REPORT OF THE NUCLEAR REGULATION COMMITTEE

This report summarizes significant court decisions, regulatory developments, and legislative actions that have occurred in the area of nuclear energy regulation from January 1 to December 31, 2013.*

I. COURT DECISIONS

A. In re Aiken County

On August 13, 2013, the U.S. Court of Appeals for the District of Columbia Circuit issued a writ of mandamus compelling the U.S. Nuclear Regulatory Commission (NRC or Commission) to continue review of the U.S. Department of Energy's (DOE) construction authorization application for a high-level radioactive waste repository at Yucca Mountain.[1] The court reasoned that in abstaining from exhausting all appropriated funds to review the Yucca Mountain license application, "the Nuclear Regulatory Commission has continued to violate the law governing the Yucca Mountain licensing process."[2]

* This report was assembled by Aaron Weston with assistance from Amanda Mertens Campbell and Scott Vance. The Committee is greatly appreciative of the tremendous assistance provided by Nuclear Energy Institute counsel in identifying and assembling information regarding significant legal developments during 2013.

1. *In re* Aiken County, 725 F.3d 255, 257 (D.C. Cir. 2013).

2. *Id.*

Although the Nuclear Waste Policy Act of 1982 (NWPA) designates Yucca Mountain as the site for the nation's nuclear waste repository and the NRC's Atomic Safety License Board ruled in 2010 that the DOE lacked authority to withdraw its application,[3] the project has reached a political impasse in the Congress,[4] which has not appropriated funds for continued NRC review of the license since fiscal year 2011.[5] In this case, the court rejected the NRC's argument that Congressional intent to no longer appropriate funds in the future could justify an immediate shutdown of a statutory mandate.[6] Moreover, some appropriated funds remain; as the court noted, "the Commission has at least $11.1 million in appropriated funds to continue consideration of the license application in support of its decision to issue the writ."[7]

In 1982, the NWPA ordered the DOE to build and operate a permanent underground nuclear disposal facility.[8] In 2002, Congress designated Yucca Mountain as the nation's first permanent nuclear waste repository.[9] On November 18, 2013, the NRC ordered its staff use its remaining carryover funds to complete the Safety Evaluation Report associated with the DOE's construction authorization application for a high-level radioactive waste repository at Yucca Mountain.[10]

B. NARUC v. DOE

On November 19, 2013, the U.S. Court of Appeals for the District of Columbia Circuit ordered the Secretary of Energy to suspend the nuclear waste fee until the Yucca Mountain repository resumes progress or there exists a viable alternative enabling, for which the Secretary could use as a basis to reassess the fee.[11] This decision follows a previous ruling by the court in 2012,[12] holding that the Secretary of Energy could not abdicate his responsibility to determine the adequacy of the waste fee absent contrary evidence from a challenger but rather has an affirmative obligation to assess the fee's adequacy based on current facts.[13] In response to the petitioners' request in 2012 for a suspension of the fee, the court remanded with instructions that the Secretary conduct a new fee assessment.[14]

3. U.S. Dep't of Energy, 71. N.R.C. 609, 618 (2010).

4. *Aiken County*, 725 F.3d at 259 (observing that the NRC previously speculated that Congress would not find agreement to appropriate additional funds).

5. *Id.* at 257 (noting that Congress appropriated funds in fiscal year 2011 "so that the Commission could conduct the statutorily mandated licensing process").

6. *Id.* at 260.

7. *Id.* at 259.

8. Nuclear Waste Policy Act of 1982, 42 U.S.C. §§10101, 10131-10145 (2012).

9. H.R.J. Res. 87, 107th Cong. (2002).

10. U.S. Dep't of Energy, CLI-13-08, Docket No. 63-001 (N.R.C. Nov. 18, 2013).

11. National Ass'n of Regulatory Util. Comm'rs v. U.S. Dep't of Energy (NARUC v. DOE II), 736 F.3d 517, 521 (D.C. Cir. 2013).

12. National Ass'n of Regulatory Util. Comm'rs v. U.S. Dep't of Energy (NARUC v. DOE I), 680 F.3d 819 (D.C. Cir. 2012).

13. *NARUC v. DOE II*, 736 F.3d at 518.

14. *NARUC v. DOE I*, 680 F.3d at 820.

