



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

December 22, 2015

COMMISSION VOTING RECORD

DECISION ITEM: SECY-15-0094

TITLE: HISTORICAL AND CURRENT ISSUES RELATED TO
DISPOSAL OF GREATER-THAN-CLASS-C LOW-LEVEL
RADIOACTIVE WASTE

The Commission acted on the subject paper as recorded in the Staff Requirements Memorandum (SRM) of December 22, 2015.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette L. Vietti-Cook
Secretary of the Commission

Enclosures:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Burns
Commissioner Svinicki
Commissioner Ostendorff
Commissioner Baran
OCAA

VOTING SUMMARY - SECY-15-0094

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. BURNS	X	X			X	11/04/15
COMR. SVINICKI	X				X	09/28/15
COMR. OSTENDORFF	X	X			X	09/25/15
COMR. BARAN	X	X			X	08/25/15

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: Chairman Burns
SUBJECT: SECY-15-0094: Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level Radioactive Waste

Approved XX (in part) Disapproved XX (in part) Abstain Not Participating

COMMENTS: Below Attached XX None

Entered in STARS
Yes x
No



Signature

 4 November 2015

Date

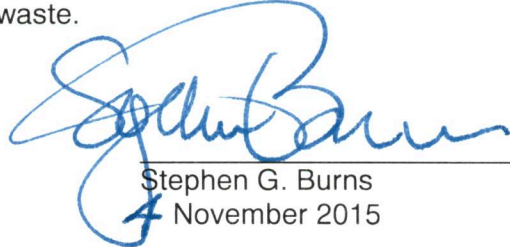
**Chairman Burns' Comments on SECY-15-0094
Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level
Radioactive Waste**

The staff proposes three options to address the question of whether an Agreement State, specifically the State of Texas, may license the disposal of Greater-Than-Class C (GTCC) waste. Based on my review, I believe that a Commission determination on the jurisdictional matter is premature. Before a Commission determination can be made, the staff should take steps that would allow specific technical and practical aspects of the options posed by the staff to be less speculative.

As the staff notes in its paper, the NRC's regulations currently provide a limited path for the disposal of specific shipments of GTCC waste in a 10 CFR Part 61 disposal facility through the case-by-case review contemplated in 10 CFR § 61.55(a)(2)(iv). This option remains available to parties wishing to conduct this activity in the near term.

Nonetheless, there is merit to proceeding with the development of generic criteria for disposal of GTCC waste. This approach will inform the ultimate decision on the jurisdictional matter. Within three months of the issuance of the Staff Requirements Memorandum, the staff should, consistent with the established rulemaking process, submit a notation vote paper that contains the technical basis for disposal of GTCC waste in a near-surface low-level waste facility or another type of facility other than a deep geologic repository, applicable disposal criteria, and a recommendation regarding the need for rulemaking either under Part 61 or another part in 10 CFR Chapter 1. The paper should also contain the estimated resources and schedule for a rulemaking.

Finally, I approve the staff's recommendation to initiate a rulemaking to address the noted inconsistencies in Part 61 related to transuranic waste.



Stephen G. Burns
4 November 2015

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER SVINICKI
SUBJECT: SECY-15-0094: HISTORICAL AND CURRENT ISSUES
RELATED TO DISPOSAL OF GREATER-THAN-CLASS
C LOW-LEVEL RADIOACTIVE WASTE

Approved XX Disapproved _____ Abstain _____ Not Participating _____

COMMENTS: Below _____ Attached XX None _____



SIGNATURE

09/ 28 /15

DATE

Entered on "STARS" Yes No _____

**Commissioner Svinicki's Comments on SECY-15-0094
Historical and Current Issues Related to Disposal of
Greater-Than-Class C Low-Level Radioactive Waste**

