

UNITED STATES COURT OF APPEAL FOR THE THIRD CIRCUIT  
DOCKET NOS. 06-5140, 07-1559 AND 07-1756

STATE OF NEW JERSEY,	)	
	)	PETITION FOR REVIEW
Petitioner,	)	OF THE FINAL ISSUANCE
	)	OF NUREG-1757 BY THE
v.	)	UNITED STATES NUCLEAR
	)	REGULATORY COMMISSION
UNITED STATES NUCLEAR REGULATORY	)	
COMMISSION and UNITED STATES	)	
OF AMERICA,	)	
	)	
Respondents.	)	

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REPLY BRIEF ON BEHALF OF PETITIONER,  
STATE OF NEW JERSEY

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POINT I

NRC'S ISSUANCE OF NUREG-1757 IS A FINAL AGENCY ACTION WHICH IS RIPE FOR REVIEW.

The NRC and Shieldalloy argue that NUREG-1757 is not a final agency action. (NRC at 27-33; Shieldalloy at 17-19). However, issuing NUREG-1757 has the effect of a substantive rule or regulation that is made reviewable by the Hobbs Act.

The Hobbs Act provides this Court with jurisdiction to review the following NRC proceedings listed in 42 U.S.C. § 2239(a): "any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license . . . and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licenses." See 28 U.S.C. § 2342(H); 42 U.S.C. § 2239(b).

Courts have found that review under the Hobbs Act is triggered by a NRC policy shift involving an interpretation of its regulation and also by the NRC's determination to adopt a non-binding policy statement when a regulation is arguably required. Citizens Awareness Network, Inc. v. NRC, 59 F.3d 284, 291-92 (1st Cir. 1995). The NRC tries to distinguish Citizens Awareness Network on the basis that it involved a policy statement rather than a guidance document. (NRC at 32). The decision should not be so narrowly construed, however. The court stated that the NRC's policy shift involved

an interpretative policy that provided a great

deal of substantive guidance on the rather ambiguous language of the regulation, by specifically delineating the permissible activities of licensees. We think that the statute's phrase "modification of rules and regulations" encompasses substantive interpretative policy changes like the one involved here.

[Citizens Awareness Network, supra, 59 F.3d at 292.]

The form in which the NRC announces the policy shift is irrelevant; it is the substance and effect of the policy shift that matters.

Just as the policy shift in Citizens Awareness Network was found to be reviewable because it provided substantive guidance on ambiguous regulatory language by specifically delineating licensees' permissible activities, NUREG-1757 also involves a NRC policy shift which specifically delineates how a decommissioning facility can leave its long-lived radioactive waste onsite. Specifically, NUREG-1757 expands the LTR and creates a new license. (See pages 14-20). NUREG-1757 changed NRC policy to allow private ownership of long-lived radioactive waste sites to perpetuity. (State's Merits brief at 13-26). NUREG-1757 also provides a great deal of substantive guidance regarding the 1,000-year modeling and investment rate for financial assurance, both of which are not protective of the public health and safety when applied to long-lived radioactive waste. (Id. at 45-50).

Furthermore, review is permitted under the Hobbs Act since the AEA requires the NRC to promulgate rules or regulations

when providing a new license. See 42 U.S.C. §§ 2232(a), 2233; (see pages 14-20 below). Had the NRC complied with the AEA in proposing the LTC license, there would be no question that the rules or regulations proposing the LTC license would be a "proceeding for the issuance or modification of rules and regulations dealing with the activities of licenses," which this Court has jurisdiction to review. The NRC should not be allowed to elude review by circumventing the AEA's requirements to promulgate rules or regulations.

The NRC argues Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719 (3d Cir. 1989), stands for the proposition that policy statements are not automatically reviewable. (NRC at 32, n.6). The Limerick Court actually stated: "we need not decide whether the Final Policy Statement could have been challenged at the time of issuance." 869 F.2d at 736. The court in Public Citizen v. NRC, 845 F.2d 1105, 1107-08, n.1 (D.C. Cir. 1988), did directly address the question of whether a NRC policy statement is automatically reviewable and held that it was indeed. The court held that any challenge to a NRC policy statement must be made within 60 days of its issuance, as required by the Hobbs Act. Id.

The NRC and Shieldalloy argue NUREG-1757 is not a final agency action because it does not "mark the 'consummation' of the agency's decisionmaking process" and it does not determine "rights or obligations" from which "legal consequences will flow." (NRC at

