

NOT YET CALENDARIED FOR ORAL ARGUMENT

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 11-1449

SHIELDALLOY METALLURGICAL CORPORATION,
Petitioner,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION
and the UNITED STATES OF AMERICA,
Respondents,

STATE OF NEW JERSEY
Intervenor.

ON PETITION FOR REVIEW OF AN ORDER OF THE
U.S. NUCLEAR REGULATORY COMMISSION

BRIEF FOR THE FEDERAL RESPONDENTS

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***CERTIFICATE AS TO PARTIES, RULINGS,
AND RELATED CASES***

Counsel for the United States Nuclear Regulatory Commission agrees with Petitioner Shieldalloy Metallurgical Corporation's statement of the parties, rulings, and related cases in its opening brief.

Respectfully submitted,

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GLOSSARY

AEC	Atomic Energy Commission
AEA	Atomic Energy Act of 1954, as amended
ALARA	as low as is reasonably achievable
mrem	millirem
NRC	Nuclear Regulatory Commission
Shieldalloy	Shieldalloy Metallurgical Corporation

JURISDICTIONAL STATEMENT

We agree with the Jurisdictional Statement in petitioner Shieldalloy Metallurgical Corporation's opening brief (pp. 4-6).

ISSUES PRESENTED

Section 274d of the Atomic Energy Act ("AEA"), 42 U.S.C. § 2021(d), provides that the Nuclear Regulatory Commission (NRC) "shall enter" agreements giving states authority to regulate certain nuclear materials if NRC finds that the state requesting an agreement has a regulatory program "compatible" with NRC's and "adequate" to protect public health and safety.

The issues presented are:

1. Does section 274 give NRC discretion to retain authority over particular licensees, notwithstanding a state's request for that authority and notwithstanding an NRC finding that the state's regulatory program is "adequate" and "compatible"?
2. On the record of this case, did NRC reasonably enter a section 274 agreement with New Jersey upon finding that New Jersey's radiation-protection program, including its license-termination program, was permissibly more stringent than NRC's

and fairly and adequately achieved NRC's public health-and-safety objective?

STATEMENT OF THE CASE

A. Nature of the Case

In 2008, New Jersey applied to become an agreement state under section 274 of the AEA, 42 U.S.C. § 2021. After reviewing New Jersey's application, NRC found that the application met section 274's requirement that the state program be "compatible" with NRC's and "adequate" to protect public health and safety. Shieldalloy, which owns a contaminated site in Newfield, New Jersey, and had sought NRC approval of a license-termination plan, had opposed the agreement and sought judicial review in this Court challenging NRC's agreement-state decision.

In *Shieldalloy Metallurgical Corporation v. NRC*, 624 F.3d 489 (D.C. Cir. 2010), this Court vacated the transfer as to the Newfield site, on the ground that NRC had not explained adequately why it could not retain authority over Shieldalloy's site and why transferring authority over the site to New Jersey did not amount to "interfering" in a pending licensing action, within the meaning of an NRC agreement-state criterion (Criterion 25).

On remand, NRC, after affording Shieldalloy and New Jersey a fresh opportunity to provide views on all issues related to New Jersey's agreement-state application, issued a formal decision reinstating transfer of regulatory authority over the Newfield site to New Jersey. *Shieldalloy Metallurgical Corp.*, CLI-11-12, 74 NRC __ (Oct. 12, 2011) (slip op.) (JA___).

NRC rejected Shieldalloy's claims. NRC held that section 274d's "shall-enter-into-an-agreement" clause gave NRC no discretion to withhold a transfer of authority over a particular site, over a qualifying state's objection, at the behest of a licensee. As to Criterion 25, NRC explained that the "interference" provision merely ensures an orderly transfer of licensing records, and does not require a state to follow substantive NRC licensing standards.

Shieldalloy then filed this petition for review.

B. Statutory and Regulatory Background

1. The Agreement-State Program

a. Section 274 of the AEA

In 1959, Congress amended the AEA to establish a program of federal-state cooperation in the regulation of nuclear materials.

AEA § 274, 42 U.S.C. § 2021. The 1959 amendments were

intended “generally to increase the States’ role” in regulation of nuclear materials. *English v. General Electric Co.*, 496 U.S. 72, 81 (1990).

Section 274b of the AEA, 42 U.S.C. § 2021(b), states that, with exceptions not pertinent here, NRC “is authorized to enter into agreements” with states “providing for discontinuance of the regulatory authority” of NRC “with respect to any one or more of” “source,” “byproduct,” and “special nuclear material,” as defined in the AEA. Once NRC enters into an agreement, the state shall, “during the duration of [the] agreement,” “have authority to regulate the materials covered by the agreement for the protection of the public health and safety from radiation hazards.” AEA § 274b, 42 U.S.C. § 2021(b).

Section 274d, 42 U.S.C. § 2021(d), states that NRC “shall” enter into an agreement with a state upon a state Governor’s request if NRC finds the state program “compatible with the [NRC’s] program for regulation of such materials, and . . . adequate to protect the public health and safety with respect to the materials covered by the proposed agreement.” Before entering an agreement with a state, NRC must publish the terms of a requested agreement

and provide an opportunity for public comment. AEA § 274d, 42 U.S.C. § 2021(d).

NRC is authorized to terminate or suspend all or part of an agreement and “reassert [] licensing and regulatory authority” if it finds, *inter alia*, that “termination or suspension is required to protect the public health and safety.” AEA § 274j., 42 U.S.C. § 2021(j). NRC is required to “periodically review” its agreements “and actions taken by the States under the agreements” to ensure compliance with section 274. *Id.*

b. *NRC Implementation of Section 274*

In a policy statement first published in 1961 and updated in 1981, NRC established criteria for assessing a state's program. *Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement*, 46 Fed. Reg. 7540 (Jan. 23, 1981) (JA___). These criteria are factors it will “consider in approving new or amended agreements” but are “not intended to limit [its] discretion in viewing individual agreements or amendments.” *Id.*

The 1981 policy statement includes Criterion 25, *Existing NRC Licenses and Pending Applications*, which provides that, “[i]n

effecting the discontinuance of jurisdiction, appropriate arrangements will be made by NRC and the State to ensure that there will be no interference with or interruption of licensed activities or the processing of license applications, by reason of the transfer,” and Criterion 23, *Administration*, which provides that “State practices for assuring the fair and impartial administration of regulatory law, including the provision for public participation where appropriate, should be incorporated in procedures for” formulating rules, approving or denying license applications, and taking disciplinary actions against licensees.

In 1997, NRC issued a new policy statement to further clarify its agreement-state program. *Statement of Principles and Policy for the Agreement State Program*, 62 Fed. Reg. 46,517 (Sept. 3, 1997) (JA___). It states that “uniformity and consistency” are essential for state program elements having “national significance,” such as those “affecting interstate commerce, movement of goods and provision of services.” *Id.* at 46,520 (JA___). But it specifies that, except in areas requiring national uniformity, agreement states “should be provided with flexibility in program implementation to accommodate individual State preferences, State legislative

direction, and local needs and conditions,” including the flexibility to “incorporat[e] more stringent, or similar, requirements.” *Id.*

The 1997 policy statement also addressed NRC's approach for determining, as to both new and existing agreements, whether a state's program is “adequate” and “compatible.” It explains that, as a general matter, “adequacy” focuses “on the protection of public health and safety within a particular State,” whereas “compatibility” focuses “on the impacts of an Agreement State's regulation of agreement material on a nationwide basis or its potential effects on other jurisdictions.” *Id.* at 46,523-24 (JA___).

More specifically, the policy statement explains that “adequacy” “presumes” that the “level of protection of NRC's regulatory program is . . . that which is adequate to provide a reasonable assurance of protection of public health and safety.” *Id.* at 46,524 (JA___). Thus, the policy statement indicates, to be “adequate,” the “overall level of protection of public health and safety provided by a State program should be equivalent to, or greater than, the level provided by the NRC program.” *Id.*

Regarding “compatibility,” the policy statement states that a state's program is acceptable “when its program does not create

conflicts, duplications, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide basis.” *Id.* The policy statement establishes five “compatibility categories” to be assigned to NRC’s regulations for the purpose of assessing a state’s proposed or existing program for compatibility. *Id.* These categories indicate which aspects of NRC’s regulatory program a state *must* adopt, and which aspects a state has flexibility to depart from.

A state must adopt regulations that are “essentially identical” to NRC regulations classified as compatibility category “A,” which establish “basic radiation protection standards,” such as dose limits, or “B,” which have “significant trans-boundary implications.” *Id.* Category C consists of aspects of NRC’s regulatory program that an agreement state program must incorporate “to avoid conflicts, duplications, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide basis.” *Id.* To be “compatible” with a Category C program element, an agreement state need not adopt regulations identical to NRC’s, but the state’s program must “embody the essential objective” of the corresponding NRC program element. *Id.*

This case involves license termination, which NRC designated as a “Division 2” – now “Category C” – program. *Radiological Criteria for License Termination*, 62 Fed. Reg. 39,058, 39,080 (July 21, 1997) (JA__). To be both adequate *and* compatible, agreement-state regulations corresponding to an NRC Category C program element must afford protection to the public health and safety “equivalent to, or greater than,” the level provided by NRC, as well as incorporate the “essential objective” of NRC’s program element.¹ Category C, therefore, contemplates state regulations more stringent than NRC’s.

2. *NRC’s Regulations*

a. *Dose Limits and ALARA*

NRC’s regulations establish maximum dose exposure standards -- *i.e.*, dose limits – that NRC has determined will ensure an adequate level of protection to the public from radiation resulting from NRC-authorized activities, including license termination. *See* 10 C.F.R. Part 20. NRC has determined that the requisite level of protection for license termination is a maximum of

¹ The two remaining categories do not pertain to this case. *See* 62 Fed. Reg. at 46,525 (JA__).

25 millirem (“mrem”) per year to members of the public. See 62 Fed. Reg. at 39,080 (JA___); 10 C.F.R. §§ 20.1402 and 20.1403(b).

Dose limits required for adequate protection, such as the 25 mrem dose limit for license termination, are binding regardless of costs. But NRC regulations contain a regulatory principle known as “ALARA” – “as low as is reasonably achievable” – which considers costs in requiring doses to be reduced below the dose limit if “reasonable.” See 10 C.F.R. § 20.1003. NRC considers reduction of doses below the dose limit to be “reasonable” when cost-effective, as shown through a cost-benefit analysis described in NRC guidance documents. See, e.g., NUREG-1757, Appendix N (JA___). Use of the ALARA principle is required for all “doses to members of the public” established in 10 C.F.R. Part 20’s “Radiation Protection Programs,” including the license-termination dose limit of 25 mrem per year. See 10 C.F.R. § 20.1101(b).

An ALARA cost-benefit analysis calls for comparing potential benefits of incremental reductions in radioactivity levels to potential costs of such reductions. NUREG-1757 at N-3 (JA___). All benefits and costs are given a monetary value if possible. *Id.* In license termination, the “costs” in an ALARA analysis to reduce doses below

regulatory limits include, *inter alia*, out-of-pocket costs of soil removal, transportation, and disposal, doses from transportation to workers and the public, and transportation accidents. *Id.* at N-7 – N-8 (JA___). The “benefits” in an ALARA analysis include, *inter alia*, collective dose averted to future occupants of the site, regulatory costs avoided, and changes in land values. *Id.* at N-4 – N-6 (JA___).

b. *License-Termination Rule*

NRC established dose limits and other criteria for license termination in a rule issued in 1997. *See* 62 Fed. Reg. 39,058 (JA___); 10 C.F.R. Part 20, Subpart E. A comprehensive NRC guidance document, NUREG-1757 (JA___), explains in detail how NRC expects to implement the license-termination rule. The essential objective of the rule was “to provide specific radiological criteria for the decommissioning of lands and structures . . . to ensure that decommissioning will be carried out without undue impact on public health and safety and the environment.” 62 Fed. Reg. at 39,058 (JA___).

The rule provides for license termination for both “unrestricted” and “restricted” use. Unrestricted use requires no “institutional controls,” *i.e.*, no legal measures to restrict land use

and maintain engineered controls,² to achieve a maximum dose of 25 mrem per year to a member of the public upon termination of the license. *See* 10 C.F.R. § 20.1402. Restricted use would rely on legally enforceable institutional controls to achieve the 25 mrem dose limit. *See* 10 C.F.R. § 20.1403.

