

NOT YET CALENDARRED FOR ORAL ARGUMENT

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

No. 09-1268

SHIELDALLOY METALLURGICAL CORPORATION,
Petitioner,

v.

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

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

BRIEF FOR THE FEDERAL RESPONDENTS

IGNACIA S. MORENO
Acting Assistant Attorney
General

LANE MCFADDEN
Attorney
Appellate Section
Environment and Natural
Resources Division
U.S. Department of Justice
P.O. Box 23795
Washington, D.C. 20026-3795
(202) 353-9022

STEPHEN G. BURNS
General Counsel

JOHN F. CORDES, JR.
Solicitor

GRACE H. KIM
Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
(301) 415-3605

June 28, 2010

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

SHIELDALLOY METALLURGICAL)	
CORPORATION)	
)	
Petitioner)	
)	
v.)	No. 09-1268
)	
U.S. NUCLEAR REGULATORY)	
COMMISSION)	
and UNITED STATES OF AMERICA,)	
)	
Respondents.)	

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

Counsel for the United States Nuclear Regulatory Commission ("NRC") certifies the following with respect to the parties, rulings, and related cases.

A. *Parties*

All parties and amici appearing in this Court are listed in the Certificate as to Parties, Rulings, and Related Cases in Shieldalloy Metallurgical Corporation's brief.

B. *Rulings Under Review*

Shieldalloy Metallurgical Corporation seeks review of the

Nuclear Regulatory Commission's ("NRC") entry into an agreement with the State of New Jersey transferring regulatory authority to the State over certain nuclear materials. *See 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. 51882 (Oct. 8, 2009).

C. *Related Cases*

The case on review was never previously before this Court of any other court. There are no related cases pending in any other court.

Respectfully submitted,

/S/ _____
Grace H. Kim
Senior Attorney
U.S. Nuclear Regulatory
Commission

June 28, 2010

TABLE OF CONTENTS

TABLE OF AUTHORITIES	iv
GLOSSARY	x
JURISDICTIONAL STATEMENT	1
ISSUE PRESENTED	1
STATUTES AND REGULATIONS	2
STATEMENT OF THE CASE	2
A. Nature of the Case.....	2
B. Statutory and Regulatory Background.....	4
1. The Agreement-State Program	4
a. Section 274 of the AEA.....	4
b. NRC Implementation of Section 274	7
2. NRC's Regulations.....	14
a. ALARA.....	14
b. License Termination Rule.....	16
C. Statement of the Facts	22
1. NRC's Agreement with New Jersey	22

a.	New Jersey's Application	22
b.	Shieldalloy's Comments	25
c.	NRC Staff Response to Shieldalloy Comments	27
i.	Criterion 9	27
ii.	Criterion 12	30
iii.	Criterion 23	31
iv.	Criterion 25	33
d.	Commission's Entry into Agreement.....	35
2.	Shieldalloy's License Termination Proceeding	35
SUMMARY OF ARGUMENT		38
ARGUMENT.....		43
Standard of Review.....		43
The NRC Reasonably Concluded that New Jersey's Program for License Termination is Compatible with the NRC's Program and Adequate to Protect the Public Health and Safety		45
A.	New Jersey's Program for License Termination Incorporates the NRC's As Low As Reasonably Achievable (ALARA) Principle.....	45

B.	New Jersey's Radiation Control Program Permits License Termination under Restricted Use	55
C.	New Jersey's License Termination Program Incorporates Dose Criteria and Dose Calculation Methodologies that are Compatible with the NRC's under the Compatibility Designation for the NRC's License Termination Rule	59
D.	New Jersey's Program Satisfies Criteria 23 and 25	64
E.	Shieldalloy Improperly Relies on Extra Record Evidence	71
	CONCLUSION.....	75

TABLE OF AUTHORITIES

Federal Cases

<i>Amfac Resorts, L.L.C. v. U.S. Dep't of the Interior</i> , 282 F.3d 818 (D.C. Cir. 2002)	58
<i>Auer v. Robbins</i> , 519 U.S. 452 (1997)	45
<i>*Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc.</i> , 419 U.S. 281 (1974)	44, 52, 57
<i>Camp v. Pitts</i> , 411 U.S. 138 (1973)	71
<i>Covad Communications Co. v. FCC</i> , 450 F.3d 528 (D.C. Cir. 2006)	53
<i>Dillmon v. NTSB</i> , 588 F.3d 1085 (D.C. Cir. 2009)	44
<i>Drake v. FAA</i> , 291 F.3d 59 (D.C. Cir. 2002)	45
<i>English v. General Electric Co.</i> , 496 U.S. 72 (1990)	5
<i>Exxon-Mobil Corp. v. FERC</i> , 501 F.3d 204 (D.C. Cir. 2007)	58
<i>*FCC v. Fox Communications Commission</i> , 129 S. Ct. 1800 (2009)	44, 53
<i>Florida Power & Light Co. v. Lorion</i> , 470 U.S. 729 (1985)	1
<i>Good Samaritan Hospital v. Shalala</i> , 508 U.S. 402 (1993)	64

<i>IMS, P.C. v. Alvarez</i> , 129 F.3d (D.C. Cir. 1997)	72
<i>*Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co.</i> , 463 U.S. 29 (1983)	44, 65
<i>Nevada v. DOE</i> , 457 F.3d 78 (D.C. Cir. 2006)	54
<i>Northside Sanitary Landfill, Inc. v. Thomas</i> , 849 F.2d 1516 (D.C. Cir. 1988)	53
<i>Nuclear Energy Institute, Inc. v. EPA</i> , 373 F.3d 1251 (D.C. Cir. 2004)	64
<i>Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission</i> , 461 U.S. 190 (1983)	5
<i>*PPL Montana, LLC v. Surface Transportation Board</i> , 437 F.3d 1240 (D.C. Cir. 2006)	45
<i>San Luis Obispo Mothers for Peace v. NRC</i> , 751 F.2d 1287 (D.C. Cir. 1984)	71
<i>Sunflower Coalition v. NRC</i> , 534 F. Supp. 446 (D. Colo. 1982)	1
<i>Thompson v. Clark</i> , 741 F.2d 401 (D.C. Cir. 1984)	53
<i>Transcontinental Gas Pipe Line Corp. v. FERC</i> , 518 F.3d 916 (D.C. Cir. 2008)	44, 52
<i>Union of Concerned Scientists v. NRC</i> , 920 F.2d 50 (D.C. Cir. 1990)	58

* <i>Vermont Yankee Nuclear Power Corp. v. NRDC</i> , 435 U.S. 519 (1978)	54
--	----

Administrative Decisions

<i>Kerr-McGee Chemical Corp. (West Chicago Rare Earths Facility)</i> , CLI-96-2, 43 NRC 13 (1996)	69
--	----

<i>Shieldalloy Metallurgical Corp. (Licensing Amendment Request for Decommissioning of the Newfield, New Jersey Facility)</i> , LBP-07-5, 65 NRC 341 (2007)	35-38
--	-------

<i>Shieldalloy Metallurgical Corp. (Licensing Amendment Request for Decommissioning of the Newfield, New Jersey Facility)</i> , CLI-10-08, 71 NRC __ (Jan. 7, 2010)(slip op.)	37-38, 51
--	-----------

Federal Register Notices

<i>Criteria for Guidance of States and NRC in Discontinuance Of NRC Regulatory Authority and Assumption Thereof by States Through Agreement</i> , 46 Fed. Reg. 7540 (Jan. 23, 1981)	8, 54
--	-------

<i>Radiological Criteria for License Termination, Final Rule</i> , 62 Fed. Reg. 39058 (Jul. 21, 1997)	15-18, 21, 22, 47, 61
--	-----------------------

<i>State of New Jersey, NRC Staff Assessment of a Proposed Agreement between the Nuclear Regulatory Commission and the State of New Jersey</i> , 74 Fed. Reg. 25283 (May 27, 2009)	23, 25
---	--------

<i>State of New Jersey; NRC Staff Assessment of a Proposed Agreement between the Nuclear Regulatory Commission and the State of New Jersey</i> , 74 Fed. Reg. 27572 (June 3, 2009)	23
---	----

<i>State of New Jersey; NRC Staff Assessment of a Proposed Agreement between the Nuclear Regulatory Commission and the State of New Jersey,</i> 74 Fed. Reg. 28728 (June 3, 2009).....	23
<i>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,</i> 74 Fed. Reg. 51882 (Oct. 8, 2009)	35
<i>Statement of Principles and Policy for the Agreement State Program,</i> 62 Fed. Reg. 46517 (Sept. 3, 1997)	9-14, 63

Federal Regulations

10 C.F.R. § 2.802	64
10 C.F.R. Part 20.....	8, 14, 15, 17, 10, 23, 28, 29, 46
10 C.F.R. Part 20, Subpart E.....	16
10 C.F.R. Part 20, Subpart K.....	52
10 C.F.R. § 20.1003	15
10 C.F.R. § 20.1101	15
10 C.F.R. § 20.1101(b).....	18, 20, 23, 46, 47, 54
10 C.F.R. § 20.1301	15, 23
10 C.F.R. § 20.1401-1405	23
10 C.F.R. § 20.1401(d).....	17, 24
10 C.F.R. § 20.1402	15-20, 27

10 C.F.R. § 20.1403	17, 19, 20
10 C.F.R. § 20.1403(a).....	19, 46, 54, 75
10 C.F.R. § 20.1403(b).....	15, 20, 47
10 C.F.R. § 20.1403(e).....	20, 24, 47

Federal Statutes

5 U.S.C. § 551	44
5 U.S.C. § 706(2)(A)	44
28 U.S.C. § 2342(4)	1
28 U.S.C. § 2344	1
42 U.S.C. §§ 2014(e), (z), (aa)	5
42 U.S.C. § 2021	1-4
42 U.S.C. § 2021(b)	5
42 U.S.C. § 2021(c).....	6
42 U.S.C. § 2021(d)	7
42 U.S.C. § 2021(e).....	7, 23
42 U.S.C. § 2021(j)	7, 67
42 U.S.C. § 2239(b)	1

State Regulations

Ariz. Admin. Code § R12-1-452C.2	69
--	----

Mass. Code Regs. § 120.245	69
Me. Code R. § 1403B	69
N.J. Admin. Code § 7:28-2.8.....	32, 62
N.J. Admin. Code § 7:28-6.....	32
N.J. Admin. Code § 7:28-6.1(a)	24, 46, 54
N.J. Admin. Code § 7:28-6.1(c)	24
N.J. Admin. Code § 7:28-12.8(a)(1)	25, 56
N.J. Admin. Code § 7:28-12.8(b).....	26
N.J. Admin. Code § 7:28-12.8(c)	26
N.J. Admin. Code § 7:28-12.10.....	56
N.J. Admin. Code § 7:28-12.10(d)	25
N.J. Admin. Code § 7:28-12.10(e)	25
N.J. Admin. Code § 7:28-12.11(b)	26
N.J. Admin. Code § 7:28-12.11(e)	25, 56-57
N.J. Stat. Ann. § 26:2D-9(k)	69

GLOSSARY

AEA	Atomic Energy Act of 1954, as amended
ALARA	as low as is reasonably achievable
IMPEP	Integrated Materials Performance Evaluation Program
mrem	millirem
NJDEP	New Jersey Department of Environmental Protection
NRC	Nuclear Regulatory Commission
Shieldalloy	Shieldalloy Metallurgical Corporation

JURISDICTIONAL STATEMENT

We agree with the Jurisdictional Statement in petitioner Shieldalloy Metallurgical Corporation's ("Shieldalloy") opening brief (pp. 4-6). The Nuclear Regulatory Commission ("NRC") had jurisdiction under Section 274 of the Atomic Energy Act ("AEA"), 42 U.S.C. § 2021, to enter into an agreement with New Jersey giving the state licensing and regulatory authority over certain radioactive materials, and this Court has jurisdiction under the AEA and the Hobbs Act to review NRC's agreement-state decision. 28 U.S.C. § 2342(4); 42 U.S.C. § 2239(b). *See Sunflower Coalition v. NRC*, 534 F. Supp. 446, 448 (D. Colo. 1982). *See also Florida Power & Light Co. v. Lorion*, 470 U.S. 729, 734-46 (1985). Shieldalloy timely filed its petition for review within the Hobbs Act's 60-day deadline. 28 U.S.C. § 2344.

