

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued October 15, 2010

Decided November 9, 2010

No. 09-1268

SHIELDALLOY METALLURGICAL CORPORATION,
PETITIONER

v.

NUCLEAR REGULATORY COMMISSION
AND UNITED STATES OF AMERICA,
RESPONDENTS

On Petition for Review of an Order
of the Nuclear Regulatory Commission

Matias F. Traveiso-Diaz argued the cause for petitioner. With him on the briefs were *Jay E. Silberg* and *Alison M. Crane*.

Grace H. Kim, Senior Attorney, U.S. Nuclear Regulatory Commission, argued the cause for respondent. With her on the brief were *Lane McFadden*, Attorney, U.S. Department of Justice, *Stephen G. Burns*, General Counsel, U.S. Nuclear Regulatory Commission, and *John F. Cordes, Jr.*, Solicitor.

Paula T. Dow, Attorney General, Office of the Attorney General for the State of New Jersey, and *Andrew D. Reese*, Deputy Attorney General, were on the brief for *amicus curiae* State of New Jersey.

Before: SENTELLE, *Chief Judge*, ROGERS, *Circuit Judge*,
and WILLIAMS, *Senior Circuit Judge*.

Opinion for the Court filed by *Senior Circuit Judge*
WILLIAMS.

WILLIAMS, *Senior Circuit Judge*: Under § 274 of the Atomic Energy Act of 1954 as amended, Pub. L. 86-373, 73 Stat. 688 (1959), codified at 42 U.S.C. § 2021 (“AEA”), the Nuclear Regulatory Commission (“NRC”) is authorized to transfer regulatory authority over various categories of nuclear materials within a state to the state government, provided that the state’s regulatory program is “compatible with the [NRC’s] program” and is “adequate to protect the public health and safety.” *Id.* § 2021(d)(2). Shieldalloy Metallurgical Corporation, which for a decade has been seeking NRC approval for a plan to decommission a New Jersey facility, challenges the NRC’s recent transfer of regulatory authority to that state, arguing that New Jersey’s program is incompatible with the federal scheme and that the transfer of authority was “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). We agree.

* * *

From 1955 to 1998, Shieldalloy manufactured metal alloys at its Newfield, New Jersey facility. Shieldalloy’s manufacturing process generated radioactive byproducts in the form of slag and baghouse dust; the firm held these materials on site under a license from the NRC. In the early 1990s, Shieldalloy took the first steps toward decommissioning the Newfield facility. Based on discussions with the NRC staff, it developed a conceptual plan for on-site disposal of the materials under conditions restricting the site’s

use. At the same time, the NRC developed, and in 1997 published, a final rule on the decommissioning of licensed facilities. 10 C.F.R. §§ 20.1401-06. Although this license termination rule (“LTR”) expressed a preference for remediating a site in a way that allowed unrestricted use, it conditionally allowed firms to dispose radioactive materials on site under restrictions designed to guarantee public health and safety. *Id.* Over the next decade, the NRC and Shieldalloy engaged in repeated discussions regarding the on-site disposal of waste at Newfield. Between 2002 and 2009, Shieldalloy submitted four iterations of its decommissioning plan, two of which the NRC rejected outright and one of which the NRC accepted for purposes of starting a technical review. Shieldalloy revised each proposed plan based on the NRC staff’s comments and on an extensive site-specific “Interim Guidance” document provided by NRC staff on April 15, 2004. The NRC declined to review the fourth plan; instead, in light of its roughly simultaneous transfer of regulatory authority, it forwarded the plan to New Jersey along with the previously accumulated files.

In October 2008 New Jersey applied for a transfer of regulatory authority over in-state nuclear materials from the NRC, pursuant to 42 U.S.C. § 2021. Under that provision, Congress has authorized the NRC to “enter into agreements with the Governor of any State providing for discontinuance of the regulatory authority of the [NRC]” and the assumption of authority by the state. 42 U.S.C. § 2021(b). Before making such an agreement, however, the NRC must find that the state’s regulatory regime is “compatible with the [NRC’s] program” and that the state’s regime is “adequate to protect the public health and safety.” *Id.* § 2021(d)(2).