In the license-termination context, as noted above, the purpose of the general ALARA requirement is to ensure that, under either the restricted-use or unrestricted-use option, doses to a member of the public will be reduced below the 25 mrem per year dose limit when cost-effective. *See* 10 C.F.R. §§ 20.1101(b) and 20.1402; 62 Fed. Reg. at 39,065; NUREG-1757 at 17-87 (JA___).

In adopting the license-termination rule, NRC expressed a preference for unrestricted use “because it requires no additional precautions or limitations on use of the site after licensing control ceases, in particular for those sites with long-lived nuclides.” 62 Fed. Reg. at 39,069 (JA___). The rule permits a licensee to pursue restricted use as a regulatory option only if it is able to

² *See* NUREG-1757 at 3-6 (JA___).

demonstrate that it is “initially eligible” to pursue that option. See NUREG-1757 at 17-70 (JA___).

To demonstrate “initial eligibility” for restricted use, a licensee must perform an analysis of the costs and benefits of reducing radioactivity to the level of adequate protection for unrestricted use – *i.e.*, 25 mrem per year with no institutional controls in place. 10 C.F.R. § 20.1403(a). The initial-eligibility requirement under section 20.1403(a) calls for a determination of the costs and benefits of reducing doses to the unrestricted-release level using the same cost-benefit factors analyzed for the traditional ALARA purpose (to reduce doses below the maximum allowable if cost-beneficial).³ Thus, in NRC’s regulatory program, the ALARA cost-

³The potential “costs” in an ALARA analysis to determine restricted-use eligibility include transportation-related doses to workers and the public, occupational doses, and occupational non-radiological risks such as traffic accidents, as well as the out-of-pocket costs of removing soil to reach the 25 mrem per year unrestricted-use level and transporting and disposing of the soil at a low-level radioactive waste facility. See NUREG-1757 at N-3 (JA___). These potential “costs” are compared against potential “benefits,” including collective dose averted, regulatory costs avoided, changes in land values, esthetics, and reduction in public opposition. *Id.* Most of the potential benefits and costs (including occupational and transportation-related doses and transportation risks) are converted to a dollar value. *Id.* at N-3; N-7 (JA___). Section 20.1403(a) requires a licensee, for purposes of demonstrating eligibility for

benefit analysis is used for two separate purposes – to ensure that doses are reduced below the level determined necessary for adequate protection if reasonable, and also to determine initial eligibility for restricted use.

If the ALARA initial-eligibility analysis shows that reducing radioactivity to the level of adequate protection for unrestricted use (25 mrem per year) is cost-beneficial – *i.e.*, the benefits outweigh the costs – the licensee must pursue unrestricted use under 10 C.F.R. § 20.1402 and is not eligible for restricted use.

If the ALARA eligibility analysis demonstrates that reduction to the level of adequate protection for unrestricted use is not cost-beneficial – *i.e.*, the costs outweigh the benefits – the licensee is eligible to propose a restricted-use decommissioning plan for NRC

restricted use, either (1) to compare all of the potential benefits to all of the potential costs (referred to in section 20.1403(a) as the “ALARA” analysis), or (2) to compare all of the potential benefits to only a subset of potential costs that excludes the out-of-pocket costs of soil removal, transportation, and disposal (referred to in section 20.1403(a) as “net public or environmental harm” analysis). See NUREG-1757 at 17-70 (JA___). A cost-benefit analysis using only a subset of “costs” (*i.e.*, the “net public or environmental harm” analysis) will naturally result in a higher proportion of benefits to cost, or a higher benefit-to-cost ratio, than if all costs were compared to all benefits (*i.e.*, the “ALARA” analysis).

review. To receive NRC approval, such a plan must satisfy the restricted-use dose criteria and other NRC requirements deemed necessary for adequate protection. *See* 10 C.F.R. § 20.1403. If a licensee’s plan fails to satisfy the restricted-use requirements, the licensee must then revert to an unrestricted-use plan. *See* 10 C.F.R. § 20.1402.

C. *Statement of the Facts*

1. *NRC’s Original Entry of Agreement with New Jersey*

New Jersey’s application to become an agreement state certified “that the State of New Jersey wishes to assume regulatory authority and oversight responsibility for [source and other nuclear materials under NRC jurisdiction], and that the State of New Jersey has an adequate program for the control of radiation hazards covered by this proposed agreement.” *Letter from Jon S. Corzine, Governor* (JA___).

New Jersey’s program incorporated by reference many of NRC’s regulations, including 10 C.F.R. § 20.1101(b), requiring that public doses for all Part 20 radiation protection programs be ALARA (N.J. Admin. Code § 7:28-6.1(a)), and 10 C.F.R. § 40.42(k), specifying conditions for terminating a source-material license. N.J.

Admin. Code § 7:28-58.1. New Jersey did not incorporate by reference NRC's license-termination regulations in 10 C.F.R. §§ 20.1401-1405 (*see* N.J. Admin. Code § 7:28-6.1(c)), but promulgated its own. New Jersey adopted requirements relating to license termination calling for more conservative dose limits and calculation methodologies than NRC's. N.J. Admin. Code § 7:28-12.8(a)(1).

After reviewing New Jersey's request, NRC staff found that New Jersey's program met section 274's "adequacy" and "compatibility" requirements. 74 Fed. Reg. 25,283, 25,286 (May 27, 2009) (JA___). As required by AEA § 274e, 42 U.S.C. § 2021(e), NRC then sought public comments.

Shieldalloy filed comments opposing the agreement, noting that it was seeking NRC approval of a license-termination plan for its Newfield site. Shieldalloy complained that New Jersey's license-termination regulations were different from and more stringent than NRC's regulations, did not follow ALARA principles, and did not allow restricted-use license termination. (JA___). Shieldalloy also argued that contrary to Criterion 25 of NRC's 1981 policy statement New Jersey had failed to make "appropriate arrangements" to

ensure there would be no “interference” with the processing of pending license applications. *Id.*

NRC staff found Shieldalloy’s comments unpersuasive.⁴ NRC staff stressed that section 274 and NRC policy allowed states to impose different and more stringent regulatory requirements. The staff also found Criterion 25 satisfied because New Jersey had made arrangements to consider pending license applications.

Based on NRC staff’s findings, the Commission approved the agreement with New Jersey.⁵ It later denied Shieldalloy’s request for a stay of the agreement pending judicial review.⁶ Shieldalloy ultimately sought judicial review in this Court and obtained a remand on the ground that NRC’s explanation of its Criterion-25 determination was inadequate.

2. *Shieldalloy's License-Termination Proceeding*

Shieldalloy’s site in Newfield, New Jersey is contaminated with source material, which consists of long-lived radionuclides (uranium and thorium isotopes). Between October 2002 and 2006,

⁴ See SECY-090114 (Aug. 18, 2009), Enclosure 2 at 5. (JA___).

⁵ See 74 Fed. Reg. 51882 (Oct. 8, 2009) (JA___).

⁶ *Shieldalloy Metallurgical Corp.*, 71 NRC 142 (2010) (JA___).

NRC staff rejected two Shieldalloy plans for restricted-use (onsite) decommissioning at the Newfield site. *See Shieldalloy Metallurgical Corp.*, 65 NRC 341, 343 (2007) (JA___). NRC staff accepted for review Shieldalloy's third revised decommissioning plan, filed in June 2006, for the purpose of initiating a technical review of the plan. *Id.*⁷ Shieldalloy submitted a fourth revised decommissioning plan in August 2009.

NRC staff's review of Shieldalloy's third decommissioning plan was still pending when NRC's agreement with New Jersey became effective in September 2009. NRC staff then terminated its review of Shieldalloy's third plan, declined to review the fourth plan, and forwarded the associated files to New Jersey. *See Shieldalloy*, 624 F.3d at 491.

⁷ NRC's licensing board granted New Jersey's hearing request on Shieldalloy's proposed license-termination plan but held the case in abeyance pending the staff's review.

3. *The Shieldalloy Decision and NRC's Order on Remand*
 - a. *Remand and Vacatur of the NRC-New Jersey Agreement as to Shieldalloy's site*

In *Shieldalloy*, this Court held that “NRC’s insufficient explanations on the applicability of criterion 25 and the retention of jurisdiction [over Shieldalloy’s site] render its transfer of regulatory authority to New Jersey arbitrary and capricious.” 624 F.3d at 497. The Court characterized as “inapposite and woefully incomplete” NRC staff’s response to Shieldalloy’s invocation of criterion 25. *Id.* at 493. Referencing NRC’s AEA § 274 agreement with the state of Oklahoma, under which NRC had agreed to exclude a sub-category of materials at Oklahoma’s request, the Court found that “NRC practice leaves it far more leeway than its dismissive answer to Shieldalloy suggests.” *Id.*

The Court noted that at oral argument NRC's counsel had pointed to section 274d – which says that NRC “shall” enter into an agreement upon a finding of compatibility and adequacy – as a provision that “would rule out limiting transfers at the behest of regulated firms.” 624 F.3d at 495. The Court observed that a different AEA provision, section 274b (42 U.S.C § 2021(b)), which

says that NRC is “authorized” to enter agreements, raises an ambiguity as to the NRC's “discretion to negotiate the terms of the agreement with the state requesting authority.”*Id.* The Court stated that, “[o]n the current record,” it could not “affirm on the basis of [NRC counsel’s] reading,” as the statute “does not plainly compel the reading now being proposed.” *Id.*

In light of its finding that NRC had not adequately explained how its approval of the NRC-New Jersey agreement satisfied Criterion 25, the Court vacated the agreement and remanded the case for further proceedings. The Court did not decide Shieldalloy’s other arguments opposing the agreement.

b. *NRC’s Decision in Response to the Court’s Remand*

On remand, to assure a full airing of the matter, the full Commission decided to examine anew all issues of concern regarding transfer of Shieldalloy’s site to New Jersey. CLI-11-12 at 6-7 (JA___). NRC afforded Shieldalloy and New Jersey an opportunity to submit their views on the question. *Id.* After reviewing Shieldalloy’s and New Jersey’s lengthy submissions, NRC issued a 50-page decision reinstating New Jersey’s authority over

the Shieldalloy site and explaining why the agreement is lawful. CLI-11-12 (Oct. 12, 2011) (JA___).

The following is a summary of NRC's decision as relevant to the issues before this Court.

1. *NRC Authority to Retain Jurisdiction Over a Site at a Licensee's Request*

At the outset, NRC rejected Shieldalloy's position that the Court had rejected the statutory interpretation NRC counsel offered at oral argument. NRC explained that the Court found only that NRC itself "had not exercised any interpretive discretion." CLI-11-12 at 11 (JA___).

NRC examined the pertinent statutory provisions – section 274b's "is authorized" clause and section 274d's "shall" clause. Starting with section 274b, NRC found that under the "most natural reading," that subsection "simply provides a general grant of legal authority to the Commission to turn regulatory authority over certain designated nuclear materials to the states, and gives no more specific command." *Id.* at 12 (JA___).

NRC then turned to section 274d and construed it "as providing the specific conditions under which the Commission

‘shall’ exercise the general legal authority granted to it under subsection b.” *Id.* at 13 (JA___). NRC explained that the term “shall,” by its plain meaning, is “mandatory in nature.” *Id.* at 13-14 (JA___). The “shall” clause, NRC said, “requir[ed] [NRC] to enter into an agreement for state regulation of the particular categories of nuclear materials that a state certifies it both desires to regulate and has established a program for – provided that [NRC] find[s] the state's program for regulation of such materials to be adequate and compatible.” *Id.* at 14 (JA___).

NRC found its construction consistent with the policy and purposes of the agreement-state legislation – to give states an increased role in nuclear regulation impacting primarily local interests and the discretion to decide which categories of nuclear materials to regulate. *Id.* at 15 (JA___).

NRC “closely examined” (*id.* at 16 (JA___)) this Court’s observation in *Shieldalloy* that section 274b’s reference to NRC-state agreements “with respect to *any one or more* of a variety of classes of nuclear materials,” 624 F.2d at 495 (emphasis in original), “suggests that [NRC] has discretion to negotiate the terms of the agreement with the state requesting authority.” *Id.* NRC

concluded that section 274b “does not reasonably lend itself to this interpretation.” CLI-11-12 at 16 (JA___). Instead, NRC read sections 274b and 274d “together, as giving [NRC] the authority and flexibility to enter into limited agreements, depending on a state's desire and readiness to assume jurisdiction over particular materials, but not as giving [NRC] authority to withhold authority from a state that wants it and has a qualifying program.” *Id.* at 16-17 (JA___).

