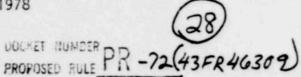


## AMERICAN NUCLEAR SOCIETY STANDARDS COMMITTEE

NRC PUBLIC DOCUMENT ROOM



December 22, 1978



Mr. R. E. L. Stanford Office of Standards Development U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Russ:

Please find enclosed ANS-57.7 committee's comments on 10 CFR, Part 72. I hope these comments prove helpful.

Please feel free to call if you have any questions.

Very truly yours,

John A. Nevshemal

Chairman, ANS-57.7

JAN:mk Encl.

ACKNOWINGLED by card 17:28.4 M.K.

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## Science Applications, Inc.

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72.1 Last sentence - Delete. Even though the ISFSI is a temporary storage, they are being designed on a 40-year basis. The title of the Regulation does not say anything about the temporary nature of the facility.

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...

72.2 Last sentence - Delete. A grandfather clause should be on a permanent basis rather than say a license of an existing facility will not be renewed unless it meets these new regulations. What happens to an ISFSI if it is full of spent fuel and their license comes up for renewal and their facility does not meet the new regulations? This sentence is too restrictive and should be deleted or modified.

Section 72.3 (S) "Structures, systems, components important to safety" as "sfined in 10 CFR Part 50, "are those safety related items that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public". It seems appropriate that definitions in Part 72 should be consistent with these used in other Federal Regulations to avoid confusion. It is recommended that the change be made.

Section 72.3 (g) and 72.3 (k) defined "controlled" and "neighboring" areas respectively. 10CFR100, paragraph 100.3 (a) defines an "exclusion" area; the definition of which is similar to the Part 72 definition of a "controlled" area. The definition of "low population zone" in 10CFR100 is similar to the definition of "neighboring" area in Part 72. The definitions of the various "areas" discussed in Part 72 should be consistent to the definition used in other parts including 10CFR20, 10CFR73 and 10CFR100 to avoid confusion and misuse of terminology.

72.15 (a) Requiring research and development to confirm the design is too restrictive. The paragraph does not say who makes the decision requiring R&D. This could be a very expensive item for the licensee. The paragraph should either be deleted or modified.

72.15 (12) (1) (a&b) Why not combine the two paragraphs by inserting "and gaseous" following "liquid" in paragraph A. In the first paragraph in (12), gaseous and liquid effluents are included together rather than separate. 72.15 (13) (b) I believe the (b) should be an (a). In this paragraph, the requirement to update the SAR annually is unduely restrictive. It appears that the last part of that paragraph should be changed to read "---the SAR will be updated and submitted to the Commission for approval when significant changes are proposed to the ISFSI." If there have been no changes to the facility or components or systems since the SAR, there is no reason to continuously making reports that are the same as previously submitted.

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72.15 (13) (i) (3) (c) Delete the last sentence because it is covered by paragraph 72.75. It does not add anything that has not been said.

72.17 (c) "Certified" should be deleted. There are only certifications for reactor and reprocess ng operators. Trained plant personnel should be adequate for this operation.

72.18 (b) Delete sentence. This is too restrictive. No one else in the nuclear field have had to comply with financial arrangements for decommissioning. You could make the ISFSI too costly to operate with the burden for decommissioning some 40 years down the road.

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Section 72.18 - Decommissioning plan. Including its financing. This section addresses "dismantling and disposal of an ISFSI"; it is our understanding that once the installation is decontaminated, the final disposition of the remaining structures are the purview of the owners and state and local zoning regulations. If this is the case, this info should be incorporated into this section.

Section 72.31 (a) (10) specifically states that initiation of construction by an applicant prior to a finding that the action called for, following review by the Director of the Office of Nuclear Materials Safety and Safeguards, is issuance of the proposed license may be grounds for denial of a license. In 10CFR70, paragraph 70.21 (f), the requirement is established that an application must be filed "at least 9 months prior to commencement of construction". It is recommended that a similar provision be included in 10CFR72 to allow an applicant to proceed with construction, after a suitable period has elapsed from the date an application was filed, without jeopardizing a favorable ruling on the application.

72.31 (a) (a) Same as paragraph 72.18 (b).

... ...

72.32 Since the facility is designed for a 40-year life, it seems that the license should be issued for 40 years rather than 20 unless there is some overriding reason for the 20. Another burden placed on the licensee is that upon renewal, he has to comply with the current regulations in force at that time. A license should be issued for the duration of the facility unless a significant design change has been made to the plant. Same comment for paragraph 72.2.

72.33 (5) (c) (4) "And certification" should be deleted. A training program should be efficient to meet the NRC requirements.

