

4

STATE OF ILLINOIS
DEPARTMENT OF NUCLEAR SAFETY

1035 OUTER PARK DRIVE • SPRINGFIELD, ILLINOIS 62704
217-785-9900 • 217-782-6133 (TDD)

George H. Ryan
Governor

Thomas W. Ortziger
Director

August 14, 2000

DOCKET NUMBER
PROPOSED RULE **PR 72+150**
(65FR37712)

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Attn: Rulemakings and Adjudications Staff

Re: Interim Storage for Greater Than Class C Waste
Federal Register: June 16, 2000 (Volume 65, Number 117)
Proposed rule

Dear Madam Secretary:

The Illinois Department of Nuclear Safety (Department) submits its comments on the above referenced proposed rule. The Department's comments on the related State Agreements Program information SP-97-028 were submitted to the Nuclear Regulatory Commission (NRC) on June 4, 1997. The Department strenuously objects to the NRC's disregard of the Atomic Energy Act (AEA) and the agreement between the NRC and the State of Illinois under Section 274 b. of the AEA.

The NRC's Proposed Action is Contrary to the Atomic Energy Act.

Section 274 b. of the Atomic Energy Act (AEA) authorizes the NRC to discontinue, and an Agreement State to assume, regulatory authority over radioactive material, including byproduct materials, source materials, and special nuclear materials in quantities not sufficient to form a critical mass. 42 U.S.C. §2021 (b). The AEA provides further that, "During the duration of such an agreement it is recognized that the State shall have authority to regulate the materials covered by the agreement for the protection of the public health and safety from radiation hazards." Id.

Section 274 c. of the AEA specifies that the NRC is not permitted to discontinue its regulatory authority over certain activities:



Template = SECY-067

SECY-02

August 14, 2000

“No agreement entered into pursuant to subsection (b) of this section shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of –

- (1) the construction and operation of any production or utilization facility or any uranium enrichment facility;
- (2) the export from or import into the United States of byproduct, source, or special nuclear material, or of any production or utilization facility;
- (3) the disposal into the ocean or sea of byproduct, source, or special nuclear waste materials as defined in regulations or orders of the Commission;
- (4) the disposal of such other byproduct, source, or special nuclear material as the Commission determines by regulation or order should, because of the hazards or potential hazards thereof, not be so disposed of without a license from the Commission.” 42 U.S.C. §2021 (c).

As authorized by the AEA, the NRC has discontinued and Illinois has assumed regulatory authority over byproduct materials, source materials, special nuclear material in quantities not sufficient to form a critical mass, and land disposal of source, byproduct and special nuclear material received from other persons. Agreement between the United States Nuclear Regulatory Commission and the State of Illinois for Discontinuance of Certain Commission Regulatory Authority and Responsibility within the State Pursuant to Section 274 of the Atomic Energy Act of 1954, As Amended (the Illinois Agreement); Amendment Number 1 to the Illinois Agreement. The Illinois Agreement became effective June 1, 1987, and Amendment Number 1 to the Illinois Agreement became effective November 1, 1990. The Illinois Agreement is effective until terminated.

The process and conditions for termination of an agreement between the NRC and an Agreement State are specified in Section 274 j. of the AEA:

“(1) The Commission, upon its own initiative after reasonable notice and opportunity for hearing to the State with which an agreement under subsection (b) of this section has become effective, or upon request of the

August 14, 2000

Governor of such State, may terminate or suspend all or part of its agreement with the State and reassert the licensing and regulatory authority vested in it under this chapter, if the Commission finds that (1) such termination or suspension is required to protect the public health and safety, or (2) the State has not complied with one or more of the requirements of this section.

(2) The Commission, upon its own motion or upon request of the Governor of any State, may, after notifying the Governor, temporarily suspend all or part of its agreement with the State without notice or hearing if, in the judgment of the Commission:

(A) an emergency situation exists with respect to any material covered by such an agreement creating danger which requires immediate action to protect the health or safety of persons either within or outside the State, and

(B) the State has failed to take steps necessary to contain or eliminate the cause of the danger within a reasonable time after the situation arose.