NRC found that legislative history and sound policy supported its interpretation. *Id.* at 17-19 (JA___). NRC explained that the legislative history reflects concern that there be a reasonable transition period following enactment of the agreement-state legislation to allow a state to assume regulatory jurisdiction over one or more categories of nuclear material only when a state becomes ready. *Id.* at 17 (JA___). NRC also observed that the legislative history showed an intent to avoid piecemeal federal-state jurisdiction over a specified nuclear materials category. *Id.* NRC added that, as a policy matter, retaining jurisdiction over particular sites within a single category, if requested by a licensee for purely financial or commercial interests and over a state’s objection, would

be inconsistent with congressional intent to provide a framework for “centralized responsibility.” *Id.*

Finally, NRC explained that the NRC-Oklahoma agreement that attracted the Court’s mention in *Shieldalloy* (624 F.3d at 495) involved a situation different from the one present in this case. *Id.* at 20 (JA___). NRC explained that in the Oklahoma matter it was the state, not the licensee, who had requested NRC retention of authority over a certain sub-category of materials. *Id.*

2. *Adequacy and Compatibility of New Jersey’s License Termination Program*

After concluding that it lacked discretion to turn down a state’s request for regulatory authority for reasons apart from the statutory criteria specified in AEA § 274d, NRC addressed the compatibility and adequacy of New Jersey’s license-termination program.

a. *Criterion 25*

NRC noted that the Court in *Shieldalloy*, 624 F.3d at 494-95, and *Shieldalloy* itself, seemingly understood Criterion 25’s reference to “interference” with license applications to mean that, even after authority has transferred to the state, pending applications will

continue to be processed under NRC’s substantive regulatory standards. CLI-11-12, at 28-29 (JA___).

NRC said that “50 years of practice” and “37 agreements” show that Criterion 25 “was not intended to be construed in this manner.” *Id.* at 29-30 (JA___). On the contrary, the “purpose of that criterion . . . is to ensure that licensing records are transferred to and received by the new agreement state in an orderly manner that ensures that no pending licensing actions will be significantly delayed or that no records will be lost or misplaced as a result of the transition of authority. It is a housekeeping criterion, not a substantive one.” *Id.* at 30 (JA___). NRC observed that the “transition plan” followed in this case “fulfilled the administrative purpose of Criterion 25.” *Id.* at 31 (JA___).

b. *Protection of Public Health and Safety and ALARA*

In the remand proceeding, Shieldalloy renewed an argument that it had raised before the Court but not originally at NRC (*see* 624 F.3d at 496) – that license termination using onsite disposal (restricted use) would provide more protection to the public than offsite disposal (unrestricted use). *See* CLI-11-12 at 35 (JA___).

NRC rejected Shieldalloy's position on the ground that comparing the restricted-use and unrestricted-use options is not feasible and also is not contemplated by NRC regulations:

[O]ur regulations neither explicitly nor implicitly require a comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options. This is because the levels of protection of unrestricted release and restricted release are simply not susceptible to being compared meaningfully. Each option uses significantly different methods to achieve adequate protection and has significantly different risks and uncertainties associated with it.

Id. at 37 (JA___). NRC emphasized that, in view of the inherent complexities and uncertainties associated with restricted release, its preference has always been for unrestricted release. *Id.* at 39 (JA___).

NRC also addressed Shieldalloy's apparent position regarding ALARA as relevant to its comparative-dose argument – that New Jersey's purported failure to implement the ALARA standard “would allow New Jersey to reject the decommissioning option for the Newfield Facility that would result in the *lowest* doses to the public and the environment” and instead allow the State to order “a decommissioning choice that would result in *higher* radiation

doses to workers, the public and the environment [that] would not be ALARA.” *Id.* at 40 (JA___).

Finding Shieldalloy’s ALARA argument “hardly clear,” *Id.* at 40 (JA___), NRC nevertheless speculated that Shieldalloy may be alluding to the ALARA-based “initial-eligibility” test for restricted-use in 10 C.F.R. § 20.1403(a). *Id.* at 41 (JA___). If so, NRC observed, “[t]his is a fundamental misconception of [NRC’s] ALARA principle.” *Id.* at 40 (JA___).

NRC explained that, “consistent with [its] general approach to license termination, no comparison of restricted-release and unrestricted-release doses is involved in [its] section 20.1403(a) eligibility criterion,” and that the “ALARA analysis for restricted-release eligibility purposes does not and was never intended to demonstrate whether one decommissioning option affords greater protection than another.” *Id.* at 41 (JA___). NRC concluded that New Jersey’s lack of an ALARA-based criterion for restricted-use eligibility is immaterial to the statutory “adequacy” and “compatibility” requirements. *Id.* at 42 (JA___).

c. *Restricted Release; Departure from NRC's Regulations; and Criterion 23*

Shieldalloy also claimed that New Jersey's program is incompatible with NRC's because it lacked a restricted-release option; that New Jersey's license-termination program is incompatible with NRC's because it departs from NRC's program in ways that NRC had rejected; and that New Jersey's license-termination regulations are not "fair and impartial" as called for under Criterion 23 because they apply only to the Newfield site. *Id.* at 44-49 (JA___).

NRC rejected Shieldalloy's claims. NRC found that New Jersey *does* have a restricted-use option, albeit under standards "more conservative" than NRC's; that for license termination, classified as a "Category C" program, it is permissible for New Jersey to impose more stringent requirements than NRC's; and that it is not "unfair" under Criterion 23 for New Jersey to apply regulations to just one site if that is the only such site in the state and the state's overall regulatory program is fair and impartial. *Id.*

SUMMARY OF ARGUMENT

Shieldalloy's challenges to NRC's agreement-state decision are unpersuasive.

1. Shieldalloy argues that the AEA gives NRC discretion to withhold a transfer of authority to New Jersey at Shieldalloy's request. But section 274d of the AEA says that NRC "*shall* enter" an agreement with a state that requests a transfer of authority and also meets the statute's "compatibility" and "adequacy" requirements. Such mandatory language leaves NRC no residual authority to withhold a transfer to a qualifying state at the behest of a licensee.

Shieldalloy's brief never discusses section 274d, but offers up other statutory provisions, and legislative-history excerpts, to demonstrate NRC's "flexibility" in administering the agreement-state program. Shieldalloy's citations are irrelevant. None contradicts section 274d's mandatory "shall" clause.

Similarly, Shieldalloy's reliance on NRC's so-called "Oklahoma" policy is unavailing. In the Oklahoma case NRC retained authority over certain sub-categories of nuclear materials *at the state's*

request. The opposite is true here – New Jersey wants authority over Shieldalloy’s site.

NRC’s statutory construction follows from the statutory language, and at the least is entitled to judicial deference under the *Chevron* doctrine.

2. Shieldalloy also argues that New Jersey’s regulatory program is not “compatible” and “adequate,” thus invalidating the agreement. Again, Shieldalloy’s claims are unpersuasive.

A. Shieldalloy cites NRC’s “Criterion 25,” which says that NRC and a prospective agreement state should make “appropriate arrangements” to avoid “interference with” pending license applications. But contrary to Shieldalloy’s view, this criterion does not mean that to avoid “interference” pending applications must continue to be processed under NRC standards. Rather, as history and practice confirm, the criterion is administrative in nature, intended to ensure the orderly transition of authority so that license applications can move forward, as the criterion says, without “interruption.”

B. Shieldalloy faults New Jersey’s regulatory scheme for not adopting NRC’s “ALARA” principle and NRC’s “restricted-use”

methodology in 10 C.F.R. § 20.1403(a). New Jersey does follow ALARA, however, and was under no obligation to adopt section 20.1403(a).

Shieldalloy sees ALARA and section 20.1403(a) as enshrining a “comparative-dose” approach – namely, an approach that compares the risks of restricted-use and unrestricted-use decommissioning and mandates using the more protective option. But, as NRC explained below, NRC regulations do not use a comparative-dose methodology, which as a technical matter is not a meaningful regulatory tool. Shieldalloy’s elaborate argument otherwise simply misunderstands NRC regulations.

C. Shieldalloy attacks New Jersey’s supposed lack of a restricted-use decommissioning option. But New Jersey regulations do in fact allow restricted-use decommissioning, albeit under standards different from NRC’s.

D. Shieldalloy says that New Jersey’s regulations fail to implement many NRC regulations – for example, New Jersey imposes a 15 mrem per year dose limit, as compared to NRC’s 25 mrem limit, and New Jersey uses a “peak dose” approach rather than NRC’s 1000-year limit. But NRC’s compatibility determination

for license termination – “Category C” – found no need for national uniformity and allows states to impose more stringent standards. Thus, New Jersey’s departures from NRC standards are perfectly permissible.

E. Finally, Shieldalloy invokes NRC’s “Criterion 23,” which considers whether state regulatory programs are “fair” and “impartial,” and maintains that New Jersey’s regulations target the Shieldalloy site. On this point, NRC reasonably found that there is nothing unfair about applying state regulations to just one site, if that is the only site involving a particular regulated activity. Moreover, a major underpinning of the agreement-state program is states’ freedom to achieve desired outcomes by applying their own policies to local conditions, even if those policies do not replicate, or are more stringent than, NRC’s. Here, New Jersey has implemented appropriate measures, like administrative hearings and judicial review, to avoid unreasonable results.

ARGUMENT

Standard of Review

1. NRC’s interpretation of its authority under AEA § 274 is subject to judicial review under a now-familiar two-step inquiry.

Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984). “First, always, is the question whether Congress has directly spoken to the precise question at issue.” *Chevron*, 467 U.S. at 842. If, however, a court determines that the statute is “ambiguous with respect to the specific issue,” *id.* at 843, “then in step two the court must defer to the agency’s interpretation unless it is ‘manifestly contrary to the statute.’” *Int’l Union, United Mine Workers of Am. v. Mine Safety & Health Admin.*, 626 F.3d 84, 90 (D.C. Cir. 2010) (quoting *Chevron*, 467 U.S. at 844). *Accord Mayo Found. for Med. Educ. & Research v. U.S.*, 131 S.Ct. 704, 711 (2011).

2. NRC’s decision that New Jersey’s program is adequate and compatible is subject to review under the “arbitrary and capricious” standard of the Administrative Procedure Act (APA), 5 U.S.C. § 706(2)(A). This “narrow standard of review,” *FCC v. Fox Communications Commission*, 129 S.Ct. 1800, 1810 (2009), requires a court to uphold an agency decision that “has considered the relevant factors and articulated a rational connection between the facts found and the choice made.” *Transcontinental Gas Pipe Line Corp. v. FERC*, 518 F.3d 916, 919 (D.C. Cir. 2008) (citation omitted).

A court reviewing an agency decision under the deferential “arbitrary and capricious” standard “is not to substitute its judgment for that of the agency,” *Fox*, 129 S.Ct. at 1810 (citation omitted), but must “defer to the wisdom of the agency, provided its decision is reasoned and rational. . . .” *Dillmon v. NTSB*, 588 F.3d 1085, 1089 (D.C. Cir. 2009) (citation omitted).

Finally, under the “arbitrary and capricious” scope of review, “an agency's interpretation of its own rule is given ‘controlling weight unless it is plainly erroneous or inconsistent with the regulation.’” *City of Idaho Falls v. FERC*, 629 F.3d 222, 228 (D.C. Cir. 2011) (citation omitted). *See Auer v. Robbins*, 519 U.S. 452, 462-63 (1997); *Drake v. FAA*, 291 F.3d 59, 67 (D.C. Cir. 2002).

I. If NRC Finds a State Regulatory Program “Adequate” and “Compatible,” NRC Lacks Discretion under Section 274 of the AEA to Retain Authority over a Particular Site at a Licensee’s Request

Shieldalloy argues (Br.24-34) that NRC has power to withhold authority over particular nuclear materials at the request of a licensee and over a state’s objection. But section 274d of the AEA, 42 U.S.C. § 2021(d), plainly says otherwise. It provides that NRC “shall enter into an agreement” when a state requests one and

meets the statutory prerequisites. This statutory command defeats Shieldalloy's argument under a *Chevron* step-one analysis. But even were this Court to use a *Chevron* step-two approach, NRC's interpretation is reasonable, consistent with the statutory language and intent, and should be upheld.

1. “[T]he starting point for interpreting a statute is the language of the statute itself.” *Consumer Product Safety Comm’n v. GTE Sylvania, Inc.*, 447 U.S. 102, 108 (1980). And the pertinent language here, as we have seen, says unequivocally that NRC “shall” enter an agreement if the state meets all statutory prerequisites. There is no residual authority for NRC to reject an agreement on the ground that a licensee would consider it more convenient or economical for NRC to retain authority over a particular licensee.