ISSUE PRESENTED

Section 274 of the AEA, 42 U.S.C. § 2021, requires NRC to enter agreements giving states authority to regulate certain nuclear materials, so long as the state requesting such an agreement has shown that it has a regulatory program "compatible" with NRC's and "adequate" to protect public health and safety. In policy

statements and guidance documents, NRC has indicated that for some types of regulatory programs, including license termination, “compatibility” does not require an identical state program, but only one equivalent to or more stringent than NRC’s.

The issue presented is:

Did NRC reasonably enter a Section 274 agreement giving New Jersey regulatory authority over nuclear material activities, including license termination -- and reasonably reject objections to the agreement -- where the agency found that New Jersey’s radiation-protection program was permissibly more stringent than NRC’s under long-established agency policy and fairly and adequately achieved NRC’s public health and safety objective?

STATUTES AND REGULATIONS

All applicable statutes and regulations are contained in the Addendum to Shieldalloy's opening brief.

STATEMENT OF THE CASE

A. Nature of the Case

This case arises under Section 274 of the AEA, 42 U.S.C. § 2021, which established NRC’s agreement-state program. Under that program, NRC enters agreements with states to discontinue

NRC regulatory authority over certain nuclear materials and transfer it to the state. The statute provides that the state program must be “compatible” with NRC’s and “adequate” to protect the public health and safety.

In 2008, New Jersey applied to become an agreement state. After reviewing New Jersey’s application, including its regulatory program, NRC staff found that the application met Section 274’s “compatibility” and “adequacy” requirements, and proposed that the Commission approve it. Prior to Commission approval, however, NRC solicited public comments. Shieldalloy, which owns a contaminated industrial site in New Jersey and had for years sought NRC approval of a license decommissioning plan, filed comments opposing the agreement, largely complaining that New Jersey’s decommissioning scheme was too strict compared to NRC’s. NRC staff considered Shieldalloy’s objections, but rejected them, concluding that under longstanding NRC policy more stringent state regulation of license termination is permissible. The Commission then approved the agreement on the basis of the staff analysis.

Shieldalloy subsequently filed this lawsuit. It also filed motions with this Court and with the Commission seeking to stay the effectiveness of the agreement pending judicial review. The Commission denied the motion, issuing an opinion finding no irreparable harm and no likelihood of success on the merits. Shieldalloy withdrew the stay motion it had filed in this Court.

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 broad program of federal-state cooperation in the regulation of nuclear materials. AEA § 274, 42 U.S.C. § 2021. Recognizing the interest of states in regulating radiation hazards that are "local and limited" in nature¹ and do not involve "interstate, national, or international considerations,"² the 1959 amendments were intended "generally to increase the States' role" in regulation of

¹ *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 8 ("*Joint Committee Report*").

²*Joint Committee Report* at 3.

nuclear materials. *English v. General Electric Co.*, 496 U.S. 72, 81 (1990). See also *Pacific Gas and Electric Co. v. State Energy Resources Conservation & Development Commission*, 461 U.S. 190, 209 (1983) ("The point of the 1959 Amendments was to heighten the states' role.").

The 1959 amendments "authorized the NRC, by agreements with state governors[,] to discontinue its regulatory authority over certain nuclear materials," including "source," "byproduct," and "special nuclear material," as defined in the AEA.³ *Pacific Gas and Electric Co.*, 461 U.S. at 209. Under Section 274b., 42 U.S.C. § 2021(b), once NRC enters into such an agreement it is the state that, "during the duration of [the] agreement," "shall have authority to regulate the materials covered by the agreement for the protection of the public health and safety from radiation hazards." Congress did "not intend[] to leave any room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source, or special nuclear materials."⁴ The

³ See AEA §§ 11e., 11z., and 11aa., 42 U.S.C. §§ 2014(e), (z), (aa).

⁴ *Joint Committee Report* at 9.

"intent [was] to have the material regulated and licensed either by the [NRC], or by the State and local governments, but not by both."

*Id.*⁵

Section 274 provides that NRC "shall" enter into an agreement with a state if: (1) the state's governor "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) NRC finds that the state program is "compatible with the [NRC's] program for 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." AEA § 274d., 42 U.S.C. § 2021(d). Prior to entering an agreement with a state, NRC must publish the terms of a requested agreement and

⁵ The 1959 amendments required NRC to retain licensing and regulatory jurisdiction over matters with significant interstate or international effects, including regulation of nuclear reactors, larger quantities of special nuclear material, and export and import of nuclear materials and facilities. See AEA § 274c., 42 U.S.C. § 2021(c).

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

Later, after providing a state “reasonable notice and opportunity for hearing,” NRC may 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.* NRC has implemented the agreement-state program through policy statements and guidance documents setting forth the framework for state regulatory programs that are both “adequate” to protect the public health and safety and “compatible” with NRC’s regulatory program, as Section 274 requires. In a policy statement originally published in 1961 and updated in 1981, NRC established 36 criteria for

assessing a state's program.⁶ NRC explained that the 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 provides guidance on the laws and regulations of a state as well as a state's organizational and administrative structure for executing and enforcing its laws and regulations.⁷

As relevant to this litigation, the 1981 policy statement includes the following criteria for assessing adequacy and compatibility:

- Criterion 9, *Waste Disposal*, provides that "the standards for the disposal of radioactive materials into the air, water, and sewers, and burial in the soil shall be in accordance with [10 C.F.R.] Part 20."

⁶ *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) ("1981 policy statement") (JA___).

⁷ A more detailed NRC reference document, SA-700, *Processing an Agreement* (JA___), sets forth additional guidance for implementing the 1981 policy statement.

- Criterion 12, *Additional Requirements and Exemptions*, provides that the state regulatory authority shall be authorized "to grant necessary exemptions which will not jeopardize health and safety."

- Criterion 23, *Administration*, 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.

- Criterion 25, *Existing NRC Licenses and Pending Applications*, 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."

In 1997, after opportunities for public comment, NRC issued a fresh policy statement designed to further clarify its agreement-state program. *Statement of Principles and Policy for the Agreement State Program*, 62 Fed. Reg. 46517 (Sept. 3, 1997) (JA___) ("1997

policy statement"). 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 46520 (JA___). But it also states 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.* at 46520 (JA___).

The 1997 policy statement initiated a "performance evaluation program to provide NRC and agreement-state management with systematic, integrated, and reliable evaluations of the strengths and weaknesses of their respective radiation control programs and identification of areas needing improvement." *Id.* at 46521 (JA___).⁸

⁸ NRC guidance for implementing this review program is contained in NRC Management Directive 5.6, *Integrated Materials Performance Evaluation Program* ("IMPEP"). See NRC Website, *Office of Federal and State Materials and Environmental Management Programs*, <http://nrc-stp.ornl.gov/procedures.html#directives>. The first IMPEP review generally occurs approximately 18 months after an agreement is entered into, and every four or five years thereafter.

Finally, the 1997 policy statement established NRC's current approach for determining, with respect to both new and existing agreements, whether a state's program is "adequate" and "compatible." The policy statement 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 46523-24 (JA___).

More specifically, the 1997 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 46524 (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 1997 policy statement specifies 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" -- A, B, C, D, and E -- 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 or modify. The compatibility designation for an NRC regulation is determined as part of the public rulemaking process, at the time the regulation is promulgated.⁹

⁹ An NRC document, Management Directive 5.9, *Adequacy and Compatibility of Agreement State Programs* (JA___) ("MD-5.9"), provides detailed guidance on implementing the 1997 policy statement. Another guidance document, SA-200: *Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements* (JA___) ("SA-200"), was originally developed primarily to provide a listing of the compatibility category assigned to each NRC rule or program element. As SA-200 notes (at 3) (JA___), updated compatibility designation listings are now provided on the NRC's website. See *Regulation Toolbox: Review Summary Sheets for Regulation Adoption for New Agreement States/Programs* (10 C.F.R.__), http://nrc-stp.ornl.gov/regsumsheets_newregs.html.

A state must adopt regulations that are "essentially identical" to NRC regulations classified as compatibility category "A" or "B." 62 Fed. Reg. at 46524. Category A includes NRC regulations establishing "basic radiation protection standards," such as "dose limits, concentration and release limits related to radiation protection [] that are generally applicable." *Id.* This category also includes "definitions, signs, labels, and scientific terms that are necessary for a common understanding of radiation protection principles among licensees, regulatory agencies, and members of the public." *Id.* Category B consists of regulations, such as transportation regulations, that have "significant transboundary implications." *Id.*

Category C consists of those aspects of NRC's regulatory program (referred to as "program elements") 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, unlike those in Categories A and B, but the state's program must

"embody the essential objective" of the corresponding NRC program element. *Id.*

As we explain below, this case involves a Category C program (license termination). The 1997 policy statement established that, 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 that is "equivalent to, or greater than," the level provided by NRC, as well as incorporate the "essential objective" of NRC's program element.¹⁰ Category C, in other words, contemplates state regulations more stringent than NRC's.

2. *NRC's Regulations*

a. *ALARA*. NRC's regulations establish maximum dose exposure standards -- *i.e.*, dose limits -- for protecting the public and occupational workers from radiation resulting from NRC-authorized activities, including license termination. *See* 10 C.F.R.

¹⁰ The remaining categories, "D" and "E," consist, respectively, of NRC program elements that are not required for compatibility purposes, and program elements in areas within NRC's exclusive regulatory authority that cannot be relinquished to states. *Id.* at 46525 (JA___).