A temporary suspension under this paragraph shall remain in effect only for such time as the emergency situation exists and shall authorize the Commission to exercise its authority only to the extent necessary to contain or eliminate the danger." 42 U.S.C. §2021 (j).

The AEA provides the NRC with no authority to unilaterally modify agreements with Agreement States, either by administrative fiat or by rule. The NRC is likewise without authority to override provisions in the AEA by rule.

The NRC recognized in the Draft Rulemaking Plan that the Agreement States, not the NRC, would have the authority to regulate storage of GTCC waste once a Part 50 license is terminated. The NRC suggested that Agreement States "voluntarily relinquish their licensing authority for GTCC waste." Having received three of four Agreement State comments opposing voluntarily relinquishing that authority, the NRC now proposes a rule that would purport to nullify Agreement State authority based on "efficiency and consistency of licensing." The NRC cites no legal authority for ignoring provisions of the AEA on grounds of "efficiency and consistency of licensing."

The Department recognizes that Section 274 c. of the AEA forbids NRC from discontinuing its authority to license construction and operation of production or utilization facilities. The AEA's requirement that the NRC not discontinue that authority does not, however, authorize the NRC to dictate that Agreement States no longer have authority to license storage of GTCC waste at a facility that is no longer licensed as a production or utilization facility.

The NRC has once again failed to treat Agreement States as partners with respect to control of radiation hazards associated with the use of radioactive materials, opting rather to suggest to the Agreement States what is good for them, and having failed to receive the desired response, proposing to simply override provisions of duly executed agreements by administrative rule, totally ignoring provisions of the AEA for terminating or suspending Agreement State agreements. Termination or suspension of an AEA agreement with an Agreement State is allowed for two reasons: because the Agreement State has either failed to protect the public health and safety or failed to comply with requirements in Section 274 of the AEA. Neither reason is applicable to licensing of storage of GTCC waste, and neither reason is asserted in the proposed rule.

The Department does not object to an Agreement State deciding that it prefers that the NRC license storage of power reactor generated GTCC waste within that State, any more than the Department would object to a State preferring NRC regulation of 11e(2) byproduct material. Neither issue is, however, one to be decided by the NRC unilaterally.

The Department notes that the NRC has not taken the position that Agreement States would not have the expertise to regulate storage of GTCC waste or that Agreement State regulation of waste at former Part 50 sites would be contrary to the common defense and security. Such positions would, of course, be difficult to sustain because the proposed rule pertains only to power reactor generated GTCC and because the proposed rule is not intended "to change other current responsibilities for Class A, B, and C reactor-related LLW after termination of the 10 CFR Part 50 license." In other words, Agreement States will continue to have the authority to regulate storage of GTCC waste not generated in a power reactor (or in a Part 72 ISFSI) and will continue to have the authority to regulate all other classes of low-level radioactive waste stored at power reactor sites following termination of the Part 50 license. It should, but perhaps does not, go without saying that the NRC does not have the authority to negate by rule Agreement State and Compact authority over disposal of Class A, B, and C low-level radioactive waste.

Specific Questions

Compatibility of Agreement State Regulations

While the NRC's proposed rule would, contrary to the AEA, prohibit Agreement States from exercising their authority to regulate power reactor generated GTCC following termination of a Part 50 license, the NRC nevertheless solicits Agreement State comments on three questions regarding Agreement State licensing of such waste. Illinois' answers to the questions are as follows.

1. *What is the position of the Agreement States on the NRC assuming jurisdiction of storage of GTCC waste generated during the operation of a 10 CFR Part 50 license after termination of the 10 CFR Part 50 license?*

Without the agreement of the Agreement State where the pertinent facility is located, such "assuming of jurisdiction" is contrary to the AEA.

2. *What controls and regulatory framework would the Agreement States envision assuming they have jurisdiction over GTCC waste generated during the operation under a 10 CFR Part 50 license after termination of the 10 CFR Part 50 license? How would the Agreement States plan to ensure consistency with a national regulatory scheme?*

The second question should be answered first. Consistency with a national regulatory scheme would be ensured in the same manner as other Agreement State regulation. The NRC staff responsible for the proposed rule should talk with staff in the Office of State Programs. Illinois would envision "controls and regulatory framework" that are compatible with the NRC's controls and regulatory framework for the regulation of GTCC waste generated during the operation under a 10 CFR Part 50 license after termination of the 10 CFR Part 50 license.

