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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CHAIRMAN

August 16, 1995

Mr. James C. Murr
Assistant Director for
Legislative Reference
Office of Management and Budget
Washington, D.C. 20503-0001

Dear Mr. Murr:

I am responding to your office's request for the views of the Nuclear Regulatory Commission on H.R. 1020, the "Nuclear Waste Policy Act of 1995." The Commission agrees with the fundamental approach of H.R. 1020 in addressing the management of high-level waste from our nation's licensed commercial nuclear power reactors, although some aspects are of concern to us.

We believe that H.R. 1020 contains the three fundamental elements of an integrated high-level waste management plan needed for the protection of public health and safety and the environment -- interim on-site storage, centralized interim off-site storage, and deep geologic disposal. H.R. 1020 also provides a transportation mechanism to tie the elements together. In our view, H.R. 1020 recognizes that the overall, long-term success of this nation's program to manage spent fuel and other high-level radioactive waste is dependent on finding a permanent solution to the disposition of this material.

With respect to interim on-site storage, the NRC has approved seven dry cask systems for storage at commercial nuclear power reactor sites using a general license process authorized in Section 133 of the existing Nuclear Waste Policy Act, as amended (NWPA). We are therefore pleased that an equivalent provision for generic certification of storage systems was added to H.R. 1020 by the Energy and Power Subcommittee of the House Committee on Commerce.

We also believe that the provision in H.R. 1020 for centralized interim storage of spent fuel has several advantages, although continued at-reactor storage would also protect public health and safety. Specifically, a centralized facility, when compared to dispersed storage at more than 74 sites throughout the country, would allow for a more focused inspection and surveillance program by both DOE and NRC and would also benefit DOE's program for accepting waste from utilities. Therefore, because there are clear advantages to centralized interim off-site storage, establishment of such a facility under H.R. 1020 could partially resolve one of the most vexing issues facing this nation. However, the NRC takes no position as to where a centralized facility should be located.

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The Commission does not object to the H.R. 1020 provision for issuance of a license for centralized storage in phases, to accommodate expansion of storage capacity. However, it should be recognized that some licensing considerations and siting factors are essentially independent of storage capacity and will need to be met by DOE for all licensing phases.

We support the provision in H.R. 1020 on Waste Confidence. Under that section, the NRC would base its Waste Confidence finding not only on DOE's obligation to construct and operate an interim storage facility, but also on its obligation to develop the integrated spent fuel management system in the bill.

One of our principal concerns relates to the centralized interim storage element. In particular, H.R. 1020 might effectively preclude involvement of the public in our licensing process. H.R. 1020 requires the Commission to license a centralized interim off-site storage facility within 16 months after submittal of an application. If the public were to exercise full participation rights under our procedures, it is doubtful we could accomplish the activities in the time allowed. Public participation is a fundamental part of NRC licensing actions and key to retaining public confidence in our process.

The Commission strongly supports including spent fuel disposal provisions in H.R. 1020, and continues to believe that deep geologic disposal is a sound and technically feasible solution to the problem of final disposition of spent nuclear fuel and other high-level radioactive wastes. Further, we are confident that the Commission will be able to determine with reasonable assurance that spent fuel and other high-level wastes can be disposed of safely in a geologic repository, assuming that we get a high quality license application, that NRC requirements are met, and that NRC can maintain its technical capabilities for licensing deep geologic disposal which are threatened by the funding levels in the House-passed Energy and Water Development Appropriations bill. In addition, we agree with provisions in H.R. 1020 which revoke DOE siting guidelines -- a holdover from days when multiple sites were under examination. We believe this will allow DOE to focus its repository efforts on meeting NRC licensing requirements.

Further, we believe that attempts to address some of the more troublesome issues related to high-level waste disposal are positive steps. Specifically, we support those provisions in H.R. 1020 that would continue to define the scope of NRC's National Environmental Policy Act responsibilities for disposal (as well as for interim storage). H.R. 1020 will also enable us to implement a dose-based release standard. However, some clarification in the legislation may be necessary to allow the Commission's use of subsystem performance objectives for repository licensing.

With respect to the dose-based release standard in H.R. 1020, the Commission does not object to a single, overall performance standard for the repository for a 10,000-year period following commencement of repository operations. The Commission notes that the standard in H.R. 1020 is an annual effective dose of 100 mrem or 1 mSv. This dose level corresponds to a level of protection that is consistent with NRC's existing numerical limit for exposure of the public

from a licensed nuclear facility. Within this limit, the Commission would expect DOE to evaluate alternatives among the major repository design features.

Some clarification of H.R. 1020 may be needed however. Specifically, we believe the Commission should be given the flexibility, in application of the standard on overall performance, to rely on deterministic evaluations or probabilistic methods or any combination of the two, in order to address attendant uncertainties given the time periods involved and reach conclusions on whether there is reasonable assurance that releases will not result in doses exceeding the standard. Our recommendation therefore is to amend the text of section 205(d)(1)(B) of the bill to read as follows:

> The Commission shall issue the license if it finds reasonable assurance that, for 10,000 years following commencement of repository operations, the overall system performance standard will be met based on an evaluation of overall performance of the disposal system. To the extent considered appropriate by the Commission, the evaluation may be deterministic or probabilistic and shall take uncertainty into account. For long time periods, the evaluation may be based on reasonable extrapolations from credible, reasonably available information.

In sum, we agree with the fundamental approach of H.R. 1020 -- development of an integrated plan for storage and disposal of spent nuclear fuel -- which focuses on an integrated spent fuel management system of interim on-site storage, centralized interim off-site storage, and provisions for permanent disposal.

Sincerely,

Shirley Ann Jackson

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