27-29; Shieldalloy at 17). The NRC also argues that the State's action is not ripe for review because NUREG-1757 is not definitive and lacks the status of law. (NRC at 38). The NRC has certainly consummated its decision making about the LTC license. The NRC Staff opposition brief to the State's hearing request on Shieldalloy's decommissioning plan states: "the Commission has already determined that the LTC license is consistent with the LTR." (State's Opposition Brief, Exhibit 2, page 20). The NRC's Merits Opposition Brief likewise states: "The Commission has approved the POL/LTC as a general matter." (NRC at 45). NUREG-1757 does mark the consummation of NRC's decision making process to change its settled policy to allow a privately owned radioactive waste site that will remain a hazard for perpetuity, (State's Merits brief at 13-26); to require 1,000-year modeling even in cases where the radioactive hazard remains beyond 1,000 years, (State's Merits brief at 45-49); and to allow the facility to assume an 1% investment rate in determining the sufficient level of financial assurance (State's Merits brief at 49-50). Legal consequences flow from NUREG-1757 because it provides new, permissible options for decommissioning facilities containing long-lived radioactive waste. By providing the LTC license, the NRC has created additional rights to potential applicants since the NRC may not deny the LTC license for arbitrary or capricious reasons. Friends of the Earth v. Hintz, 800 F.2d 822, 830-31 (9th Cir.

1986).

POINT II

THE STATE HAS STANDING TO CHALLENGE NUREG-1757.

The NRC and Shieldalloy argue the State lacks standing to challenge NUREG-1757. (NRC at 34-35; Shieldalloy at 20-22). The State does have standing because the NRC's establishment of the LTC license that allows Shieldalloy to leave its radioactive waste onsite and which relies on Shieldalloy to monitor and maintain the site, even though the waste will remain a radioactive hazard for billions of years, creates an injury to the State that is redressable by this Court. The continuing contamination to the State's land and water and the adverse economic affects from Shieldalloy's radioactive waste will continue for an unnecessarily longer period of time unless the Court directs the NRC to comply with the AEA. Finally, the NRC has violated the State's procedural rights by failing to conduct the rulemaking required by the AEA and its failure to prepare an Environmental Impact Statement ("EIS").

"At bottom, 'the gist of the question of standing' is whether petitioners have 'such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends for illumination.'" Massachusetts v. EPA, 127 S. Ct. 1438,

1453 (2007). Standing can be demonstrated where a litigant can show she has "suffered a concrete and particularized injury that is either actual or imminent, that the injury is fairly traceable to the defendant, and that it is likely that a favorable decision will redress that injury." Id. The Supreme Court has also provided an alternative means to establish standing:

However, a litigant to whom Congress has "accorded a procedural right to protect his concrete interests," . . . "can assert that right without meeting all the normal standards for redressability and immediacy." When a litigant is vested with a procedural right, that litigant has standing if there is some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant.

Id. (citations omitted).

In pointing out "States are not normal litigants for the purposes of invoking federal jurisdiction," the Court held that a State has an interest in a clean and healthy environment. Id. at 1454. The reasonable concern of environmental harm is sufficient to demonstrate standing. Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs. (TOC), Inc., 528 U.S. 167, 183-84 (2000). The loss of property value from environmental harm also is sufficient for standing. Society Hill Towers Owners' Ass'n v. Rendell, 210 F.3d 168, 176-77 (3d Cir. 2000).

In Duke Power Co. v. Carolina Env'tl. Study Group, plaintiffs challenged the Price-Anderson Act, which granted partial

tort immunity to nuclear power plants owners. 438 U.S. 59, 67 (1978), cited with approval in Massachusetts, supra, 127 S. Ct. at 1455. The Supreme Court held that plaintiffs had standing to challenge the Act even though the power plants were not yet completed. Duke Power, supra, 438 U.S. at 78. Plaintiffs' injuries included the potential of thermal pollution to lakes and the concern over possible radioactive contamination once the power plants were completed and operating. Id. at 73-74. The Supreme Court found that a favorable ruling holding the Act unconstitutional would redress plaintiffs' injury because there was a "substantial likelihood" that Duke would not be able to construct and operate the power plants but for the partial tort immunity provided by the Act. Id. at 74-75. The Supreme Court nevertheless acknowledged that if the Act was held invalid, Duke might still take the risk of completing and operating the plant or that the government might devise another method of making nuclear power plants viable. Id. at 75-77.

The Supreme Court has stated that an agency's failure to comply with the requirement under the National Environmental Policy Act ("NEPA") to perform an EIS violates a person's procedural rights that causes injury and gives rise to standing. Lujan v. Defenders of Wildlife, 504 U.S. 555, 572-73, n.8 (1992).

One of the State's injuries caused by NUREG-1757 is that it provides the ill-conceived LTC license which will allow the

creation of a permanent radioactive waste site in a populated community of New Jersey that will remain a hazard in perpetuity. (A777-779; A562). The LTC license causes injury to the State because Shieldalloy is not expected to endure to enforce the LTC license to maintain the radioactive waste site, as the NRC itself admits, (NRC at 52), and there is insufficient financial assurance to maintain the site to perpetuity, (State's at 49-50). Furthermore, the transcript of a NRC public meeting in Newfield, NJ supplied by Gloucester County demonstrates the public's reasonable perception of adverse health effects from allowing the radioactive waste to remain onsite permanently. (Exhibit B). A permanent radioactive waste site will have adverse economic effects on the community, including loss of property values, as set forth in the report submitted by Gloucester County. (Exhibit A).<sup>1</sup>

