

March 5, 1997

FOR: The Commissioners

FROM: L. Joseph Callan /s/
Executive Director for Operations

SUBJECT: INTERIM STORAGE FOR GREATER THAN CLASS C WASTE, CHANGES TO 10 CFR PART 72

PURPOSE:

To inform the Commission of the staff's draft Rulemaking Plan to allow storage of greater than Class C (GTCC) waste at an independent spent fuel storage installation (ISFSI) or a monitored retrievable storage installation (MRS) under the provisions of Part 72 and my intent to send the draft Rulemaking Plan to the Agreement States for comment.

BACKGROUND:

Portland General Electric Company submitted a petition (PRM-72-2) to allow GTCC waste to be stored at an ISFSI or an MRS under a Part 72 license. The NRC staff has evaluated the petition and the six comments, which all supported the petition, and has concluded that the petitioner's concept has merit because there are currently no routine disposal options for GTCC waste.

AGREEMENT STATE IMPLEMENTATION ISSUE:

Storage of GTCC waste at an ISFSI (or an MRS) could lead to a situation of dual regulation of the ISFSI between the NRC and an Agreement State after termination of the Part 50 license. While the Part 50 license exists, the NRC has exclusive regulatory authority over a reactor licensee's storage of GTCC waste. However, once the Part 50 license is terminated in an Agreement State, the Agreement State has authority over the storage of LLW waste, including GTCC waste. This situation, although acceptable from a safety standpoint, may not be the most efficient. One potential way of avoiding dual regulation of the ISFSI would be for the Agreement State to voluntarily relinquish its authority for licensing any material or waste stored at an ISFSI. However, if the Agreement State does not relinquish this authority, the GTCC waste located with the spent fuel at an ISFSI would need to be licensed by the Agreement State.

We are particularly requesting Agreement State comments relative to their likelihood of relinquishing authority for licensing when an ISFSI or an MRS is involved in storing GTCC waste. The rulemaking process will provide the Agreement States an opportunity to comment on the draft Rulemaking Plan prior to final approval.

COORDINATION:

The Office of the General Counsel has no legal objection to the draft Rulemaking Plan. The Office of the Chief Financial Officer has no resource-related objection to the draft Rulemaking Plan. The Office of the Chief Information Officer concurs that there will be no information technology impacts.

RESOURCES:

Resources to complete the rulemaking are included in the current budget. Resources required to implement the final rule will be addressed during the FY 1999 budget formulation process.

RECOMMENDATION:

I intend to proceed with the development of the attached draft Rulemaking Plan unless otherwise directed by the Commission within 10 days from the date of this paper. This will include providing the draft Rulemaking Plan to the Agreement States for a 45-day comment period. If significant comments are received, I will provide the Commission with the staff's disposition of the Agreement State comments before I implement the Rulemaking Plan.

L. Joseph Callan
Executive Director for Operations

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Attachment: [Draft Rulemaking Plan](#)

NOTE: TO BE MADE PUBLICLY AVAILABLE WHEN THE FINAL SRM IS MADE AVAILABLE

Draft Rulemaking Plan

INTERIM STORAGE FOR GREATER THAN CLASS C WASTE, CHANGES TO 10 CFR PART 72

REGULATORY ISSUE TO BE RESOLVED

The regulations currently are not clear with respect to the acceptability of storing Greater than Class C (GTCC) waste at an independent spent fuel storage installation (ISFSI) or a monitored retrievable storage installation (MRS). This has created confusion and uncertainty on the part of decommissioning reactors and has the potential to create inefficiency and inconsistency in the way the NRC handles GTCC waste licensing matters. In addition, storage of GTCC waste at an ISFSI (or an MRS) could lead to a situation of dual regulation at the ISFSI between the NRC and an Agreement State. The NRC has exclusive regulatory authority over a reactor licensee's storage of spent fuel and of GTCC waste, but an Agreement State will have authority for any GTCC waste possessed by the utility when the Part 50 license is terminated.