In criticizing NRC's view of section 274, Shieldalloy essentially ignores the key language of the statute – the “shall” clause in subsection d, although it was a centerpiece of NRC's decision below. See CLI-11-12, at 13 (JA___). Shieldalloy relies instead on selective quotations from legislative history purportedly showing that Congress intended NRC's agreement-state authority to be

“permissive” and to give NRC “flexibility” and “discretion” in entering agreements. Br.25-27.

But in the legislative history Shieldalloy quotes,⁸ discretionary terms like “permit,” “may,” and “can” are merely used in the context of general natural-language descriptions of the draft legislation. None of these snippets of legislative history addresses the “precise question at issue” (*Chevron*, 467 U.S. at 843) – whether NRC may retain authority over a site at a licensee’s request when the statutory prerequisites of state certification, adequacy, and compatibility are satisfied. Likewise, none of Shieldalloy’s legislative-history citations contradicts the plain language of the “shall” provision in section 274d. *See I.N.S. v. Cardoza-Fonseca*, 480 U.S. 421, 432 (1987).

It is true that the “authorized” term in subsection b, read in isolation, is language of discretion. But when construed in context

⁸ *Federal-State Relationships in the Atomic Energy Field: Hearings before the Joint Committee on Atomic Energy*, 86th Cong. at 294, 299 (1959) (“*Hearings*”); *Report by the Joint Committee on Atomic Energy: Amendments to the Atomic Energy Act of 1954, as amended, with Respect to Cooperation with the States*, H.R. Rep. No. 86-1125, 86th Cong., 1st Sess. at 10, 11 (1959) (“*Joint Committee Report*”); 105 Cong. Rec. 19043 (daily ed. Sept. 11, 1959).

with subsection d’s “shall” provision, subsection b’s most natural meaning is that the “authorized” term was intended as a general grant of authority to NRC to enter into state agreements, whereas the “shall” term was a specific directive that NRC *must* exercise that authority when the prerequisites are met. See CLI-11-12, at 16-17(JA___), A “cardinal rule of statutory interpretation [is] that a statute is to be read as a whole, . . . since the meaning of statutory language, plain or not, depends on context.” *Dae Corp. v. Engeleiter*, 958 F.2d 436, 439 (D.C. Cir. 1992) (citation omitted). “[T]he specific governs the general.” *Radlax Gateway Hotel v. Amalgamated Bank*, No. 11-166, slip op. at 6 (U.S. May 29, 2012) (citation omitted).

NRC cannot simply replace “shall” with “may,” as Shieldalloy would prefer. As NRC detailed in its decision, section 274’s legislative history reveals that use of the mandatory term “shall” was deliberate, replacing the discretionary term “may” that had appeared in an earlier version of the agreement-state proposal. See CLI-11-12, at 13-14 (JA___). The mandatory “shall” clause is consistent with Congress’s intent to increase states’ role in nuclear regulation. See *id.* at 14-15 (JA___). Congress knows how to

“unambiguously express[] its intent through its choice of statutory language.” *Young v. Community Nutrition Institute*, 476 U.S. 983, 980 (1986). If Congress had intended to use a discretionary term in subsection d, “it could easily have done so explicitly.” *Consumer Prod. Safety Comm’n*, 447 U.S. at 109.

Construing subsection b the way Shieldalloy would like – to confer on NRC discretion to retain individual sites at a licensee’s request – would essentially render meaningless the “shall” command in subsection d. Courts have “consistently. . . expressed a deep reluctance to interpret a statutory provision so as to render superfluous other provisions in the same enactment.” *Freytag v. C.I.R.*, 501 U.S. 868, 877 (1991) (citation omitted).

2. Shieldalloy (Br.28) points to “other provisions in section 274,” specifically, the authorities reserved to NRC under subsection c and NRC’s authority to terminate an agreement under subsection j, as evidence of Congress’s intention to allow NRC “flexibility” to retain individual sites at its discretion. But neither of these provisions gives NRC general “flexibility” or “discretion” with respect to retention of individual sites. On the contrary, these provisions prescribe specific conditions triggering NRC retention or

resumption of regulatory authority within a state. Such provisions do not apply to this case.

Section 274c(4) of the AEA, 42 U.S.C. § 2021(c)(4), for example, allows NRC to retain authority over disposal of particular nuclear material, but only when NRC determines “by regulation or order” that the material should be disposed of by an NRC license because of its “hazards or potential hazards.” Shieldalloy does not claim, nor can it, that the material at Shieldalloy’s site contains special “hazards or potential hazards” requiring disposal under NRC license. No NRC “regulation or order” has identified any such hazards or potential hazards at the Shieldalloy site.

Similarly, section 274j, 42 U.S.C. § 2021(j), governing termination or suspension of agreement-state authority, applies in specific circumstances only. It covers just cases where NRC finds that termination or suspension is necessary to protect public health and safety or when a state violates legal requirements. The provision says nothing about overriding the mandate in section 274d that NRC “shall” grant agreement-state status upon state request, if all prerequisites are met.

3. Shieldalloy (Br.30) also points to language in subsection b referring to NRC's authority to enter into an agreement covering "any one or more of" the three types of nuclear material regulated under the AEA. But this provision does not give *carte blanche* to NRC to carve out individual sites from state authority, at the request of NRC licensees. Rather, the provision merely makes clear, as NRC held below, that section 274 "does not authorize a wholesale relinquishment or abdication by the Commission of its regulatory responsibilities but only a gradual, carefully considered turnover, on a State-by-State basis, as individual States may become qualified." See CLI-11-12 at 17 (JA___) (quoting *Joint Committee Report* at 8).

Shieldalloy (Br.31) refers to testimony by Robert Lowenstein of the Atomic Energy Commission's ("AEC") Office of the General Counsel in hearings before the Joint Committee. But Shieldalloy's cited testimony says nothing at all about general NRC discretion to retain authority over a particular site, at the behest of a licensee, notwithstanding that a qualified state has asked for that authority to be transferred.

If anything, Mr. Lowenstein’s testimony supports NRC’s view of subsection b’s “any one or more” language. His testimony shows that he understood the proposed agreement-state law to contemplate category-by-category (not site-by-site) transfers of authority, thus allowing states to take on less than the entire burden of nuclear-materials regulation:

Before I left these three categories, I did want to point out that under this bill the Commission as a State became ready and by agreement with the Governor, could turn over any one or more of these categories. We would not try to break them down. If a State were ready to assume its responsibilities in the way of regulation with respect to byproduct materials, the agreement would provide for a turnover of these responsibilities with respect to this entire category. However, there might be a series of agreements with a particular State adding additional categories as time goes on, and the State program develops. It would be the intention of the Commission under this bill to enter into agreements with the States covering all of these three categories as soon as the States are prepared to assume those responsibilities.

See CLI-11-12 at 17 (JA___) (quoting *Hearings* at 305) (testimony of Robert Lowenstein).

Shieldalloy claims (Br.30) that NRC “implicitly recognizes that it has found nothing in the legislative history or in the statute itself that supports [its] view that it cannot allow partial transfers over

subcategories of material at a licensee’s request for reasons unrelated to health and safety or compatibility when a state has requested authority.” That precise issue, it is true, is not addressed in the legislative history. But the absence of directly relevant legislative history harms Shieldalloy’s case, not NRC’s. As we have stressed, section 274d’s “shall” clause directs NRC to transfer authority to qualifying states upon request. Nothing in Shieldalloy’s legislative-history discussion reveals a “clearly expressed legislative intention contrary to [the statutory] language.” *Cardoza-Fonseca*, 480 U.S. at 432 n. 12 (citation omitted).⁹

4. In its decision below, NRC made the policy point that, contrary to the piecemeal federal-state regulation Congress sought to avoid, Shieldalloy’s approach would give licensees “an incentive to manipulate the license application process depending on which

⁹ The most pertinent aspect of legislative history that NRC has found cuts against Shieldalloy’s argument for broad NRC discretion to reject state requests for agreement-state authority. As NRC’s decision below recounts, NRC found evidence that Congress considered, but took no action on, financial and other non-health and safety interests of industry. Specifically, the Joint Committee took no action on a recommendation that “burden” to industry should be a criterion in lieu of “compatibility” in AEC’s approval of state programs. See CLI-11-12, at 19, n. 51 (JA___).

regulatory scheme they preferred for financial or other commercial interests apart from health and safety or compatibility.” CLI-11-12 at 19 (JA___). Shieldalloy argues (Br.30) that this is not so because of the “rigorous requirements of NRC’s regulations,” and because NRC is “not obliged to accede to a licensee’s request that authority for a facility remain with NRC.”

Shieldalloy misses the point. Under a scheme where NRC may retain authority over particular sites at a licensee’s request, the rigor of NRC regulations or the possibility that NRC may reject a licensee’s request (though under what standards Shieldalloy does not say) does not mean a licensee would not have an *incentive* to manipulate the license application process in an effort to come under the regulatory program it finds most beneficial. Licensees might speed up or delay applications, in other words, based on commercial interests and on the expected timing of agreement-state decisions.

5. Finally, Shieldalloy argues (Br.34) that its site qualifies for retention by NRC under the so-called “Oklahoma” policy. But, as NRC explained below, the Oklahoma policy came about in the context of Oklahoma’s being unwilling to assume jurisdiction over a

particular sub-category of nuclear materials. See CLI-11-12 at 19 (JA___). The *state*, in other words, sought and obtained an agreement that excluded a nuclear-material sub-category and kept authority over that sub-category at NRC. Nothing in the Oklahoma case suggested that NRC claimed authority to withhold authority from a requesting (and qualifying) state on the basis of a *licensee* request.

Thus, the Oklahoma case does not support Shieldalloy's position here, where New Jersey has requested authority over all source-material sites, including Shieldalloy's. If, as happened in the Oklahoma case, a state does not make the required certifications under subsection d for particular sub-categories of nuclear materials, then, in effect, a statutory prerequisite for NRC to exercise its authority to transfer authority over those particular sub-categories will not have been met. See *id.* at 20 n.53 (JA___).

What the Oklahoma case shows is that under section 274 NRC defers to a qualifying state's wishes; a state must request authority before NRC will give it. Shieldalloy's approach would treat states in the opposite manner. It "would have the NRC override, on grounds

not specified in the statute, the state’s expression of readiness.” *Id.* at 20 (JA___).

6. In sum, the “particular statutory language” supports NRC’s interpretation of its authority under section 274, as do the “design of the statute as a whole” and its “object and policy.” *Crandon v. U.S.*, 494 U.S. 152, 158 (1990). *See also United States of America, ex rel. D.J. Findley v. FPC-Boron Employees’ Club*, 105 F.3d 675, 681 (D.C. Cir. 1997). NRC reasonably found that it lacks general discretion to override, at the behest of a licensee, a qualifying state’s request for authority over nuclear materials. That leaves only the question whether, here, New Jersey met the statutory prerequisites for agreement-state status, a question we address in our next argument.

II. NRC Reasonably Concluded that New Jersey’s License-Termination Program is Compatible With NRC’s Program and Adequate to Protect the Public Health And Safety

A. NRC Provided a Reasonable Explanation of the Administrative and Non-Substantive Purpose of Criterion 25 Based on its 50-Year Implementation of the Agreement-State Program

Criterion 25 of NRC’s 1981 policy statement calls on NRC and prospective agreement states to make “appropriate arrangements”

to avoid “interference with or interruption of . . . the processing of license applications.” (JA___). Shieldalloy complains (Br.37, 39) that NRC’s construction of Criterion 25 as being administrative, not substantive, is inconsistent with NRC’s prior explanations of that criterion and constitutes a “litigation-driven” “revisionist view” of the criterion. Shieldalloy says (Br.38 n.16) that NRC’s explanation on remand is entitled to “no weight” unless it mirrors the agency’s prior explanations.

But NRC was not required on remand to provide an explanation identical to the one that this Court found lacking the first time around. The whole point of the remand was to allow NRC to revisit an explanation this Court found lacking. There is no question that on remand, agencies may “reach the same result for a different reason,” as long as they “explain themselves better or develop better evidence for their position.” *Heartland Regional Medical Center v. Leavitt*, 415 F.3d 24, 30 n. 9 (D.C. Cir. 2005) (citations omitted).