In its 2013 decision, the court found the Secretary's assessment, ranging from a $2 trillion deficit to a $4.9 trillion surplus, to be "absolutely useless as an analytical technique to be employed to determine . . . the adequacy of the annual fees paid by petitioners."[15] The Respondents argued that the Secretary cannot rely on cost calculations for Yucca Mountain when assessing the fee per the court's direction in 2012 and now would be required to make an assessment based on a yet-to-be-determined hypothetical non-Yucca Mountain site.[16] The court dismissed this argument as a problem of the government's "own making."[17] Moreover, the court declined the government's request for a remand, reasoning that the government may not permissibly force the petitioners to pay the fees until the DOE arrives at a tangible conclusion of how it can permanently deposit nuclear waste, should a future plan require additional funds.[18]

In 2013, the DOE assessed the value of the nuclear waste fund at approximately $28.2 billion, accruing interest of $1.5 billion per year.[19] The aggregate payment by utilities into the nuclear waste fund was approximately $750 million per year.[20]

C. Blue Ridge Environmental Defense League v. NRC

On May 14, 2013, the U.S. Court of Appeals for the District of Columbia Circuit upheld the NRC's decision to reject petitioners' request to reopen the hearing connected with the license for two AP1000 reactors under construction at the Vogtle site in Georgia.[21] This case follows a series of adjudications resulting in the NRC granting the Southern Company (Southern) an early site permit and combined construction and operation licenses (COLs) supported by an environmental impact statement (EIS) for Southern's planned AP1000 reactors (Vogtle Units 3 and 4).[22] The COL application was supported by the initial EIS as well as an updated EIS.[23]

Petitioners sought to reopen the hearing connected with the licensing of Vogtle Units 3 and 4 to litigate issues relating to the nuclear accident at the Fukushima Dai-ichi nuclear complex in Japan.[24] Following the Fukushima incident, the NRC commissioned a task force to evaluate U.S. nuclear regulations and issue recommendations in light of new information learned from the incident.[25] The petitioners contended that the EIS failed to address new and

15. *NARUC v. DOE II*, 736 F.3d at 519.

16. *Id.* at 520.

17. *Id.*

18. *Id.*

19. U.S. DEP'T OF ENERGY, NUCLEAR WASTE FUND FEE ADEQUACY ASSESSMENT REPORT 2 (2013), *available at* http://energy.gov/sites/prod/files/January%2016%202013%20Secretarial%20Determination%20of%20the%20Adequacy%20of%20the%20Nuclear%20Waste%20Fund%20Fee.pdf.

20. *Id.*

21. Blue Ridge Envtl. Def. League v. U.S. Nuclear Regulatory Comm'n, 716 F.3d 183 (D.C. Cir. 2013).

22. *Id.* at 185-88.

23. *Id.* at 186.

24. *Id.*

25. CHARLES MILLER ET AL., U.S. NUCLEAR REGULATORY COMM'N, RECOMMENDATIONS FOR ENHANCING REACTOR SAFETY IN THE 21ST CENTURY: THE NEAR-TERM TASK FORCE REVIEW OF INSIGHTS FROM THE FUKUSHIMA DAI-ICHI ACCIDENT (2011), [hereinafter NARUC RECOMMENDATIONS AFTER

significant environmental implications of the Task Force's recommendations, which the NRC did not find persuasive, holding that petitioners' contentions failed to identify sufficient environmentally significant information to conclude a deficiency in the Vogtle EISs.[26] Petitioners also argued that the NRC abused its discretion in approving the AP1000 reactor design without supplementing its related environmental assessment (EA), which contained information regarding "Severe Accident Mitigation Design Alternatives" applicable to the Vogtle project.[27]

Applying an "arbitrary and capricious" standard of review, the court gave deference to the NRC's decision not to supplement its EA for the AP1000 reactor design or the Vogtle EISs.[28] The court held that the NRC acted reasonably and that the Task Force Report alone did not constitute a "new and significant" circumstance requiring a supplemental EIS because "petitioners failed to indicate any environmental data that were not considered in the EIS."[29] The court also agreed with the NRC's finding that the petitioners did not sufficiently connect the Fukushima accident and the Vogtle site since petitioners did not present evidence or allegations to connect the site to relevant Task Force recommendations.[30]