Part 20. For example, the basic dose limit for individual members of the public from a licensed activity is a total effective dose equivalent of 100 millirem (mrem) per year (see 10 C.F.R. § 20.1301), and the dose limit for license termination is a "constraint within the public dose limit" of 25 mrem per year to members of the public. See *Radiological Criteria for License Termination*, 62 Fed. Reg. 39058, 39080 (July 21, 1997) ("license termination rule") (JA__); 10 C.F.R. §§ 20.1402 and 20.1403(b).

NRC regulations also contain a regulatory principle known as "ALARA" – "as low as is reasonably achievable." ALARA is defined in 10 C.F.R. Part 20 as "every reasonable effort to maintain exposures to radiation as far below the dose limits in this part as is practical consistent with the purpose for which the licensed activity is undertaken." See 10 C.F.R. § 20.1003. ALARA is a general requirement for all "doses to members of the public" established in the "Radiation Protection Programs" in 10 C.F.R. Part 20, including the license termination dose limit of 25 mrem. See 10 C.F.R. § 20.1101, *Radiation Protection Programs*, subsection (b) ("The licensee shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection

principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA)").

ALARA levels – that is, radiation exposures *below* regulatory dose limits -- are determined through a cost-benefit analysis described in various NRC guidance documents. *See, e.g.*, NUREG-1757, *Consolidated Decommissioning Guidance*, Vol. 2, Appendix N (JA___). ALARA analysis calls for comparing potential benefits of incremental reductions in radioactivity levels below a specified dose limit to potential costs of such reductions. *Id.* at N-3 (JA___).

b. *License Termination Rule.* NRC established dose limits and other criteria for license termination in its license termination rule, issued in 1997. *License Termination Rule*, 62 Fed. Reg. 39058 (JA___); *see* 10 C.F.R. Part 20, Subpart E. A comprehensive NRC guidance document, NUREG-1757, *Consolidated Decommissioning Guidance* (JA___) ("NUREG-1757"), 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

39058 (JA___). The rule was intended "to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before decommissioning of a site can be considered complete and the license terminated."

Id.

The rule provides for license termination for both "unrestricted use" and "restricted use." Terminating a license for unrestricted use would require no "institutional controls," *i.e.*, governmental monitoring of engineered barriers and land-use restrictions,¹¹ 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. Terminating a license for restricted use would rely on legally enforceable institutional controls to achieve the 25 mrem dose limit. *See* 10 C.F.R. § 20.1403.¹²

¹¹ *See* NUREG-1757, Vol. 2, Sec. 3.5, at 3-6 (JA___).

¹² The rule requires a licensee, when calculating the total effective dose equivalent to a member of the public, to determine the peak annual dose for the first 1000 years after decommissioning. *See* 10 C.F.R. § 20.1401(d).

As noted above, the general ALARA requirement in 10 C.F.R. § 20.1101(b) applies to doses for both unrestricted and restricted use. See 10 C.F.R. § 20.1101(b) (requiring that doses be ALARA for all "doses to members of the public" established in Part 20's "Radiation Protection Programs"). Thus, for license termination under either restricted use or unrestricted use, doses to a member of the public must be as low as reasonably achievable under 25 mrem per year. See also 10 C.F.R. § 20.1402; 62 Fed. Reg. at 39065; NUREG-1757, Vol. 2, Sec. 17.7.6, at 17-87 (JA___) (doses for restricted release cannot exceed 25 mrem per year with institutional controls in place and must be as low as reasonably achievable).

In promulgating the license termination rule, NRC stated that it "expected licensees to make every reasonable effort to achieve unrestricted use." 62 Fed. Reg. at 39,069 (JA___). NRC expressed a general 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." *Id.* But NRC recognized that for some sites, such as "materials facilities where the dose is controlled by relatively short-lived nuclides. . . that will decay to unrestricted dose levels in a

finite time period of institutional control," there may possibly be "net public or environmental harm from removing and transporting soil to achieve unrestricted use compared to restricting use for a period of time associated with a reasonable decay period." *Id.* Thus, NRC decided to allow restricted use under certain conditions.

The license termination rule includes a cost-benefit test intended to identify whether a site is eligible or ineligible for further consideration of restricted release. *See* 10 C.F.R. § 20.1403(a). As a threshold matter a licensee must demonstrate that it is entitled, or "initially eligible," to pursue license termination under restricted use. *See* NUREG-1757, Vol. 1, Sec. 17.7.2, at 17-70 (JA___) (licensee must "demonstrat[e] that it is initially eligible to further evaluate release of the site, under the provisions of 10 C.F.R. 20.1403"). The initial eligibility demonstration under Section 20.1403(a) employs ALARA principles (that is, a cost-benefit approach), but it is a separate regulatory requirement from the ALARA standard generally applicable to 10 C.F.R. Part 20 dose limits.

Sites not "eligible" for restricted release must be remediated to unrestricted use in accordance with 10 C.F.R. § 20.1402. If a

licensee is able to demonstrate initial eligibility for restricted release; it must then show that the restricted release dose criteria will be met. *See* 10 C.F.R. § 20.1403. The licensee must establish that: 1) the dose to a member of the public with legally enforceable institutional controls in place will not exceed 25 mrem per year, and are as low as reasonably achievable (10 C.F.R. §§ 20.1101(b) and 20.1403(b); NUREG-1757, Vol. 1, Sec. 17.7.6, at 17-87) (JA__); and 2) if institutional controls fail and engineered barriers have degraded over a period of time,¹³ the dose to a member of the public will not exceed 100 mrem per year (or 500 mrem per year under certain circumstances). 10 C.F.R. § 20.1403(e). If the licensee cannot satisfy those criteria, its site will not "be considered acceptable for license termination under restricted conditions," 10 C.F.R. § 20.1403, and the site must be remediated to unrestricted release levels pursuant to 10 C.F.R. § 20.1402.

¹³ NRC does not require dose calculations for the institutional controls failure scenario to assume "instantaneous and complete failure of a barrier" but permits the licensee to assume that "barriers may degrade over time." *See* NUREG-1757, Vol. 2, Sec. 3.5.2, at 3-12 (JA__).

When the license termination rule was at the proposed-rule stage, NRC requested comments on a “compatibility” determination for the rule, for agreement-state purposes.¹⁴ In the final rule, NRC noted that the comments were divided on the compatibility issue. 62 Fed. Reg. at 39079 (JA___). Consistent with the local nature of the radiological impacts of license termination, NRC decided to categorize the rule as a Division 2 (now Category C¹⁵) regulation, explaining that:

Because the [25mrem] dose criterion in the rule is not a 'standard' in the sense of the public dose limits of 10 C.F.R. Part 20 but is a constraint within the public dose limit that provides a sufficient and ample margin of safety below the limit, it is reasonable that the rule would be a Division 2 level of compatibility under the current

¹⁴At the time the license termination rule was issued, NRC was in the process of revising its compatibility categorization, ultimately approving the current compatibility categories reflected in the 1997 policy statement. The prior compatibility policy categorized rules into "Divisions." Division 2 is the equivalent of today's compatibility category "C." See 62 Fed. Reg. at 39079 (JA___). Agreement states were required to address the "underlying principles" of these rules but did not have to use language identical to the NRC's rules, and could "adopt requirements more stringent than NRC's rules." *Id.* at 39079-80 (JA___).

¹⁵ See SECY-09-0114, *Section 274b Agreement with the State of New Jersey, Enclosure 2, Staff Analysis of Public Comments*, at 5 (Aug. 18, 2009) (JA___) ("Staff Analysis").

policy. This means the Agreement States would be required to adopt the regulation but would have significant flexibility in language, and would be allowed to adopt more stringent requirements.

Id. at 39080 (JA___).

C. *Statement of the Facts*

1. *NRC's Agreement with New Jersey*

a. *New Jersey's Application.* New Jersey formally applied to become an agreement state by letter of October 16, 2008, from New Jersey's Governor to NRC's Chairman. *Letter from Jon S. Corzine, Governor* (JA___). The Governor's letter certified "that the State of New Jersey wishes to assume regulatory authority and oversight responsibility for [specified 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." *Id.* at 1 (JA___). The Governor's letter enclosed the text of the proposed agreement and provided detailed information describing the state's radiation control program and regulations applicable to categories of nuclear materials in the proposed agreement. (JA___).

In accordance with AEA § 274e., 42 U.S.C. § 2021(e), NRC, for four consecutive weeks, published for comment NRC staff's assessment of New Jersey's proposed radiation control program.¹⁶ NRC staff verified that New Jersey was adopting the relevant NRC regulations, including NRC's regulations in 10 C.F.R. Part 20. New Jersey incorporated by reference many of NRC's regulations in 10 C.F.R. Part 20, including 10 C.F.R. § 20.1101(b), requiring that public doses for all Part 20 radiation protection programs be ALARA, and 10 C.F.R. § 20.1301, establishing a basic radiation protection public dose standard of 100 mrem per year. See N.J. Admin. Code § 7:28-6.1(a). 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.

Under New Jersey's license termination regulations, a licensee is required to show that, for "an unrestricted use remedial action, limited restricted use remedial action, or a restricted use remedial

¹⁶ 74 Fed. Reg. 25283 (May 27, 2009) (JA__); 74 Fed. Reg. 26739 (June 3, 2009) (JA__); 74 Fed. Reg. 27572 (June 10, 2009) (JA__); 74 Fed. Reg. 28728 (June 17, 2009) (JA__).

action," the total effective dose equivalent to members of the public would not be more than *15 mrem* per year as compared to the *25 mrem* per year limit in NRC's regulations. See N.J. Admin. Code § 7:28-12.8(a)(1).

New Jersey also adopted other requirements relating to license termination that called for the use of more conservative dose calculation methodologies than NRC's requirements. Specifically, New Jersey's license termination regulations required that dose calculations be "performed out to the time of peak dose or 1000 years, whichever is longer," N.J. Admin. Code § 7:28-12.10(d), as compared to NRC's requirement that dose calculations be limited to the first 1000 years after decommissioning, 10 C.F.R. § 20.1401(d); that doses to members of the public not exceed 100 mrem per year if there were a simultaneous and complete failure of both institutional controls and engineered barriers at a restricted use site, N.J. Admin. Code §§ 7:28-12.10(e), 7:28-12.11(e), as compared to NRC's dose criteria of 100 mrem or 500 mrem under certain circumstances, 10 C.F.R. § 20.1403(e), under the assumption that failure of institutional controls will result in engineered barriers degrading over time, NUREG-1757, Vol. 2, 3.5.2, at 3-12 (JA__);

that dose modeling for license termination be based on specific parameters, N.J. Admin. Code § 7:28-12.11(b), as compared to NRC's dose modeling guidance allowing dose calculations to be based on exposure scenarios for "reasonably foreseeable land uses," NUREG-1757, Vol. 2, Ch. 5, at 5-5 (JA__); and that radioactively contaminated ground and surface water must be remediated in accordance with New Jersey water quality requirements, N.J. Admin. Code § 7:28-12.8(b) and (c), as compared to NRC's all pathways approach without a separate release standard for water.

