation. The proposed changes do not change the RPS design function or result in the RPS being operated outside its design operating range. There are no new or different equipment failure modes introduced by the proposed changes. The proposed changes do not introduce any new or different accident initiators. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed changes do not involve a significant reduction in a margin of safety.

The proposed changes affect the TS requirements for the RPS instrumentation. The capability of the RPS to perform its required functions is not adversely affected by the proposed changes. The proposed changes do not alter any initial conditions contributing to accident severity or consequences. There will be no changes to the plants' systems, structures, or components, nor in the manner in which they will be operated as a result of the proposed changes. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

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*NRC Section Chief:* Anthony J. Mendiola.

*Maine Yankee Atomic Power Company, Docket No. 50-309, Maine*

*Yankee Atomic Power Station, Lincoln County, Maine.*

*Date of amendment request:*

September 11, 2003.

*Description of amendment request:*

Revise the dose model for the containment activated concrete, rebar (hereafter referred to as activated concrete) and liner, by incorporating more realistic radionuclide release rates and to change the associated derived concentration guideline limit (DCGL) for activated concrete.

*Basis for proposed no significant hazards consideration determination:*

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The requested license amendment does not authorize any plant activities beyond those allowed by 10 CFR Chapter I or beyond those considered in the DSAR. The bounding accident described in the Defueled Safety Analysis Report (DSAR) for potential airborne activity is the postulated resin cask drop accident in the Low Level Radioactive Waste Storage Building. This accident is expected to contain more potential airborne activity than can be released from other decommissioning events. The radionuclide distribution assumed for the spent resin cask has a greater inventory of transuranic radionuclides (the major dose contributor) than the distribution of plant derived radionuclides in the components involved in other decommissioning accidents. The other accidents considered in the DSAR include: (1) Explosion of liquid petroleum gas (LPG) leaked from a front end loader or forklift; (2) Explosion of oxyacetylene during segmenting of the reactor vessel shell; (3) Release of radioactivity from the RCS decontamination ion exchange resins; (4) Gross leak during in-situ decontamination; (5) Segmentation of RCS piping with unremoved contamination; (6) Fire involving contaminated clothing or combustible waste; (7) Loss of local airborne contamination control during blasting or jackhammer operations; (8) Temporary Loss of Services; (9) Dropping of Contaminated Concrete Rubble; (10) Natural phenomena; and (11) Transportation accidents. The probabilities and consequences for these accidents are estimated in the basis documentation for DSAR Section 7. No systems, structures, or components that could initiate or be required to mitigate the consequences of an accident are affected by the proposed change in any way not previously evaluated in the DSAR. Since Maine Yankee does not exceed the salient parameters associated with the plant referenced in the basis documentation in any material respects, it is concluded that these probabilities and consequences are not increased. Therefore, the proposed change to the Maine Yankee license does not involve

any increase in the probability or consequences of any accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The requested license amendment does not authorize any plant activities that could precipitate or result in any accidents beyond those considered in the DSAR. The accidents previously evaluated in the DSAR are described above. These accidents are described in the basis documentation for DSAR Section 7. The proposed change does not affect plant systems, structures, or components in any way not previously evaluated in the DSAR. Since Maine Yankee does not exceed the salient parameters associated with the plant referenced in the basis documentation in any material respects, it is concluded that these accidents appropriately bound the kinds of accidents possible during decommissioning. Therefore, the proposed change to the Maine Yankee license would not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The margin of safety defined in Maine Yankee's license basis for the consequences of decommissioning accidents has been established as the margin between the bounding decommissioning accident and the dose limits associated with the need for emergency plan offsite protection, namely the Environmental Protection Agency Protective Action Guidelines EPA-PAGs. As described above, the bounding decommissioning accident is the postulated resin cask drop accident in the Low Level Radioactive Waste Storage Building. Since the bounding decommissioning accident is expected to contain more potential airborne activity than can be released from other decommissioning events and since the radionuclide distribution assumed for the spent resin cask has more transuranics (the major dose contributor) than the distribution in the components involved in other decommissioning accidents, the margin of safety associated with the consequences of decommissioning accidents cannot be reduced. The margin of safety defined in the statements of consideration for the final rule on the Radiological Criteria for License Termination is described as the margin between the 100 mrem/yr public dose limit established in 10 CFR 20.1301 for licensed operation and the 25 mrem/yr dose limit to the average member of the critical group at a site considered acceptable for unrestricted use. This margin of safety accounts for the potential effect of multiple sources of radiation exposure to the critical group. Since the license termination plan (LTP) was designed to comply with the radiological criteria for license termination for unrestricted use, the margin of safety cannot be reduced. Therefore, the proposed changes to the Maine Yankee license would not involve a significant reduction in any margin of safety.