The proposed onsite disposal of Shieldalloy's radioactive waste is "fairly traceable" to the NRC's proposal of the LTC license in NUREG-1757. Just as where the Supreme Court held that passage of the Price-Anderson Act gave standing to plaintiffs' challenge to the Act because its grant of partial tort immunity made it fairly likely Duke Energy would operate two nuclear power plants, 438 U.S. at 75-77, by providing the LTC license in the case

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<sup>1</sup>The County and State are permitted to rely on evidence outside of the record to demonstrate standing. See Northwest Env'tl. Defense Ctr. v. Bonneville Power Admin., 117 F.3d 1520, 1527-28 (9th Cir. 1997).

at bar the NRC has provided Shieldalloy with the opportunity to permanently dispose its radioactive waste onsite. Shieldalloy has for years lobbied the NRC to allow it to leave its radioactive waste onsite. (State's Merits brief at 21-26). The NRC created an interim guidance document especially for Shieldalloy for onsite disposal, even though the LTC license had not yet been proposed to the public. (Id. at 24-25). Shieldalloy's current decommissioning plan relies upon the LTC license, (A560), and the NRC has accepted Shieldalloy's plan for technical review. Because the NRC has made the LTC license available to applicants, it may not deny the LTC license for arbitrary or capricious reasons. Hintz, supra, 800 F.2d at 830-31. Therefore, NRC would be required to grant the LTC license if Shieldalloy has demonstrated it is qualified and meets the conditions necessary for issuance of the license. See id. NUREG-1757's other provisions also make it easier for Shieldalloy to receive NRC approval to leave its radioactive waste onsite. (State's Merits brief at 43-49).

A favorable judicial ruling will likely redress the State's injury. A holding that the LTC license and other NUREG-1757 provisions are arbitrary and capricious or otherwise contrary to law will require Shieldalloy to seek a safer and more permanent means of disposing its radioactive waste than onsite disposal. By requiring the NRC to rescind the LTC license until it conducts rulemaking, the LTC license will be exposed to greater public

scrutiny and force the NRC to conduct a more thoughtful approach to decommissioning facilities containing long-lived radioactive waste.

The State's second injury from Shieldalloy's radioactive waste is the ongoing contamination to the Hudson Branch and soils. (A564-566; State's Opposition Brief at 10-11 and Exhibits referenced therein). The State's third injury is the adverse economic impacts on the community from the perception of contamination from Shieldalloy's decommissioning facility. (Gloucester County Exhibits A & B). The NRC Staff's review of the decommissioning plan is predicted to last until November 2008. The administrative hearing will take place after that review. In the meantime, Shieldalloy's waste will remain exposed to the elements at the facility and continue its adverse environmental and economic impacts. A favorable decision by this Court will require the NRC to reject Shieldalloy's current decommissioning plan because of its reliance on the LTC license. (See A560). The NRC will then know it either needs to initiate rulemaking or inform Shieldalloy the LTC license is not available. If the Court declines to reach the merits of this case, the NRC will continue its review of the decommissioning plan under the assumption that the LTC license is permissible, which will cause further contamination and adverse economic impacts from Shieldalloy's radioactive waste.

The NRC suggests that the State is not interested in stopping the ongoing contamination because the State argued the

Board's deferral of the administrative hearing was appropriate. (NRC at 40-41). The State's letter noted Shieldalloy's decommissioning plan was significantly flawed and the NRC Staff had in March 2007 sent an extensive 13 page Request for Additional Information on the plan to Shieldalloy. (Enclosed as A919). Much of the requested technical information requested by the NRC also was the subject of the State's contentions in its request for a hearing. Id. The State urged the NRC to reject the decommissioning plan because of the plan's significant flaws and so that a more permanent solution to the radioactive waste would be proposed. Id.

The State's fourth injury is violation to its procedural rights because the NRC failed to comply with the AEA requirement to promulgate rules or regulations prior to issuing the LTC license pursuant to 42 U.S.C. §§ 2232(a), 2233. See Massachusetts, supra, 127 S. Ct. at 1453. Because the NRC failed to perform rulemaking prior to providing the LTC license, it bypassed full public scrutiny and failed to adequately consider the public health and safety of future generations.

The NRC also violated the State's procedural rights when it failed to perform an EIS for NUREG-1757. See Lujan, supra, 504 U.S. at 572-73, n.8.

### POINT III

#### THE STATE IS NOT REQUIRED TO EXHAUST ITS ADMINISTRATIVE REMEDIES.

The NRC and Shieldalloy argue the State can challenge NUREG-1757 in the administrative hearing and should therefore be required to exhaust its administrative remedies. (NRC at 35, 42-45; Shieldalloy at 22-23). However, exhaustion is not required where Congress has provided pre-enforcement review or where pursuing administrative remedies would be futile. Shalala v. Illinois Council on Long Term Care, 529 U.S. 1, 13 (2000).

As discussed above at pages 1-4, the Hobbs Act requires the State to file its petition for review within 60 days of the challenged agency action.