II. REGULATORY DEVELOPMENTS

A. NRC Order, Regarding the Completion of the Yucca Mountain Safety Evaluation Report

On November 18, 2013, pursuant to the writ of mandamus issued by the U.S. Court of Appeals for the District of Columbia Circuit in *In Re Aiken County*, the NRC ordered its staff use its approximately $11 million[31] in carryover funds to complete the Safety Evaluation Report (SER) associated with the DOE construction authorization application for a high-level radioactive waste repository at Yucca Mountain.[32] The court's order afforded the Commission "broad discretion in choosing a pragmatic course of action to resume the licensing process."[33] Considering that a full adjudication will (in addition to the SER) require a formal hearing and an independent Commission review,[34] the order concluded that completion of the SER represents an incremental approach, "constructive and consistent with the court's decision and the resources available."[35] Moreover, the next step, discovery in the

FUKUSHIMA DAI-ICHI] *available at* http://www.psr.org/assets/pdfs/recommendations-for-enhancing-reactor-safety.pdf.

26. *Blue Ridge*, 716 F.3d at 186.
27. *Id.* at 187.
28. *Id.* at 195-96.
29. *Id.* at 196.
30. *Id.* at 200.
31. U.S. Dep't of Energy, CLI-13-08, Docket No. 63-001, at 10 (N.R.C. Nov. 18, 2013).
32. *Id.* at 1; *see also In re* Aiken County, 725 F.3d 255, 258 (D.C. Cir. 2013).
33. *U.S. Dep't of Energy*, Docket No. 63-001, at 8.
34. *Id.* at 8-9. *See also* 10 C.F.R. §§ 2.101(e)(8), 2.104(a), 2.1023.
35. *U.S. Dep't of Energy*, Docket No. 63-001 at 9.

adjudication, would require a completed SER.[36] The Commission also pointed out that it sought the views of interested parties, including the State of "Nevada (joined by Inyo and Clark Counties, the Timbisha Shoshone Tribe, and the Native Community Action Council), the Nuclear Energy Institute (NEI), [and] Nye County (joined by South Carolina and [the State of] Washington, Aiken County, and NARUC)", among others, all of whom requested that NRC staff complete the SER (subject to some differences regarding sequencing).[37]

The Commission also requested that the DOE prepare a supplemental EIS, as recommended by NRC staff, in order to complete a full National Environmental Policy Act (NEPA) review.[38] The justification for the supplemental EIS originates from a 2008 NRC report, as noted in the order, "the [NRC] Staff concluded that the discussion of certain environmental impacts in the DOE's EISs, particularly the potential impacts of the proposal on groundwater and from surface discharges of groundwater, was insufficient and that supplementation was required to ensure adequacy of the EISs."[39] According to the order, the DOE represented in August 2013 that it had approximately $15.4 million in unobligated carryover funds and an additional $18.1 million in obligated carryover funds, all of which could be used to support the licensing proceeding (the $18.1 million requiring de-obligation).[40] The Commission expects that both the NRC staff and the DOE can accomplish the tasks set before them with the currently available funds mentioned above.[41] Commissioner Apostolakis recused himself from the adjudication.[42]

B. NRC Order, Regarding Hardened Containment Venting Systems

1. Background

After the nuclear accident at Fukushima Dai-ichi in Japan, the NRC established the Near Term Task Force (NTTF) to develop mitigation strategies for similar events.[43] The NTTF developed a comprehensive set of recommendations, documented in SECY–11–0093, "Recommendations for Enhancing Reactor Safety in the 21st Century," dated July 12, 2011.[44]

36. *Id.*

37. *Id.* at 4-5. The complete list of participants included the following:

> The DOE, the NRC Staff, Nevada (joined by Inyo and Clark Counties, the Timbisha Shoshone Tribe, and the Native Community Action Council), the Nuclear Energy Institute (NEI), Nye County (joined by South Carolina and Washington, Aiken County, and NARUC), the Four Nevada Counties, White Pine County, the Prairie Island Indian Community (PIIC), Lincoln County, and Eureka County.

Id.

38. *Id.* at 2.

39. *Id.* at 14 (citing U.S. NUCLEAR REGULATORY COMM'N, U.S. NUCLEAR REGULATORY COMMISSION STAFF'S ADOPTION DETERMINATION REPORT FOR THE U.S. DEPARTMENT OF ENERGY'S ENVIRONMENTAL IMPACT STATEMENTS FOR THE PROPOSED GEOLOGICAL REPOSITORY AT YUCCA MOUNTAIN § 3.2.1.4.2 (2008), *available at* http://www.nrc.gov/waste/hlw-disposal/yucca-lic-app/nrc-eis-adr.pdf).