To evaluate the compatibility of the state and federal regulatory programs, the NRC considers thirty-six criteria that it enumerated in a policy statement that we will call the

“Criteria Document.”¹ It further clarified its evaluation process in a later policy statement, the “Compatibility Guidance Document,”² which interprets the compatibility requirement as mandating that the state program must “not create conflicts, duplications, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide basis.” 62 Fed. Reg. at 46,524. Pursuant to this policy, each element of the NRC’s program is assigned to one of five groups, A through E (though only the first three concern us here). Categories A and B require the state and NRC programs to be “essentially identical”; category C merely requires each element of the state program to “embody the essential objective” of its federal counterpart. *Id.* Outside of areas requiring uniformity, the document provides that a state should have “flexibility” and can implement regulations that are “more stringent” than the federal regime. *Id.* at 46,520. In a later document, the NRC deemed the license termination rule to be a category C element of its program.³

¹ Criteria for Guidance of State and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States Through Agreement, 46 Fed. Reg. 7540 (Jan. 23, 1981), as amended by 46 Fed. Reg. 36,969 (July 16, 1981) and 48 Fed. Reg. 33,376 (July 21, 1983).

² Statement of Principles and Policy for the Agreement State Program; Policy Statement on Adequacy and Compatibility of Agreement State Programs, 62 Fed. Reg. 46,517 (Sept. 3, 1997).

³ See Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements – SA-200, at App. A (June 5, 2009) (stating that program elements in 10 C.F.R. are classified at http://nrc-stp.ornl.gov/regsumsheets_newregs.html) (follow link for Standards for Protection Against Radiation).

After finding New Jersey's program adequate and compatible with the federal program, the NRC published notice of the proposed agreement in the Federal Register and sought comments from the public, pursuant to its statutory obligation under 42 U.S.C. § 2021(e).⁴ In a letter to the NRC responding to the call for comments (the "Shieldalloy Comment Letter"), Shieldalloy argued that the New Jersey and federal programs were incompatible.⁵ The NRC staff rejected Shieldalloy's protests, see Memorandum from R.W. Borchardt to NRC Commissioners, SECY-09-0114, encl. 2 (Aug. 18, 2009) ("NRC Staff Comments"), and the agreement transferring authority to New Jersey took effect on September 30, 2009.⁶ Less than two weeks after the transfer of authority, New Jersey notified Shieldalloy that its revised decommissioning plan, hitherto pending before the NRC, did not meet New Jersey's remediation requirements. Worried that it would now be forced to jettison its plans for on-site remediation and instead transfer the radioactive materials to a facility in Clive, Utah, Shieldalloy sought relief along multiple avenues. It requested an exemption from the relevant New Jersey regulatory provisions (and was denied). It filed a motion with the NRC to stay the transfer for regulatory authority (and was denied). And it filed the instant petition challenging the NRC's transfer.

⁴ See, e.g., State of New Jersey: NRC Staff Assessment of a Proposed Agreement Between the Nuclear Regulatory Commission and the State of New Jersey, 74 Fed. Reg. 25,283 (May 27, 2009).

⁵ Letter from Hoy E. Frakes, Jr., President, Shieldalloy, to Michael T. Lesar, NRC (June 11, 2009).

⁶ State of New Jersey: Discontinuance of Certain Commission Regulatory Authority Within the State; Notice of Agreement Between the Nuclear Regulatory Commission and the State of New Jersey, 74 Fed. Reg. 51,882 (Oct. 8, 2009).

In reviewing agency action that is alleged to be arbitrary or capricious, we are “not to substitute [our] judgment for that of the agency,” but we must ensure that the agency has “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)). Encompassed in the latter duty, of course, is the obligation of an agency to explain any important changes of policy or legal interpretation. *Ramaprakash v. FAA*, 346 F.3d 1121, 1124 (D.C. Cir. 2003). And agencies must evaluate parties’ proposals of “significant and viable” alternatives. *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1511 n.54 (D.C. Cir. 1984).

* * *

Item 25 of the Criteria Document states in relevant part,

Existing NRC Licenses and Pending Applications. In 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.