Furthermore, the administrative hearing would not redress the State's injury since the State would not be able to challenge the LTC license and other NUREG provisions on the basis that they are arbitrary and capricious and not in accordance with law. The NRC does not permit the challenge of its rules or regulations in administrative proceedings. 10 C.F.R. § 2.335(a). NRC Staff relied on this provision in taking the position that the State's contention in its request for a hearing on the Shieldalloy decommissioning plan that the NUREG and LTC license are inconsistent with the NRC's own regulations. (State's Opposition Brief at Exhibit 2 pages 14, 20). The NRC should be judicially

estopped from taking a contradictory position in this appeal (NRC at 44) just to suit its exhaustion argument. See McNemar v. The Disney Store, 91 F.3d 610, 617 (3d Cir. 1996).

#### POINT IV

##### THE NRC IMPROPERLY DENIED THE STATE'S REQUEST FOR A HEARING.

The NRC argues the State was already given a hearing through notice and comment on NUREG-1757. (NRC at 47). However, the APA requires agencies to provide an adversarial hearing with the opportunity for cross-examination when it is necessary to develop a full record. Citizens Awareness Network, Inc. v. U.S., 391 F.3d 338, 354 (1st Cir. 2004). Also, NRC's own regulations require a hearing involving discovery and an adversarial hearing process. 10 C.F.R. §§ 2.310, 2.700, 2.1200.

POINT V

THE NRC IS REQUIRED TO PROMULGATE RULES OR REGULATIONS BEFORE OFFERING THE LTC LICENSE.

The AEA provides as follows: "Each application for a license hereunder shall be in writing and shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary . . . ." 42 U.S.C. § 2232(a) (emphasis added). The AEA also provides the following: "Each license shall be in such form and contain such terms and conditions as the Commission may, by rule or regulation, prescribe to effectuate the provisions of this chapter . . . ." 42 U.S.C. § 2233 (emphasis added); see also Appalachian Power v. EPA, 208 F.3d 1015, 1028 (D.C. Cir. 2000) (EPA guidance found to expand existing rule requiring rulemaking).

The NRC and Shieldalloy argue the LTC license is not a new license but is instead a continuation of an existing license. (NRC at 49; Shieldalloy at 24-25). Yet, NUREG-1757 itself states that the LTC license is a new type of license:

This new type of possession-only license is referred to in this guidance as a long-term control (LTC) license to clearly distinguish it from the NRC's existing possession-only licenses for storage. The existing possession-only license is typically used at NRC licensed sites in the operating or decommissioning phases. In contrast, the LTC license is for use as an institutional control in the long-term control phase after completion of decommissioning.

[(A284) (emphasis added).]

Furthermore, the LTC license is different procedurally from a materials license. NUREG-1757 states that an entity must apply for the LTC license as part of its decommissioning plan. (A233-242).

The purpose of a LTC license also differs from a source material license. According to NUREG-1757, the LTC license's purpose is to satisfy the LTR requirement for "legally enforceable and durable institutional controls" for a decommissioned facility that does not fully remediate its long-lived radioactive waste. (A227-229). The LTC license would be used to constitute the required institutional controls where the Federal or State government is unwilling to take ownership of the site. Id. Such controls would be required for "as long as needed, but could be permanent for a site with long half-life radionuclides, such as uranium and thorium." (A236). In contrast, the purpose of the source material license is for operating facilities using and possessing source material. 10 C.F.R. § 40.1(a). Shieldalloy is currently licensed to possess source material. (A560). However, its current license lacks terms and conditions concerning the care, monitoring, and maintenance of a permanent radioactive waste site.

The terms and conditions of a LTC license are different from a source material license. The terms and conditions of the LTC license would include allowing the onsite disposal of hazardous

waste containing long-lived nuclides while requiring the licensee to prohibit certain land uses and perform long-term monitoring and maintenance activities. (A235-241). The NRC previously admitted that the LTC license would contain "new conditions" as compared to a licensee's operating or possession only decommissioning license. (A887). The NRC also admitted: "the staff's option for a possession-only license for long-term care is significantly different from the possession-only license for storage that SMC [Shieldalloy] has proposed." (A390). No other NRC license has a similar purpose or contains similar terms or conditions as the LTC license. See 10 C.F.R. Part 40. The LTC license is a significant departure from any license previously provided by the NRC.

No NRC rules or regulations currently provide for a LTC license. Shieldalloy admits that the regulations at 10 C.F.R. Part 40 provide for its current license. (Shieldalloy at 25, n.14). Indeed, the regulations in this Part provide licenses for the active use and possession of source material. 10 C.F.R. § 40.1(a). The regulations in this part also provide licenses for the disposal and long-term care and custody of byproduct<sup>2</sup> and residual

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<sup>2</sup>Byproduct material is defined as (1) any material yielded or made radioactive in the process involving special nuclear material or (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material. § 2014(e). Special nuclear material is defined as plutonium or uranium enriched to a certain level. § 2014(aa). Shieldalloy's radioactive waste is not considered byproduct material because it was processed for its ferrocolumbium, not for its source material (see footnote 4

radioactive material.<sup>3</sup> 10 C.F.R. § 40.1(a). However, the regulations in this part have no provisions for licenses for the disposal or long-term care and custody of source material.<sup>4</sup> Shieldalloy's radioactive waste is source material. (A562). There is no provision in 10 C.F.R. § 40.1 to issue Shieldalloy a license to conduct onsite disposal or long-term care and custody of its radioactive waste. The NRC must promulgate rules or regulations pursuant to 42 U.S.C. §§ 2232(a) and 2233 if it wishes to establish and use LTC licenses.