This paper discusses, in some detail, the Nation's complex framework – both in statute and regulation – governing low-level radioactive waste disposal and provides three different options in answer to the jurisdictional questions regarding disposal of Greater-Than-Class C (GTCC), GTCC-like, and transuranic (TRU) waste posed to the NRC by the State of Texas in its letter to the NRC, dated January 30, 2015. I agree with the staff's assessment that each option would provide a path forward that is both legally defensible and protective of public health and safety and I approve the staff's recommended Option 2. Under this option, the Federal government would meet its statutory responsibilities under the Low-Level Radioactive Waste (LLRW) Policy Amendments Act of 1985 (Amendments Act) and Atomic Energy Act (AEA), as amended, by developing a process under which Texas is authorized to exercise its AEA-derived regulatory authority for the licensing of LLRW disposal. I further approve direction to the staff to initiate rulemaking to revise generically the definition of LLRW to address TRU waste in 10 Code of Federal Regulations (CFR) § 61.2. If the Commission chooses this path, the staff should dispatch a letter to the State of Texas reflecting the Commission's decision and proposing concrete next steps for engagement between the NRC and the Texas Commission on Environmental Quality (TCEQ) to begin development of the necessary process to support this outcome.

I approve Option 2 because I assess that it contains the potential for the greatest measure of resulting public policy good when all relevant factors are balanced, but I do not contort my reasoning simply to advance the purpose of waste disposal. As Commissioner Ostendorff notes and I agree, these materials are currently safely stored. If a rigorous safety case cannot be demonstrated in support of disposal of these materials, in Texas or elsewhere, I am confident neither the NRC nor TCEQ would allow such a proposal to move forward.

I agree with the conclusions of the NRC staff that the statutory framework and applicable regulations – while complex and on their face, in places, contradictory – raise no fundamental obstacle to proceeding as the staff recommends. Although additional work and analysis will be needed to put the proper procedural structure in place between NRC and TCEQ, that work will unfold over time. Should policy issues arise at any point in their development, the staff should seek Commission direction, as the staff has done in this paper. I find Option 2 consistent with the elements that guide my deliberations; namely, the NRC's Principles of Good Regulation, relevant statute and regulation, and the Constitution of the United States.

Finally, while the concept of "urgency" is certainly subjective, our Nation has not made concrete progress on the disposal of GTCC waste in the three decades since the Amendments Act was put in place. Although I approve the initiation of rulemaking as described above, this rulemaking need not precede immediate substantive movement forward to implement Option 2 by the NRC staff and the regulatory staff of the TCEQ Radioactive Materials Division. Specifically, the staff should proceed directly and in parallel to explore with TCEQ the detailed form and content of any proposal from the State of Texas to license near-surface disposal of GTCC in accordance with 10 CFR § 61.55(a)(2)(iv).

Unlike the NRC, the State of Texas has experience in licensing and overseeing the operations of a low-level waste disposal facility. In this regard, our Texas regulatory colleagues have vast expertise and insight to bring to the development of criteria and standards against which the safety of near-surface disposal of GTCC, GTCC-like, and TRU waste must be assessed. Consequently, technical exchange regarding the establishment of such criteria and standards should begin between our agencies immediately.



Kristine L. Svinicki

09/28/15

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: Commissioner Ostendorff
SUBJECT: SECY-15-0094: Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level Radioactive Waste

Approved XX Disapproved XX Abstain _____ Not Participating _____

COMMENTS: Below _____ Attached XX None _____

Entered in STARS

Yes _____

No _____



Signature

9/25/15

Date

**Commissioner Ostendorff's Comments on SECY-15-0094,
"HISTORICAL AND CURRENT ISSUES RELATED TO DISPOSAL OF GREATER-THAN-
CLASS-C LOW-LEVEL RADIOACTIVE WASTE."**

The Commission has been asked to decide whether Texas, an agreement state under section 274 of the Atomic Energy Act (AEA), has the authority to license and regulate the disposal of greater-than-class-C (GTCC) low-level radioactive waste (LLRW). Texas asked the NRC this question because Waste Control Specialist, LLC (WCS), the holder of a Texas license for LLRW disposal, has petitioned Texas to remove prohibitions on the disposal of GTCC waste at its facility. The staff recommends in SECY-15-0094 that the Commission allow Texas to license and regulate the disposal of GTCC waste and direct the NRC staff to pursue a rulemaking to address transuranic (TRU) waste disposal. The staff does not recommend a more complete revision to 10 C.F.R. part 61, which would establish standards for the disposal of GTCC waste. As I see it, we need to have those standards in place before either regulator (NRC or Texas) may license the disposal of GTCC waste. For the reasons I discuss more fully below, I approve an approach that directs the staff to revise the current part 61 rulemaking to address disposal of GTCC waste, including TRU waste. The outcome of that rulemaking will establish standards against which either the NRC or Texas could evaluate a license application for GTCC waste disposal.

