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(44FR 70408)

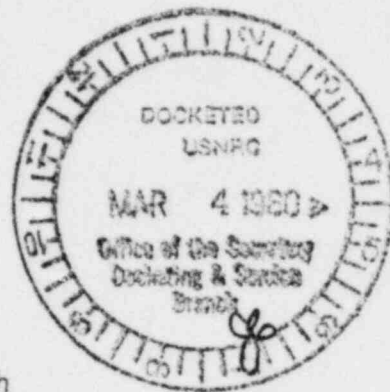
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M T Johnson
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February 25, 1980



Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Docketing and Service Branch

Subject: Disposal of High Level Radioactive Wastes in Geologic Repositories

Dear Sir:

This is in response to your request for comments on the proposed licensing procedures for disposal of high level radioactive wastes (HLW) in geologic repositories.

The proposed licensing procedures have several general deficiencies:

- a. The preamble's references to "best" (pages 70410 and 70412) makes inevitable a never-ending quest for a licensable repository site. It is unlikely that a "best" site can ever be determined. More likely, many sites will be found, each capable of meeting realistic licensing criteria provided a systems approach is utilized.

The National Academy of Sciences recently concluded that it is not necessary to look upon HLW disposal as a problem to which a perfect solution must be found before any action can be taken. They emphasized that storage of waste at geologic sites would engender much smaller risk to the public than that of routine emissions from the rest of the fuel cycle.* NRC's rulemaking on 10CFR60 should take this into account. A licensing philosophy based on a "best" site, a "best" waste form or a "best" waste package should be avoided. Instead, an overall systems approach should be adopted to license a geologic repository. Realistic licensing criteria should be developed during the design, construction and operation of repository system demonstrations which should become a required element in near-term national programs.

- b. It is our understanding that forthcoming technical criteria, 10CFR60 Subpart E, will place no reliance on the geology for radionuclide containment during the first 1,000 years. If this is the case, the proposed licensing procedures

* Handler, P. et al, "Energy in Transition, 1985-2010," Committee on Nuclear and Alternative Energy Systems (CONAES), National Academy of Sciences, Washington, D.C., December 1979.

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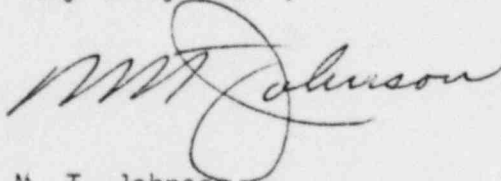
concerning site selection are too conservative (e.g., see Attachment Item 1). However, we believe that due reliance should be placed on geologic barriers, and that performance criteria should apply to the overall repository system. Therefore, NRC should not finalize the proposed rule until the forthcoming technical criteria are published and acted upon.

- c. In some cases these proposals go beyond licensing procedures, and appear to establish national policy. For example, irradiated reactor fuel should not be included in the definition of high level waste, 60.2(i). Such a definition preempts a change in the existing National Policy on reprocessing. In addition, the footnote to 51.40(d) and the definition of required site characterization, 60.2(n), call for a large number of exploratory shafts and testing at depth. These policy proposals appear to exceed both technical and NEPA requirements, and should not be included in NRC regulations.
- d. The proposed procedures tend towards increasing bureaucracy and taxpayer expense rather than toward assurance of public health and safety. For example, 10CFR60.3(b) and 10CFR60.11(g) state that NRC may deny DOE a license for a given site if certain NRC administrative procedures are not followed. The granting or denial of a license should be determined solely on a balance of factors affecting the public interest, and not regarded as an inter-agency punitive remedy.

Also, need for the proposed extensive involvement of NRC during the site characterization process is far from clear. Since NRC will issue no license or authorization at this point in the process, or be in any way bound as a result of such review, it is difficult to see how this accomplishes any useful objective.

Additional detailed comments are provided in the attachment. Westinghouse fully recognizes that national importance of nuclear waste management, and is prepared to assist in any way possible in the resolution of our comments.

Very truly yours,



M. T. Johnson
General Manager

Attachment

ATTACHMENT - DETAILED COMMENTS ON NRC PROPOSED LICENSING PROCEDURES

1. The requirement for at-depth evaluation of alternative sites and geologic media in addition to the preferred site is more than that which is required. Surface investigation and borehole drilling will allow a comparison of potential sites and geologic media which can be identified as alternatives. In order to provide a balance between data required and expenditures, only the preferred site, as determined from the surface evaluations should be investigated in situ. The in situ evaluation will identify whether this preferred site is adequate as a geologic repository. Assuming the site is found to be adequate, there should be no need to further investigate alternative sites since from a surface evaluation, none is clearly superior. The concept that a proposed site must be adequate with no clearly superior alternatives, rather than optimal, has been determined in several Atomic Safety and Licensing Appeal Board Hearings.

If the preferred site should be evaluated as not adequate based upon the site characterization at-depth, the program must then be modified to make the repository adequate by changing the scope of the mission or an alternative repository must be evaluated in depth. This evaluation can be substantiated by the NRC at the time of construction permit application and would eliminate the need for expending resources to evaluate alternate repositories at depth which would not be required for the mission.

2. The stated costs of 20 million dollars per site investigation (including in situ experiments) appears to be much too low, depending on the geologic media.
3. Note that not only can NRC (Director) comment on site work, but based upon DOE's research and development in waste matters he is free to comment on all such matters, and can do so, presumably, based upon preliminary data that DOE would furnish under the explanation of "Other Reviews", Page 70412. The Director can also provide ... "specific guidance on technical matters relevant to licensing requirements". This can seriously delay the timing for DOE's submission for construction authorization, and receipt of wastes (Part 3).
4. The definition of high-level waste in 60.2(i) should be revised so that irradiated reactor fuel is not included in material emplaced "with no intent to retrieve for resource values" (60.2(e)).
5. In 60.6, it would appear that exemptions can be granted without notice or opportunity for comment. This seems inappropriate.
6. 60.11(e) should be revised to specify time limits for NRC's review.
7. It should be clarified throughout that DOE regulations require an Environmental Assessment for each site characterization, and not an Environmental Impact Statement.