The NRC and Shieldalloy argue the LTC license is the same as Shieldalloy's current license because it would be amended to become a LTC license. (NRC at 49; Shieldalloy at 25). However, the NRC previously explained that the applicant's current license would be amended to become a new LTC license only for administrative convenience, not because they are the same license. (A887). Just because the NRC will retain Shieldalloy's same license number does

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below). (A560).

<sup>3</sup>Residual radioactive material is defined in this Part as waste subject to the Uranium Mill Tailings Radiation Control Act of 1978 ("UMTRCA"). 10 C.F.R. § 40.4. UMTRCA only applies to processing sites that sold uranium to the Federal government prior to January 1, 1971. 42 U.S.C. §§ 7911(6)(A), 7912(a). Shieldalloy did not extract uranium from ore at its Newfield site, but rather produced ferrocolumbium. (A560).

<sup>4</sup>Source material is defined as uranium or thorium or ores containing one or more of the foregoing materials above certain concentrations. 42 U.S.C. § 2014(z). Shieldalloy's radioactive waste is considered source material since it contains uranium and thorium. (A562).

not mean the licenses are the same. "The agency's label of an agency action, although one factor to be considered, does not control whether the action is in fact a rulemaking." Limerick, supra, 869 F.2d at 734.

Furthermore, the existing regulations contemplate termination of the license of a decommissioned facility under either restricted or unrestricted release, as demonstrated by the applicable Subpart's name, "Radiological Criteria for License Termination." 10 C.F.R. Part 20, Subpart E. The regulations define "decommission" as follows:

to remove a facility or site safely from service and reduce residual radioactivity to a level that permits --

. . .

(2) Release of the property under restricted conditions and termination of the license.

10 C.F.R. §20.1003 (emphasis added).

NUREG-1757 provides the LTC license where State or Federal ownership of a site is not available and would otherwise be required to maintain a site containing long-lived radioactive waste. (A229). In such a case, the facility is not terminating its license but instead is depending on the license to meet the institutional control requirement for restricted conditions under 10 C.F.R. § 20.1403(b). Thus, the facility is not "reduc[ing] residual radioactivity to a level that permits . . . (2) Release of the property under restricted conditions and termination of the

license." 10 C.F.R. §20.1003. NUREG-1757 therefore violates the License Termination Rule.

Shieldalloy seems to argue that the LTR already provides the information an applicant for a LTC license is required to provide and the form, terms and conditions of a LTC license. (Shieldalloy at 24). However, the LTR does not mention the LTC license. In fact, as just discussed, the LTR actually requires termination of the license upon decommissioning, not issuance of a new or continued license.

Concerning the information to be submitted by an applicant, the LTR states: "The licensee has made provisions for legally enforceable institutional controls that provide reasonable assurance that" radiation doses are below a specified level. 10 C.F.R. § 20.1403(b). The LTR also requires the applicant to document the advice sought from the public regarding proposed institutional controls. § 20.1403(d). These provisions fail to mention a license as an institutional control. Paragraph (b) is silent regarding submitting any information. These provisions fail to discuss the submission of information regarding restrictions and permissible uses on present and future land uses, the method to impose these restrictions, the duration of the restrictions, long-term monitoring, long-term maintenance, and how and where records pertaining to the LTC license will be maintained. In contrast, NUREG-1757 provides that this information should be submitted by

the LTC license applicant under the chapter titled "Acceptance Criteria: Information to be Submitted." (A233, A235-237, A241-242).

The LTR does not mention a LTC license. The LTR requires "legally enforceable institutional controls that provide reasonable assurance that" radiation doses are below a specified level. 10 C.F.R. § 20.1403(b). However, this statement does not provide the terms and conditions of the license, it simply provides a regulatory standard.

It is NUREG-1757 which actually provides the terms and conditions of the LTC license: "The conditions of the LTC license would require the licensee to maintain restrictions on site use and any necessary monitoring, maintenance, and reporting." (A227). It goes on to state: "If the LTC license or LA/RC is used, all of the above should be conditions in the LTC license or LA/RC," which include prohibited and permissible access and land uses. (A235-236).

Thus, the NRC has violated the AEA by setting forth the information an applicant shall submit for a LTC license and providing the form, terms, and conditions of a LTC license in the NUREG-1757 guidance document rather than by rules or regulations. See 42 U.S.C. §§ 2232(a), 2233.

POINT VI

THE LTC LICENSE IS ARBITRARY AND CAPRICIOUS.