First, let me state that licensees are currently storing GTCC waste in a manner that is protective of public health and safety, but permanent disposal is in the best interest of the nation. I appreciate that WCS is interested in taking on the disposal of GTCC waste and that Texas engaged the NRC before moving forward with licensing. Through a thorough review of SECY-15-0094 and helpful insights from the public meeting in August as well as several follow-up meetings with the staff, I have gained an understanding of the complex history of LLRW disposal.

A great deal has changed politically and technologically since the early 1980s when the current LLRW disposal framework was established. Historically, it was assumed that GTCC waste would be disposed of in a geologic repository unless the NRC approved an alternative disposal option under 10 C.F.R. § 61.55(a)(2)(iv). At the time that part 61 was developed, the NRC envisioned the availability of a deep geologic repository by the end of the twentieth century. Now, movement on the construction of a deep geologic repository has stalled. Additionally, when LLRW was originally classified, technology would not have allowed for near-surface disposal of GTCC waste. Now, as indicated in SECY-15-0094, with additional knowledge of GTCC waste characteristics, enhanced near-surface capabilities, and an understanding of specific intruder scenarios, the staff has determined that disposal of GTCC waste in an enhanced near-surface facility such as WCS is a potential option. However, in SECY-15-0094, the staff did not go as far as to determine the criteria under which disposal of GTCC waste would be protective of public health and safety. Nor did the staff determine whether all forms of GTCC waste could be disposed of in a near-surface facility.

Regarding the statutory question before the Commission, I respect Commissioner Baran's concern with the staff's interpretation of section 3(b) of the Low-Level Radioactive Waste Policy

Amendments Act of 1985 (Amendments Act). I agree that the interpretation may present some litigation risk for the NRC, but I do not conclude that the statute prohibits agreement states from licensing the disposal of GTCC waste. Section 274 of the AEA allows agreement states to take on the authority to regulate a wide array of byproduct, source, and special nuclear materials. Section 274c. reserves exclusive NRC authority over only a few areas:

- (1) the construction and operation of any production or utilization facility or any uranium enrichment facility;
- (2) the export 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 disposed of without a license from the Commission.

The Commission shall also retain authority . . . to make a determination that all applicable standards and requirements have been met prior to termination of a license for byproduct material, as defined in section 11e.(2).

I do not conclude that section 3(b)(2) of the Amendments Act should be read to upset the balance established by section 274. At this stage, however, the Commission does not have an adequate analysis of GTCC waste disposal to make a determination under section 274c.(4). The completion of a part 61 rulemaking would provide the needed analysis for the Commission to determine if it should retain its authority over the disposal of some or all GTCC waste disposal. Accordingly, by simply saying that Texas may submit a proposal to license a GTCC-waste-disposal site before the Commission makes that determination, the Commission would not be adequately adhering to its own principles of good regulation. In particular, I see a lack of openness, efficiency, clarity, and reliability in that approach.

In its historical statements on GTCC waste, the NRC has left open the possibility of near-surface disposal of GTCC waste as well as agreement state licensing of such near-surface disposal. But the NRC has never truly analyzed either matter in order to come to a conclusion or establish standards. Section 61.55(a)(2)(iv) states:

Waste that is not generally acceptable for near-surface disposal is waste for which form and disposal methods must be different, and in general more stringent, than those specified for Class C waste. In the absence of specific requirements in this part, such waste must be disposed of in a geologic repository as defined in part 60 or 63 of this chapter unless proposals for disposal of such waste in a disposal site licensed by this part are approved by the Commission.