40. *Id.* at 11.

41. *Id.* at 9.

42. Notice of Recusal, *U.S. Dep't of Energy*, Docket No. 63-001 (N.R.C. July 15, 2010).

43. Order Modifying Licenses with Regard to Reliable Hardened Containment Vents, 77 Fed. Reg. 16,098, 16,099 (N.R.C. Mar. 19, 2012).

44. NARUC RECOMMENDATIONS AFTER FUKUSHIMA DAI-ICHI, *supra* note 26.

The NTTF examined, among other items, the use of hardened vents at reactors with Fukushima-style containment buildings.[45] The Fukushima events illustrated the importance of reliable, hardened vents to remove the heat and pressure generated within the containment structure when the reactor's normal cooling mechanism is disabled.[46] While hardened vents have been in use at U.S. boiling water reactors (BWRs) with Mark I containments for several years, BWRs with Mark II containments were not required to have hardened vents installed.[47] In addition, significant variations existed in the reliability of the hardened vents in use.[48]

On August 19, 2011, the Commission responded to the report from the NTTF by directing the NRC staff to review and assess the NTTF recommendations and make recommendations to the NRC regarding the implementation and prioritization of the NTTF recommendations.[49] Subsequently, on March 12, 2012, the NRC ordered all U.S. nuclear power plants with Mark I and Mark II containment designs to install a hardened containment venting system (HCVS) to remove heat and pressure before potential damage to a reactor core occurs.[50]

2. Recent Developments

On November 26, 2012, the staff provided the Commission with "information, options, and a recommendation . . . to impose new requirements for containment venting systems for [BWRs] with Mark I and Mark II containments."[51] In response, on March 19, 2013, the Commission "approved . . . modification to Order EA-12-50."[52] The modified Order required affected licensees "to upgrade or replace the reliable hardened vents required by Order EA-12-050, with a containment venting system designed and installed to remain functional during severe accident conditions."[53] In addition, the Commission directed the NRC staff to develop a technical basis and a rulemaking for filtering strategies, taking into consideration Option 3

45. *Id.* at 39-41.

46. *Id.* at 41.

47. Order Modifying Licenses with Regard to Reliable Hardened Containment Vents, 77 Fed. Reg. at 16,099.

48. *Id.*

49. NRC Staff Requirement Memorandum, SECY–11–0093—Near-Term Report and Recommendations for Agency Actions Following the Events in Japan (Aug. 19, 2011), *available at* http://www.nrc.gov/reading-rm/doc-collections/commission/srm/2011/2011-0093srm.pdf (ADAMS Accession No. ML112310021).

50. *See generally* Order Modifying Licenses with Regard to Reliable Hardened Containment Vents, 77 Fed. Reg. 16,098 (N.R.C. Mar. 19, 2012) (general discussion of Mark I and Mark II containment designs and installation of hardened containment venting systems).

51. Memorandum from R. W. Borchardt, Exec. Dir. of Operations, NRC, to NRC Comm'rs, re Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments (Nov. 26, 2012), *available at* http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2012/2012-0157scy.pdf (ADAMS Accession No. ML12345A030).

52. NRC Staff Requirement Memorandum, SECY-12-0157—Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments (Nov. 26, 2012), *available at* http://www.nrc.gov/reading-rm/doc-collections/commission/srm/2012/2012-0157srm.pdf (ADAMS Accession No. ML12345A030).

53. *Id.*

("engineered filtered containment venting system") and Option 4 ("confinement strategies").[54]

The NRC staff was directed to complete the technical evaluation in support of the rulemaking, including "engag[ing] a diversity of stakeholders," within one year (i.e., March 2014).[55] The Commission also provided guidance to the NRC staff that the technical evaluation should "assume that the benefits of [severe accident capable hardened vents] accrue equally to engineered filters and to filtration strategies."[56] The NRC staff was further directed to "evaluate a variety of performance criteria, such as a decontamination factor, equipment and procedure availability similar to those required to implement 10 CFR 50.54(hh), or other measures that may be developed during the stakeholder engagement."[57] The NRC staff was directed to submit a proposed rule to the Commission for its review and approval by March 2015 and complete the rulemaking by March 2017.[58]

