



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

MAY 6 1980

MEMORANDUM FOR: John B. Martin, Director
Division of Waste Management

FROM: Joseph O. Bunting, Jr., Chief
Licensing Process and Integration Branch

SUBJECT: COMMENTS ON S. 2443

As we stated in our previous comments on H.R. 6865, the companion Bill to S. 2443 (see enclosed), we strongly support the intent of this legislation to spur remedial action on the potential liquid high-level waste hazard at the NFS West Valley site. The Bill is silent on the extent to which NRC would have authority to license what the Bill authorizes, however. As the enclosed draft Commission comments on the House Bill attest, this question has undergone extensive debate, and we will not attempt to gainsay the Commission's majority view that it has adequate existing authority to license and regulate a DOE liquid HLW solidification facility. We would only note that at some point, more probably sooner than later, the Commission will be asked to spell out how it intends to use its existing authority to license and regulate any demonstration solidification project DOE might undertake at West Valley.

Given this expectation, we would add the following comments on specific provisions of the Bill:

Section 2(a): Since the solidified wastes are to be transported "as soon as feasible," the subsection could be construed to require the immediate or near-term selection of the form of the solidified waste product. This would be inconsistent with the "systems approach" to waste disposal recommended by the IRG and reflected in the Waste Management Division's draft technical rule. Because an early selection of the "most effective [solidification] technology...available" would probably be neither necessary nor desirable, the subsection should specify that the waste form meet national repository criteria.

"Long-term burial" at a federal repository (page 2, line 10) probably means disposal and should be deleted. The word "disposal" should be substituted. Since the repository may not be operational in time to accept the wastes immediately after their solidification, on-site storage may well be necessary for an interim of several years.

Secondary wastes will be generated as a result of processing the high-level waste and during decontamination and decommissioning. The Bill does not provide for the disposal of these wastes and may not need to, but their ultimate destination (off-site or on-site) may become an issue.

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Section 2(b): The September 30, 1980, deadline for the preparation of a DOE plan is probably unrealistic, especially if the plan is to be the basis for a license application to NRC. The same deadline is almost certainly unrealistic for the transfer of title to the wastes to DOE, if transfer of title is construed to effect a transfer of possession requiring an amendment to the current license.

Section 3: Although the September 30, 1980 deadline may well be unrealistic, the provision limiting authorizations to \$5 million for planning and data collection until the various parties have contractually agreed to key elements of the project should afford the Commission considerable regulatory leverage in the early stages of the project. The Commission would probably have to terminate or amend the existing license to enable the Secretary to "utilize property and facilities at the Center for the project" under subsection (b), for example.

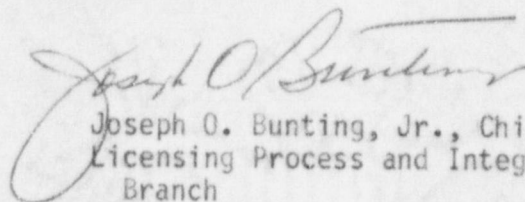
The allocation of costs between federal and state government under subsection (c) is subject to conflicting interpretations. While the "appropriate fee" to be paid by the state and Nuclear Fuel Services for perpetual care and maintenance of the wastes under Section 2(b)(3) appears to be distinct from the state's ten percent share of total project costs under Section 3(c), the inclusion of the existing perpetual care fund as a credit toward the state share casts doubt on this interpretation.

Subsection (d) mentions only timeliness, not public health and safety, as the primary consideration in the conduct of the project. The omission may not be an oversight.

Section 4: The requirement that DOE "consult" with NRC in carrying out the project could provide a foothold for an interpretation that the Commission's role stops short of full, formal licensing. This has been our interpretation of "consultation" in the past. In our recent Federal Waste Licensing Study (NUREG-0527) for example, consultation implied that NRC would conduct independent safety and environmental reviews of proposed DOE actions, but not convene a licensing board and actually issue a license. Despite the assurance in Section 6 that the Bill would have no effect on any "applicable" NRC licensing requirements, support for a more limited interpretation of NRC authority, perhaps extending only through early termination of the existing license, can be drawn from other parts of the Bill:

MAY 6 1980

- a. The Secretary is required to consult NRC only in "carrying out" the project, and there is no mention of any NRC involvement during the preparation of plans (Section 2[b]) and the negotiation of arrangements for waste title transfer and facility utilization (Section 3[a] and [b]). Given the premise that a waste solidification facility would not be licensable as a facility "used primarily for receipt and storage" of wastes, the Bill's silence on these points could buttress an argument that it did not contemplate NRC jurisdiction beyond disposition of the existing license.
- b. The requirement in Section 2(b)(2) for determining the feasibility of immobilization techniques and initiation of detailed engineering studies by September 30, 1980, suggests that DOE would have to select the waste form before NRC technical criteria are finalized.
- c. In general, the 1980 deadlines in Sections 2 and 3 indicate that NRC licensing decisions were not considered in the development of timetables for DOE action.