Although the staff has said that the performance objectives in part 61 likely cover GTCC waste, there are no specific requirements for GTCC waste disposal in part 61. Nor is there an

established process for reviewing an alternative proposal under section 61.55(a)(2)(iv). From the standpoint of good regulation, the most open and efficient solution here is an NRC rulemaking. A rulemaking will also supply much needed clarity, reliability, and certainty in the complex area of LLRW. Therefore, the staff should use the current part 61 rulemaking to address GTCC waste disposal. Through its rulemaking, the NRC will be able to establish what forms of GTCC waste can be disposed of in a near-surface facility and what requirements should be applied. The NRC will also be able to identify whether any forms of GTCC waste cannot be licensed under part 61 and instead must be licensed under part 60 or 63. Rulemaking will provide a transparent and efficient means for the public, potential applicants, and agreement states to be involved in the NRC's decision-making. In addition, by codifying requirements, there will be no need for Texas to submit a proposal to the NRC under section 61.55(a)(2)(iv) because there will be specific requirements for GTCC waste disposal in part 61. Any waste that falls under part 61 could be licensed by the NRC or Texas. Any waste that falls under part 60 or 63 would need to be disposed of under an NRC license. This provides both the certainty and reliability that our stakeholders should be able to count on from the NRC.

In discussions with the staff, I have not heard any urgent matter that argues for not taking the time to address GTCC and TRU waste in the current part 61 rulemaking. With the understanding that the rule would likely need to be re-noticed, the staff should provide the Commission with a proposed rule within six months of a final Staff Requirements Memorandum and the staff should have a final rule ready for Commission approval within twelve months of the proposed rule's approval.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Commissioner Baran

SUBJECT: SECY-15-0094: Historical and Current Issues Related
to Disposal of Greater-Than-Class C Low-Level
Radioactive Waste

Approved XX Disapproved XX Abstain _____ Not Participating _____

COMMENTS: Below _____ Attached XX None _____

Entered in STARS

Yes XX

No _____



Signature

8/25/15

Date

Commissioner Baran's Comments on SECY-15-0094, "Historical and Current Issues Related to Disposal of Greater-than-Class-C Low-Level Radioactive Waste"

The policy paper before us presents the question of whether the Low-Level Waste Policy Amendments Act of 1985 (Amendments Act) permits an Agreement State to license a disposal facility for Greater-than-Class-C (GTCC) radioactive waste or whether the Act assigns this responsibility exclusively to NRC. The staff paper is prompted by a January 30, 2015, letter from the Texas Commission on Environmental Quality (TCEQ) posing this legal question in light of a petition from Waste Control Specialists (WCS) for a TCEQ rulemaking to authorize the disposal of GTCC waste in its existing Federal Waste Disposal Facility in Andrews, Texas. I appreciate TCEQ's effort to seek clarification of the respective licensing authorities of our two agencies.

In its paper, the NRC staff presents three options: (1) interpret the Amendments Act to require NRC licensing of the disposal of GTCC waste and separately initiate a rulemaking to amend NRC's Part 61 low-level waste disposal regulations to address transuranic waste; (2) interpret the Amendments Act to allow TCEQ licensing of the disposal of GTCC waste and separately initiate a rulemaking to amend Part 61 to address transuranic waste; or (3) take no action. The NRC staff recommends option 2. However, for the reasons discussed below, I approve a modified version of option 1.

Interpretation of the Amendments Act

The staff paper and TCEQ letter pose the threshold question of how to interpret the GTCC-related provisions of the Amendments Act. Although it is a complex question, I believe the soundest reading of the Amendments Act is that it provides for exclusive NRC licensing of all GTCC waste disposal.

Section 3(b)(1) of the Amendments Act states: "The Federal Government shall be responsible for the disposal of ... low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the Commission for class C radioactive waste." This provision clearly establishes that disposal of GTCC waste is solely a federal responsibility. Section (3)(b)(2) directly addresses the question of who licenses a GTCC waste facility. It provides:

All radioactive waste designated a Federal responsibility pursuant to subparagraph (b)(1)(D) that results from activities licensed by the Nuclear Regulatory Commission under the Atomic Energy Act of 1954, as amended, shall be disposed of in a facility licensed by the Nuclear Regulatory Commission that the Commission determines is adequate to protect the public health and safety.

The plain language of the statute clearly indicates that NRC is the licensing authority for disposal of GTCC waste. There is nothing in the text of the provision that suggests that Congress contemplated or provided for Agreement State licensing of GTCC waste disposal facilities.

