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TRANSNUCLEAR OWNERS GROUP

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OFFICE
OF
ADJUDICATION

Secretary
U.S. Nuclear Regulatory Commission
Washington D.C., 20555-0001
Attn: Rulemakings and Adjudications Staff

DOCKET NUMBER
PROPOSED RULE **PR 72**
(64FR45920)

Subject: Comments concerning 10 CFR Part 72 proposed rulemaking "List of Approved Spent Fuel Storage Casks" (TN-68) Addition", August 23, 1999

Dear Sir:

The Transnuclear Owners Group appreciates this opportunity to provide comments concerning the 10 CFR Part 72 proposed rulemaking "List of Approved Spent Fuel Storage Casks" (TN-68) Addition", dated August 23, 1999. The proposed NRC rulemaking would add the TN-68 cask to the list of approved casks under 10 CFR 72.214.

The proposed Technical Specifications continue the industry progress toward Improved Technical Specifications similar in format to those being used at many power reactor sites (10CFR 50). The Transnuclear Owners Group supports the use of standardized technical specifications in this format. Towards this goal, we fully support to the process initiated by the Nuclear Energy Institute (NEI) to work with the NRC to develop standard cask Improved Technical Specifications (Reference: NEI Guidance 99-06). The NEI guidance follows the criteria used to determine the content of power reactor Improved Technical Specifications. We feel this is the proper approach to use in the development of Improved Technical Specifications for spent fuel storage casks. This approach focuses on safety based criteria to determine the content of the specifications, and provides a consistent approach between Part 50 and Part 72 regulations.

You will notice that many of our comments remove certain specific requirements from the Technical Specifications, such as details of the fuel types and ASME Code application. These suggestions are consistent with the Improved Technical Specifications proposed by the industry and are based on the belief that;

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- 1) These details are fully contained in the Safety Analysis Report and as such are governed by the conditions of 10 CFR 72.48. The 72.48 process provides assurance that any proposed change, test or experiment that involves an unreviewed safety question will not be performed without prior commission approval. and
- 2) The areas noted for deletion do not fit the criteria for inclusion in Technical Specification for power reactors. We refer you to the NEI guidance for further details.

Other specific comments are included as an attachment to this letter. If you have any questions, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "Jon Kapitz". The signature is written in a cursive, slightly slanted style.

Jon Kapitz, PE
Chairman, Transnuclear Owners Group

Comments on Proposed TN-68 Technical Specifications

2.1 Fuel To Be Stored In The TN-68 Cask

General Comment – The NEI guidance suggests that details of the fuel to be stored is contained in the SAR and does not need to be repeated in the Tech Specs, consistent with Tech specs for power reactors.

We specifically note that the maximum rod pitch and minimum rod OD should be removed. These parameters are already specified by defining the fuel type allowed (e.g. GE 7x7, 2A). Including these separately is unnecessarily redundant. As noted in the NEI guidance, this detail is already in the SAR and including it in the TSs adds duplication which may tend to reduce the importance of other requirements in the TSs. These parameters cannot be verified by direct means, so the only mechanism for the licensee to verify these values is to determine the fuel type (GE 7x7, 2A).

The maximum uranium content (MTU/assembly) should be deleted. If the intent of this requirement is to require licensees to verify this value using fuel manufacturer data it has the potential to be overly restrictive. Most fuel manufacturers specify this value as a nominal value. Actual values (based on fuel transfer records, i.e. 741 forms) contain a small statistical variation. We do not believe it is the intent of this specification to exclude a fuel assembly from storage if it is a few grams over the specific value. However, as written, the specification would have this effect.

The channel thickness should be identified as up to a nominal thickness of .120”.

Table 2.1.1-1

The parameters should be labeled as Minimum Initial Enrichment and Maximum Burnup, to avoid confusion as to the application of the data.

SR 3.1.3 and SR 3.1.4

The frequency should use the term TRANSPORT OPERATIONS to be consistent with the definitions. The frequency for SR 3.1.3 should read “Once prior to TRANSPORT OPERATIONS”. The frequency for SR 3.1.4 should read “Once prior to TRANSPORT OPERATIONS OR Once within 48 hours of commencing STORAGE OPERATIONS”.

SR 3.1.6.1

The frequency should be changed to “Once, ~~after~~ immediately prior to lifting cask...”. The intent is to prevent a possible cask drop accident if the temperature is below the NDTT. This should be determined before the cask is raised.

LCO 3.2.1.b

The values should read 20 dpm/100 cm².

SR 3.2.1

The current Tech Spec as written would inappropriately require immediate entry into the ACTION statement as soon as the cask was placed in the fuel pool. A more appropriate APPLICABILITY for this LCO would be "During TRANSPORT OPERATIONS". However, if LOADING OPERATIONS is retained as the APPLICABILITY, a note should be added to CONDITION A: "Not applicable until SR 3.2.1.1 has been performed. This will clarify that the spec does not apply immediately after removal from the pool, and is intended to govern the cask contamination rates prior to movement to an ISFSI.

4.0 DESIGN FEATURES

We note that the NEI guidance states that there are no design features that are applicable to a cask, consistent with power reactor Tech Spec practice. As already stated, we endorse the NEI guidance and look forward to working with the NRC on these issues. In the interim, we offer the following specific comments.

4.1.1 Criticality

We don't believe that it is necessary to call out the cell opening or boron loading as specifically unique design parameters controlling criticality. There are many other aspects of the design impacting the subcritical condition of the cask. Changes to any of these design features are adequately controlled by 10CFR72.48 to ensure that prior NRC approval is obtained when needed. . These parameters are under the control of the manufacturer, not the operator of the cask and most cannot be verified in the field. These design parameters are appropriate for the SAR, not the operational limitations in the Technical Specifications.

4.1.3 Codes and Standards

We strongly encourage the removal of this section. We believe that the inclusion of the specific ASME Boiler and Pressure Vessel code and exceptions in the Tech Specs is unnecessary. The commitment to the ASME code and the specific exceptions is already contained in the Safety Analysis Report. Any changes to this are governed by the requirements of 10CFR 72.48. This process provides that any changes resulting in an unreviewed safety question must first receive NRC approval. By placing this information in the Tech Specs, any insignificant changes or minor deviations would require NRC review and approval. We do not believe that this situation would be an effective use of NRC staff resources.

4.2.1 Storage locations for Casks

The 16 foot dimension should either be noted as the minimum nominal spacing, or a tolerance should be added. We expect that many designs may use a 16 foot nominal spacing for their casks. To ensure that each cask is no less than 16 feet apart requires an accuracy in placement that is difficult to achieve when moving a 100 ton plus package. A 3 inch tolerance on this spacing would seem appropriate.

4.3.6 Supplemental Shielding

Remove the following words “ ... 10 CFR 72.104(a) ~~are met, such features are to be considered important to safety and~~ must be evaluated... ”. Supplemental shielding is not normally considered Important to Safety. Part 72.104(a) relates to an annual dose equivalent to any individual located beyond the controlled area. If engineered features such as berms experienced compromised functionality, readily available compensatory measures can be quickly implemented. This non-safety related approach is consistent with NUREG 1567 (Section 7.4.4.1) allowing cask shielding to be damaged by a tornado event because compensatory measures are easily and simply implemented. Indeed, the concrete pads that the casks rest upon “typically are not classified as important to safety.” (NUREG 1567, Section 7.4.4.2). Section 9.4.3.3 of NUREG 1567 says that typical shielding at an ISFSI includes “ shielding provided by natural or man-made earth barriers ... ” Clearly, it makes good sense to use a natural feature such as a hill to shield an ISFSI, and such natural features are not considered important to safety.