It is anticipated that the decommissioning activities at nuclear power plants will generate relatively small volumes of GTCC waste relative to the amount of spent fuel that exists at these sites. GTCC waste is principally activated metals from the reactor vessel and internal components, and it can include other waste (i.e., sealed sources or filters). GTCC waste exceeds the concentration limits of radionuclides established for Class C in 61.55 and is not generally acceptable for near-surface disposal at licensed low-level radioactive waste (LLW) disposal facilities. There currently are no routine disposal options for GTCC waste.

Utilities are currently storing these wastes under their Part 50 licenses, either within the reactor vessel or in the spent fuel pool, pending development of suitable disposal. The Low-Level Radioactive Waste Policy Amendments Act of 1985 gave the Federal Government (Department of Energy (DOE)) the primary responsibility for developing a national strategy for disposal of GTCC waste, and the Act gave the NRC the licensing responsibility for a disposal facility. Based on current plans, this disposal capability will not be available in the near term. Since GTCC waste is unlikely to be disposed of at a LLW disposal site regulated under Part 61, the GTCC waste must, therefore, be stored in the interim.

BACKGROUND

Petition From Portland General Electric Company

This rulemaking addresses PRM-72-2, which the Commission received from Portland General Electric Company on November 2, 1995. PRM-72-2 requests that Part 72 be amended to specifically provide for storage of GTCC waste at an ISFSI or an MRS pending its transfer to a permanent disposal facility. Because interim storage of the GTCC waste would be accomplished in a manner similar to that used to store spent fuel at an ISFSI, the petitioner believes public health and safety and environmental protection would be ensured.

The NRC published a notice of receipt of the petition in the *Federal Register* on February 1, 1996, allowing a 75-day comment period. The NRC received six comment letters, all supporting the petition. The NRC staff has evaluated the petition and the comments and has concluded that the petitioner's concept has merit. Part 72 only provides for licensing storage of spent fuel at an ISFSI and storage of spent fuel and solid high-level radioactive waste at an MRS. Nonetheless, a reactor licensee could elect to store GTCC waste at an ISFSI site under licenses issued under other NRC regulations, namely, Part 30 and Part 70. However, the present Part 30 and Part 70 regulations do not provide specific licensing criteria for storage of GTCC waste at an ISFSI, and thus it may not have been known to the petitioner or to the commenters that GTCC waste can be stored under a Part 30 or a Part 70 license.

PRELIMINARY REGULATORY ANALYSIS

To resolve the regulatory issue identified above, the following two options were considered.

Option 1: The first option is to clarify that NRC's existing regulations allow storage of GTCC waste at the licensee's ISFSI under a Part 30 or a Part 70 license normally conferred as part of its Part 50 license. However, upon termination of the Part 50 license it would be necessary to apply for a specific Part 30 or Part 70 license (or under equivalent Agreement State Part 30 or Part 70 regulations) if GTCC waste is to remain at the ISFSI. Under this option, the petition would be denied because no changes to NRC's regulations are necessary to meet the specific requirements of the petitioner. The NRC could issue an Information Notice or issue a clarifying rule change to Part 72 that makes it clear that GTCC waste can be stored at an ISFSI under a Part 50 license during reactor operations, or under a Part 30 or a Part 70 license either during operations or after the Part 50 license is terminated.

Option 2: The second option would modify Part 72 to allow storage of GTCC waste under Part 72 using the performance criteria of Part 72. Storage and licensing requirements would be fully contained in Part 72. Storage of GTCC waste would be permitted under a Part 72 general or specific license. This option meets the request of the petitioner and provides a more efficient means of implementing what is already permitted by the regulations (storage of GTCC waste at an ISFSI or an MRS). That is, revising the regulations to allow storage of GTCC waste under Part 72 does not preclude storing it under Part 30 or Part 70 if a licensee so chooses.