The plain language reading of this specific provision is bolstered by the multiple references to "agreement states" in other sections of the Amendments Act. Sections 2, 6, and 9 all specifically reference "agreement states." This demonstrates that Congress was aware of the Agreement State program and could have explicitly stated that Agreement States are

authorized to license GTCC waste disposal facilities. But Congress did not do so. The absence of the term “Agreement State” in section 3(b)(2) indicates that Congress did not intend to confer upon Agreement States the authority to license disposal cells for GTCC waste.

The legislative history of the Amendments Act supports this reading of the text. For example, Senator Hart, a co-sponsor of the legislation stated:

We have also clarified that the Federal Government is responsible for the disposal of low-level radioactive waste that exceeds the limits established by the Commission for class C radioactive waste, as defined by the regulations cited above. Such disposal is to be in a facility licensed by the Commission. This resolves the contentious issue of above class C waste, which the states were unwilling to be required to dispose of due to the uncertainty surrounding the type of disposal facility that might be required by the Commission for the safe disposal of such wastes.¹

Similarly, Senator Bentsen stated:

This legislation also addresses the difficult issue of what to do with above class C waste, which the states are unwilling to accept. Rather than remain silent on this possible source of “orphan” waste, we declare that such waste is a Federal responsibility and must be put in a facility licensed by the Nuclear Regulatory Commission.²

In the House of Representatives, Rep. Markey, Chairman of Subcommittee on Energy Conservation & Power, explained:

[The Act] contains language which would establish a new requirement that the NRC license any disposal facility for ... above class C wastes, for which the Federal Government is explicitly given management responsibility for the first time.³

Rep. Udall, Chairman of the Subcommittee on Energy and the Environment further stated:

It is my belief that the language in the act, now contained in section 3, which requires the Federal Government to assume responsibility for disposing of all above class C wastes, and which requires that such disposal be accomplished in licensed facilities, gives the NRC all the authority necessary to accomplish the kind of review contemplated in the House language, and further, that such a review will, in my opinion, be found necessary in order for the NRC to discharge its responsibilities under section 3 of the bill now under consideration.⁴

This legislative history reinforces the plain language of the Amendments Act. It reveals that Congress intended to make the federal government solely responsible for the disposal of all GTCC waste because states were unwilling to bear the responsibility for disposing of such waste. The statements of these key members of the Senate and House also show that Congress meant what it said in the statute: GTCC must be disposed of in an NRC-licensed facility. Conspicuously absent from all of these Congressional descriptions of the licensing responsibility for GTCC waste disposal is any mention of Agreement States or suggestion that

¹ 131 Cong. Rec. S18103 (daily ed. Dec. 19, 1985).

² 131 Cong. Rec. S18106 (daily ed. Dec. 19, 1985).

³ 131 Cong. Rec. H13077 (daily ed. Dec. 19, 1985).

⁴ 131 Cong. Rec. H13077 (daily ed. Dec. 19, 1985).

Agreement States could license such a facility. The main focus of the legislation was on precisely defining the roles and responsibilities of the federal government and the states with respect to the disposal of low-level radioactive waste. It is difficult to believe that Congress intended to allow Agreement States to license GTCC waste disposal facilities without any legislators even hinting that this was the case.

In light of the statutory text and accompanying legislative history, it is not surprising that NRC repeatedly indicated over the years that the agency was the licensing authority for GTCC waste disposal. In the statement of considerations for a 1988 proposed rule regarding GTCC waste, NRC stated:

This is intended to reflect the policy of the Low-Level Radioactive Waste Policy Amendments Act, which provides that all commercially-generated waste with concentrations exceeding Class C limits shall be disposed of in a facility licensed by the Commission that the Commission determines is adequate to protect public health and safety.⁵

The preamble to the subsequent 1989 final rule includes identical language and also states: “The proposed rule only recognized that GTCC wastes must be disposed of in a facility licensed by the NRC – a constraint imposed by the LLWPAA.”⁶ More recently, in the statement of considerations for a 2001 final rule on interim storage for GTCC waste, NRC reiterated that “[t]he Act also gave the NRC the licensing responsibility for a disposal facility for GTCC waste.”⁷

An alternative reading of section 3(b)(2) is that it requires NRC to license the disposal of only the GTCC waste “that results from activities licensed by the Nuclear Regulatory Commission,” not GTCC waste that results from activities licensed by Agreement States. I do not find this interpretation persuasive for at least two reasons.