This Court did not dictate to NRC what the result on remand must be. Rather, this Court found NRC’s explanation of how Criterion 25 applies “incomplete” and “insufficient.” *See* 624 F.3d

at 493, 497. NRC responded appropriately to the basis for this Court's remand by closely examining its statutory authority to retain jurisdiction over individual sites at a licensee's request (already discussed above), and by enlarging its explanation of Criterion 25's basic purpose in light of its more than 50-year history in applying that criterion.

Moreover, NRC's explanation on remand *was* consistent with its prior statements about Criterion 25. NRC explained that the purpose of Criterion 25 was to further a "smooth and seamless" transfer of licensing records so as to allow the new agreement state to assume regulation over already-licensed activities as well as pending applications without any delay or disruption. CLI-11-12, at 30 (JA___). Criterion 25, as NRC explained below, is "administrative" in design, a "housekeeping" provision intended to promote an "orderly" transition and transfer of authority between NRC and state regulatory authorities. *Id.* None of the prior NRC statements quoted by Shieldalloy (Br.37, 38), which (like the latest Commission decision) describe Criterion 25 as designed to facilitate an "orderly" transition between NRC and new agreement states, indicate that NRC ever considered Criterion 25 as anything more

than administrative; there is no indication anywhere that NRC viewed Criterion 25 as giving substantive rights to licensees. See CLI-11-12 at 30 (JA___).¹⁰

Shieldalloy belittles NRC’s “administrative” explanation of Criterion 25, characterizing it as the equivalent of “tossing [records] over the transom to the applying state.” (Br.39). But an accurate and thorough transfer of records is no frivolous matter. It plays a key role in facilitating a smooth transition of authority to the state, and avoids unnecessary interruption, confusion, and delay.

Here, as NRC indicated below, NRC employed the same Criterion 25-driven approach that it has “over the past 50 years” by using a “transition plan” that facilitated the successful transfer of records for 490 existing licenses and 17 licensing applications (including Shieldalloy’s). See CLI-11-12 at 31 (App.____). “No licensing records have been identified as being lost or misplaced as a result of the transfer, and New Jersey was able to commence its

¹⁰ While NRC has followed its standard agreement-state policies in this case, it bears mention that neither Criterion 25 nor NRC’s other agreement-state criteria establish binding, judicially-enforceable private rights. See generally *Wilderness Society v. Norton*, 434 F.3d 584, 595-96 (D.C. Cir. 2006); *Vietnam Veterans of America v. Sec’y of Navy*, 843 F.2d 528, 536-38 (D.C. Cir. 1988).

regulation over the transferred licenses and pending applications immediately after the transfer.” *Id.* This orderly approach “fulfilled the administrative purpose of Criterion 25.” *Id.*

Shieldalloy now claims that NRC misunderstood its position regarding Criterion 25. It says (Br.39) that it never invoked Criterion 25 as a mechanism for retaining NRC’s authority or regulatory approach but only as obligating NRC, in the “unique” circumstances of its “long-pending licensing proceeding,” “to consider alternatives to . . . a transfer.” *Id.* at 40.

But throughout this litigation, now before this Court for the second time, Shieldalloy has consistently “invoked criterion 25 in support of its . . . contention that, even if the NRC entered a transfer agreement with New Jersey, it might exclude the Newfield site from the transfer.” 624 F.3d at 493. As for what other “alternatives” Shieldalloy now says NRC has ignored, Shieldalloy does not say. Indeed, the *only* alternative to transfer Shieldalloy has ever identified, whether in its initial comments on the proposed agreement, its previous briefs before this Court, or its filings before NRC on remand, is NRC retention of authority over the Newfield site. As evident from NRC’s decision on remand, NRC *has*

considered that alternative at length, but concluded that NRC lacks statutory authority to implement it. There is simply no merit to Shieldalloy's claim that NRC has not considered the alternative it sought.

Despite Shieldalloy's suggestion that it has not been treated fairly,¹¹ Shieldalloy has been treated the same as any other regulated entity that had an NRC application pending at the time of transfer of authority to an agreement state. As NRC explained below, it has never, under Criterion 25 or otherwise, retained individual sites because of a long-pending license application. *See* CLI-11-12 at 32-33 (JA___).

NRC has routinely transferred *all* pending NRC license applications to a state (absent a state's request for NRC retention, as in the Oklahoma situation). This includes a case similar to this one, *Kerr-McGee Chemical Corp.* (West Chicago Rare Earths Facility), CLI-96-2, 43 NRC 13 (1996). *See* CLI-11-12 at 32 & n.104 (JA___). That case shared several characteristics with the current case: (1) an NRC proceeding on a pending application for

¹¹ Br.40, *citing* 5 U.S.C. § 558(c).

decommissioning through onsite disposal was ongoing at the time of the regulatory transfer; (2) the NRC licensee strenuously objected to the transfer of regulatory authority as to its site; and (3) the state was strongly opposed to the licensee's application. See CLI-11-12 at 32 & n.104 (JA___).

Kerr-McGee had actually reached the point of NRC staff approval of an onsite disposal plan at the time the transfer of authority came before NRC. NRC nonetheless approved the transfer. Notably, Shieldalloy's opening brief in this Court does not mention the *Kerr-McGee* precedent, even though it was featured in NRC's decision below. See *id.*

In sum, NRC's "administrative" interpretation of Criterion 25 is reasonable, and it has been consistently and even-handedly applied to promote an orderly transfer of regulatory authority to an agreement state. There is no past NRC practice or precedent suggesting otherwise.

B. New Jersey's Lack of an Eligibility Test for Licensees to Pursue Restricted Release does not Render its Program Inadequate or Incompatible with NRC's

Shieldalloy vigorously disagrees with NRC's interpretation of what its own license-termination regulations require – *i.e.*, NRC's view that neither the license-termination regulations generally nor the ALARA eligibility test for restricted release in section 20.1403(a) call for comparing doses, or comparing the levels of health-and-safety protection, between restricted-use and unrestricted-use license termination. Shieldalloy believes that because of NRC's "ALARA principle," "dose comparisons between the unrestricted and restricted release options are not only permissible, but *required*." (Br.46-47) (emphasis in original).

While Shieldalloy has alluded to its "comparative-dose" claim before, and also has complained generally that New Jersey's program "fails to implement the ALARA principle,"¹² Shieldalloy's arguments to NRC never linked its claim to NRC's test for

¹²See, *e.g.*, Shieldalloy Feb. 4, 2011 filing at 15. (JA___). Shieldalloy had previously complained about New Jersey's alleged omission of the general ALARA requirement in section 20.1101(b). But New Jersey's program does in fact incorporate that requirement. See CLI-11-12 at 42 (JA___).

restricted-use eligibility in section 20.1403(a). As we explain below, however, Shieldalloy's 20.1403(a) argument betrays a fundamental misunderstanding of NRC's license-termination regulations and the function of the ALARA analysis in determining restricted-use eligibility.

Shieldalloy's argument also runs afoul of a fundamental proposition of administrative law: the judiciary routinely defers to agencies' interpretations of their own regulations. Deference is "all the more warranted" when, as here, "the regulation concerns a complex and highly technical regulatory program, in which the identification and classification of relevant criteria necessarily require significant expertise and entail the exercise of judgment grounded in policy concerns." *St. Luke's Hospital v. Sebelius*, 611 F.3d 900, 905 (D.C. Cir. 2010) (citation omitted). *Accord Howmet Corp. v. EPA*, 614 F.3d 544, 549 (D.C. Cir. 2010).

1. An ALARA analysis, whether for its traditional purpose to reduce doses below the minimum level of adequate protection, if reasonable, or to determine restricted-release eligibility, does involve a comparison – specifically, a comparison, or weighing, of potential costs of an activity against its potential benefits. But this

comparison of costs and benefits is, at bottom, an economic analysis to determine whether a given activity would likely be cost-beneficial. See NUREG-1757 at N-3 (JA___) (in an ALARA analysis all benefits and costs are given a monetary value if possible). An ALARA analysis does not determine the level of adequate protection or compare the level of protection afforded by one license-termination option with another.

Under NRC's regulations, the minimum level of adequate protection – set at 25 mrem per year for unrestricted-use decommissioning (and 25 and 100 mrem per year for restricted release) – must be met by a licensee *regardless of* economic costs or any cost-benefit analysis. Thus, no ALARA analysis, or weighing of costs and benefits, will excuse a licensee from having to satisfy the minimum required level of adequate protection for a particular regulated activity.

In license termination, it is hardly surprising that costs are likely to outweigh the benefits to achieve the level of adequate protection for unrestricted release (25 mrem per year). NRC's own guidance acknowledges that "shipping soil to a low-level waste disposal facility is unlikely to be cost effective for unrestricted

release, largely because of the high costs of waste disposal.”

NUREG-1757 at N-13 (JA___). In other words, particularly for sites with large volumes of contaminated material like Shieldalloy’s, it may virtually always be cheaper, from a cost perspective, simply to put a cover over a contaminated site and avoid the large out-of-pocket costs associated with soil removal, transportation of contaminated material across the country, and permanent disposal of the material in an isolated low-level radioactive waste facility. That is what Shieldalloy would like to do here.

But cheaper does not mean more protective. As NRC explained below, restricted release “is far more complex and involves significantly greater uncertainties than offsite disposal.” CLI-11-12 at 37 (JA___). It is “in view of the inherent complexities and uncertainties associated with restricted release” that NRC “explicitly expressed a preference for unrestricted release in adopting [the] license termination rule.” *Id.*

In light of its strong preference for unrestricted release, NRC regulations demand that licensees actually demonstrate that remediation to the level of 25mrem per year for unrestricted release would not be beneficial from a cost standpoint before allowing them

to pursue restricted-use (onsite) disposal. That is the intended purpose of the ALARA eligibility criterion in section 20.1403(a). The ALARA principle was “incorporated into the restricted-use portion of the license termination rule for the purpose of providing a criterion to limit the use of restricted release – effectively, to screen out sites that should be removing contamination to achieve unrestricted use.” *Id.* at 41 (JA___).

If the licensee’s cost-benefit eligibility analysis shows that unrestricted remediation *would* likely be cost-effective, the licensee will be required to pursue unrestricted instead of restricted release as that is NRC’s preferred decommissioning option. But even if a licensee is able to demonstrate that offsite disposal would not likely be cost-effective, and thus satisfies the eligibility test to pursue restricted release, NRC will still require the licensee to decommission under unrestricted release if the licensee’s restricted-release plan fails to meet the dose and other requirements deemed necessary for adequate protection to the public. This includes, *inter alia*, demonstrating the “sustained effectiveness of institutional controls over a 1000-year compliance period to restrict future access and use to meet the 25 mrem per year dose requirement” (*id.*

at 37 (JA___)), and that failure of engineered and institutional controls will result in doses to the public no greater than 100 mrem per (or 500 mrem per year in some circumstances). *Id.* See 10 C.F.R. § 20.1403(e).

2. Shieldalloy views the cost-benefit comparison involved in section 20.1403(a)'s ALARA restricted-use eligibility analysis as requiring a comparison of the levels of *protection* afforded by restricted release and unrestricted release in order to facilitate choosing the most protective option. But NRC's license-termination regulations "neither explicitly nor implicitly require a comparison of the levels of protection afforded by the unrestricted and restricted decommissioning options." CLI-11-12 at 37 (JA___). This is because the "levels of protection of unrestricted release and restricted release are simply not susceptible to being compared meaningfully." *Id.* "Each option uses significantly different methods to achieve adequate protection and has significantly different risks and uncertainties associated with it." *Id.*

Unrestricted release involves well-known and quantifiable handling and associated radiological impacts on workers and the public over a short time period of one to two years, whereas

restricted release relies on the sustained effectiveness of engineered covers and barriers and institutional controls to maintain the 25 mrem per year dose for a 1000-year compliance period. *See id.* at 37-38 (JA___). While NRC’s preference is for unrestricted release in light of the inherent uncertainties in restricted release, it made “both available as independent regulatory options that would provide adequate protection to the public health and safety *if* the applicable dose and other criteria are met.” *Id.* at 39 (JA___) (emphasis in original).

Contrary to Shieldalloy’s belief, the “ALARA principle itself, either as a general regulatory principle or as used in [its] license termination rule, [does not] incorporate or call for any comparative analysis of doses from restricted and unrestricted release.” *Id.* at 40 (JA___). Neither does the ALARA principle “demonstrate whether one decommissioning option affords greater protection than another” or “compare or explicitly analyze any of the uncertainties that affect the level of protection afforded by a particular disposal option.” *Id.* at 41,42 (JA___).