Preferred Option

Option 2 is recommended for the following reasons:

1. Development of licensing criteria under Parts 30 and 70 would be unnecessary. Neither Part 30 nor Part 70 includes explicit criteria for storage of GTCC waste and, therefore, the licensing process could be more complicated because the licensee would need to propose criteria and the NRC would need to review and approve them. Part 72 was developed specifically for storage of spent fuel at an ISFSI and spent fuel and high-level waste at an

MRS, and the licensing process will be clearer and more straightforward if all the radioactive waste to be stored at an ISFSI meets common criteria and is stored under the authority of one license. The performance criteria in Part 72 (General Design Criteria in Subpart F) for spent fuel would also be used for the GTCC waste. Although the individual waste types of GTCC are different than spent fuel, the GTCC waste is less hazardous than spent fuel from a radiological, chemical, and physical standpoint. The GTCC waste is also expected to be in a solid waste form (i.e., mostly activated metals) such as reactor internals, nozzles, and in-core instrumentation. However, other GTCC waste forms would be considered for storage at the ISFSI (or MRS) provided that the GTCC waste meet the performance criteria in Part 72.

2. After termination of the Part 50 license, Option 1 would require multiple licenses -- Part 72 for spent fuel and a Part 30 or a Part 70 (or both) for GTCC waste. Having one license for the ISFSI under Part 72 will be simpler for both licensees and the NRC.

PROPOSED CHANGE TO IMPLEMENT OPTION 2

To implement Option 2, the NRC staff proposes to add a definition of GTCC waste in Section 72.3 for use in Part 72 that would be consistent with 61.55. This would require modification of over 30 sections within Part 72 to add the term GTCC waste where the term spent fuel is used. The title to Part 72 would also be changed.

OGC ANALYSIS

OGC has no legal objection to this proposed rulemaking.

AGREEMENT STATE IMPLEMENTATION ISSUE

Storage of GTCC waste at an ISFSI (or an MRS) could lead to a situation of dual regulation of the ISFSI between the NRC and an Agreement State after expiration of the Part 50 license. While the Part 50 license exists, the NRC has exclusive regulatory authority over a reactor licensee's storage of GTCC waste⁽¹⁾. However, once the Part 50 license is terminated in an Agreement State, the Agreement State has authority over the storage of LLW waste, including GTCC waste. Therefore, when a nuclear power reactor in an Agreement State is decommissioned and the Part 50 license is terminated, storage of GTCC waste would fall under the purview of that Agreement State. This would result in the situation where the Agreement State has authority over GTCC waste stored at the ISFSI and the NRC has authority over spent fuel also stored at the ISFSI. This situation, although acceptable from a safety standpoint, may not be the most efficient. One potential way of avoiding dual regulation of the ISFSI would be for the Agreement State to voluntarily relinquish its authority for licensing any material or waste stored at an ISFSI. However, if the Agreement State does not relinquish this authority, the GTCC waste located with the spent fuel at an ISFSI would need to be licensed by the Agreement State. This would result in the NRC licensing the spent fuel under Part 72 and the Agreement State licensing GTCC waste under its regulations equivalent to Part 30 or Part 70.

This issue is pertinent for Agreement States irrespective of the option chosen or whether storage of GTCC waste is licensed by the NRC under Part 72, Part 30, or Part 70. This issue is most pertinent for Agreement States where an ISFSI (or an MRS) might be located (i.e., for an ISFSI, a nuclear power reactor is in the State). There are 29 Agreement States and 21 of them have nuclear power reactors. There are also four States seeking to become Agreement States and three of these have power reactors.

The proposed compatibility level for this rulemaking is Division 4 because the change only affects Part 72. Division 4 rules pertain to those regulatory functions that are reserved solely to the authority of the NRC pursuant to the Atomic Energy Act, as amended, and [10 CFR Part 150](#).

We are particularly interested in Agreement State comments relative to their likelihood of relinquishing authority for licensing when an ISFSI or an MRS is involved in storing GTCC waste. The rulemaking process will provide the Agreement States an opportunity to comment on this draft Rulemaking Plan prior to final approval. The Agreement States, along with the public, will have an opportunity to comment on the proposed rule.