First, the phrase “that results from activities licensed by the Nuclear Regulatory Commission” should be understood in the broader context of the legislation. As originally drafted, the Amendments Act did not contain section 3(b)(2). The section was added through an amendment offered by Senator Thurmond on the Senate floor.⁸ The most likely explanation for the amendment is that it was necessary to provide NRC authority to license the disposal of commercial GTCC waste (from both NRC and Agreement State-regulated activities) stored or disposed of at Department of Energy sites. The Senate Report accompanying the original version of the Senate bill reported out of the Committee on Energy and Natural Resources included comments from the Commission, which explained that without additional legislation “NRC would have no jurisdiction to regulate the storage or disposal of commercial low-level waste by DOE.”⁹ Therefore, the natural reading of the phrase “that results from activities licensed by the Nuclear Regulatory Commission” is to distinguish between commercial GTCC waste to be regulated by NRC and non-commercial, GTCC-like waste not subject to NRC regulation.

Second, reading the language of 3(b)(2) as limiting the authority of NRC to license only non-Agreement State waste, would lead to the absurd result that NRC would license the

⁵ Fed. Reg. 17710 (May 18, 1988).

⁶ Fed. Reg. 22581-22582 (May 25, 1985).

⁷ Fed. Reg. 51824 (October 11, 2011).

⁸ 131 Cong. Rec. S18105-06 (daily ed. Dec. 19, 1985).

⁹ S. Rep. No. 99-199 at 44 (1985).

disposal of some, but not all, GTCC waste while unidentified entities would license the disposal of the remaining GTCC waste. This interpretation would have NRC license the disposal of GTCC waste resulting from reactors and NRC's materials licensees, but would leave unaddressed the question of who would license the disposal of GTCC waste resulting from Agreement State materials licensees. This would frustrate the Act's purpose of assigning clear responsibility for the disposal and regulation of all low-level waste, including GTCC waste. I do not believe that Congress would make the federal government responsible for the disposal of all GTCC waste and simultaneously stipulate that no federal agency would have the obligation and authority to license disposal of the portion of GTCC waste generated by Agreement State licensees.

Thus, if the Commission is going to definitively interpret section 3(b)(2), we should recognize that the plain language of the Amendments Act and the most straightforward reading of Congressional intent provide for exclusive NRC licensing of all GTCC waste disposal.

A Path Forward without Interpreting the Amendments Act

Although the clearest reading of the Amendments Act is that it provides for exclusive NRC licensing of all GTCC waste disposal, it is not necessary for the Commission to decide this interpretative question at this time. Instead, the Commission should exercise its clear authority under section 274c. of the Atomic Energy Act to retain responsibility for licensing all GTCC waste disposal facilities.

Section 274c. provides, in pertinent part, that no Agreement State agreement

shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of ... 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.

This provision plainly establishes that the Commission has discretionary authority to retain licensing and regulatory responsibility over hazardous GTCC radioactive waste, which can consist of byproduct, source, and special nuclear material. At the August 13, 2015, Commission meeting on GTCC waste, NRC's General Counsel confirmed that it is clear that, pursuant to this statutory provision, the Commission could decide in its discretion to handle the licensing of a GTCC waste disposal facility regardless of how the Commission interprets section 3(b)(2) of the Amendments Act.

There is no question that the potential hazards posed by GTCC waste would support a Commission decision to retain authority to license GTCC waste disposal facilities. In 1989, the Commission finalized a rule requiring disposal of all GTCC waste in a deep geologic repository unless a non-repository alternative is explicitly approved by the Commission. This rule reflected the view that GTCC waste is "not generally acceptable" for near-surface disposal and warranted "more stringent" disposal methods. In fact, at the recent Commission meeting on GTCC waste, the NRC staff explained that, for all isotopes, the average radionuclide concentrations of the GTCC waste inventory are at least 50 times higher than those of the transuranic waste currently being disposed of at the WIPP deep geologic repository. Some GTCC concentrations are 12,000 times higher than the transuranic waste bound for WIPP.