The LTC license is an ill-conceived, temporary remedy for disposal of radioactive waste that poses a permanent threat to the public health and safety. The NRC should instead require disposal of radioactive waste in a manner that protects the public health and safety.

The NRC argues it will maintain regulatory control of the site once a LTC licensee ceases to exist. (NRC at 52). However, the NRC has no rational basis to wait until the LTC licensee ceases to exist to find a permanent solution to the radioactive waste when it can exercise that authority now while the owner of the site is able to comply. As discussed in the State's Merits Brief at pages 13-16, this was NRC's prior policy. By issuing the ill-conceived LTC license, the public will face a long-lived radioactive waste site in their community with only a temporary owner. Once the owner ceases to exist, the NRC will not be able to enforce its regulatory control.<sup>5</sup>

Furthermore, the NRC's own requirement that institutional controls exist for decommissioned sites released for restricted use

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<sup>5</sup>The NRC also claims it has control over the facility's financial assurance. (NRC at 52). However, the NUREG-1757 allows licensees to post insufficient financial assurance to maintain a site containing long-lived radioactive waste. (State's Merits Brief at 49-50).

demonstrates that the NRC's sole regulatory control over sites is not sufficient to protect the public health and safety. See 10 C.F.R. § 20.1403(b); 62 Fed. Reg. at 39070 (Response to comment B.3.3).

The NRC argues it did not insulate itself when inserting the LTC license and other decommissioning provisions into NUREG-1757. (NRC at 52). Although the proposed changes to NUREG-1757 were posted on the NRC's web site and notice of the web site posting was published in the Federal Register, this is certainly not the same as engaging in rulemaking. When reversing settled NRC policy on such an important subject as long-lived radioactive waste that will affect many generations into the future, the NRC should allow full public scrutiny by conducting rulemaking. The NRC received only twelve comments on the LTC license and other NUREG-1757 revisions. (Public Comments, A410-A457; SECY-06-0143, Enclosure 1, A538). In contrast, when the NRC conducted rulemaking to add a restricted release option to the LTR, the NRC received over 100 comments. 62 Fed. Reg. at 39059.

The NRC also denies that the LTC license is a major policy change. (NRC at 51-54). However, the State's Merits Brief at pages 13-26 has an extensive discussion of the NRC's major policy change. The NRC asserts that the State's brief deliberately replaces the word "or" with the word "and" when describing whether the NRC's past pronouncements required "government ownership and

control" or just "government ownership or control." (NRC at 54 n.12). However, the State's brief does nothing of the sort. For example, page 14 of the State's brief quotes the NRC's response to public comments discussing the institutional controls that may be required where longer-lived radioactive waste is present and will remain a radioactive hazard beyond 100 years. Among the controls listed are "State and local government control or ownership, . . . and Federal ownership, as appropriate." 62 Fed. Reg. at 39070. The State's brief goes on to make the most reasonable interpretation of the NRC's policy based on this language: "the NRC would require Federal ownership and control of the site for the longest-lived nuclides, which would constitute the most durable institutional control." (State's Merits Brief at 14).

Furthermore, it is actually the NRC that is shifting its definitions of the terms "control" and "ownership." After the NRC made the statement regarding institutional controls for waste remaining a radioactive hazard beyond 100 years, the NRC stated in the very next sentence: "Federal control is authorized under Section 151(b) of the National Waste Policy Act (NWPA)." 62 Fed. Reg. at 39070 (emphasis added). Section 151(b) of the NWPA actually provides the U.S. Department of Energy ("DOE") with the authority to "assume title and custody" of certain waste sites. 42 U.S.C. § 10171(b)(1). In contrast, the NRC argues in its brief that "Federal control" does not mean ownership, but can instead mean its

authority through a LTC license. (NRC at 51, 53).

The NRC argues that licensing privately owned radioactive waste sites that remain a hazard to perpetuity is not a major policy reversal based on only three past examples. (NRC at 50). However, the first two examples do not involve sites licensed by the NRC.

The NRC's third example in Wyoming involves a distinguishable case where the radioactive waste is located on property immediately adjacent to property owned by the DOE and involves materials regulated under the Uranium Mill Tailings Radiation Control Act of 1978 ("UMTRCA"). (A501). UMTRCA requires the DOE to take ownership of uranium and thorium recovery facilities unless the NRC determines government ownership is not necessary for the protection of the public health or safety. 42 U.S.C. § 2113(b)(1)(A). Therefore, the DOE would be required to take ownership of the adjacent property in the future if it is necessary to protect the public health or safety. Id.