Joseph O. Bunting, Jr., Chief
Licensing Process and Integration
Branch

Enclosures:
As stated

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Original Signed By:

Joseph O. Bunting, Jr., Chief
Licensing Process and Integration
Branch

Enclosures:
As stated

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SURNAME	RMacDougall	prh ERegnier	CChaghney	JBunting		
DATE	5/1/80	5/2/80	5/5/80	5/5/80		

For:

The Commissioners

From:

Carlton R. Stoiber
Deputy General Counsel

Subject:

H.R. 6865

Discussion:

The Chairman of the House Committee on Interstate and Foreign Commerce has requested your views on H.R. 6865, a bill which would authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, New York. The only provisions relevant to the NRC would require the Secretary of Energy to consult with the NRC in carrying out the project and would explicitly maintain any applicable licensing requirements of the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974. I believe that your letter of November 23, 1979, to Congressman Udall contains your views on these matters. Accordingly, the relevant portions of that letter have been incorporated in the proposed enclosed reply.

Coordination:

Staff comments have been incorporated in the proposed reply.

Recommendation:

Send the proposed reply.

Carlton R. Stoiber
Deputy General Counsel

Enclosure: Bill 6865

Enclosure

The Honorable Harley O. Staggers
Chairman, Committee on Interstate
and Foreign Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This is in response to your request for the Nuclear Regulatory Commission's (NRC) views on H.R. 6865, a bill which would authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, New York. With regard to the NRC, the bill would require the Secretary of Energy to consult with the NRC in carrying out the project, and would preserve any applicable licensing requirements of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974. For the reasons discussed below, the Commission believes that H.R. 6865 is consistent with the Commission's current licensing authority. However, as is also discussed below, Commissioners Gilinsky, and Bradford believe that the NRC should have direct authority to license any DOE solidification facility at West Valley.

The Commission believes that its current authority for licensing non-Federal waste management activities at West Valley is adequate, and that this authority permits adequate evaluation of any DOE solidification activities at that site. The Atomic Energy Act of 1954 authorizes the Commission to regulate NFS's receipt, possession and transfer of licensed materials. The current commercial license for West Valley does not permit NFS to transfer high-level liquid waste to a DOE solidification facility, to modify its storage facilities to permit such a transfer, or to terminate its license in anticipation of a transfer to DOE of responsibility for the site. Consequently, before DOE could begin to solidify the high-level liquid waste at West Valley, the Commission must first amend the current NFS license. Of course, the Commission must find that such amendments

provide adequate protection to the public health and safety and are in accord with the common defense and security. Accordingly, if DOE is authorized to build a waste solidification facility on the licensed NFS site, NRC could conduct analyses to determine: (1) whether any transfers to and from the licensed NFS waste storage facility can be accomplished safely, and (2) whether the impacts of the solidification facilities on other NFS-licensed facilities are contrary to the requirement for protection of the public health and safety.

Moreover, the NRC's authority under the Energy Reorganization Act of 1974 includes the imposition of waste form criteria on the solidified product from a DOE waste solidification plant at West Valley. Such solidified waste would result from activities licensed under the Atomic Energy Act. Consequently, DOE would require an NRC license to receive and store such material in a facility used primarily for these purposes. Waste form criteria would be included in such a license.

The authorities discussed above appear to provide the NRC with substantial and sufficient regulatory oversight over any future DOE waste solidification activities at West Valley.

On the other hand, Commissioners Bradford and Gilinsky believe that the Commission could more effectively discharge its responsibilities regarding public health and safety at West Valley if it had direct authority to license a DOE solidification plant at that site. While the Commission could indirectly affect DOE's solidification activities there as explained above, it currently is not authorized to license a DOE waste solidification facility because such a facility would likely not be used primarily for the receipt and storage of high-level

wastes resulting from activities licensed under the Atomic Energy Act. as required by Section 202(3) of the Energy Reorganization Act of 1974. These Commissioners believe that the potential public health hazards related to solidification, the intimate connection between the licensed storage activities and solidification, and the need for extensive NRC review of the solidification process to assure that the appropriate quality assurance requirements have been identified support the extension of NRC licensing authority to a DOE solidification plant for the West Valley wastes. Moreover, in their view, such solidification activity would not present issues of national security because about 40% of the waste is of commercial origin, the radiochemical composition of the waste is publicly available, and NRC licensing would not interfere with any current national defense activities. Finally, these Commissioners believe that the Commission's existing regulatory process would provide the public participation necessary to any decision regarding radioactive waste management at West Valley.

The Commission appreciates this opportunity to express its views. If you have further questions on these matters, the Commission will be pleased to provide further assistance.

Sincerely,

John F. Ahearne

RH

Joe
analysis

96TH CONGRESS
2D SESSION

S. 2443

To authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, New York.