NRC staff's assessment concluded that New Jersey's program "to regulate Agreement materials, as comprised of statutes, regulations, procedures, and staffing is compatible with the program of the [NRC] and is adequate to protect public health and safety with respect to the materials covered by the proposed Agreement." 74 Fed. Reg. at 25,286 (JA__).

b. *Shieldalloy's Comments.* Shieldalloy filed comments in response to NRC staff's assessment of the New Jersey program. Letter from Shieldalloy to NRC dated June 11, 2009 ("*Comments*") (JA__). In its comments, Shieldalloy asserted, *inter alia*, that New Jersey's license termination regulations were "vastly different from

those which the NRC has established" and "fundamentally incompatible with the NRC regulatory framework." *Id.* at 5 (JA___). Shieldalloy maintained that New Jersey's license termination program "fails to satisfy" the criteria for adequacy and compatibility in NRC's 1981 policy statement, including Criteria 9, 12, 23, and 25.¹⁷

In arguing that New Jersey's program did not satisfy the 1981 policy statement criteria, Shieldalloy listed as examples various New Jersey license termination regulations that are more stringent than NRC's regulations. Shieldalloy included among the listed examples New Jersey's purported failure to permit license termination under restricted release (*see Comments* at 3, 5 (JA___)) and its purported failure to adopt an ALARA requirement for license termination. *See Comments* at 3, 5, 8 (JA___). On the ALARA point, Shieldalloy claimed that NRC's ALARA requirement allows doses *above* a specified dose limit. *See id.* at 5 (JA___) (asserting that the New Jersey program fails to satisfy Criterion 12 because, *inter alia*, "the

¹⁷Our discussion in this brief is limited to those objections raised by Shieldalloy in its brief.

NJ Regulations will not allow consideration of alternate remediation standards that would *increase* the allowed incremental dose criterion of 15 mrem/yr (itself significantly lower than the maximum allowable dose of 25 mrem/yr set by the NRC regulations in 10 C.F.R. § 20.1402), even if justified through an ALARA analysis"); and 5 n. 15 (JA___) ("The *increased* levels of radioactivity allowed by the NRC and rejected by New Jersey are part of the restricted conditions for license termination that include implementation of the ALARA principle.") (emphasis added).

c. *NRC Staff Response to Shieldalloy's Comments.* NRC staff analyzed the public comments and prepared, for the Commission's consideration, responses to individual comments, *see Staff Analysis, supra* (JA___), and an assessment of New Jersey's radiation control program based on the criteria in the 1981 policy statement. *See* SECY-09-0114, Enclosure 3, *NRC Staff Assessment of the New Jersey Program ("Staff Assessment")* (JA___).

i. *Criterion 9.* Shieldalloy argued that New Jersey's regulations did not satisfy Criterion 9's specification that standards for the disposal of radioactive materials "shall be in accordance with [10 C.F.R] Part 20" because "the NJ Regulations differ from the

radiological criteria for license termination in 10 C.F.R. Part 20 in many significant respects." *Comments* at 3 (JA____). Shieldalloy gave several examples of New Jersey's purported failure to satisfy Criterion 9, including: (1) the maximum allowable total doses to a member of the public of 15 mrem per year (in contrast to NRC's 25 mrem per year dose limit); (2) the failure to include implementation of the ALARA principle; (3) the failure to include provisions for restricted release; (4) requiring calculation of peak dose exceeding 1,000 years (in contrast to NRC's 1000-year limit); (5) the failure to allow for more than 100 mrem total effective dose equivalent if institutional controls fail (in contrast to NRC's allowance of 500 mrem under certain circumstances); and (6) requiring that the radioactivity releases to ground and surface waters be limited to the levels set by New Jersey's water quality standards. *Comments* at 3-4 (JA____); *Staff Analysis* at 4 (JA____).

NRC staff found Shieldalloy's comments unpersuasive because license termination falls under the 1997 policy statement's compatibility category "C," permitting states to enact regulations more stringent than NRC's. *See Staff Analysis* at 5 (JA____). The staff reviewed the principles underlying NRC's 1997 policy

statement, including the flexibility accorded to a state to implement programs accommodating "individual State preferences, State legislative direction, and local needs and conditions" and "to design its own program, including incorporating more stringent, or similar, requirements" provided that the requirements are adequate and compatible. *Id.* at 4 (JA___).

The staff explained that the license termination rule was designated Category C "because the rule addresses basic principles of radiation safety and regulatory functions that allow a State to establish regulations and dose limits for license termination and decommissioning that provide a sufficient and ample margin of safety [] to ensure compliance with the public dose limits of 10 C.F.R. Part 20." *Id.* at 5 (JA___). The staff pointed out that the preamble to the license termination rule stated that agreement states would "be required to adopt the regulation but would have significant flexibility in language, and would be allowed to adopt more stringent requirements." *Id.* The staff agreed with Shieldalloy that "[s]ome of NJ's license termination regulations are more stringent than NRC regulatory requirements," but said that "NRC's assessment of NJ regulations found the State's license termination

and decommissioning regulations compatible since they meet the essential objectives of the NRC program elements and provide a level of protection of public health and safety that is at least equivalent to that afforded by NRC's requirements." *Id.*

The staff noted also that Criterion 9 of the 1981 policy statement applies to disposal of low-level waste and not to the examples regarding license termination that Shieldalloy had provided. *Id.*

ii. *Criterion 12.* Shieldalloy commented that New Jersey's license termination regulations did not satisfy Criterion 12 because they "fail to provide for granting necessary exceptions to the regulatory standards that do not jeopardize health and safety." *Comments* at 5 (JA___). Shieldalloy said that New Jersey's regulations were defective because, *inter alia*, they do not allow consideration of alternate remediation standards that would increase the allowed incremental dose criterion of 15 mrem per year, "even if justified through an ALARA analysis," and they do not allow for any alternate remediation standards that would result in doses exceeding 100 mrem per year for an "all [institutional and engineered] controls fail" scenario. *Id.* at 5-6 (JA___).

NRC staff found New Jersey's approach acceptable under Criterion 12 because its "regulation, N.J.A.C. 7:28-2.8, allows the [New Jersey Department of Environmental Protection ("NJDEP")], upon application and a showing of hardship or compelling need, with the approval of the NJDEP Commission, to grant an exemption from any requirement of the rules should it determine that such exemption will not result in any exposure to radiation in excess of the limits permitted by N.J.A.C. 7:28-6, 'Standards for protection against radiation.'" *Staff Analysis* at 6 (JA___). The staff concluded that New Jersey's license termination regulations "meet[] the essential objectives of the NRC program" and "provide a level of protection of public health and safety that is at least equivalent to that afforded by NRC requirements." *Id.*

iii. *Criterion 23.* Shieldalloy commented that New Jersey's program was inconsistent with Criterion 23 because it fails to provide "for fair and impartial administration of regulatory law" or "rules of general applicability." *Comments* at 9 (JA___). Shieldalloy stated that New Jersey's decommissioning rules are, instead, "single-purpose legislation aimed exclusively at [Shieldalloy]." *Id.*

In response, NRC staff stated that it did not find New Jersey's regulations impermissibly site-specific or unfair:

Agreement States must have a regulatory program that will cover all types of uses of the radioactive material or activities that a State assumes regulatory authority over in their Agreement. NRC requires the States to have this regulatory program in place even if there is only one licensee in the State currently licensed for a specific radioactive material or activity. The State regulations would apply to any material licensee that submits a request for license termination and subsequently begins decommissioning of its site. . . . NRC has not received any evidence, such as a State court rul[ing], to indicate that NJ's regulatory program cannot be implemented fairly and impartially. Based on NRC's review of NJ legislative authority and regulation, NRC concluded that NJ has adequate legislative authority for assuring the fair and impartial application of regulatory law.

Staff Analysis, at 7 (JA___).

In evaluating New Jersey's program against Criterion 23, the staff also "confirmed that [New Jersey] is bound by general statutory provisions with respect to providing the opportunity for public participation in rulemaking, licensing actions, and disciplinary actions" and that "[t]hese general statutory provisions also apply to the protection of personnel radiation exposure records from public disclosure, maintain the confidentiality of allegers, and

administrative and judicial requirements for requesting and holding hearings on enforcement matters." *Staff Assessment* at 16 (JA).

iv. *Criterion 25*. Shieldalloy commented that New Jersey's program failed to satisfy Criterion 25 because New Jersey had not made "appropriate arrangements" with NRC to ensure that there will be no interference with the processing of its proposed decommissioning plan pending before NRC at the time of the transfer of regulatory authority to the state. *Comments* at 9 (JA___). Shieldalloy stated that instead of ensuring the "smooth processing" of its license termination application, New Jersey has opposed it "at every turn," both administratively and judicially. *Id.*

In response, NRC staff stated that its review confirmed that New Jersey law provides for recognizing existing NRC licenses, and that New Jersey regulatory procedure provides for all active NRC licenses issued to facilities in New Jersey to be recognized as New Jersey licenses upon completion of the agreement. *Staff Analysis* at 8 (JA___). The staff said that this "will ensure a smooth transition of authority from NRC to NJ so that licensees can continue to operate without interference with or interruption of licensed activities." *Id.* The staff further stated that, because NRC "would

not have regulatory authority to continue processing licensing actions after the Agreement goes into effect," New Jersey "will continue any licensing actions that are in progress at the time of the Agreement and make the final decision on all pending licensing actions." *Id.* The staff noted that "NJ's individual actions while [Shieldalloy] is under NRC regulatory authority have no bearing on whether NJ satisfies Criterion 25." *Id.*

Shieldalloy also commented that under Criterion 25 NRC has the "power" to exclude Shieldalloy's decommissioning site from the transfer of authority to New Jersey, and retain it at NRC, even if NRC decides to enter into the agreement with New Jersey.

Comments at 11-12 (JA___). NRC staff responded, in part, by stressing that the AEA does not permit concurrent state-NRC jurisdiction over the same categories of materials:

Upon the effective date of a State Agreement. . . , the NRC relinquishes regulatory authority and the Agreement State assumes regulatory authority over the radioactive materials and activities specified in the Agreement. The legislative history [of Section 274 of the AEA] specifically states that Congress did not intend to allow concurrent regulatory authority over licensees for public and safety. If the NJ Agreement is approved by the Commission, upon the effective date of the Agreement, all NRC licensees within the categories of materials for which the State requested authority will transfer to the State.

Staff Analysis at 10 (JA___).

d. *Commission's Entry Into Agreement.* Explicitly relying on NRC staff's assessment, the Commission determined that New Jersey's radiation control program was adequate to protect the public health and safety and compatible with NRC's program. *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. 51882, 51883 (Oct. 8, 2009) (JA___). NRC's Chairman and New Jersey's Governor then signed the agreement, providing for NRC to discontinue its regulatory authority and for New Jersey to assume regulatory authority over source, byproduct, and special nuclear materials (in quantities below a critical mass). *Id.* at 51882-83 (JA___). The agreement became effective on September 30, 2009. *Id.* at 51883 (JA___).