SUPPORTING DOCUMENTS

This rulemaking would require a Regulatory Analysis that the staff believes would show a benefit to licensees. The regulations would be amended to allow the option to store GTCC waste under a Part 72 license at an ISFSI or an MRS. No backfit analysis would be needed because this change would provide an option that need not be used. An OMB Clearance Package will be needed because the rulemaking would impose Part 72 recordkeeping and reporting requirements on GTCC waste stored at an ISFSI or an MRS.

A simple Environmental Assessment would be needed. GTCC waste can currently be stored at an ISFSI under a Part 30 or a Part 70 license. This rulemaking would provide licensees an additional option of storing GTCC waste under a Part 72 license using the spent fuel storage criteria of Part 72. GTCC waste is less hazardous than spent fuel from a radiological, chemical, and physical standpoint. The GTCC waste is also in the form of solid waste (i.e., mostly activated metals) such as reactor internals, nozzles, and in-core instrumentation. In addition, storage of GTCC waste at an ISFSI or an MRS would be in a passive mode with no human intervention needed for safe storage. In conclusion, the NRC staff believes that GTCC waste can be stored at an ISFSI or an MRS safely and without significant environmental impacts.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC believes that this action is not a "major rule" and, prior to issuing a final rule, will verify this with the Office of Information and Regulatory Affairs, Office of Management and Budget.

RESOURCES

The estimated resources to complete this rulemaking would be one staff-year divided among RES, NMSS, OSP, and OGC. Contractor support will be

expended to assist in the preparation of the Regulatory Analysis, which will include the OMB analysis, and the Environmental Assessment. The NRC staff estimates this effort at about \$80,000. The NRC staff believes this is a reasonable one-time use of resources to clarify and streamline NRC regulations.

LEAD OFFICE STAFF AND STAFF FROM SUPPORTING OFFICES

Lead Office - Project Management

RES - Mark Haisfield

Technical Support Offices

NMSS - Andrew Persinko (SFPO)
and Leroy Person (DWM)

OSP - Stephen Salomon
OGC - Neil Jensen

Concurring Official

Bill Morris

Charles Haughney

Richard L. Bangart
William J. Olmstead

STEERING GROUP

None. The working group is identified above.

ENHANCED PUBLIC PARTICIPATION

The Agreement States would be allowed 45 days for input on this draft Rulemaking Plan. This rulemaking will also use the NRC electronic bulletin board at FedWorld. The bulletin board will be used as a mechanism to enhance public dialogue. FedWorld allows users to review comments and questions submitted by others and also provides a mechanism for NRC to respond electronically, where appropriate. The approved Rulemaking Plan and the proposed rule would be placed on FedWorld.

EDO OR COMMISSION ISSUANCE

It is recommended that the Commission issue the proposed and final rule, since staff will propose in the course of this rulemaking that Agreement States voluntarily relinquish licensing authority to the NRC for storage of GTCC waste at an ISFSI and an MRS.

SCHEDULE.

Draft Rulemaking Plan for Office concurrence (allow 20 days for Office review)	January 1997
Draft Rulemaking Plan to the Agreement States and CRCPD for comment, and memo to the Commission for information	April 1997
SECY Paper, including draft Rulemaking Plan, with disposition of Agreement State comments for Office concurrence (allow 20 days)	July 1997
SECY Paper, for approval of Rulemaking Plan, to EDO	August 1997
Approval of final Rulemaking Plan to initiate rulemaking and publish final Rulemaking Plan on Bulletin Board	October 1997
Proposed rulemaking package for Office concurrence	February 1998
Proposed rulemaking package to the EDO	April 1998
Proposed rule published (75 day comment period) and submittal of OMB Clearance Package	June 1998
Final rule to the EDO	January 1999

1. See 10 CFR 150.15(a)(1).