46 Fed. Reg. 7540, 7543.

In its comments to the NRC, Shieldalloy argued that New Jersey had not attempted to make appropriate arrangements to guarantee a smooth transition for the pending Shieldalloy decommissioning plan; in fact, New Jersey had challenged Shieldalloy’s decommissioning process at every stage. This resistance, Shieldalloy contended, was incompatible with

criterion 25's commitment to the uninterrupted "processing of license applications." Shieldalloy Comment Letter at 9-10. In response, the NRC staff aptly noted that New Jersey is entitled to take part in hearings on licensing actions and to petition for rulemaking, and that the state's exercises of those rights did not in themselves indicate the New Jersey plan's incompatibility with the federal regime under criterion 25. NRC Staff Comments at 8.

But Shieldalloy also invoked criterion 25 in support of its separate contention that, even if the NRC entered a transfer agreement with New Jersey, it might exclude the Newfield site from the transfer. Shieldalloy Comment Letter at 11-12. In that context Shieldalloy went well beyond New Jersey's conduct in the NRC decommissioning proceeding. It pointed to the time and expense that Shieldalloy devoted to working with the NRC staff to develop a plan for safely decommissioning the site (over \$2 million in 2007-2009 alone), which it implied would be largely wasted under New Jersey's different approach. *Id.*

In response, the NRC staff noted that the "legislative history for [42 U.S.C. § 2021] specifically states that Congress did not intend to allow concurrent regulatory authority over licensees for public health and safety," and that as a result, "all NRC licensees within the categories of materials for which the State requested authority will transfer to the State." NRC Staff Comments at 10. The NRC also said that a statutory provision allowing the NRC to retain authority in cases of common defense and security, see 42 U.S.C. § 2021(m), was inapplicable, as Shieldalloy had not raised security concerns. *Id.*

These responses were inapposite and woefully incomplete. As to § 2021(m), Shieldalloy had never invoked it. As to concurrent regulatory authority, NRC practice leaves

it far more leeway than its dismissive answer to Shieldalloy suggests. It is quite true that NRC policy, developed in connection with a jurisdictional transfer to Oklahoma, rejects an exclusion of “single licensees absent an identified subcategory of material.” Memorandum from L. Joseph Callan, Exec. Dir. of Operations, to NRC Commissioners, 1, 3, Oklahoma Agreement State Negotiations, SECY-97-087 (Apr. 22, 1997). But just after articulating that view, the NRC approved an exclusion of Oklahoma from jurisdiction over certain subcategories of materials that in fact covered a very limited set of sites. The history of the Oklahoma transfer is telling.

In the late 1990s, Oklahoma submitted a draft transfer application that excluded five specific sites undergoing decommissioning. *Id.* at 1-2. Though the NRC staff recognized that the NRC had entered into limited agreements in the past, it rejected Oklahoma’s request as inconsistent with the statutory provisions, because the exclusion of single licensees, “absent an identified subcategory of material,” might create “an unwieldy and confusing pattern of regulation.” *Id.* at 3. The NRC staff recommended rejecting Oklahoma’s proposal. At the same time, however, it offered guidelines for considering future proposals for limited agreements:

[R]equests for limited Agreements would have to identify discrete categories of material or classes of licensed activity that (1) can be reserved to NRC authority without undue confusion to the regulated community or burden to NRC resources, and (2) can be applied logically, and consistently to existing and future licensees over time. Under this approach, NRC would not reserve authority over a single license unless that licensee clearly constituted a single class of activity or category of material meeting the two criteria described above.

Id. at 5-6. The NRC approved both of the staff recommendations.⁷ Two years later, in 1999, Oklahoma proposed a limited agreement that excluded a subcategory of materials—a category that aligned closely with the sites Oklahoma had desired to exclude in its site-specific proposal two years earlier. Applying the previously developed factors for limited agreements, the NRC staff this time recommended approval of the limited transfer.⁸ The Oklahoma case is strikingly relevant to Shieldalloy’s situation because Shieldalloy argues, and the NRC does not dispute, that *its* radioactive wastes constitute the sole New Jersey example of a discrete subcategory of materials.