2. *Shieldalloy's License Termination Proceeding*

Shieldalloy conducted smelting and alloy production at its site in Newfield, New Jersey for many years. *See Shieldalloy Metallurgical Corp.* (Amendment Request for Decommissioning of

the Newfield, New Jersey Facility), LBP-07-5, 65 NRC 341, 343 (2007). As part of its operations, Shieldalloy processed pyrochlore, which is subject to NRC licensing and regulation under the AEA as a "source" material.¹⁸ After Shieldalloy ceased operations, its source material license was amended in 2002 to authorize only decommissioning activities. *Id.* at 344.

In October 2002, Shieldalloy submitted its initial decommissioning plan, which was rejected by NRC staff. *See Br.* at 16-17. Shieldalloy filed a revised decommissioning plan in October 2005, which the staff also rejected. LBP-07-5, 65 NRC at 343. Shieldalloy then submitted a second revised decommissioning plan in June 2006, which proposed restricted release using engineered barriers and a long-term possession-only license as the institutional control. The staff found the revised plan acceptable for the limited purpose of initiating a technical review of the plan, which would ordinarily culminate in a safety evaluation report and an environmental impact analysis. *Id.*

¹⁸ Source material consists of uranium and thorium isotopes, which are "long-lived" radionuclides – *i.e.*, radionuclides with long "half-lives."

Subsequently, the Atomic Safety and Licensing Board (an NRC administrative-hearing tribunal) granted New Jersey's request for a hearing on Shieldalloy's proposed license termination plan after finding that at least one of New Jersey's "contentions" (claims) was admissible for hearing. *Id.* at 343. The Board deferred its ruling on the remainder of New Jersey's contentions, and held the case in abeyance, until the staff's completion of a safety evaluation report and environmental impact analysis. *Id.*

NRC staff's review of Shieldalloy's decommissioning plan was still pending when NRC's agreement with New Jersey became effective in September 2009. Since the agreement covered source material, New Jersey assumed regulatory authority over Shieldalloy's Newfield site at that time. *Shieldalloy Metallurgical Corp.* (License Amendment Request for Decommissioning of the Newfield, New Jersey Site), CLI-10-08, ___ NRC ___ (2010), slip op. at 5 (JA___). With NRC's discontinuance of authority, the staff terminated its review of Shieldalloy's proposed decommissioning plan and forwarded the files associated with its safety and environmental review to New Jersey. *Id.*

After the agreement between New Jersey and NRC became effective, Shieldalloy filed with NRC a motion for stay pending judicial review of the transfer of regulatory authority to New Jersey. (JA___). The Commission denied Shieldalloy's motion for stay in a memorandum and order dated January 7, 2010. CLI-10-08, *supra* (JA___). Addressing many of the same merits claims Shieldalloy now raises in this Court, the Commission found Shieldalloy's arguments "diffuse and difficult to follow" and "not likely to succeed on the merits." *Id.*, slip op at 17-29 (JA ___).

SUMMARY OF ARGUMENT

1. The centerpiece of Shieldalloy's challenge to NRC's acceptance of New Jersey's agreement-state program is a claim that the New Jersey program fails to incorporate NRC's "as low as reasonably achievable" (ALARA) standard, which requires that doses be ALARA below a stated dose limit. But New Jersey's program *does* incorporate the ALARA requirement for its public dose limits, including the dose limit of 15 mrem per year for license termination under unrestricted or restricted use.

New Jersey did not adopt NRC's requirement that a licensee demonstrate, through use of a cost-benefit test incorporating

ALARA methodology, initial eligibility to pursue license termination under restricted use. But under NRC's program, demonstrating eligibility for restricted release means only that a licensee has surmounted the initial hurdle for pursuing license termination under restricted use. The licensee must then satisfy the license termination dose criteria for restricted use, including the 25 mrem per year dose limit. Since New Jersey's program requires satisfaction of its 15 mrem dose limit for restricted use without the need for an initial eligibility demonstration, in the end, New Jersey's program simply incorporates a permissibly more strict dose limit than NRC's -- 15 mrem per year as compared to 25 mrem per year. The absence of an initial eligibility requirement for restricted use does not render New Jersey's program inadequate or incompatible.

Shieldalloy claims that NRC's response to its ALARA claim was insufficient because NRC did not discuss ALARA in its comment response. But Shieldalloy's position as to ALARA was, and continues to be, elusive and difficult to understand. In particular, before NRC and now in its brief, Shieldalloy has vacillated between claims that the purported absence of ALARA renders New Jersey's license termination program impermissibly too stringent and

impermissibly not stringent enough compared to NRC's.

Underscoring the confusion perpetuated by Shieldalloy is a persistent claim that ALARA permits doses *above* a regulatory limit. NRC's response, which did not address Shieldalloy's incoherent ALARA point as such but explained that New Jersey's program was permissibly more stringent in light of the compatibility category "C" designation of the license termination rule, satisfied the agency's obligation to explain the rationale for its decision.

2. Another focal point of Shieldalloy's challenge to NRC's acceptance of New Jersey's program is a claim that New Jersey's program fails to permit license termination under restricted release. Shieldalloy is, again, mistaken. New Jersey's program explicitly provides for license termination under restricted release. Contrary to Shieldalloy's position, the fact that New Jersey's conditions for license termination under restricted release are more stringent than NRC's does not negate the existence of provisions allowing for restricted release.

Without any grounding in the record, Shieldalloy implies that New Jersey's program may result in license termination decisions that are less protective of the public health and safety in

comparison to NRC's. But Shieldalloy itself, by seeking a relaxation of New Jersey's license termination criteria to mirror NRC's, has shown that it does not disagree with NRC's conclusion that the dose limits and dose calculation methodologies underlying New Jersey's license termination program are more conservative than NRC's. As NRC reasonably explained, this is permissible under the license termination rule's compatibility category "C" designation.

3. The remainder of Shieldalloy's brief consists of a scattershot array of arguments that New Jersey's more stringent license termination provisions are not adequate or compatible with NRC's.

(a) Referring to various more stringent NRC regulations as to dose criteria and dose calculation methodologies, Shieldalloy claims that NRC erred in accepting New Jersey's license termination program because it incorporates certain requirements that NRC's license termination rule did not. In addition, despite express provisions in New Jersey's regulations providing for exemptions in appropriate circumstances, Shieldalloy claims that New Jersey's program does not provide a meaningful opportunity for granting exemptions as specified in Criterion 12 of the 1981 policy

statement. NRC's reasonable response to these claims was that the license termination rule's compatibility designation -- Category C -- contemplates and permits variances and more stringent requirements in a state's program. Shieldalloy's claims essentially amount to indirect attacks on the Category C designation for the license termination rule.

(b) Despite the fact that New Jersey's program incorporates all of the regulatory components specified in Criterion 23 for fair and impartial administration of regulations, Shieldalloy claims that New Jersey's license termination regulations unfairly single out its site because there is no other source material site in the state currently undergoing decommissioning. NRC reasonably responded that a state must have a program in place to cover all classes of materials over which the state will assume regulatory authority, regardless of the number of licensees in a class. New Jersey's program is in line with other agreement-state programs in its license termination requirements and does not exhibit any inherent unfairness.

Despite the fact that New Jersey's program, consistent with Criterion 25, makes provisions for the orderly transfer of NRC licenses and license applications to prevent lapses in regulation,

Shieldalloy claims that NRC acted unreasonably and inconsistently with past practice in refusing to construe this criterion to permit it to retain jurisdiction over Shieldalloy's site. But, giving effect to an express statement of congressional intent that concurrent jurisdiction between NRC and states over the same classes of materials is to be avoided, NRC acted consistently with longstanding policy and practice in refusing to retain jurisdiction over Shieldalloy's site.

4. Shieldalloy's use of extra-record evidence, including material prepared after NRC's decision as well as material from Shieldalloy's license termination adjudicatory proceeding, is impermissible. In any event, Shieldalloy's extra-record citations are misleading and do not go to show that NRC's acceptance of New Jersey's program was arbitrary.

ARGUMENT

Standard of Review

The general standard of review in this case is governed by the Administrative Procedure Act (APA), 5 U.S.C. § 551 *et seq.* Under the APA, NRC's decision may be set aside only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance

with law." 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 (quoting *Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). Rather, a reviewing court must "defer to the wisdom of the agency, provided its decision is reasoned and rational, and even 'uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned.'" *Dillmon v. NTSB*, 588 F.3d 1085, 1089 (D.C. Cir. 2009) (quoting *Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc.*, 419 U.S. 281, 286 (1974)) (internal quotation marks and 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." *PPL Montana, LLC v. Surface Transportation Board*, 437 F.3d 1240, 1245 (D.C. Cir. 2006) (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).

The NRC Reasonably Concluded that New Jersey's Program for License Termination is Compatible with the NRC's Program and Adequate to Protect the Public Health and Safety

A. *New Jersey's Program for License Termination Incorporates the NRC's As Low As Reasonably (ALARA) Principle*

In a lengthy argument that pervades its brief, Shieldalloy contends that New Jersey's program fails to "embody the essential objective" of NRC's program because, according to Shieldalloy, the New Jersey program "does not adopt or incorporate the ALARA standard." Br. at 46. Shieldalloy maintains that the purported absence of the ALARA requirement from New Jersey's program "allows New Jersey to reject the decommissioning option for the Site that would result in the lowest doses to the public and the environment." Br. at 47.

Shieldalloy is simply wrong in its characterization of New Jersey's program. New Jersey's regulations expressly incorporate by reference much of NRC's Part 20, *including* the ALARA requirement in 10 C.F.R. § 20.1101(b). *See* N.J. Admin. Code § 7:28-6.1(a). In adopting this regulation, New Jersey's program, like NRC's, makes the ALARA principle a general requirement for all regulatory dose limits, including the dose limits for license termination. *See* p. 18, *supra*. Thus, contrary to Shieldalloy's understanding, New Jersey's program does, in fact, require that doses to members of the public be as low as reasonably achievable *below* the basic 15 mrem per year public dose limit established by New Jersey for license termination.

Perhaps Shieldalloy has mistaken a provision in 10 C.F.R. § 20.1403(a) on demonstrating eligibility for "restricted-use" decommissioning, which New Jersey did not adopt, for the general ALARA obligation imposed on licensees in 10 C.F.R. § 20.1101(b) to ensure that doses are kept below specified dose limits if feasible. But NRC's license termination rule and implementing guidance specify that the initial eligibility-demonstration requirement in Section 20.1403(a), while incorporating ALARA methodology, is

separate and distinct from the general ALARA requirement in Section 20.1101(b).