Section 72.33 License Conditions (1) <u>Functional and operating limits and moni-</u> toring instruments and limiting control settings. It appears that "Functional and operating limits" are equivalent to "safety limits" in a part 50 license. It is suggested that the title be changed to Safety Limits to be consistent with part 50.

72.34 (2) (c) If you enumerate (1) and (2), then you need to number the rest up through (5).

72.36 (b) (1) I do not think that paragraph 72.15 or 72.16 apply in this case. As a matter of fact, not even the limited case stated in this section.

72.36 (b) (2) The first sentence should be deleted. That information is part of the SAR furnished by the original owner and should be current. The second sentence in this paragraph is the information the Commission needs. As a matter of fact, the two sentences in this paragraph are not compatible.

72.42 Delete entire paragraph. Any question of backfitting should be included as a design condition. It is recommended that the storage pool be at ground level. Backfitting should not be spelled out as a separate entry.

Section 72.42 (a) states that the Commission may require backfitting if such action will provide substantial additional protection. This paragraph should be modified to include a provision that backfitting can be required only after a suitable cost-benefit analysis has shown that backfitting is justified.

Section 72.51 (b) What is intended by "a physical inventory"? Does this mean physically verifying each fuel assembly stored in the ISFSI?

A piece count and selected small quantity audit of randauly selected fuel assemblies for verification would be adequate. 72.51 (b) Delete paragraph. With all the other records required by (a), (c) and (d), you have a perpetual inventory system. Conducting a physical inventory should be at the discretion of the licensee.

... :..

72.52 Put a period after "material." When you continue by saying "contained in spent fuel," you are implying an accident report should be made if a fucl element ruptures and the pellets fall to the bottom of the pool. Do you really want such a report under that condition? As a matter of fact, you cover any loss of SSNM in paragraph 72.53.

Section 72.54 Last sentence - Does "received" mean when the cask is received at the ISFSJ? Should clarify, verification of the fuel assembly must be made before the NRC-741 can be completed and returned to DOE and the shipper. Should say "..received, verified and stored."

72.55 (c) I do not think that you can test items (1) and (2). You could inspect them, however. Item (3) and (4) you can test and inspect this equipment. I believe the entire paragraph should be rewritten. You could put a period after "regulations."

Section 72.55 (c) This section as written would allow any and all tests that could be conceived and "deemed appropriate or necessary" to be required. It also appears that if the licensee does not choose to perform the test, that the Commission would perform it. The statement appears to be too broad and all encompassing. More definitive information should be given to clarify this requirement.

Specific requirements should be stated that limit the time ( say 48 hours ) that a test would impact receiving operations.

72.61 (b) Delete "and man-induced" because at the time site selection there should not be any man-induced events to be evaluated.

72.63 (a) (b) (c) Delete second sentence in (a) and entire sentence (b) and rewrite (c) as follows: Appropriate methods shall be adapted and justified for the design basis of the ISFSI as being compatible with the characteristics of the region and the current state of knowledge. These paragraphs are talking about phenomena, when all we are talking about are man-made facilities.

72.71 (2) (ii) Delete parenthetical expression because it conflicts with paragraph 72.66 (a). In that paragraph you allow the applicant an option.

Section 72.71 Overall Requirements 3 - Would suggest that "credible" be inserted between "under fire" (5th line) for clarification. Also what type explosion was projected? Is ion exchange resin the only one to be considered? What was intended?

Section 72.71 (8) (i) would suggest adding "mechanical" between gross ruptures. Isn't this what we want to protect them from?

Section 72.71 (8) (ii) lines 16 thru 20. It should not be a requirement to have water level monitoring equipment alarm "Loth locally and is a continuously manned location", if the local area is continuously manned, the licensee may choose to have a second alarm location but this should be his choice. Remove the words "both locally and" replace with "locally if not continuously manned or in...".

Section 72.71 (10) - Clarification of this section as to what is meant by action to be taken to "operate the ISFSI safely under normal conditions" is needed. The intent should be to monitor under normal conditions not to operate. Suggest that "if required" be inserted in line 2 so it reads - "A control room or control areas, if required, shall be designed to permit occupancy and action to be taken to monitor the ISFSI safely under normal condition and to maintain the ISFSI in a safe conditior under off normal or accident conditions".

Section 72.71 (19) - It is recommended that this paragraph be amended to eliminate the requirement that on-site facilities be provided to concentrate all site generated wastes. Concentration and conversion into a form suitable for interim storage and ultimate disposal might be best accomplished at a location other than where the waste is generated. The following is a suggested rewording of this paragraph. (19) <u>Waste Treatment</u> - Waste treatment facilities shall be provided. Provisions shall be made for the conversion of site generated wastes into a form suitable for interim storage or ultimate final disposal.

72.75 (a) Delete second sentence, delete second sentence in (b), and delete (c) entirely. All of these words are part of Appendix B.

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