Other elements of the NRC’s response as to criterion 25 were equally dismissive. The NRC staff said that New Jersey’s regulatory scheme recognized existing NRC licenses and would continue “any licensing actions that are in progress” at the time of the agreement. NRC Staff Comments at 8. The NRC thus concluded that there would be a “smooth transition” and that New Jersey would make decisions on pending licensing actions. *Id.*

This hardly answered Shieldalloy’s contention that its license termination process would be disrupted and that no appropriate arrangements had been made. Although the fact of New Jersey’s participation in prior or concurrent NRC regulatory proceedings does not necessarily prejudice a transfer agreement, the formal existence of New Jersey

⁷ Memorandum from John C. Hoyle, Secretary, NRC, to L. Joseph Callan, Exec. Dir. of Operations, Oklahoma Agreement State Negotiations, SECY-97-087 (June 19, 1997).

⁸ Memorandum from William D. Travers, Exec. Dir. of Operations, to NRC Commissioners, 1, 6, Oklahoma Agreement State Negotiations, SECY-99-123 (Apr. 28, 1999).

provision for transfer seems in no way an assurance that the transfer would satisfy criterion 25's intended preclusion of "interference with or interruption of licensed activities or the processing of license applications." 46 Fed. Reg. at 7543. Obviously the NRC need not automatically consider every single pending licensing action individually when it considers transfer to a state. But in this case the NRC had a long history of dialogue and cooperation regarding the termination of a license, the state has been consistently hostile to those termination proceedings, and the regulated entity alerted the NRC not only to the likely interference with decommissioning but also to partial transfer as a possible solution. At the very least, the NRC should have explained how Shieldalloy's decommissioning process could proceed under the New Jersey regime free of the interference and interruption sought to be avoided by criterion 25 and why the partial transfer was not an appropriate alternative arrangement.

At oral argument, the NRC offered an argument that the statute did not permit a partial transfer otherwise than at the request of the would-be transferee state, pointing to § 2021(d). This would rule out limiting transfers at the behest of regulated firms. Section 2021(d) states that "[t]he Commission *shall* enter into an agreement under subsection (b) of this section" pursuant to the conditions of state certification, adequacy, and compatibility, *id.* § 2021(d) (emphasis added). See Oral Arg. Recording 32:00-49:00. But the statute also provides that "the Commission is *authorized* to enter into agreements" with a state "with respect to *any one or more* of" a variety of classes of nuclear materials. 42 U.S.C. § 2021(b) (emphasis added). As the opening phrase suggests that the NRC is not *required* to enter into agreements, it suggests that it has discretion to negotiate the terms of the agreement with the state requesting authority.

On the current record we cannot decide the interpretation of the statute. Our concern is whether NRC provided a sufficient explanation for its actions. We cannot defer to the agency's statutory interpretation under *Chevron, U.S.A. v. Natural Res. Def. Council*, 467 U.S. 837 (1984), for NRC has not exercised any interpretive discretion. And under *SEC v. Chenery Corp.*, 318 U.S. 80 (1943), as well as *United States v. Mead Corp.*, 533 U.S. 218 (2001), we cannot defer to the interpretive proposals offered by NRC counsel at oral argument. As the sections of the statute to which our attention has been drawn do not plainly compel the reading now proposed, we cannot affirm on the basis of that reading.

Because the NRC's response to Shieldalloy's comments on criterion 25 and the retention of jurisdiction does not draw a "rational connection between the facts found and the choice made," *Burlington Truck Lines*, 371 U.S. at 168, the NRC's transfer of authority to New Jersey is arbitrary and capricious. 5 U.S.C. § 706(2)(A).

* * *

Shieldalloy challenges the compatibility of many other aspects of the New Jersey and NRC regimes. It argues that a cost-benefit analysis principle called the ALARA principle ("as low as reasonably achievable") is an essential objective of the LTR, and that New Jersey's remediation program excludes ALARA from consideration. It argues that the New Jersey program fails to allow license termination for on-site decommissioning under restricted use conditions. It argues that New Jersey's program includes a variety of standards that diverge significantly from the NRC program, including the maximum allowable total dose to a member of the public, the duration of time over which peak dosage is calculated, the total effective dose equivalent limits, and the approach to

releases to ground and surface water. It argues that the New Jersey program fails criterion 12 by not authorizing exemptions in the interest of public health and safety. And it argues that the New Jersey program fails criterion 23, regarding the fair and impartial administration of regulatory law, because the state's regulations only affect Shieldalloy. Shieldalloy contends that these divergences, individually and together, render the New Jersey program incompatible with the federal regime.