3. *The NRC staff is not aware of any current Agreement State license for the storage of reactor-related GTCC waste. Are there any such licenses within your State or are you aware of any such Agreement State licenses?*

No, no.

Request for Public Input on Specific Issues

NRC has also requested comments from interested stakeholders on specific safety, technical or licensing issues. The Department's comments on these issues are as follows.

- 1. Should the storage of certain forms of GTCC waste and spent fuel in the same cask be prohibited? Or, should storage be permitted if performance criteria can be established? If so, what criteria should be used?*

If NRC is to allow the mixing of GTCC waste with spent fuel in the same casks, firm criteria should be established beforehand for each chemical type of GTCC waste and the particular cask design. Absent these criteria, mixing should be prohibited. The Palisades spent fuel cask experience indicates that performance criteria should be established for the different "certain forms of" GTCC waste and cask designs. Assurance of chemical compatibility and ultimate cask structural integrity must be established.

The U.S. Department of Energy (DOE) was remiss in not developing disposal criteria for multi-purpose casks while the current family of storage/transportation casks for spent fuel was being designed and licensed. As a result, spent fuel may have to be handled more than once before burial, resulting in increased radiation exposures and risk. Mixing other forms of GTCC waste with the spent fuel complicates matters even more. It, in effect, creates a whole new design and licensing category for casks, and could result in future waste handling problems. Therefore, lack of disposal criteria for both spent fuel and GTCC waste from the DOE is causing the NRC to become the storage criteria-setting body on a case-by-case basis. The Department agrees with the NRC that the DOE disposal criteria should be promulgated promptly.

- 2. Should the storage of explosive, pyrophoric, combustible, or chemically reactive GTCC waste be prohibited in either commingled or separate GTCC casks? Or should storage be permitted if performance criteria can be established? If so, what criteria should be used?*
- 3. Should the storage of GTCC that may generate or release gases via radiolytic or thermal decomposition, including flammable gases, be prohibited in either commingled or separate GTCC casks? Or should storage be permitted if performance criteria can be established? If so, what criteria should be used?*

August 14, 2000

4. *Should the storage of solid GTCC waste that may contain free liquid (e.g., dewatered resin) be prohibited in either commingled or separate GTCC casks? Or should storage be permitted if performance criteria can be established? If so, what criteria should be used?*
5. *Should the storage of liquid GTCC waste be prohibited in either commingled or separate GTCC casks? Or should storage be permitted if performance criteria can be established? If so, what criteria should be used?*

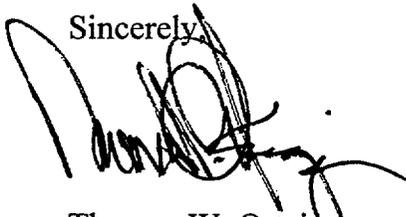
The same general comments to question 1) apply to the other specific applications referenced in questions 2) through 5). These forms of waste should be prohibited, unless criteria for the specific chemical hazard of the waste and compatibility to particular cask designs are established. This process should assure ultimate cask structural integrity. It would seem logical to require any GTCC waste to be processed to its least chemically reactive form prior to storage in a cask or for ultimate burial. If the waste continues to be explosive, pyrophoric, chemically reactive, combustible, etc., it would seem logical to prohibit storage, or store it in its own specially designed cask.

6. *If reactor licensees, after termination of their 10 CFR Part 50 license, elect to store reactor-related GTCC waste under the provisions of 10 CFR Parts 30/70, is additional guidance needed to provide a more efficient licensing process?*

The same technical criteria should be developed and applied to storage of GTCC waste regardless of which licensing option a licensee selects.

If you have any questions regarding these comments, please contact me at 217/785-9868.

Sincerely,



Thomas W. Ortciger
Director

TWO:bac