In keeping with NRC's stated preference for unrestricted use (62 Fed. Reg. at 39069 (JA___)), NRC's eligibility analysis operates to eliminate proposals for restricted release where unrestricted release would be "cost-effective." *Id.* It is, in essence, a threshold hurdle that a licensee must overcome to show that it is "initially eligible to further evaluate release" of its site for restricted use. NUREG-1757, Vol. 1, Sec. 17.7.2, at 17-70 (JA___). Even if the initial eligibility demonstration is met, under NRC's rule a licensee must still satisfy the 25 mrem per year dose criterion for license termination (as well as the dose criteria of 100/500 mrem per year in the event of failure of institutional controls) in order to pursue license termination under restricted use. *See* 10 C.F.R. §§ 20.1403(b) and (e).

New Jersey's program, in comparison to NRC's, requires a licensee to demonstrate that license termination under restricted use will satisfy New Jersey's 15 mrem per year dose limit without the licensee first having to make an initial demonstration of eligibility. At bottom, a 25 mrem dose limit for license termination applies to NRC's program, whereas a more stringent 15 mrem dose

limit applies to New Jersey's. Nothing in Shieldalloy's comments to NRC, or in its appellate brief in this Court, shows that New Jersey's decision not to employ an "eligibility" demonstration requirement for restricted use renders New Jersey's license termination program inadequate or incompatible with NRC's. New Jersey's program is governed by stricter dose limits than NRC's. Contrary to Shieldalloy's view (Br. at 48, 63), it cannot realistically be understood as less protective of public health and safety.

Shieldalloy's ALARA arguments, in short, although ardent, lack force. If Shieldalloy is complaining that New Jersey's regulations omit the general ALARA principle that exposures should be kept beneath dose limits if feasible, the complaint rests on a false premise. New Jersey's regulations adopt NRC's general ALARA rule in Part 20. If Shieldalloy is complaining that New Jersey's regulations do not include NRC's ALARA-like test for showing threshold eligibility for restricted use, the complaint does not show a lack of "adequacy" or "compatibility."

Shieldalloy's final thrust on ALARA is procedural. Shieldalloy faults NRC staff for not referring to the ALARA issue in its comment response, arguing that "no meaningful response" was provided to

Shieldalloy's "objections concerning the omission of the ALARA standard from the New Jersey Program." Br. at 48, 50. But NRC staff's failure to discuss the ALARA issue, as such, was understandable. Shieldalloy's comment on ALARA was incoherent in the context in which it was presented. Shieldalloy's comments included New Jersey's purported ALARA failure among other examples of New Jersey regulations that were (impermissibly, in Shieldalloy's view) *more stringent* than NRC's regulations. See *Comments* at 3, 8 (JA___).¹⁹ NRC staff responded by pointing out that NRC's compatibility category C, which covers license termination, *allows* state regulations to be more stringent than NRC's. See *Staff Analysis* at 4-6 (JA___).

This was a reasonable response, particularly given Shieldalloy's confusing position on ALARA. It was readily apparent from Shieldalloy's comments that its dissatisfaction with New Jersey's license termination regulations stemmed from the

¹⁹ As we discuss further below, it is not apparent why omitting an ALARA requirement (had New Jersey done so – which it did not) would make New Jersey's regulation more stringent than NRC's. This exemplifies the confusion over ALARA that pervades Shieldalloy's position on the topic.

regulations being, as a whole, more stringent than NRC's in terms of dose criteria and dose calculation methodologies. *See, e.g., Comments* at 7 (JA___) ("The NJ Regulations provide no justification for requiring stricter remediation standards than those provided by the NRC, or for not allowing licensees to apply the Federal standards when appropriate"). Indeed, a principal complaint in Shieldalloy's comments was that New Jersey had adopted a 15 mrem per year dose limit for license termination instead of NRC's higher dose limit of 25 mrem per year. *See, e.g., Comments* at 3 (JA___).

Since the ALARA standard requires doses to be as low as reasonably achievable *below* a stated dose limit, and Shieldalloy vigorously opposed New Jersey's stricter 15 mrem per year dose limit, Shieldalloy's complaint that New Jersey had not incorporated NRC's ALARA requirement was directly contrary to its central position that New Jersey's license termination program was *too stringent* in comparison to NRC's. Moreover, Shieldalloy suggested throughout its comments that NRC's ALARA principle would operate to permit license termination doses *higher* than the specified dose limit. *See Comments* at 5 (JA___) ("the NJ

Regulations will not allow consideration of alternate remediation standards that would *increase* the allowed incremental dose criterion of 15 mrem/yr. . . even if justified through an ALARA analysis"; "the increased levels of radioactivity allowed by the NRC and rejected by New Jersey are part of the restricted conditions for license termination that include implementation of the ALARA principle") (emphasis added).²⁰

In its brief before this Court, Shieldalloy finally acknowledges that NRC's ALARA principle actually requires doses to be *below* a stated regulatory limit. *See Br.* at 44, 46. Its position as to ALARA, though, continues to be internally inconsistent and elusive. While correctly stating that ALARA requires doses to be lower than a specified dose limit, Shieldalloy alternately asserts that ALARA would permit an *increase* in the specified dose limit. *See Br.* at 61 n. 21 (criticizing New Jersey for "not allowing consideration of

²⁰ Indeed, Shieldalloy made similar confusing arguments in its stay motion before the Commission, prompting the Commission to observe that "Shieldalloy's arguments are diffuse and difficult to follow." CLI-10-08 at 17 (JA___).

alternate remediation standards that would increase the allowed incremental dose criterion of 15 mrem/yr, even if justified through an ALARA analysis”).

In these circumstances, NRC staff offered a simple and reasonable response to Shieldalloy’s welter of incompatibility claims, including its ALARA claim -- the staff pointed out that New Jersey’s license termination regulations are permissibly more stringent than NRC’s because NRC’s license termination rule is designated as a Category C regulation pursuant to the 1997 policy statement. This satisfies the agency’s obligation to explain its decisions. NRC articulated a “rational connection between the facts found and the choice made.” *Bowman Transportation*, 419 U.S. at 285. *See also Transcontinental Gas Pipe Line Corp. v. FERC*, 518 F.3d at 919.²¹

²¹ In its brief, Shieldalloy continues to maintain that New Jersey’s purported lack of an ALARA requirement “violates NRC[]Criterion 9” from the 1981 policy statement. Br. at 47. Aside from the fact that the 1981 criteria are guidelines that cannot be “violated” (see 46 Fed. Reg. at 7540 (JA___)), Criterion 9, as the NRC staff correctly noted (*Staff Analysis* at 5 (JA___)), pertains not to license termination but to NRC’s standards for waste disposal contained in 10 C.F.R. Part 20, Subpart K (§§ 20.2001-20.2008). In any event, the New Jersey program is consistent with Criterion 9, as New
(continued . . .)

NRC did not have to respond explicitly to Shieldalloy's contradictory and abstruse position regarding ALARA in order for the agency's "path [to be] reasonably be discerned." *Fox*, 129 S.Ct. at 1810 (quoting *Bowman*, 419 U.S at 286). Indeed, an agency's "failure to respond to comments is significant only insofar as it demonstrates that the agency's decision was not based on a consideration of the relevant factors." *Covad Communications Co. v. FCC*, 450 F.3d 528, 550 (D.C. Cir. 2006) (quoting *Thompson v. Clark*, 741 F.2d 401, 409 (D.C. Cir. 1984)).

In its comments before NRC, Shieldalloy failed to "clearly state[] its position" regarding ALARA, so NRC's opportunity to respond to its position was essentially "meaningless." *See Northside Sanitary Landfill, Inc. v. Thomas*, 849 F.2d 1516, 1520 (D.C. Cir. 1988) ("the 'dialogue' between administrative agencies and the public 'is a two-way street'") (citation omitted). "[A]dministrative proceedings should not be a game or a forum to engage in

Jersey's radiation control regulations incorporate by reference the entirety of 10 C.F.R. Part 20, Subpart K. *See* N.J. Admin. Code § 7:28-6.1(a).

unjustified obstructionism by making cryptic and obscure references to matters that 'ought to be' considered and then, after failing to do more to bring the matter to the agency's attention, seeking to have that agency determination vacated on the ground that the agency failed to consider matters 'forcefully presented.'" *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553-54 (1978). *See also Nevada v. DOE*, 457 F.3d 78, 88 (D.C. Cir. 2006).

Even now, after filing comments with NRC staff, a motion for a stay with the Commission, and a brief with this Court, Shieldalloy's position with respect to ALARA remains enigmatic and contradictory. NRC can hardly be faulted for not singling out a point which simply did not make sense in the overall context in which it was raised.²²

²² Shieldalloy claims that New Jersey, in responding to comments on its proposed radiation protection program, acknowledged that the program did "not include a provision for ALARA in meeting [] dose criteria." Br. at 46 (quoting New Jersey regulator). But, as we have shown, New Jersey's program did incorporate NRC's general ALARA requirement in 10 C.F.R. § 1101(b). What New Jersey's program did not include was the separate NRC provision incorporating an ALARA-like cost-benefit methodology, 10 C.F.R. § 1403(a), used only for demonstrating initial eligibility for restricted- (continued . . .)

B. New Jersey's Radiation Control Program Permits License Termination under Restricted Use

Shieldalloy next maintains that New Jersey's program is incompatible with NRC's because it purportedly precludes license termination under restricted release. (Br. at 50-60). Shieldalloy asserts that "NRC does not explain how it could find New Jersey's Program compatible with its regulations in the area of facility decommissioning when the Program fails to implement an important aspect of the [license termination rule] -- terminating a license under 'restricted conditions.'" Br. at 54.

Shieldalloy's understanding of New Jersey's license termination program is, again, inaccurate. It is clear from the face of New Jersey's regulations that New Jersey does in fact permit license termination under restricted use. See N.J. Admin. Code § 7:28-12.8(a)(1) (specifying a 15 mrem dose limit to members of the public for license termination "under either an unrestricted use remedial action, limited restricted use remedial action, or a

use decommissioning. New Jersey's decision not to adopt this provision was entirely permissible. See pp. 46-48, *supra*.

restricted use remedial action”); N.J. Admin. Code § 7:28-12.10 (providing that “[r]estricted use remediation standards” must satisfy, *inter alia*, the dose criterion in N.J. Admin. Code § 7:28-12.11(e), which requires that doses to members of the public resulting from a simultaneous and complete failure of institutional and engineering controls not exceed 100 mrem per year).

Shieldalloy nonetheless claims that New Jersey does not allow license termination under restricted use, citing as support New Jersey’s “all controls failed” methodology for calculating the 100 mrem dose limit in the event of a failure of institutional and engineered controls. Br. at 52 n. 15.²³ As we understand it, Shieldalloy is essentially arguing that New Jersey’s methodology for calculating the doses from failure of restricted-use controls is tantamount to not allowing restricted release at all for license termination.

²³ On this point, Shieldalloy cites a December 11, 2009 letter to Shieldalloy from NJDEP, a letter issued months after the NRC decision under challenge in this lawsuit. We object to Shieldalloy’s attempt to introduce this and other extra-record material as matters relevant to the NRC’s review of New Jersey’s agreement state program. See Part E, *infra*.