There are strong reasons for the Commission to exercise its authority to license GTCC waste disposal. First, there is no meaningful litigation risk associated with this approach because NRC has clear legal authority under the Atomic Energy Act to retain the licensing responsibility. Although the Commission would be on solid legal footing if it were to interpret the Amendments Act to provide for exclusive NRC licensing authority for GTCC waste disposal, this interpretation potentially would be challenged in court. Alternatively, if the Commission were to interpret the Amendments Act to allow TCEQ to license a GTCC disposal facility, there would be significantly more litigation risk. The result could be TCEQ licensing slowed down by years of litigation with a significant chance that the federal courts would ultimately decide that NRC was required to conduct the licensing anyway.

Although I understand that TCEQ officials are familiar with the WCS site and already regulating WCS's Federal Waste Disposal Facility, the potential efficiencies of TCEQ conducting the GTCC waste disposal licensing would also be substantially diminished by the significant role NRC would need to play in approving any non-repository option pursuant to existing NRC regulations.¹⁰ Since NRC staff would be actively involved in assisting TCEQ with its review of a WCS application, it may well be more efficient for NRC to simply serve as the licensing agency. This is especially true if, in its final environmental impact statement, DOE presents multiple preferred alternatives, one or more of which NRC may have responsibility for licensing.

WCS has expressed concerns about whether NRC licensing would require the company to have a separate NRC-licensed GTCC disposal cell instead of being able to dispose of GTCC waste in its existing TCEQ-licensed Federal Waste Disposal Facility cell. However, there is no clear relationship between which agency conducts the GTCC waste disposal licensing and whether WCS will need a separate GTCC cell. NRC could decide that the existing cell could hold GTCC waste or TCEQ could decide that a separate cell is required, that the existing cell would need to be modified before it could accept GTCC waste, or that near-surface disposal of GTCC waste is not appropriate at the WCS site.

Ultimately, the NRC staff is clearly capable of performing a robust review of a future WCS application for a GTCC waste disposal cell. The NRC staff should welcome the involvement and insights of their colleagues at TCEQ in conducting NRC's review of a WCS license application. The NRC staff should advise the Commission on whether the Commission's section 274c. determination should be made via order or rule.

Transuranic Waste Rulemaking

Regardless of which agency conducts the licensing of GTCC waste disposal, I approve the NRC staff recommendation to initiate a rulemaking to address transuranic waste disposal in the Part 61 regulations. Currently, the Part 61 regulations are internally inconsistent in their treatment of transuranic waste and are inconsistent with the statutory definition of low-level radioactive waste in the Amendments Act (which, unlike the regulations, include transuranic waste within the definition of low-level radioactive waste). These inconsistencies should be rectified. Moreover, a rulemaking would provide an opportunity to establish technical safety and security requirements for the disposal of transuranic waste and to develop a regulatory basis for determining whether transuranic waste with concentrations greater than 100 nanocuries per gram can be safely disposed of using near-surface or intermediate-depth disposal. Because DOE has determined that up to 87% of the GTCC waste inventory contains transuranic

¹⁰ 10 C.F.R. 61.55

radionuclides with concentrations greater than 100 nanocuries per gram, evaluating the safety of disposal options for this category of GTCC waste will be necessary to determine one or more appropriate disposal pathways for what would otherwise be an orphan waste stream.

DOE has responsibility for disposing of all commercial GTCC waste and currently stores significant quantities of that waste. In about six months, DOE expects to issue its final environmental impact statement on GTCC waste disposal, which will include one or more preferred alternatives for how DOE intends to dispose of the GTCC waste. The NRC staff's rulemaking efforts should be informed by DOE's final EIS and preferred alternatives.

Conclusion

I appreciate the NRC staff's work on this policy paper, the views of the stakeholders who participated in the Commission's public meeting on GTCC waste, and TCEQ's willingness to raise this weighty subject for Commission consideration. I have been impressed by the thoughtful, problem-solving approach that all of those involved have brought to this challenging matter. If resolving GTCC waste disposal issues were easy, we would not be here 30 years after the Amendments Act still pondering fundamental questions about which agency has the responsibility to license a GTCC waste disposal facility. In order to chart a stable path forward, it is important to follow the statutory direction from Congress and minimize the potential for delay from litigation. NRC licensing of all GTCC waste disposal facilities will accomplish these goals while ensuring the protection of public health and safety.