3. Issuance of Order EA-13-109

Less than three months later, on June 6, 2013, the NRC issued Order EA-13-109, applicable to all BWRs with Mark I and Mark II containments, finalizing the requirements for the use of reliable HCVS capable of operation under severe accident conditions.[59] Order EA-13-109 superseded Order EA-12-050, including applicable schedule deadlines for additional submittals or implementation.[60]

Following the Commission's direction in the staff requirements memorandum (SRM) for SECY-12-0157,[61] EA-13-109 reflects the requirements of Order EA-12-050, with the additional requirements to ensure that venting functions are available during conditions including "elevated temperatures, pressures, radiation levels, and combustible gas [e.g., hydrogen and carbon monoxide] concentrations . . . associated with accidents involving extensive core damage, including accidents involving a breach of the reactor vessel by molten core debris."[62] Order EA-13-109 leaves "the remaining issues related to filtering strategies and severe accident management of BWR Mark I and II containments [to] be addressed through the rulemaking process, as directed by the Commission in its SRM for SECY-12-0157."[63]

In Order EA-13-109, the Commission determined that modifications to BWR facilities with Mark I and Mark II containments were "needed to protect health and to minimize danger to life or property[,] because they will give

54. *Id.*

55. *Id.*

56. *Id.*

57. *Id.*

58. *Id.*

59. Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, 78 Fed. Reg. 35,990 (N.R.C. June 14, 2013).

60. *Id.* at 35,990-91.

61. NRC Staff Requirement Memorandum, SECY-12-0157, *supra* note 53.

62. Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, 78 Fed. Reg. at 35,990.

63. *Id.* at 35,991.

licensees greater capabilities to respond to severe accidents and limit the uncontrolled release of radioactive materials."[64] Therefore, the NRC determined that the plant modifications and procedure changes required to provide a reliable hardened venting system that is capable of performing under severe accident conditions is a cost-justified substantial safety improvement.[65] Order EA-13-109 "requires Mark I and Mark II containments to have a wetwell venting system that remains functional during severe accident conditions."[66] Order EA-13-109 "also requires licensees with Mark I and Mark II containments to either install a severe accident capable drywell venting system or develop and implement a reliable containment venting strategy that makes it unlikely that a licensee would need to vent from the containment drywell during severe accident conditions."[67]

The Commission adopted a two-phased approach to implementation of Order EA-13-109:

- "Phase 1 involves upgrading the venting capabilities from the containment wetwell to provide reliable, severe accident capable hardened vents to assist in preventing core damage and, if necessary, to provide venting capability during severe accident conditions.
- Phase 2 involves providing additional protections for severe accident conditions through installation of a reliable, severe accident capable drywell vent system or the development of a reliable containment venting strategy that makes it unlikely that a licensee would need to vent from the containment drywell during severe accident conditions."[68]

The Commission directed that the NRC staff work with stakeholders to develop detailed guidance on specific capabilities, such as to define functional requirements (e.g., equipment specifications) and acceptable approaches to technical requirements (such as designing the containment venting system to minimize the reliance on operator actions).[69] At the time Order EA-13-109 was issued, the NRC anticipated that the final interim staff guidance (ISG) for Phase 1 would be issued by October 31, 2013.[70] NRC staff worked with the Nuclear Energy Institute to develop this ISG, and on October 18, the NRC staff recommended that the ISG be issued.[71] At the time EA-13-109 was issued, the

64. *Id*.

65. *Id.*

66. *Id.* at 35,992.

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

71. Letter from J. Sam Armijo, Chairman, Advisory Comm. on Reactor Safeguards, to Mark A. Satorius, Exec. Dir. for Operations, NRC, re Interim Staff Guidance JLD-ISG-2013-02, Compliance with Order EA-13-109, Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions (Oct. 18, 2013), *available at* http://pbadupws.nrc.gov/docs/ML1328/ML13280A246.pdf (ADAMS Accession No. ML13280A246).

NRC further anticipated that a final ISG for Phase 2 will be issued by April 30, 2015.[72]

Upon issuance of Order EA-13-109, the Commission ordered that all affected licensees promptly start implementation of the HCVS requirements contained therein upon issuance of the associated final ISG for each phase, and complete the two phases of implementation by the following dates:

- "Phase 1 (severe accident capable wetwell venting system): no later than startup from the second refueling outage that begins after June 30, 2014, or June 30, 2018, whichever comes first; [and]
- Phase 2, (severe accident capable drywall venting system): no later than startup from the first refueling outage that begins after June 30, 2017, or June 30, 2019, whichever comes first."[73]