But Shieldalloy does not explain why this is so. Its position amounts to nothing more than a complaint that New Jersey's dose calculation methodology with respect to failure of controls is more conservative than NRC's (which assumes that engineered barriers will degrade over time rather than all at once if institutional controls fail). As NRC staff explained, this and other aspects of New Jersey's program are permissibly more stringent than NRC's because of the Category C designation given to NRC's license termination rule. *See Staff Analysis* at 6 (JA___) (responding, *inter alia*, to Shieldalloy's citation to New Jersey's "all controls fail" requirement). As with the ALARA point, NRC adequately articulated a "rational connection between the facts found and the choice made," *Bowman*, 419 U.S. at 285. NRC did not need to respond in further detail to Shieldalloy's misunderstanding of New Jersey's restricted-use regulations in order for its rationale to be "reasonably discerned." *Id.* at 286.

Shieldalloy implies, in the context of its restricted-use argument, that New Jersey's license-termination regulatory program, when applied at Shieldalloy's site, may prove less protective than NRC's program. Br. at 54. But this Court should

not strike down the NRC-New Jersey agreement merely because Shieldalloy speculates that New Jersey might apply its Agreement-State authority invalidly. The case here is similar to those where reviewing courts reject facial challenges to otherwise lawful agency rules when the challenger does no more than point to a hypothetical possibility of an “invalid application.” See *Amfac Resorts, L.L.C. v. U.S. Dep’t of the Interior*, 282 F.3d 818, 825-28 (D.C. Cir. 2002). Accord *Exxon-Mobil Corp. v. FERC*, 501 F.3d 204, 210 (D.C. Cir. 2007); *Union of Concerned Scientists v. NRC*, 920 F.2d 50, 56 (D.C. Cir. 1990).

In any event, on the record before the agency, NRC reasonably found New Jersey’s program *more* stringent than NRC’s, not less. Shieldalloy’s only support for its claim of a less protective New Jersey regulatory program is an extra-record “sworn affidavit” prepared and filed well after the final agency decision in this case. Br. at 54.²⁴ Shieldalloy offers no record-based arguments contesting the seminal point that on their face New Jersey’s license

²⁴ See discussion regarding extra-record evidence in Part E, *infra*. The affidavit was submitted to the Commission in connection with Shieldalloy’s request for a stay of the New Jersey agreement.

termination dose criteria and dose calculation methodologies for restricted use are more stringent than NRC's.

New Jersey's program may very well operate to preclude license termination under restricted use in some instances where NRC's program would permit it, but that does not show impermissible incompatibility. It is simply a function of New Jersey's permissibly more stringent requirements.

C. *New Jersey's License Termination Program Incorporates Dose Criteria and Dose Calculation Methodologies that are Compatible with the NRC's under the Compatibility Designation for the NRC's License Termination Rule*

Shieldalloy maintains that New Jersey's regulations setting forth dose criteria and dose calculation methodologies are not compatible with NRC's because they contain more conservative requirements that NRC declined to incorporate into its own regulations. See Br. at 57-60.²⁵ Shieldalloy also contends that New Jersey's program does not satisfy Criterion 12 of the 1981 policy

²⁵With the exception of its misunderstanding of New Jersey's program as to ALARA and restricted use, Shieldalloy does not dispute that these differing requirements render New Jersey's regulations more stringent than NRC's. *Id.*

statement because it does "not provide a meaningful opportunity for granting exemptions from its requirements in the area of facility decommissioning." Br. at 61.²⁶

It is not true, to begin with, that New Jersey forbids exemptions. Its program expressly provides for the granting of exemptions from any rule requirement in appropriate circumstances. *See Staff Analysis* at 4-6 (JA__); N.J. Admin. Code § 7:28-2.8.²⁷

²⁶Shieldalloy lists (Br. at 61 n. 21) four New Jersey dose criteria and methodologies that purportedly fail to allow for meaningful "exemptions," including the 15 mrem per year dose criterion and the 100 mrem per year dose criterion under an "all controls fail" scenario.

²⁷ Citing NJDEP's letter of December 11, 2009 (not in the record), Shieldalloy claims that the opportunity to seek exemptions from New Jersey's requirements is "illusory" because New Jersey denied Shieldalloy's request for restricted release. Br. at 62-63. But it is apparent from the NJDEP letter that New Jersey's reason for not accepting Shieldalloy's restricted-use plan was its failure to satisfy New Jersey's 100 mrem dose criterion for restricted use under an "all controls failed" scenario. *See* Br. at 53 n. 15. Thus, rather than demonstrating the absence of a mechanism for exemptions, New Jersey's rejection of Shieldalloy's proposed plan simply reflects *implementation* of New Jersey's permissibly more conservative dose calculation methodology for failure of restricted-use controls.

As for variances from NRC regulations that Shieldalloy points to, NRC did not merely provide an "unexplained conclusion" (Br. at 60) with respect to the compatibility of New Jersey's license termination requirements. NRC in fact provided a thorough explanation, based on the license termination rule's compatibility designation, as to why New Jersey's more stringent license termination regulations are compatible with NRC's. For example, NRC laid out in detail NRC's compatibility approach reflected in the 1997 policy statement, highlighting the permissible flexibility for radiation programs primarily affecting "local needs and conditions," *Staff Analysis* at 4, and NRC's rationale for giving the license termination rule a Category C designation as a part of the rulemaking. *See id.* at 3-4 (JA___); 62 Fed. Reg. at 39065 (JA___); *id.* at 39080 (JA___). NRC explained that the 25 mrem per year standard was not *per se* a "basic radiation protection standard" that must be identical to NRC's to effectuate an orderly and uniform pattern of regulation in the national interest, but rather a "constraint" below the basic public dose limit of 100 mrem per year that provided a reasonable "margin of safety" to protect public health and safety. *See id.* at 39079-80 (JA___).

NRC reasonably concluded that New Jersey's license termination regulations, by lowering the annual dose limit and requiring more conservative dose calculation methodologies, embodied the "essential objective" of the license termination rule. *See Staff Analysis*, at 5 (JA___). The New Jersey regulations would, NRC found, ensure that decommissioning will be carried out without undue impact on public health and safety and the environment. *Id.*; *see also* 62 Fed. Reg. at 39058 (JA___).

Shieldalloy's true grievance -- the lack of identity between the New Jersey's approach to decommissioning and NRC's -- seemingly lies not with NRC's assessment of the compatibility of New Jersey's license termination program with NRC's, but with the compatibility designation, Category C, assigned to NRC's license termination rule. Shieldalloy's arguments amount to a claim that New Jersey may not adopt, or implement, any license termination requirements that differ or "deviate" in any way from NRC's. *See, e.g.*, Br. at 55.

But, as NRC made clear, the compatibility approach for the license termination rule -- *i.e.*, allowing a state to adopt more stringent requirements as long as they embody the essential

objectives of the corresponding NRC program elements²⁸ -- was decided long ago, at the time the rule was promulgated. The compatibility designation for the license termination rule, in effect, reflects NRC's previously-settled determination of the amount of flexibility an agreement state should have to incorporate decommissioning requirements differing from NRC's that would not create "conflicts, duplications, gaps, or other conditions [jeopardizing] an orderly pattern in the regulation of agreement material on a nationwide basis." *See 1997 Policy Statement*, 62 Fed. Reg. at 46524 (JA___).

If Shieldalloy believes that the compatibility designation for the license termination rule should prohibit agreement states from deviating from NRC's requirements, it could have sought to change

²⁸While acknowledging, in a footnote, the license termination rule's Category C designation, Shieldalloy claims that New Jersey's regulations "subvert" NRC's essential objectives because of New Jersey's purported failure "to implement the ALARA principle and allow site decommissioning under restricted conditions." Br. at 60 n. 20. As we discussed above, however, Shieldalloy is incorrect in its view that New Jersey's program does not include ALARA and restricted-use provisions.

the designation by filing a petition for rulemaking with the agency. See 10 C.F.R. § 2.802. NRC would then have had reason and occasion to re-examine the compatibility designation for the license termination rule. But Shieldalloy never requested such a re-examination, and it is improper for Shieldalloy now to attempt to achieve the same result here through what essentially amounts to a collateral attack on the rule's designation. *Cf. Nuclear Energy Institute, Inc. v. EPA*, 373 F.3d 1251, 1290 (D.C. Cir. 2004) ("claims not presented to the agency may not be made for the first time to a reviewing court") (citation omitted).

D. New Jersey's Program Satisfies Criteria 23 and 25

Shieldalloy argues that New Jersey's license termination program fails to satisfy Criteria 23 and 25 of the 1981 policy statement. Those criteria call for a fair and impartial state program (Criterion 23) and for not interfering in existing licenses (Criterion 25). Here, NRC reasonably concluded that New Jersey's program meet these criteria. NRC's acceptance of New Jersey's program is entirely consistent with prior determinations and past practice in administering the agreement-state program. See *Good Samaritan Hospital v. Shalala*, 508 U.S. 402, 417 (1993) ("the consistency of

an agency's position is a factor in assessing the weight that position is due"); *see also State Farm*, 463 U.S. at 41-42 ("A 'settled course of behavior embodies the agency's informed judgment that, by pursuing that course, it will carry out the policies committed to it by Congress.'") (citation omitted).

1. Citing several New Jersey regulations that apply to source material sites undergoing decommissioning, Shieldalloy claims that New Jersey's license termination program is "aimed specifically and uniquely" at its Newfield site, as the only source material site in New Jersey currently undergoing decommissioning, and thus are not "fair and impartial," as required by Criterion 23 of the 1981 policy statement. *See Br.* at 64. But New Jersey's radiation control program incorporates all of the regulatory components specified in Criterion 23, including procedures for public participation, formulation of rules of general applicability, approving and denying applications for licenses to possess and use radioactive material, and taking disciplinary actions against licensees. *See Staff Analysis* at 7 (JA__); *Staff Assessment* at 15-16 (JA__).

Shieldalloy portrays New Jersey's regulatory scheme as unfairly singling out its site. As NRC reasonably explained,

however, an agreement state must have a regulatory program in place for all of the material that a State seeks regulatory jurisdiction over, even if there is only one licensee in the State currently licensed for a specific radioactive material or activity. *Staff Analysis*, at 7 (JA___). Indeed, the absence of comprehensive regulations would render a State's program inadequate and incompatible under AEA § 274, 42 U.S.C. § 2021. And nowhere does Section 274 or any of NRC's implementing policy statements or guidance documents suggest that there must be more than one licensee or multiple licensees in a material class before a state may assume regulatory jurisdiction over or adopt regulations governing that material.

Shieldalloy strives to portray itself as the victim of an unreasonably restrictive regulatory regime, but nothing in New Jersey's program shows unfairness. And New Jersey's program is hardly an outlier among agreement-state regulatory programs. To the contrary, the 15 mrem per year standard for license termination, the gravamen of Shieldalloy's dissatisfaction with New Jersey's program, is fully in accord with license termination dose limits incorporated into several other agreement-state programs

accepted by NRC. For example, Arizona's license termination dose limit for members of the public is the same as New Jersey's (15 mrem per year), while both Massachusetts and Maine have incorporated an even more stringent license termination dose limit-- 10 mrem per year. See Ariz. Admin. Code § R12-1-452C.2; Mass. Code Regs. § 120.245; Me. Code R. § 1403B.