Shieldalloy claims that section 20.1403(a) “calls for a comparison of the doses associated with the two different

decommissioning approaches because the restricted release option is only available if the radiation levels it produces are ALARA or the unrestricted release option would result in radiological harm.” (Br. 45). But section 20.1403(a) says nothing of the sort. Rather, as discussed in the *Facts* (see n. 3, *supra*), what section 20.1403(a) actually describes are two alternate cost-benefit approaches a licensee may use to demonstrate that remediation to the level of adequate protection for unrestricted release would not be cost-beneficial – either a full cost-benefit analysis that compares all potential benefits to all potential costs (the “ALARA” analysis), or an abbreviated cost-benefit analysis that compares all potential benefits to only a subset of potential costs that excludes the out-of-pocket costs of soil removal, transportation, and disposal (the “net public or environmental harm” analysis).¹³

¹³ Shieldalloy portrays the abbreviated “net public or environmental harm” analysis as a litmus test to determine if “the unrestricted release option would result in radiological harm.” (Br.44-45). This is not only an erroneous interpretation of NRC’s regulation, as explained above, it is also a red-herring. The “net public or environmental harm” analysis is not likely to assist Shieldalloy because (as explained in n.3, *supra*), it will actually tilt in favor of *benefits* and result in a higher benefit-to-cost ratio than would a full ALARA analysis. A full ALARA analysis is more sensitive to costs

If Shieldalloy were correct, and the section 20.1403(a) eligibility analysis calls for comparing decommissioning options and selecting the more protective one, then NRC would surely have made the eligibility criterion a condition of unrestricted release as well. Under this scenario, licensees would have been required to demonstrate that unrestricted release is a “safer,” more protective option than restricted release before being permitted to pursue the unrestricted release option. It is telling that there is no such eligibility requirement for licensees to pursue unrestricted release. To the contrary, under NRC’s license-termination regulations, licensees are free to pursue unrestricted-use decommissioning without any prior demonstration or showing.

In sum, nothing in NRC’s regulations requires a comparative-dose analysis. Shieldalloy’s argument that New Jersey’s license-termination regulations are deficient for failure to include such an analysis is simply wrong. It rests on a misunderstanding of NRC’s regulations.

because, unlike the “net . . . harm” analysis, it includes the large out-of-pocket costs of soil removal, transportation, and disposal.

3. Shieldalloy claims that various NRC statements referring in some fashion to “comparisons” between unrestricted and restricted release contradict NRC’s decision below that the license-termination regulations do not require comparing between restricted-use and unrestricted-use options. But an examination of Shieldalloy’s citations confirms its basic misunderstanding of the license-termination regulations and of the function of the ALARA eligibility provision.

First, in NRC’s ALARA discussions, “comparisons between alternatives in the same class” (see NUREG-1757 at 6-3) refers to the traditional ALARA analysis, while “comparisons between restricted and unrestricted release” refers to ALARA for restricted-release eligibility. *Id.* See Br.45. All of the NRC statements cited by Shieldalloy (Br.45-46), when construed in context, simply provide additional technical information and guidance on the mechanics of properly performing the ALARA eligibility analysis to determine whether remediating to the level of adequate protection level for unrestricted release will be cost-beneficial.

Specifically, NRC explained in its license-termination rulemaking that a licensee pursuing restricted release must analyze

“the risks and benefits of all viable alternatives” for remediating a site to the level of adequate protection for unrestricted release, including “estimated fatalities from transportation accidents that might occur as the result of transport of wastes from cleanup activities, and societal and socioeconomic considerations such as the potential value to the community of unrestricted use of the land.” 62 Fed. Reg. at 39,069.

Likewise, in its decommissioning guidance, NRC elaborated on the “benefits” that must be examined to analyze the costs and benefits of achieving unrestricted release. For example, avoidance of regulatory costs (“regulatory costs avoided”) and aversion of doses to the collective population at the decommissioned site (“collective dose averted”) are obvious benefits to be realized by releasing a site with no restrictions. *See* NUREG-1757 at N-6, 6-3 (JA__). And, in a request for information to Shieldalloy (*see* Br.46), NRC staff commented on the “costs” to be assessed for the ALARA restricted-use eligibility test, warning that the cost-benefit analysis will be biased “away from the unrestricted use option” if “the amount of remediation work” necessary to remediate to the unrestricted-use level is “overestimated.”

None of these NRC statements, although invoked by Shieldalloy for the proposition that NRC requires a comparative analysis to identify the more protective license-termination option, supports Shieldalloy's unprecedented comparative-dose approach.

4. In its decision, NRC drew from Shieldalloy's own 2009 revised decommissioning plan to illustrate the fallacy of Shieldalloy's position that license termination by restricted release will be safer to the public health and safety than unrestricted release. As NRC explained, Shieldalloy's 2009 plan calculated an "infinitesimally small dose – 0.0000004 mrem per year – when institutional controls and engineered barriers are assumed to remain effective for 1000 years." *Id.* at 38 (JA___). However, "when institutional controls are assumed to fail and the engineered cover is assumed to degrade, Shieldalloy's own filing showed that the dose estimate would be far greater, up to a bounding dose of 86 mrem per year at the Newfield site." *Id.* This dose, NRC explained, "is well in excess of Shieldalloy's dose estimates for unrestricted release, which ranged from 1 to 25 mrem per year."

Thus, "while Shieldalloy's estimates purport to show that doses for onsite disposal (assuming fully functioning controls) are

lower than those for unrestricted release, its own dose estimates for onsite disposal assuming the uncertainty and potential failure of controls over the long term in actuality show a *higher* dose.” *Id.* (emphasis in original).

Shieldalloy complains that NRC’s discussion of Shieldalloy’s decommissioning plan did not provide a “fair comparison” between the unrestricted-use and restricted-use options because NRC’s regulations permit doses of up to 100 mrem per year if controls fail over the long term. (Br. at 48). But the fact that Shieldalloy’s plan may satisfy the dose criteria for restricted release, even if true, misses the point of NRC’s discussion. What NRC demonstrated from Shieldalloy’s own proposed plan is that a “fair comparison” of the doses yielded by the two decommissioning options is not possible – indeed, that any such comparison is “meaningless” due to the “significantly different methods to achieve adequate protection” and their “significantly different risks and uncertainties.” CLI-11-12 at 37 (JA___).

The example drawn from Shieldalloy’s own proposal illustrates that putting a cover over a site may be cheaper and easier to achieve dose reductions in the short term, compared to remediating

a site for unrestricted release, but not necessarily the least risky or most protective option over the long term.

5. Shieldalloy now apparently recognizes that New Jersey has incorporated ALARA for its traditional purpose of reducing doses below the level of adequate protection if cost-beneficial (Br.48-49), but argues that New Jersey's program is not compatible with NRC's because its exclusion of the ALARA eligibility criterion under section 20.1403(a) fails to "permit application of the ALARA principle to determine the most suitable option for decommissioning a facility." (Br.49).¹⁴ However, as we have shown, the ALARA eligibility criterion "does not compare or explicitly analyze any of the uncertainties that affect the level of protection afforded by a particular disposal option." CLI-11-12 at 42 (JA___). Hence, the absence of that criterion in New Jersey's regulations, as NRC explained below, "is immaterial to adequacy of compatibility." *Id.*

Indeed, New Jersey's lack of a section 20.1403(a)-like restricted-use (onsite) eligibility criterion has no bearing on whether

¹⁴ Shieldalloy also refers (*id.*) to NRC's "Alternate criteria for license termination," 10 C.F.R. § 20.1404, which has no bearing on the issues in this case as Shieldalloy never pursued that option before NRC.

Shieldalloy may or may not pursue onsite disposal in New Jersey. The only significance of its absence from New Jersey's program is that, unlike at NRC, licensees may pursue onsite disposal in New Jersey without first having to analyze whether off-site disposal will be cost-beneficial.

In short, it is New Jersey's more conservative standards for onsite disposal rather than New Jersey's lack of an eligibility criterion, as Shieldalloy claims, which may make onsite disposal more difficult under New Jersey's program than under NRC's. *See id.* at 42 (JA___). But New Jersey's greater stringency for onsite disposal is "permissible" under NRC policy and does not render New Jersey's program incompatible with NRC's, particularly since NRC's "regulations likewise heavily favor unrestricted over restricted release." *Id.* at 43 (JA___).

6. Finally, Shieldalloy complains that NRC's interpretation of its license-termination regulations as not requiring a comparison of decommissioning options and selection of the most protection option is at once "novel," "unprecedented," "new," and "nowhere expressed before, even in the agency's previous brief before this

Court.” (Br.41-43). But in actuality it is Shieldalloy, not NRC, that is guilty of “new” arguments.

As this Court recognized, Shieldalloy did not raise a comparative-dose claim in its original comment response to NRC on the New Jersey plan. *See* 624 F.3d at 496. Nor did Shieldalloy raise that claim in its request for an NRC stay of the New Jersey agreement. And, while Shieldalloy's comparative-dose position may have been reflected in its proposed 2005 decommissioning plan, as this Court suggested (*id.* at 496), that plan was rejected by NRC staff as not being in compliance with NRC’s license-termination regulations. *See* CLI-11-12 at 35 (JA___).

On remand before NRC, Shieldalloy raised the comparative-dose issue, but cited only the general ALARA definition in section 20.1003, never mentioning section 20.1403(a). *See* Shieldalloy Response at 13, 15-16 (JA___). NRC observed below that it largely had to “guess at the technical rationale and underlying foundation” for Shieldalloy’s comparative-dose position. CLI-11-12 at 35 (JA___).¹⁵

¹⁵ Shieldalloy implies that NRC should have understood its comparative-dose claim, since this Court “had no difficulty in

Thus, although NRC correctly surmised that Shieldalloy's position on ALARA might be grounded in section 20.1403(a), and discussed that provision in its decision below (CLI-11-12 at 41 (JA___)), insofar as NRC's decision did not address points now made for the first time in Shieldalloy's opening brief, the fault lies with Shieldalloy, not NRC. *Cf. Nevada v. DOE*, 457 F.3d 78, 88 (D.C. Cir. 2006) ("Parties "must 'structure their participation so that it . . . alerts the agency to the [parties'] position and contentions,""). (citation omitted; bracket in original).

In any event, as we have shown, New Jersey's decision not to adopt section 20.1403(a) or a regulation like it does not render its license-termination program less protective than, or incompatible with, NRC's.

C. *New Jersey's Program Allows License Termination under Restricted Release*

Shieldalloy disputes NRC's finding that New Jersey allows license termination under restricted release. *See* CLI-11-12 at 44-

understanding" it. (Br.42 n.18). But NRC said Shieldalloy had not made clear the "technical rationale" and "foundation" for its comparative dose claim, not that Shieldalloy had never made the claim at all.

46 (JA___). Shieldalloy now acknowledges that New Jersey allows site *remediation* under restricted release. (Br.51). But, in a newly-minted argument never raised before NRC, Shieldalloy claims that site remediation under restricted release is not comparable to NRC's provision of license *termination* under restricted release.

Shieldalloy points first to New Jersey regulations that require licensees undergoing site remediation involving engineering or institutional controls to obtain a state-issued "remedial action permit" which must remain in effect for as long as the site controls need to be maintained. (Br.52). As we understand Shieldalloy's position, the remedial-action permit equates to a license, and New Jersey's requirement that the permit continue in effect to preserve site controls means that the state, unlike NRC, does not actually allow license "termination," making New Jersey's program (allegedly) incompatible with NRC's.

Shieldalloy's position that New Jersey lacks restricted release derives from its mistaken comparative-dose claim and does not show a lack of adequacy or compatibility. Its argument is also without foundation in fact. New Jersey does allow license "termination" under restricted release. New Jersey incorporated by

reference NRC's regulations at 10 C.F.R. § 40.42(k), which expressly provide for termination of a source material license when regulatory requirements have been satisfied. *See* N.J. Admin. Code §§ 7:28-58.1(a) and (c)(27).

Moreover, the New Jersey remedial action permit provisions that Shieldalloy references appear to apply only to remediation of hazardous materials sites, not to remediation of radioactive materials sites such as the Newfield site. *See* N.J. Admin. Code § 7:26C-7.2. New Jersey has promulgated a discrete set of regulations, N.J. Admin. Code § 7:28-12.1 *et seq.*, for property containing radioactive materials.