Numerous additional requirements and deadlines were established in Order EA-13-109, including a timeframe in which licensees are to inform the NRC if they will be unable to comply with the requirements of the Order,[74] submittal of an "overall integrated plan" for compliance with Phase I of the Order by June 30, 2014,[75] and a similar "overall integrated plan" for compliance with Phase II of the Order by December 31, 2015.[76] Licensees are also required to provide a status report to the Commission every six months "following [the] submittal of the Phase I integrated plan," as well as provide the Commission with a report "when full compliance with the requirements for Phase 1 and Phase 2 . . . are achieved."[77]

III. LEGISLATIVE DEVELOPMENTS

A. S. 1240, The Nuclear Waste Administration Act of 2013

1. Introduction & Procedure

In between the announced closure of the San Onofre Nuclear Generating Station on June 7, 2013,[78] and the August 2013 announced closure of the Vermont Yankee Nuclear Reactor,[79] on June 27, 2013, "four senior U.S. senators introduced a bipartisan, comprehensive plan for safeguarding and permanently disposing of tens of thousands of tons of [spent nuclear fuel and other radioactive waste (collectively, "nuclear waste")] currently accumulating at sites

72. Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, 78 Fed. Reg. at 35,992.

73. *Id.*

74. *Id.*

75. *Id.* at 35,993.

76. *Id.*

77. *Id.*

78. Press Release, S. Cal. Edison, Southern California Edison Announces Plans to Retire San Onofre Nuclear Generating Station (June 7, 2013), *available at* http://www.songscommunity.com/news2013/news060713.asp.

79. Press Release, Entergy, Entergy to Close, Decommission Vermont Yankee (Aug. 27, 2013), *available at* http://www.entergy.com/news_room/newsrelease.aspx?NR_ID=2769.

dispersed across the country."[80] "Senators Dianne Feinstein, D-Calif., and Lamar Alexander, R-Tenn.—the leaders of the Senate Appropriations Subcommittee on Energy and Water Development—and Energy and Natural Resources Committee Chairman Ron Wyden, D-Ore., and Ranking Member Lisa Murkowski, R-Alaska, collaborated on the proposal, the Nuclear Waste Administration Act of 2013 [Senate Bill 1240 (S. 1240)]."[81] The seventy-one-page bill was referred to the Senate Committee on Energy and Natural Resources.[82]

The introduced S. 1240 updated an April 25, 2013, draft circulated by the four senators with the intent to spur dialogue.[83] The senators expressly requested comments and suggestions on the draft bill.[84] In addition, the senators posed eight questions on which they sought comments. Between April and June, interested parties submitted more than 2,500 public comments on the measure, instructing changes made to the text ultimately introduced as S. 1240.[85]

On July 30, 2013, the Senate Committee on Energy and Natural Resources held a two-panel hearing on S. 1240.[86] The Secretary of Energy Ernest Moniz spoke on the first panel. The second panel comprised a sampling from the legislative, regulatory, environmental, industry, and grassroots communities:

- Sally Young Jameson, Maryland Delegate, National Conference of State Legislatures;
- Joe Garcia, National Congress of American Indians;
- David Garcia, National Association of Regulatory Utility Commissioners;
- Chuck Smith, Energy Communities Alliance;
- Marvin Fertel, Nuclear Energy Institute;
- Geoffrey Fettus, Natural Resources Defense Council; and
- David Lochbaum, Union of Concerned Scientists.[87]

While the legislation has drawn bipartisan support,[88] the nuclear community as well as the House of Representatives remains split in their respective

80. Press Release, U.S. Senate Comm. on Energy & Natural Res., Senators Introduce Bipartisan, Comprehensive Nuclear Waste Legislation (June 27, 2013) [hereinafter Press Release, Bipartisan Nuclear Waste Legislation], *available at* http://www.energy.senate.gov/public/index.cfm/2013/6/senators-introduce-bipartisan-comprehensive-nuclear-waste-legislation.

81. *Id.*

82. S. 1240, 113th Cong. (2013).

83. *Id.*

84. *Nuclear Waste Administration Act of 2013 Request for Feedback*, U.S. SENATE COMMITTEE ENERGY & NAT. RESOURCES, http://www.energy.senate.gov/public/index.cfm/nuclear-waste-bill-feedback (last visited Apr. 26, 2014) (comment period closed on May 24, 2013).