A. THE 1,000-YEAR MODELING IS ARBITRARY AND CAPRICIOUS.

The NRC and Shieldalloy argue the LTR requires modeling for only 1,000 years and therefore allows the NRC to ignore the health and safety of future generations. (NRC at 55; Shieldalloy at 34). The LTR provides: "When calculating TEDE to the average member

of the critical group the licensee shall determine the peak annual TEDE dose expected within the first 1000 years after decommissioning." 10 C.F.R. § 20.1401(d). However, this regulation does not prevent NRC from requiring additional modeling beyond 1,000 years. In fact, the NRC stated in its response to public comments that the 1,000-year modeling in the LTR is based upon "the nature of the levels of radioactivity at decommissioned sites," which generally contain waste where "large quantities of long-lived radioactive material" are not present and where "residual radioactivity at levels near background are small and peak doses for radionuclides of interest in decommissioning occur within 1000 years." 62 Fed. Reg. at 39083 (Response F.7.3). Thus, the reasonable inference from NRC's response is that where a decommissioning site does contain "large quantities of long-lived radioactive material," 10 C.F.R. § 20.1401(d) does not provide justification for requiring modeling for only 1,000 years.

The NRC seems to interpret its response to public comments as concluding that all decommissioning sites will involve short-lived nuclides, as opposed to high-level waste disposal such as at Yucca Mountain. (NRC at 56-57). However, the NRC misses the obvious example of Shieldalloy's radioactive waste, which will remain a radioactive hazard for billions of years, (A778-779; A562; A777), and which possesses residual radioactivity well above

background levels.<sup>6</sup>

Shieldalloy interprets the NRC's response to comments as requiring modeling beyond 1,000 years "only in situations where large quantities of long-lived, highly radioactive materials are to be stored." (Shieldalloy at 36 (second emphasis added)). However, the NRC's response to comments actually only refers to "large quantities of long-lived radioactive material," not highly radioactive materials. 62 Fed. Reg. at 39083.

Shieldalloy is seeking to dispose of large quantities of radioactive waste, approximately 65,800 cubic meters, (A563), which will remain a radioactive hazard for billions of years. (A777-779; A562). Shieldalloy's radioactive waste constitutes "large quantities of long-lived radioactive material" by any standard. It is unreasonable for the NRC to require modeling for only 1,000 years in such a case.

The NRC distinguishes Nuclear Energy Inst. v. EPA, 373 F.3d 1251, 1273 (D.C. Cir. 2004), on the basis that the statute in that case required the EPA to base its modeling on the recommendation of the National Academy of Science. (NRC at 57). Nevertheless, the court stated that modeling should be based on the

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<sup>6</sup>The Shieldalloy decommissioning plan states the residual radioactivity level for Shieldalloy's slag as 359 pCi/g each of Uranium-238, Thorium-232, and Radium-226 (and associated decay products). (Enclosed as A916). These levels are well above the background level of these radionuclides in native soil of less than 1 pCi/g each. (Enclosed as A915).

particular radioactive waste's peak dosage, and that it is not too difficult to model for 1 million years or the 10,000 years that EPA generally requires for the disposal of other long-lived hazardous materials. Nuclear Energy Inst. supra, 373 F.3d at 1268, 1273.

B. NRC'S RECISION OF THE NUREG-1757 PROVISIONS REGARDING THE DISCOUNT RATE DEMONSTRATES THE ARBITRARY AND CAPRICIOUS NATURE OF NUREG-1757 AND THE NEED FOR RULEMAKING.

Until NRC's August 16, 2007 revision, NUREG-1757 discounted the value of averting radiation doses in the future by 7% for each year during the first 100 years and 3% for each year thereafter. (A312). At these rates, the present value of averting radiation doses approaches zero after just 100 years, which means the NRC ignores the health and safety of residents after just 100 year. (A768). By not considering the health and safety of future residents and then completely rescinding this provision because of this appeal, the NRC has demonstrated it has not adequately considered the implications of licensing a privately held disposal site containing long-lived radioactive waste.

Because the discount rate used by the NRC becomes one of the most important factors in determining if the public health and safety of future generations will be protected by long-lived radioactive waste, the NRC should not be allowed to slip just any discount rate into or out of a guidance document. Rather, the NRC

should be required to conduct rulemaking so the discount rate will receive the most public scrutiny and closest NRC examination possible. Rulemaking for the discount rate is required by the AEA, which requires the NRC to promulgate rules or regulations that set forth the information that an applicant for a license is required to submit. See 42 U.S.C. § 2232(a).

C. THE 1% INVESTMENT RATE IS ARBITRARY AND CAPRICIOUS.

The NRC argues that the 1% investment rate is reasonable because of the same rate for uranium mill tailings sites pursuant to 10 C.F.R. Part 40, Appendix A, Criterion 10. However, the NRC failed to give any justification when adopting this rate for uranium mill tailings sites. See 45 Fed. Reg. 65521 (Oct. 3, 1980); 50 Fed. Reg. 41862 (Oct. 16, 1985). An agency is required to provide a justification for its use of a particular investment rate. See Natural Resources Defense Council v. Herrington, 768 F.2d 1355, 1413-14 (D.C. Cir. 1985).

Shieldalloy argues the NRC can require additional financial assurance to be posted in the future. (Shieldalloy at 42). However, it is quite unlikely that a company will exist, let alone possess the financial means to post additional financial assurance hundreds of years into the future. Allowing an applicant to post insufficient financial assurance at the time of the

decommissioning process nullifies the entire purpose of requiring financial assurance.