In any event, New Jersey's program would not be rendered incompatible with NRC's even if the remedial-action permit provisions applies to radioactive materials sites. New Jersey's remedial-action permit requirement is intended to provide a "regulatory mechanism" to preserve the integrity of long-term controls. *See* N.J. Admin. Code § 7:26C-7.1(b). It performs essentially the same function as NRC's required "institutional controls" for license termination under restricted release. *See* 10 C.F.R. § 20.1403; NUREG-1757 at M-4 (JA___).

Shieldalloy (Br.52-53) also points to the fact that New Jersey did not incorporate by reference an NRC regulation on long-term care of certain disposal sites, 10 C.F.R. § 40.27, and to a New Jersey standard information form for requesting license termination, which Shieldalloy claims would operate to prevent terminating a license if radioactive materials remain on site. But 10 C.F.R. § 40.27 applies only to federal government monitoring and maintenance of defunct uranium mill legacy sites under a special statutory scheme. It has no relevance to New Jersey's regulation of the Shieldalloy site. And the New Jersey standard information form cited by Shieldalloy is just that – a form, not a regulation. A form used for informational purposes cannot trump state regulations allowing license termination under restricted release.¹⁶

¹⁶ The form, in any event, is a check-list. It does not suggest that a license cannot be terminated if radioactive material remains on site.

D. *New Jersey's License-Termination Program Incorporates Dose Criteria and Dose Calculation Methodologies that are Compatible with NRC's under NRC's Longstanding Agreement State Policy*

In its decision, NRC rejected Shieldalloy's position that New Jersey's license-termination program is incompatible with NRC's because it departs from NRC's program in ways that NRC had previously rejected. NRC explained that, under the compatibility Category C designation for NRC's license-termination rule, the New Jersey variances cited by Shieldalloy are aspects of the state's regulations that are permissibly more stringent than NRC's on the same technical subject areas, and that these more conservative requirements satisfy the "essential objective" of the license-termination rule. CLI-11-12 at 47 (JA___).

Shieldalloy now claims that NRC cannot rely on its compatibility designation to justify New Jersey's variances from NRC's program. (Br.56). In addition to ALARA and restricted release, Shieldalloy complains about the following New Jersey deviations from NRC's regulations: (1) its 15 mrem per year dose limit, (2) its calculation of doses to the longer of the time of peak dose or 1000 years; (3) its failure to allow for potential doses over

100 mrem per year; and (4) its requirement that radioactively-contaminated ground and surface water be remediated pursuant to New Jersey water-quality standards (Br.55-56).

Curiously, except for ALARA and restricted-release, Shieldalloy does not claim outright that the New Jersey deviations it cites will result in “undue impact” to or be less protective of public health and safety than NRC’s. Instead, Shieldalloy maintains that NRC should have required New Jersey to mirror NRC’s requirements in these particular areas simply because NRC had adopted them after a lengthy public rulemaking process. (Br.57).

We have already discussed why Shieldalloy’s arguments regarding ALARA and restricted-release lack merit. With respect to New Jersey’s other variances, Shieldalloy’s position reflects a disagreement with NRC’s compatibility *policy* rather than any claim that NRC failed to follow that policy or that New Jersey’s requirements are less protective than NRC’s. But Shieldalloy cannot rightly maintain that it was arbitrary and capricious for NRC to abide by the longstanding compatibility approach it has followed for every other agreement-state proposal in its implementation of the agreement-state program.

To recap, NRC’s compatibility policy “presumes” that the level of protection of NRC’s regulatory program is “adequate to provide a reasonable assurance of protection of public health and safety.” 46 Fed. Reg. at 46,524. However, as NRC indicated in its decision, the levels of adequate protection established by NRC, “while safe and acceptable,” do not mean zero risk. Indeed, NRC’s ALARA policy that doses should be reduced below limits when reasonable (*i.e.*, cost-effective), stems from its recognition that NRC adequate protection levels, as reflected in its license-termination dose limits and other criteria that Shieldalloy cites, may still “have some associated risk.” CLI-11-12 at 41 (JA__).

In license termination and other regulatory fields determined by NRC to affect primarily local rather than national interests, NRC’s compatibility policy permits agreement states to establish a lower risk level than NRC’s and adopt requirements more conservative than those NRC deemed necessary for adequate protection. That is precisely what New Jersey did in establishing its license-termination program. Contrary to Shieldalloy’s position, there was nothing unreasonable about NRC’s approving New

Jersey's more conservative program under NRC's long-established agreement-state compatibility policy.¹⁷

E. NRC's Approval of New Jersey's Program was not Inconsistent with Criterion 23

Shieldalloy argues that New Jersey's license-termination regulations single out the Shieldalloy site at Newfield and thus are not "fair and impartial" under Criterion 23. Br.57-58. But, as NRC pointed out, agreement-state regulations must cover *all* activities that a state is regulating even if such activities are present at just one place; there is nothing inherently "unfair or unlawful in state regulations that may apply to just one licensee in a state at any given time." See CLI-11-12 at 47-50 (JA___).

NRC also acted reasonably when it refused to accept Shieldalloy's position that New Jersey's license-termination regulations are inherently unfair because they were intended to

¹⁷ Shieldalloy claims (Br.56) that NRC should have explained why its 1981 policy statement has never been revised to incorporate the 1997 license-termination program (which this Court found "odd," see *Shieldalloy*, 624 F.3d at 496-98). But Shieldalloy points to no harm from the lack of such incorporation, nor can it. As was done in this case, NRC reviews proposed agreement-state programs against all relevant NRC regulatory programs whether or not a particular program is reflected in the criteria document.

effectuate a state-desired regulatory outcome. NRC explained that it is a state's prerogative under the section 274 agreement-state program to decide which local interests, preferences, and needs it wishes to accommodate, and that NRC's role is not to force a state to adopt regulations equivalent to NRC's but to assess whether a state-proposed program is adequate and compatible. *Id.*

NRC observed that it retains power to revoke agreements and restore NRC regulatory authority under AEA section 274j, 42 U.S.C. § 2021(j), and that it will monitor New Jersey's implementation of its approved program to ensure that New Jersey's application of its regulations to the Newfield site is not unduly strict or incompatible with NRC's regulatory program. *Id.* at 49 (JA___). NRC welcomed Shieldalloy to raise any agreement-state performance concerns with NRC at any time. *Id.*

Accusing NRC of ignoring "notions of fair play and substantial justice" and "turn[ing] a blind eye" to New Jersey's purportedly unfair regulations (Br.60), Shieldalloy maintains that the "outcome-oriented nature" of New Jersey's regulations "should have triggered increased scrutiny by NRC to verify that the Program will be administered fairly and impartially." (Br.59). But Shieldalloy does

not specify how this rhetoric translates into unreasonable or unlawful NRC action. The fact is, the AEA and NRC's implementing policy allow New Jersey to impose standards more stringent than NRC's. And it is also true, notwithstanding Shieldalloy's cynicism (Br.52 n.5), that NRC retains vigilant oversight over the ongoing effectiveness of agreement-state programs and stands ready to step in should agreement states falter.

Shieldalloy may not like NRC's transfer of authority to New Jersey, or the added expense that New Jersey's license-termination regulations may entail, but that does not mean NRC acted arbitrarily in finding that New Jersey's program, which has all the indicia of a fair program (including hearings and judicial review before state tribunals), is not unfair or biased under Criterion 23. Indeed, NRC found that "there is simply no evidence in the record suggesting that New Jersey is less committed to safety than the NRC," and that "New Jersey seems willing to entertain any safety-based arguments [as to offsite versus onsite disposal] Shieldalloy can offer." CLI-11-12 at 43 (JA__).

CONCLUSION

For the foregoing reasons, the petition for review should be denied.

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Dated: May 29, 2012

CERTIFICATE OF LENGTH OF BRIEF

I hereby certify that the foregoing "Brief for Respondent U.S. Nuclear Regulatory Commission and United States of America" contains 13,989 words, excluding the Table of Contents, Table of Authorities, Glossary, and Certificates of Counsel, as counted by the Microsoft Word 2007 program.

Respectfully submitted,

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May 29, 2012

CERTIFICATE OF SERVICE

I hereby certify that on May 29, 2012, a copy of the foregoing Brief for the Federal Respondents was filed with the Clerk of the Court and served upon the following counsel of record in the case through the CM/ECF System:

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STATUTORY ADDENDUM

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AEA § 274, 42 U.S.C. § 2021.....A-1

10 C.F.R. § 20.1401A-7

10 C.F.R. § 20.1402A-8

10 C.F.R. § 20.1403A-8

Effective: August 8, 2005

United States Code Annotated [Currentness](#)
Title 42. The Public Health and Welfare
Chapter 23. Development and Control of Atomic Energy ([Refs & Annos](#))
 ▣ [Division a.](#) Atomic Energy
 ▣ [Subchapter I.](#) General Provisions
 →→ **§ 2021. Cooperation with States**

(a) Purpose

It is the purpose of this section--

- (1) to recognize the interests of the States in the peaceful uses of atomic energy, and to clarify the respective responsibilities under this chapter of the States and the Commission with respect to the regulation of byproduct, source, and special nuclear materials;
- (2) to recognize the need, and establish programs for, cooperation between the States and the Commission with respect to control of radiation hazards associated with use of such materials;
- (3) to promote an orderly regulatory pattern between the Commission and State governments with respect to nuclear development and use and regulation of byproduct, source, and special nuclear materials;
- (4) to establish procedures and criteria for discontinuance of certain of the Commission's regulatory responsibilities with respect to byproduct, source, and special nuclear materials, and the assumption thereof by the States;
- (5) to provide for coordination of the development of radiation standards for the guidance of Federal agencies and cooperation with the States; and
- (6) to recognize that, as the States improve their capabilities to regulate effectively such materials, additional legislation may be desirable.

(b) Agreements with States

Except as provided in subsection (c) of this section, the Commission is authorized to enter into agreements with the Governor of any State providing for discontinuance of the regulatory authority of the Commission under subchapters V, VI, and VII of this division, and [section 2201](#) of this title, with respect to any one or more of the following materials within the State:

- (1) Byproduct materials (as defined in [section 2014\(e\)](#) of this title).

(2) Source materials.

(3) Special nuclear materials in quantities not sufficient to form a critical mass.

(4) Repealed. [Pub.L. 109-58, Title VI, § 651\(e\)\(2\)](#), Aug. 8, 2005, 119 Stat. 807.

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.

(c) Commission regulation of certain activities

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.

The Commission shall also retain authority under any such agreement 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 2014\(e\)\(2\)](#) of this title. Notwithstanding any agreement between the Commission and any State pursuant to subsection (b) of this section, the Commission is authorized by rule, regulation, or order to require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear material shall not transfer possession or control of such product except pursuant to a license issued by the Commission.

(d) Conditions

The Commission shall enter into an agreement under subsection (b) of this section with any State if--

(1) The [\[FN1\]](#) Governor of that State certifies that the State has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the materials within the State covered by the proposed agreement, and that the State desires to assume regulatory responsibility for such materials; and

(2) the Commission finds that the State program is in accordance with the requirements of subsection (o) of this section and in all other respects compatible with the Commission's program for the regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement.

(e) Publication in Federal Register; comment of interested persons

(1) Before any agreement under subsection (b) of this section is signed by the Commission, the terms of the proposed agreement and of proposed exemptions pursuant to subsection (f) of this section shall be published once each week for four consecutive weeks in the Federal Register; and such opportunity for comment by interested persons on the proposed agreement and exemptions shall be allowed as the Commission determines by regulation or order to be appropriate.

(2) Each proposed agreement shall include the proposed effective date of such proposed agreement or exemptions. The agreement and exemptions shall be published in the Federal Register within thirty days after signature by the Commission and the Governor.

(f) Exemptions

The Commission is authorized and directed, by regulation or order, to grant such exemptions from the licensing requirements contained in subchapters V, VI, and VII of this division, and from its regulations applicable to licensees as the Commission finds necessary or appropriate to carry out any agreement entered into pursuant to subsection (b) of this section.

(g) Compatible radiation standards

The Commission is authorized and directed to cooperate with the States in the formulation of standards for protection against hazards of radiation to assure that State and Commission programs for protection against hazards of radiation will be coordinated and compatible.

(h) Consultative, advisory, and miscellaneous functions of Administrator of Environmental Protection Agency

The Administrator of the Environmental Protection Agency shall consult qualified scientists and experts in radiation matters, including the President of the National Academy of Sciences, the Chairman of the National Committee on Radiation Protection and Measurement, and qualified experts in the field of biology and medicine and in the field of health physics. The Special Assistant to the President for Science and Technology, or his designee, is authorized to attend meetings with, participate in the deliberations of, and to advise the Administrator. The Administrator shall advise the President with respect to radiation matters, directly or indirectly affecting health, including guidance for all Federal agencies in the formulation of radiation standards and in the establishment and execution of programs of cooperation with States. The Administrator shall also perform such other functions as the President may assign to him by Executive order.