85. Press Release, Bipartisan Nuclear Waste Legislation, *supra* note 81.

86. *Nuclear Waste: Hearing on S. 1240 Before the S. Comm. on Energy & Natural Res.*, 113th Cong. (2013).

87. *Id.*

88. Press Release, U.S. Senate Comm. on Energy & Natural Res., Energy Committee Passes 12 Public Land Bills (Nov. 21, 2013), *available at* http://www.energy.senate.gov/public/index.cfm/2013/11/energy-committee-passes-12-public-lands-bills.

support.[89] Because of this split and unyielding support, there is currently no clear path forward for this legislation to become law.[90]

2. Historical Context

The United States currently stores more than 65,000 tons of spent nuclear fuel throughout the country at roughly seventy–five operating and shuttered reactor sites.[91] The current nuclear operating fleet produces more than 2,000 tons of spent nuclear fuel each year.[92] The DOE is storing an additional 2,500 tons of spent fuel and volumes of radioactive nuclear waste, mostly from past weapons programs, at a handful of government-owned sites.[93]

Despite the fact that Yucca Mountain—federal land adjacent to the Nevada Test Site in Nye County, Nevada—has been legislatively designated as the United States' long term, deep geological repository storage facility for nuclear waste,[94] political pressures combined with regulatory and funding fits and starts has left this long-term solution unrealized to date.[95] Pursuant to the NWPA,[96] the DOE—which has collected an estimated $35 billion in nuclear waste fund fees since 1982—"should have already moved more than 28,000 MTU of [spent nuclear] fuel from [the varied] sites [across the country] and should be moving an additional 3,000 MTU every year."[97] In November 2013, a federal appeals court ordered the DOE to stop collecting the roughly $750 million a year in nuclear waste storage fees.[98]

To address the complex issue of storage of nuclear waste, in January 2010, President Obama directed the DOE to convene a Blue Ribbon Commission on America's Nuclear Future (BRC).[99] The fifteen-member BRC, co-chaired by

89. Press Release, House Comm. on Energy & Commerce, Subcommittee Presses DOE Secretary Moniz on Strategy for Nuclear Waste Storage (July 31, 2013), *available at* http://energycommerce.house.gov/press-release/subcommittee-presses-doe-secretary-moniz-strategy-nuclear-waste-storage.

90. Karoun Demirjian, *Yucca Mountain Debate Returns to Capitol Hill*, LAS VEGAS SUN (Aug. 2, 2013, 2:00 AM), http://www.lasvegassun.com/news/2013/aug/02/yucca-mountain-debate-returns-capitol-hill/.

91. Brian Wingfield, *Nuclear Trashmen Gain from Record U.S. Reactor Shutdowns*, BLOOMBERG (Sept. 4, 2013), http://www.bloomberg.com/news/2013-09-04/nuclear-trashmen-gain-from-record-u-s-reactor-shutdowns.html.

92. Miguel Llanos, *Nuclear Headache: What to do with 65,000 Tons of Spent Fuel?*, NBC NEWS (June 8, 2012), http://usnews.nbcnews.com/_news/2012/06/08/12127578-nuclear-headache-what-to-do-with-65000-tons-of-spent-fuel?lite.

93. *U.S. Nuclear Fuel Cycle*, WORLD NUCLEAR ASS'N, http://www.world-nuclear.org/info/Country-Profiles/Countries-T-Z/USA--Nuclear-Fuel-Cycle/ (last updated Apr. 2014).

94. Nuclear Waste Policy Act of 1982, 42 U.S.C. §§ 10101, 10172 (2012).

95. Mayra Cuevas & Chelsea J. Carter, *Court to NRC: Make Decision on Nuclear Waste Storage at Yucca Mountain*, CNN (Aug. 13, 2013), http://www.cnn.com/2013/08/13/us/nevada-yucca-mountain-order.

96. 42 U.S.C. §§ 10101-10270.

97. *Nuclear Waste: Hearing on S. 1240 Before the S. Comm. on Energy & Natural Resources*, 113th Cong. (2013) (statement of Marvin S. Fertel, President & CEO, Nuclear Energy Inst.).