IN THE SENATE OF THE UNITED STATES

MARCH 19 (legislative day, JANUARY 3), 1980

Mr. MOYNIHAN (for himself and Mr. JAVITS) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, New York.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That this Act may be cited as the "West Valley Demonstra-
4 tion Project Act".

5 SEC. 2. (a) The Secretary of Energy (hereinafter in this
6 Act referred to as the "Secretary") shall carry out, in accord-
7 ance with the provisions of this Act, a high-level liquid nu-

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US NRC
NMSS DIV OF WASTE MANAGEMENT
DIVISION DIRECTOR
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WASHINGTON DC 20555

1 clear waste management demonstration project at the West-
2 ern New York Service Center in West Valley, New York
3 (hereinafter referred to as "the project"). The Secretary shall
4 carry out the project by vitrifying the high-level liquid
5 nuclear wastes located at such Center or by employing the
6 most effective technology for solidification available. The
7 Secretary shall, as part of the project, also (1) as soon as
8 feasible transport such solidified wastes, in accordance with
9 applicable provisions of law, to an appropriate Federal re-
10 pository for long term burial, and (2) decontaminate and de-
11 commission facilities, materials, and hardware used in con-
12 nection with the project.

13 (b) During the fiscal year ending September 30, 1980,
14 the Secretary shall—

15 (1) prepare a plan for safe removal of such wastes
16 from tank numbered 8D-2 and any other storage tank
17 at the Center containing such wastes including safely
18 breaching the tanks, operating waste removal equip-
19 ment, and sluicing techniques,

20 (2) determine the feasibility of immobilization and
21 waste handling techniques required by the unique situ-
22 ation of such wastes at the Center, including initiation
23 of detailed engineering and cost estimates as well as
24 safety analyses and environmental impact analyses,
25 and

1 (3) title to the high level liquid wastes at the
2 Center shall be transferred to the United States upon
3 payment by the State of New York and other appropri- *whom?*
4 ate persons of an appropriate fee, as determined by the
5 Secretary, for the perpetual care and maintenance of
6 such wastes.

7 Sec. 3. There is authorized to be appropriated to the
8 Secretary not more than \$5,000,000 for the fiscal year
9 ending September 30, 1980, for the project. Funds author-
10 ized and appropriated in subsequent fiscal years for the proj-
11 ect shall not be used by the Secretary for such purpose until
12 the Secretary, the State of New York, and other appropriate
13 persons enter into such contracts and agreements as may be
14 required—

15 (a) to provide for the transfer of title of such
16 wastes and the payment therefor,

17 (b) to enable the Secretary to utilize property and
18 facilities at the Center for the project,

19 (c) to share the costs of the project, except that
20 the non-Federal share of such costs shall be limited to
21 no more than 10 per centum thereof and in determin-
22 ing such share the Secretary shall consider the utiliza-
23 tion of such Center by the Secretary for the project,
24 the amount of money in the existing perpetual care
25 fund originally designated to provide, for ultimate dis-

1 position of the high-level liquid nuclear waste at the
2 Center, and such other factors as the Secretary deems
3 appropriate, and

4 (d) to otherwise provide for the conduct of the
5 project in a ^{safe +} timely manner.

6 SEC. 4. In carrying out the project, the Secretary shall
7 consult with the Nuclear Regulatory Commission, the Ad-
8 ministrator of the Environmental Protection Agency, the
9 Secretary of Transportation, the Director of the Geological
10 Survey, the State of New York, and the commercial operator
11 of the Center.

12 SEC. 5. Not later than February 1, 1981, and on Febru-
13 ary 1 of each calendar year thereafter during the term of the
14 project, the Secretary shall transmit to the Committee on
15 Science and Technology, the Committee on Interior and In-
16 sular Affairs, and the Committee on Interstate and Foreign
17 Commerce of the House of Representatives and the Commit-
18 tee on Energy and Natural Resources ^{and Envir + PW} of the Senate an up-to-
19 date report containing a detailed description of the activities
20 of the Secretary in carrying out the project, including the
21 costs incurred, and the activities to be taken in the next fiscal
22 year and the costs thereof. Any contract or agreement ex-
23 ecuted under section 3 of this Act, together with summaries
24 thereof, shall be promptly transmitted to such committees for
25 their information and review.

1 SEC. 6. Other than the costs and responsibilities estab-
2 lished by this Act for the project, nothing in this Act shall be
3 construed as affecting any rights, obligations, or liabilities of
4 the commerical operator of the Center, the State of New
5 York, or any person, as is appropriate, arising under the
6 Atomic Energy Act of 1954 or under any other law, con-
7 tract, or agreement for the operation, maintenance, or decon-
8 tamination of any facilities or property at the Center or for
9 any wastes at the Center. Nothing in this Act shall be con-
10 strued as affecting any applicable licensing requirements of
11 the Atomic Energy Act of 1954 or the Energy Reorganiza-
12 tion Act of 1974. The provisions of this Act shall not apply
13 or be extended to any facilities or property at the Center
14 which is not used in conducting the project.