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

CHAIRMAN

COMM
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March 31, 1980

The Honorable Gary Hart, Chairman
Subcommittee for Nuclear Regulation
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I am responding to your letter dated December 7, 1979 concerning low-level radioactive waste disposal. I have provided to you at your hearings on January 23, 1980 answers to all your questions except 2.d., the U.S. Nuclear Regulatory Commission (NRC) analysis and position on H.R. 5819 introduced by Congressman McCormack and H.R. 5809 introduced by Congressman Derrick. Enclosed is our response to this question. Thank you for this opportunity to express our views on these matters. We will be pleased to provide any additional information you require.

Sincerely,

John F. Ahearne

Enclosure:
Response to Question 2.d.

cc: Representative Mike McCormack
Representative Butler Derrick

RESPONSE TO QUESTION 2d

Question 2d: Please analyze and state the Commission's position on the provisions of H.R. 5819 introduced by Congressman Mike McCormack and H.R. 5809 introduced by Congressman Butler Derrick.

Answer (H.R. 5819):

H.R. 5819 would authorize the Secretary of Energy to establish a number of regional repositories for low-level radioactive waste. These repositories would provide needed regional disposal capacity for commercially generated low-level radioative wastes and also provide the performance of research for the improvement of disposal techniques and methods. The Commission agrees that there is a national need for more low-level waste disposal sites and that these sites should be equitably distributed. However, the Commission does not believe that the federal government need be responsible for developing and operating such repositories. Chairman Hendrie testified on November 7, 1979 before the House Subcommittee on Energy Research and Production that the Commission believes that the states should be responsible for the low-level wastes generated within their borders including regulation of operators under Agreement States jurisdiction. State residents benefit from the nuclear technologies which produce these wastes and the waste is not sufficiently hazardous nor composed of such materials that federal assumption of responsibility is required. However, this does not imply that each state should have its own disposal site. We believe that it may be preferable for the states to approach this problem on a regional basis and work out regional solutions.

Sections 4(a) and (c) would require the Secretary of Energy to establish, operate and obtain NRC licenses for at least nine but not more than fourteen low-level radioactive waste repositories no later than six months after enactment of the bill. The NRC does not believe that this six-month time limit is sufficient for three reasons. First, the establishment of each of these repositories would constitute a major federal action within the context of the National Environmental Policy Act (NEPA). Based on its experience, the NRC believes that six months is not adequate time for compliance with the requirements of NEPA, which would include the preparation of an Environmental Impact Statement with appropriate opportunity for public comment for each repository site application submitted by the Secretary of Energy. Second, Section 189 of the Atomic Energy Act of 1954, as amended, requires the NRC, as part of its licensing procedure, to offer a hearing to interested persons whose interest may be affected. Since it is very likely that hearings will be requested, NRC's licensing process can be expected to take more than six months. Third, NRC's present resource allocations are based on the assumption that it will receive no more than four new low-level radioactive waste repository applications per year for the next several years. To carry out the licensing actions necessary to satisfy the provisions of Sections 4(a) and (c), additional resources would be required, either through interoffice and interagency transfers or through new allocations. Training of the transferred professional personnel would be required before they could effectively assist in reviewing license applications for new low-level waste repositories. Such training would require approximately six months to one year. For these reasons, the NRC believes that Section 4(a) should be amended by deleting the six-month time limit.

Section 4(g) would also authorize the Secretary of Energy to establish a research and development program for new and improved techniques and methods for concentrating, solidifying and storing low-level radioactive waste. Because the technology of shallow land burial is well developed, we suggest that the research and development program specifically include alternative disposal methods including intermediate land burial, mined cavities and engineered structures. Accordingly, we recommend that Section 4(g) be amended to explicitly include these items.

We note that the Bill (1) does not provide for a direct state role in the siting, operation and decommissioning of the proposed sites; (2) is silent on the custody matter covered by H.R. 5809; and (3) does not address shipment standards and quality control. We recommend that these issues be addressed.

Answer (H.R. 5809):

H.R. 5809 would authorize states to enter into agreements and compacts for the establishment of disposal sites for low-level radioactive waste, direct the Commission to promulgate rules regarding the ownership of low-level radioactive waste and define low-level radioactive waste. As discussed in detail below, these provisions raise technical and jurisdictional issues which must be resolved if the purposes of this Bill are to be realized. Accordingly, the Commission does not support H.R. 5809 as currently drafted.