(i) Inspections and other functions; training and other assistance

The Commission in carrying out its licensing and regulatory responsibilities under this chapter is authorized to enter into agreements with any State, or group of States, to perform inspections or other functions on a cooperative basis as the Commission deems appropriate. The Commission is also authorized to provide training, with or without charge, to employees of, and such other assistance to, any State or political subdivision thereof or group of States as the Commission deems appropriate. Any such provision or assistance by the Commission shall take into account the additional expenses that may be incurred by a State as a consequence of the State's entering into an agreement with the Commission pursuant to subsection (b) of this section.

(j) Reserve power to terminate or suspend agreements; emergency situations; State nonaction on causes of danger; authority exercisable only during emergency and commensurate with danger

(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 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. The Commission shall periodically review such agreements and actions taken by the States under the agreements to ensure compliance with the provisions 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.

(k) State regulation of activities for certain purposes

Nothing in this section shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards.

(l) Commission regulated activities; notice of filing; hearing

With respect to each application for Commission license authorizing an activity as to which the Commission's authority is continued pursuant to subsection (c) of this section, the Commission shall give prompt notice to the State or States in which the activity will be conducted of the filing of the license application; and shall afford reasonable opportunity for State representatives to offer evidence, interrogate witnesses, and advise the Commission as to the application without requiring such representatives to take a position for or against the granting of the application.

(m) Limitation of agreements and exemptions

No agreement entered into under subsection (b) of this section, and no exemption granted pursuant to subsection (f) of this section, shall affect the authority of the Commission under [section 2201\(b\)](#) or [\(i\)](#) of this title to issue rules, regulations, or orders to protect the common defense and security, to protect restricted data or to guard against the loss or diversion of special nuclear material. For purposes of [section 2201\(i\)](#) of this title, activities covered by exemptions granted pursuant to subsection (f) of this section shall be deemed to constitute activities authorized pursuant to this chapter; and special nuclear material acquired by any person pursuant to such an exemption shall be deemed to have been acquired pursuant to [section 2073](#) of this title.

(n) "State" and "agreement" defined

As used in this section, the term "State" means any State, Territory, or possession of the United States, the Canal Zone, Puerto Rico, and the District of Columbia. As used in this section, the term "agreement" includes any amendment to any agreement.

(o) State compliance requirements: compliance with section 2113(b) of this title and health and environmental protection standards; procedures for licenses, rulemaking, and license impact analysis; amendment of agreements for transfer of State collected funds; proceedings duplication restriction; alternative requirements

In the licensing and regulation of byproduct material, as defined in [section 2014\(e\)\(2\)](#) of this title, or of any activity which results in the production of byproduct material as so defined under an agreement entered into pursuant to subsection (b) of this section, a State shall require--

(1) compliance with the requirements of [subsection \(b\) of section 2113](#) of this title (respecting ownership of by-product material and land), and

(2) compliance with standards which shall be adopted by the State for the protection of the public health, safety, and the environment from hazards associated with such material which are equivalent, to the extent practicable, or more stringent than, standards adopted and enforced by the Commission for the same purpose, including requirements and standards promulgated by the Commission and the Administrator of the Environmental Protection Agency pursuant to [sections 2113, 2114, and 2022](#) of this title, and

(3) procedures which--

(A) in the case of licenses, provide procedures under State law which include--

(i) an opportunity, after public notice, for written comments and a public hearing, with a transcript,

(ii) an opportunity for cross examination, and

(iii) a written determination which is based upon findings included in such determination and upon the evidence presented during the public comment period and which is subject to judicial review;

(B) in the case of rulemaking, provide an opportunity for public participation through written comments or a public hearing and provide for judicial review of the rule;

(C) require for each license which has a significant impact on the human environment a written analysis (which shall be available to the public before the commencement of any such proceedings) of the impact of such license, including any activities conducted pursuant thereto, on the environment, which analysis shall include--

(i) an assessment of the radiological and nonradiological impacts to the public health of the activities to be conducted pursuant to such license;

(ii) an assessment of any impact on any waterway and groundwater resulting from such activities;

(iii) consideration of alternatives, including alternative sites and engineering methods, to the activities to be conducted pursuant to such license; and

(iv) consideration of the long-term impacts, including decommissioning, decontamination, and reclamation impacts, associated with activities to be conducted pursuant to such license, including the management of any byproduct material, as defined by [section 2014\(e\)\(2\)](#) of this title; and

(D) prohibit any major construction activity with respect to such material prior to complying with the provisions of subparagraph (C).

If any State under such agreement imposes upon any licensee any requirement for the payment of funds to such State for the reclamation or long-term maintenance and monitoring of such material, and if transfer to the United States of such material is required in accordance with [section 2113\(b\)](#) of this title, such agreement shall be amended by the Commission to provide that such State shall transfer to the United States upon termination of the license issued to such licensee the total amount collected by such State from such licensee for such purpose. If such payments are required, they must be sufficient to ensure compliance with the standards established by the Commission pursuant to [section 2201\(x\)](#) of this title. No State shall be required under paragraph (3) to conduct proceedings concerning any license or regulation which would duplicate proceedings conducted by the Commission. In adopting requirements pursuant to paragraph (2) of this subsection with respect to sites at which ores are processed primarily for their source material content or which are used for the disposal of byproduct material as defined in [section 2014\(e\)\(2\)](#) of this title, the State may adopt alternatives (including, where appropriate, site-specific alternatives) to the requirements adopted and enforced by the Commission for the same purpose if, after notice and opportunity for public hearing, the Commission determines that such alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission for the same purpose and any final standards promulgated by the Administrator of the Environmental Protection Agency in accordance with [section 2022](#) of this title. Such alternative State requirements may take into account local or regional conditions, including geology, topography, hydrology and meteorology.

CREDIT(S)

(Aug. 1, 1946, c. 724, Title I, § 274, as added Sept. 23, 1959, Pub.L. 86-373, § 1, 73 Stat. 688; amended 1970 Reorg. Plan No. 3, §§ 2(a)(7), 6(2), eff. Dec. 2, 1970, 35 F.R. 15623, 84 Stat. 2086; Nov. 8, 1978, [Pub.L. 95-604, Title II, § 204\(a\)-\(e\)\(1\), \(f\)](#), 92 Stat. 3036-3038; June 30, 1980, [Pub.L. 96-295, Title II, § 205](#), 94 Stat. 787; Jan. 4, 1983, [Pub.L. 97-415, § 19\(a\)](#), 96 Stat. 2078; renumbered Title I and amended Oct. 24, 1992, [Pub.L. 102-486, Title IX, § 902\(a\)\(6\), \(8\)](#), 106 Stat. 2944; Aug. 8, 2005, [Pub.L. 109-58, Title VI, § 651\(e\)\(2\)](#), 119 Stat. 807.)

[\[FN1\]](#) So in original. Probably should read “the”.

Current through P.L. 112-104 (excluding P.L. 112-96 and 112-102) approved 4-2-12

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END OF DOCUMENT

Subpart E--Radiological Criteria for License Termination

Source: 62 FR 39088, July 21, 1987, unless otherwise noted.

§ 20.1401 General provisions and scope.

(a) The criteria in this subpart apply to the decommissioning of facilities licensed under parts 30, 40, 50, 52, 60, 61, 63, 70, and 72 of this chapter, and release of part of a facility or site for unrestricted use in accordance with § 50.83 of this chapter, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended. For high-level and low-level waste disposal facilities (10 CFR parts 60, 61, and 63), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities. The criteria do not apply to uranium and thorium recovery facilities already subject to appendix A to 10 CFR part 40 or the uranium solution extraction facilities.

(b) The criteria in this subpart do not apply to sites which:

(1) Have been decommissioned prior to the effective date of the rule in accordance with criteria identified in the Site Decommissioning Management Plan (SDMP) Action Plan of April 16, 1992 (57 FR 13389);

(2) Have previously submitted and received Commission approval on a license termination plan (LTP) or decommissioning plan that is compatible with the SDMP Action Plan criteria; or

(3) Submit a sufficient LTP or decommissioning plan before August 20, 1998 and such LTP or decommissioning plan is approved by the Commission before August 20, 1999 and in accordance with the criteria identified in the SDMP Action Plan, except that if an EIS is required in the submittal, there will be a provision for day-for-day extension.

(c) After a site has been decommissioned and the license terminated in accordance with the criteria in this subpart, or after part of a facility or site has been released for unrestricted use in accordance with § 50.83 of this chapter and in accordance with the criteria in this subpart, the Commission will require additional cleanup only, if based on new information, it determines that the criteria of this subpart were not met and residual radioactivity remaining at the site could result in significant threat to public health and safety.

(d) When calculating TEDE to the average member of the critical group the licensee shall determine the peak annual TEDE dose expected within the first 1000 years after decommissioning.

§ 20.1402 Radiological criteria for unrestricted use.

A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a TEDE to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year, including that from groundwater sources of drinking water, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). Determination of the levels which are ALARA must take into account consideration of any detriments, such as deaths from transportation accidents, expected to potentially result from decontamination and waste disposal.

§ 20.1403 Criteria for license termination under restricted conditions.

A site will be considered acceptable for license termination under restricted conditions if:

- (a) The licensee can demonstrate that further reductions in residual radioactivity necessary to comply with the provisions of § 20.1402 would result in net public or environmental harm or were not being made because the residual levels associated with restricted conditions are ALARA. Determination of the levels which are ALARA must take into account consideration of any detriments, such as traffic accidents, expected to potentially result from decontamination and waste disposal;
- (b) The licensee has made provisions for legally enforceable institutional controls that provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem (0.25 mSv) per year;
- (c) The licensee has provided sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site. Acceptable financial assurance mechanisms are--
 - (1) Funds placed into an account segregated from the licensee's assets and outside the licensee's administrative control as described in § 30.35(f)(1) of this chapter;
 - (2) Surety method, insurance, or other guarantee method as described in § 30.35(f)(2) of this chapter;
 - (3) A statement of intent in the case of Federal, State, or local Government licensees, as described in § 30.35(f)(4) of this chapter; or
 - (4) When a governmental entity is assuming custody and ownership of a site, an arrangement that is deemed acceptable by such governmental entity.

(d) The licensee has submitted a decommissioning plan or License Termination Plan (LTP) to the Commission indicating the licensee's intent to decommission in accordance with §§ 30.36(d), 40.42(d), 50.82 (a) and (b), 70.38(d), or 72.54 of this chapter, and specifying that the licensee intends to decommission by restricting use of the site. The licensee shall document in the LTP or decommissioning plan how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice.

(1) Licensees proposing to decommission by restricting use of the site shall seek advice from such affected parties regarding the following matters concerning the proposed decommissioning-

(i) Whether provisions for institutional controls proposed by the licensee;

(A) Will provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem (0.25 mSv) TEDE per year;

(B) Will be enforceable; and

(C) Will not impose undue burdens on the local community or other affected parties.

(ii) Whether the licensee has provided sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site;

(2) In seeking advice on the issues identified in § 20.1403(d)(1), the licensee shall provide for:

(i) Participation by representatives of a broad cross section of community interests who may be affected by the decommissioning;

(ii) An opportunity for a comprehensive, collective discussion on the issues by the participants represented; and

(iii) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement and disagreement among the participants on the issues; and

(e) Residual radioactivity at the site has been reduced so that if the institutional controls were no longer in effect, there is reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group is as low as reasonably achievable and would not exceed either--

(1) 100 mrem (1 mSv) per year; or

(2) 500 mrem (5 mSv) per year provided the licensee—

(i) Demonstrates that further reductions in residual radioactivity necessary to comply with the 100 mrem/y (1 mSv/y) value of paragraph (e)(1) of this section are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm;

(ii) Makes provisions for durable institutional controls;

(iii) Provides sufficient financial assurance to enable a responsible government entity or independent third party, including a governmental custodian of a site, both to carry out periodic rechecks of the site no less frequently than every 5 years to assure that the institutional controls remain in place as necessary to meet the criteria of § 20.1403(b) and to assume and carry out responsibilities for any necessary control and maintenance of those controls. Acceptable financial assurance mechanisms are those in paragraph (c) of this section.