Finally, if Shieldalloy believes that New Jersey's program, as implemented, is unlawful or contrary to public health and safety, it may raise its concerns with NRC at any time through NRC's IMPEP program. See n. 8, *supra*. NRC retains power under AEA § 274j., 42 U.S.C. § 2021(j), to revoke agreements with states and to restore NRC regulatory authority.

2. Shieldalloy also maintains that New Jersey's license termination program does not satisfy Criterion 25 of the 1981 policy statement, which specifies that "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." Br. at 66. But as called for by Criterion 25, New Jersey's program does take account of existing NRC licenses and provides for the transfer

of all active NRC licenses to the state upon the effective date of the agreement. *See Staff Analysis* at 8 (JA___) (citing N.J. Stat. Ann. § 26:2D-9(k); NJDEP BER Procedure 3.08, *License Transition from NRC to New Jersey*).

Shieldalloy apparently construes Criterion 25's phrase, "no interference with . . . the processing of license applications by reason of the transfer," to require New Jersey's acceptance of standards identical to NRC's for license termination. This argument, again, amounts to nothing more than a challenge to the compatibility designation of NRC's license termination rule. Alternatively, Shieldalloy appears to believe that NRC is required to retain authority over individual sites with license applications pending at the time authority is transferred to a state. Shieldalloy accuses New Jersey of "grossly interfer[ing]" with the processing of its license termination application and NRC of "ignor[ing] its long-term regulatory relationship with Shieldalloy" by transferring regulatory authority to New Jersey. Br. at 68.

Criterion 25 addresses generally the necessity of an orderly transfer of authority from NRC to a state to prevent gaps or lapses in regulation. NRC has never applied this criterion to require that it

retain authority over individual sites with pending applications, including sites undergoing decommissioning. To the contrary, in the past, sites in various stages of decommissioning before NRC have routinely been transferred to agreement states upon NRC's entry into a Section 274 agreement.²⁹

²⁹ See, e.g., SECY-08-0008, *Section 274b Agreement with the Commonwealth of Pennsylvania*, at 4 (seven decommissioning sites transferred) (SA__); SECY-99-039, *Proposed Agreement Between the State of Ohio and the Commission Pursuant to Section 274 of the Atomic Energy Act of 1954*, at 4 (SA__) (two decommissioning sites transferred); SECY-97-032, *Agreement Between the Commonwealth of Massachusetts and the Commission Pursuant to Section 274 of the Atomic Energy Act of 1954*, at 3 (SA__) (three decommissioning sites transferred); Staff Requirements, SECY-97-087, *Oklahoma Agreement State Negotiations: State Requests that Major Facilities Undergoing Site Decommissioning not be Relinquished to State*, (approving staff recommendation to deny Oklahoma's request to exclude five decommissioning sites from the agreement) ("SECY-97-087") (JA__). See also *Kerr-McGee Chemical Corp.*, CLI-96-2, 43 NRC 13 (1996) (reflecting NRC's transfer of Kerr-McGee's decommissioning site to Illinois).

In *Kerr-McGee*, which Shieldalloy referenced in its comments (see *Comments* at 12 (JA__)), NRC had already issued a license authorizing on-site disposal at a decommissioning site in Illinois and an adjudicatory challenge to the license was pending at the time NRC (over Kerr-McGee's objections) transferred regulatory authority over the nuclear materials at the site to Illinois. See *Kerr-McGee Chemical Corp. (West Chicago Rare Earths Facility)*, CLI-96-2, 43 NRC 13, 15 (1996).

Retaining NRC jurisdiction over the Newfield site, as Shieldalloy desires, would result in concurrent NRC and New Jersey jurisdiction over the same type of nuclear materials. As NRC correctly noted in responding to Shieldalloy's comment calling for NRC to retain jurisdiction over the Newfield site, "the legislative history of [Section 274] specifically states that Congress did not intend to allow concurrent regulatory authority over licensees for public health and safety." *See Staff Analysis* at 10 (JA___).

NRC's approach and underlying rationale with respect to retention of NRC jurisdiction over individual sites is set forth in an NRC staff recommendation approved by the Commission in rejecting Oklahoma's request to exclude five decommissioning sites from the agreement. *See* SECY-97-087 (JA___). There, the staff explained, *inter alia*, that Oklahoma's proposed approach raised several concerns, including the creation of a "form of dual regulation," where licensees using the same nuclear material would be subject to differing NRC and state regulations. *Id.* at 4-5 (JA___). NRC staff pointed out that this approach would cause "confusion and duplication." SECY-97-087 at 5 (JA___).

Shieldalloy nevertheless maintains that NRC's refusal to retain jurisdiction over its site was "inconsistent" with its prior handling of Oklahoma's Section 274 agreement. Shieldalloy claims that in rejecting Oklahoma's request to exclude certain facilities from being transferred, NRC never "indicated that it lacked the power to retain authority over individual facilities." Br. at 69. This is not so. In recommending that the Commission deny Oklahoma's request to exclude sites undergoing decommissioning, NRC staff expressly stated: "the Office of the General Counsel has indicated that implementation of this approach may be inconsistent with the Commission's authority under the AEA." SECY-97-087 at 3 (JA__).

In short, NRC's refusal to exclude Shieldalloy's decommissioning site from the New Jersey agreement is consistent with longstanding policy and practice.

E. Shieldalloy Improperly Relies on Extra-Record Evidence

Reliance on extra-record evidence on judicial review is generally prohibited. *See, e.g., Camp v. Pitts*, 411 U.S. 138, 142 (1973); *San Obispo Mothers for Peace v. NRC*, 751 F.2d 1287, 1325 (D.C. Cir. 1984). Throughout its brief, Shieldalloy attempts to

bolster its arguments through liberal citations of material prepared after the September 30, 2009 effective date of the NRC-New Jersey agreement. But material created after an agency's decision by its very nature is not part of the record of the agency decision. See *IMS, P.C. v. Alvarez*, 129 F.3d 618, 623-24 (D.C. Cir. 1997).

Shieldalloy also relies heavily on various material culled from Shieldalloy's license termination proceeding. While this material at least was in existence at the time of the agency decision, we nonetheless oppose including it in the record of this case -- which is a challenge to NRC's agreement-state decision, not to any adjudicatory decision.

Individual pending NRC license adjudications do not bear on NRC's assessment of a proposed Section 274 agreement. While NRC as a general matter is aware of pending licensing proceedings that could be affected by a proposed agreement, its review of a proposed agreement is properly confined to a *programmatic* assessment of a state's laws and regulations. This is consistent with longstanding practice reflected in the 1981 and 1997 policy statements as well as in the detailed procedures set forth in NRC

guidance documents for reviewing agreement-state applications.

See, e.g., SA-700 (JA___), SA-200 (JA___), MD-5.9 (JA___).

In any event, as we have shown above, Shieldalloy's extra-record citations do not support its case that NRC's acceptance of New Jersey's program was unreasonable. Moreover, many of Shieldalloy's extra-record citations are misleading, intended to create the impression that NRC staff was close to approving Shieldalloy's site for license termination under restricted use at the time New Jersey became an agreement state. *See, e.g.*, Br. at 22-23, 51 (NRC staff "repeatedly identified [Shieldalloy's] site as a prime candidate for application of the restricted release option"), 67. This is simply not true.

Indeed, NRC staff had fundamental concerns with Shieldalloy's restricted-use decommissioning plan. For example, an NRC staff request for information on Shieldalloy's plan shows that Shieldalloy had not even satisfied the initial eligibility demonstration for restricted use required under 10 C.F.R. § 20.1403(a). *See Request for Additional Information for Safety Review of Proposed Decommissioning Plan for Shieldalloy Metallurgical*

Corporation, Newfield, New Jersey (License No. SMB-743),
Enclosure, at 19-27 (RAI numbers 27-42) (July 5, 2007) (SA___).

Moreover, at the time NRC entered into the agreement with New Jersey, in September 2009, NRC's Licensing Board remained in the earliest stages of the associated hearing process. As reflected in an August 7, 2009 staff status report, submitted to the Board shortly before New Jersey became an agreement state, NRC staff was nowhere close to completing its review of Shieldalloy's proposed decommissioning plan, let alone approving it. NRC staff reported that neither the safety evaluation report nor the draft environmental impact statement had been completed and, as of that date, the staff had not received Shieldalloy's revised decommissioning plan in response to the staff's earlier request for information. *See NRC Staff's Fourteenth Status Report* (August 7, 2009) at 2 (SA___).³⁰

³⁰ We make reference to documents pertaining to Shieldalloy's license termination proceeding not as record items, which they are not, but solely to highlight misimpressions created by Shieldalloy's own extra-record citations.

CONCLUSION

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

Respectfully submitted,

IGNACIA S. MORENO
Assistant Attorney
General

STEPHEN G. BURNS
General Counsel

/S/ _____
LANE MCFADDEN
Attorney
Appellate Section
Environmental and Natural
Resources Division
U.S. Department of Justice
P.O. Box 23795
Washington, D.C. 20026-3795
(202) 353-9022

/S/ _____
JOHN F. CORDES
Solicitor

/S/ _____
GRACE H. KIM
Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory
Commission
11555 Rockville Pike
Mailstop O-15-D21
Rockville, MD 20852
(301) 415-3605

Dated: June 28, 2010

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

SHIELDALLOY METALLURGICAL)	
CORPORATION)	
)	
Petitioner)	
)	
v.)	No. 09-1268
)	
U.S. NUCLEAR REGULATORY)	
COMMISSION)	
and UNITED STATES OF AMERICA,)	
)	
Respondents.)	
)	

CERTIFICATE OF LENGTH OF BRIEF

I hereby certify that the foregoing final "Brief for Respondent U.S. Nuclear Regulatory Commission and United States of America" contains 13,859 words, excluding the Table of Contents, Table of Authorities, Glossary, and Certificates of Counsel, as counted by the Microsoft Word 2007 program.

Respectfully submitted,

/S/

Grace H. Kim
Senior Attorney

June 28, 2010

CERTIFICATE OF SERVICE

I hereby certify that on June 28, 2010, 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:

Jay E. Silberg
Matias F. Travieso-Diaz
Pillsbury Winthrop Shaw Pittman, LLP
2300 N Street, N.W.
Washington, D.C. 20037

Anne Milgram
Attorney General of New Jersey
Andrew Reese
Deputy Attorney General
New Jersey Office of the Attorney General
Department of Law and Public Safety
25 Market Street
P.O. Box 093
Trenton, NJ 08625-0093

/S/
Grace H. Kim
Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory
Commission
11555 Rockville Pike
MS-15D21
Rockville, MD 20852
(301) 415-3605