98. NARUC v. DOE II, 736 F.3d 517, 521 (D.C. Cir. 2013).

99. BLUE RIBBON COMM'N, http://brc.gov/ (last visited Feb. 1, 2014).

> The BRC was established in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App. 2, and as directed by the President's Memorandum for the Secretary of Energy dated January 29, 2010: Blue Ribbon Commission on America's Nuclear Future. This charter establishes the Commission under the authority of the U.S. Department of Energy (DOE).

former Congressman Lee Hamilton and former National Security Advisor Brent Scowcroft, was tasked with conducting a comprehensive review of policies for managing the back end of the nuclear fuel cycle and to recommending a new plan.[100]

The BRC formed three subcommittees: one focused on Reactor and Fuel Cycle Technology, a second on issues of Transportation and Storage, and a third focused on Disposal.[101] Each subcommittee addressed cross-cutting questions related to governance and institutional arrangements.[102]

Nearly two years later, on January 26, 2012, the BRC submitted its final report, setting forth a series of recommendations for creating a safe, long term solution for managing and disposing of the nation's nuclear waste.[103] Among other recommendations, the report encouraged immediate efforts to develop at least one geologic disposal facility and at least one consolidated storage facility, plus preparations for the eventual subsequent large-scale transport of nuclear waste from current storage sites to those new facilities.[104]

3. Essential Elements of S. 1240

S. 1240 implements the recommendations of the BRC. It establishes a new nuclear waste administration and creates a consent-based process for siting nuclear waste facilities.[105] It also enables the federal government to fulfill its commitment to managing commercial nuclear spent fuel, limiting the costly government liability for failing to dispose of commercial nuclear spent fuel.[106]

a. A Nuclear Waste Administration

With the aim of discharging the federal government's responsibility for the long-term disposal of nuclear waste, Title 2 of S. 1240 establishes a new independent agency, headed by a single Administrator, appointed by the president and subject to confirmation by the Senate, to manage the nuclear waste program in place of the DOE.[107] It also establishes an Oversight Board—composed of five members with staggered terms, appointed by the president and confirmed by the Senate—to oversee the new agency's administration of the program.[108]

Id.

100. Press Release, Blue Ribbon Comm'n, Blue Ribbon Commission on America's Nuclear Future Issues Final Report to Secretary of Energy (Jan. 26, 2012) [hereinafter Press Release, BRC Final Report], *available at* http://cybercemetery.unt.edu/archive/brc/20120620220827/http://brc.gov/index.php?q=announcement/brc-releases-their-final-report.

101. *Subcommittees*, BLUE RIBBON COMM'N, http://brc.gov/ (last visited Feb. 1, 2014).

102. *Id.*

103. Press Release, BRC Final Report, *supra* note 101.

104. *Id.*

105. S. 1240, 113th Cong. § 102 (2013).

106. *Id.*

107. *Id.* § 201.

108. *Id.* § 205.

b. Siting of Pilot Consolidated Storage Facilities and Permanent Repositories

In addition to requiring plans for one or more permanent repositories within ten years of its passage,[109] title 3 of S. 1240 directs the new agency to build one or more pilot spent fuel storage facilities to store spent fuel from decommissioned nuclear power plants and emergency shipments from operating plants.[110] The three tenets of the pilot program are: (1) to obtain a license from the Nuclear Regulatory Commission and any other Federal or State entity that is necessary for the construction of one or more storage facilities; (2) to demonstrate the safe transportation of spent nuclear fuel and high-level radioactive waste, as applicable; and (3) to demonstrate the safe storage of spent nuclear and high-level radioactive waste, as applicable, at the one or more storage facilities, pending the construction and operation of deep geologic disposal capacity for the permanent disposal of the spent nuclear fuel or high-level radioactive waste.[111]

S. 1240 authorizes the Administrator to begin siting a pilot storage facility for priority waste immediately.[112] S. 1240 provides that for ten years following enactment, the Administrator may continue to site new storage facilities for non-priority waste as long as funds have been obligated to carry out a parallel repository program.[113] After ten years, the Administrator may site new storage facilities only if at least one site has been selected for evaluation as a potential location for a long-term repository.[114]

c. Nuclear Waste Fund

Title 4 of S. 1240 establishes a new Working Capital Fund in the Treasury, into which the fees collected from the utilities would be deposited.[115] These funds will be available to the Administration without further appropriation.[116] Fees already collected remain in the Nuclear Waste Fund, where they will continue to be subject to appropriation.[117]

109. *Id.* §§ 303-305.
110. *Id.* § 303.
111. *Id.* § 305.
112. *Id.* § 306.
113. *Id.* § 305.
114. *Id.*
115. *Id.* § 401.
116. *Id.*
117. *Id.*

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