The NRC provided responses to each of these claims in its comments. It claimed that Shieldalloy was simply wrong on whether New Jersey allows exemptions and, among other things, said that there was no evidence of unfair administration of New Jersey law. NRC Staff Comments at 6-7. With respect to ALARA, restricted use, and the various dosage standards, the NRC argued that New Jersey's program merely has more stringent requirements than the federal regime—and that greater stringency is acceptable under the Compatibility Guidance Document, 62 Fed. Reg. at 46,520. *Id.* at 4. Given that the LTR is a category C regulation, they argued, the state regulatory program only needs to meet the LTR's "essential objectives." *Id.* at 5.

Shieldalloy replies that while New Jersey's standards may be more stringent, they are actually less safe. See Shieldalloy Br. at 50. Because of the higher stringency, Shieldalloy states that it is prevented from using on-site disposal and will be forced to ship the materials to a facility in Utah. The consequence is that the doses of radiation to the public resulting from removing the radioactive materials from the site and relocating them in Utah will actually be *greater* than the public health and environmental harms that accompany on-site disposal of the materials. *Id.* Although this is a troubling prospect, given the NRC's commitment to protecting public health and safety from nuclear materials

throughout the nation, see, e.g., Compatibility Guidance Document, 62 Fed. Reg. at 46,520 (stating that the NRC’s mission is to enable civilian nuclear use “with adequate protection of public health and safety” and that the NRC must ensure a “coherent nationwide effort” for the control of nuclear materials), Shieldalloy did not raise this criticism in its comments on the proposed transfer (though it had done so in its second decommissioning proposal to the Commission, filed in October 2005).⁹

Given our findings on criterion 25 and the retention of jurisdiction, we need not address whether this and Shieldalloy’s other allegations hold up and whether the NRC’s explanations in response were sufficient. But we do pause briefly to note one curiosity. 42 U.S.C. § 2021(d) requires that the state regulatory scheme be compatible with the NRC’s program. Through rulemaking, the NRC has adopted the LTR, which appears as subpart E of 10 C.F.R. part 20, which (as a whole) governs standards for protection against radiation. 62 Fed. Reg. 39,058 (July 21, 1997); 10 C.F.R. §§ 20.1401-1406. The LTR is thus part of the NRC’s regulatory program, but for some reason, it does not feature in the Criteria Document. This seems odd, given that the Criteria Document otherwise tracks the various subparts of 10 C.F.R. part 20 quite closely and that the NRC staff seems to follow the Criteria Document religiously in assessing the compatibility of the state and federal programs. See, e.g., Memorandum from R.W. Borchardt to NRC Commissioners, SECY-09-0114, encl. 3 (Aug. 18, 2009) (Staff Assessment of the New Jersey Program). To be sure, the LTR was promulgated years after the Criteria Document. Compare 62 Fed. Reg. 39,058 (July 21, 1997) (LTR) with 46 Fed. Reg.

⁹ Shieldalloy, Decommissioning Plan for the Newfield Facility 92, Report No. 94005/G-28247, Rev. 1 (Oct. 21, 2005).

7540 (Jan. 23, 1981) (Criteria Document). But it is not clear that a simple temporal distinction would justify deviation from § 2021(d)'s apparent statutory requirement to ensure the compatibility of the state program with the federal. Of course, this issue was not raised or argued before us, so the NRC may have an account of the role of the LTR in its regulatory scheme that it had no occasion to present (and we no occasion to assess). We only bring it up because it may be the unacknowledged source of Shieldalloy's criticisms regarding ALARA, restricted use, and various standards for decommissioning (and because it provides a possible explanation for why Shieldalloy tried to shoehorn its criticisms into criterion 9, which relates to "waste disposal," see Shieldalloy Comment Letter at 3, even though that criterion appears to parallel subpart K of 10 C.F.R. part 20, also relating to "waste disposal.").

* * *

Together, the NRC's insufficient explanations on the applicability of criterion 25 and the retention of jurisdiction render its transfer of regulatory authority to New Jersey arbitrary and capricious. We therefore grant Shieldalloy's petition, vacate the NRC's transfer of authority, and remand for proceedings consistent with this opinion.

So ordered.