Section 1 would authorize states to enter into agreements and compacts with other states as may be necessary to establish a system of regional disposal sites to be used for the disposal of low-level waste generated within such a region. The National Governors' Association has supported voluntary compacts for some time as a means of dealing with interstate issues. We understand that this legislation would eliminate the need for specific federal legislation for each interstate compact, thereby encouraging states to assume their appropriate responsibility for the disposal of low-level waste. We fully endorse that purpose. However, this provision does not address the issues regarding jurisdiction of a regional site by a group comprised of Agreement and non-Agreement states. For example, if the site was located in a non-Agreement state, the Commission would retain licensing authority over the site. (See Section 274b of the Atomic Energy Act of 1954, as amended.) The Congress should consider whether the NRC should retain jurisdiction over a site established and operated by a regional compact that includes Agreement and non-Agreement States.

Section 2 would require the Commission to promulgate rules regarding the ownership of low-level radioactive waste. These rules would provide that the licensee generator shall have title to the waste until it is delivered to another licensee for transportation to a disposal facility. At that time, title would be transferred to the state in which the waste was generated, and would remain with this state until the waste is delivered to a disposal facility. Upon such delivery, title would pass to the state in which the facility is located unless that state determined that the waste was not packaged or labelled in accordance with the regulations of the NRC or the U.S. Department of Transportation. If the NRC determined that the regulations had not be complied with, the state in which the waste generator was located would be required to take whatever action the NRC deems appropriate.

In our view, this provision may not provide for improved regulation of low-level waste disposal. Pursuant to the Atomic Energy Act of 1954, as amended, the Commission has issued general licenses for the ownership of source, byproduct, and special nuclear material. Regulation of these materials is usually based on their possession or use, and not on title; and in some instances, the generator of waste is not its owner. Moreover, state ownership may not improve the current regulatory scheme. Agreement states are now subject to periodic NRC review of their regulatory programs. Non-Agreement states do not have the authority to require waste generators to take corrective actions; these generators are now subject to direct NRC regulations.

In addition, we have the following comments regarding the title provision:

(a) The Bill is silent on the ultimate responsibility for commercial waste in the event of default on the part of any state or state compact.

(b) Section 85b is inconsistent with the NRC's transfer of authority to Agreement states. Under Section 274 of the Atomic Energy Act of 1954, as amended, the NRC does not retain jurisdiction over low-level waste disposal in Agreement states.

(c) The Bill seems to require transportation only by a licensee, excluding exempt contract and common carriers who, in fact, transport low-level waste. We believe exempt contract and common carriers should be allowed to transport wastes.

(d) Section 85b is inconsistent with Section 85a(2). Section 85a(2) refers to a state determination of non-compliance. However, Section 85b refers to a Commission determination under Section 85a(2). These provisions should be amended to resolve this inconsistency.

(e) It is unlikely that the ownership rules could be promulgated within one year of enactment. The issuance of such rules may be considered as a major federal action requiring compliance with NEPA. Accordingly, the Commission recommends that Section 2(c) be amended to allow for two years.

The Commission believes that it would be desirable to include an additional provision with respect to final ownership of the disposal sites. Our regulations (10 CFR Part 20 §20.302(b)) currently require that licensed materials must be disposed of on land owned by either the Federal government or a state government. We believe that, just prior to the termination of the license for the site, the state in which the site is located should have the option of taking ownership from the Federal government or of transferring ownership to the Federal government. In either case, the states would have the first choice of ownership. However, the final owner of the site would be required to maintain the site in accordance with NRC requirements and EPA standards. Such provisions would parallel those set forth in the Uranium Mill Tailings Radiation Control Act of 1978 for restored sites.

Section 3 would define low-level radioactive waste as:

> "Any byproduct material which contains less than ten nanocuries of transuranic contaminants per gram of material or any such byproduct material which is free of transuranic contaminants but which the Commission determines, under rules promulgated by it, to have a low, but potentially hazardous, concentration or quantity of radionuclides."

This definition does not include source and special nuclear material. Moreover, it refers to transuranic wastes which are not defined by the Atomic Energy Act of 1954, as amended. Finally, the definition is not consistent with the regulations regarding low-level waste disposal now being developed by the NRC. Accordingly, we suggest the following alternative definition of low-level radioactive waste:

> The term "low-level radioactive waste" means waste containing source byproduct, and special nuclear material which the Commission determines by regulation to require disposal in accordance with the Atomic Energy Act, except that such term does not include byproduct material as defined in Section 11(e)(2).