The NRC and Shieldalloy argue the State failed to comment on the 1% investment rate in Draft Supplement 1 to NUREG-1757. (NRC 47 n.10; Shieldalloy 41 n.31). However, Kennecott Energy submitted a comment challenging the 1% investment rate. (A423).

#### POINT VII

THE NRC IS REQUIRED TO CONDUCT AN EIS FOR  
NUREG-1757.

The NRC contends no EIS was needed for NUREG-1757 because as a guidance document it is categorically excluded by the NRC's regulations at 10 C.F.R. §51.22(c)(10) from the requirements to prepare an EIS. (NRC at 60). The fact that NRC has established this new license in guidance rather than regulation neither invalidates nor overrides the NEPA statutory requirements for the LTC license in NUREG-1757.

The NRC also asserts that NUREG-1757 does not establish a "program" and that it is legally sufficient that the NRC intends to perform a site-specific EIS for facilities which will be subject to restricted release conditions after decommissioning. (NRC at 61). According to the NRC, the State's argument "presumes there will be a flood of POL/LTCs." (Id. at 61). The State's argument presumes nothing of the kind. The State relies on Sierra Club v.

U.S. Forest Service, 843 F. 2d. 1190, 1191 (9th Cir. 1988), which involved a mere nine timber contracts. The Sierra Club court found NEPA required the agency to look at the cumulative impact of those actions on the environment. Id. A programmatic or "tiered" EIS will be appropriate when the site specific EIS approach will not visit the programmatic issues and alternatives. Nevada v. DOE, 457 F.3d 78, 91-92 (D.C. Cir. 2006). Here New Jersey has raised the concern that the LTC license program will result in the proliferation of smaller disposal sites which present a risk to health and the environment and create perpetual surveillance obligations for the NRC. The NRC should also consider questions such as whether the type of radioactive materials at issue in LTC licenses should be stored collectively or individually, and whether the materials might be more safely stored under particular geographic or climate conditions found in certain regions of the country. The NRC cannot deny that these are legitimate concerns. In connection with its proposal for rules concerning the on-site storage (contrasted with disposal) of low level radioactive waste in 1993 the NRC stated:

Although LLW can be safely stored, NRC believes that the protection of the public health and safety and environment is enhanced by disposal, rather than long term indefinite storage of waste. Disposal of waste in a limited number of facilities, licensed under the requirements of 10 C.F.R. part 61 or compatible agreement State regulations, will provide better protection of the public health and safety and the environment than long-term storage at hundreds or thousands of sites around the country.

[58 Fed. Reg. at 6731.]

The NRC has not even performed an environmental analysis for its proposed action to determine whether there is a significant impact from the LTC license and to consider alternatives.

Finally, the NRC asserts: "if NUREG-1757 receives broader applicably than currently anticipated, there will be time enough for NRC to act." (NRC at 61 (citing Public Citizen v. NRC, 940 F.2d 679, 684 (D.C. Cir. 1991)). In Public Citizen, however, no action under the NRC proposal was planned. Under NUREG-1757 the NRC has accepted for review a decommissioning proposal which would result in the permanent disposal of 65,000 cubic meters of radioactive waste under the LTC license. The NRC's suggestion that there will be "time enough for NRC to act" in the future ignores this reality.<sup>7</sup>

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<sup>7</sup>The need for a programmatic EIS for restricted use disposal was raised in Comments to Draft NUREG-1757. (A416, A424-425; A863, A882). Furthermore, the State is not required to raise with the NRC its failure to conduct an EIS prior to this appeal. Jones v. Gordon, 621 F. Supp. 7, 11 (D. Alaska 1985), aff'd in part and rev'd in part on other grounds, 792 F.2d 821 (9th Cir. 1986).

**CONCLUSION**

The State respectfully requests that the Court hold the LTC license and other provisions of NUREG-1757 invalid for the reasons set forth above.

Respectfully submitted,

ANNE MILGRAM  
ATTORNEY GENERAL OF NEW JERSEY

Dated: September 14, 2007

By: /s/ \_\_\_\_\_  
Andrew D. Reese  
Deputy Attorney General

**CERTIFICATION OF BAR MEMBERSHIP**

I certify that I am a member in good standing of the Bar of the U.S. Court of Appeals for the Third Circuit.

/s/  
Andrew D. Reese  
Deputy Attorney General

Dated: September 14, 2007

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/s/  
Andrew D. Reese  
Deputy Attorney General

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On this day I caused ten copies of the reply brief and four copies of the supplemental appendix to be mailed by UPS Next Day Air mail to the Clerk's Office. On this day I also caused two copies of the reply brief and one copy of the supplemental appendix to be mailed by UPS Next Day Air mail upon the following counsel of record:

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Dated: September 14, 2007

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I certify that the text of the paper copies of this brief and the text of the PDF version of this brief filed electronically with the Court today are identical.

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Deputy Attorney General

Dated: September 14, 2007

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