

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

ATOMIC SAFETY AND LICENSING BOARD

<hr/>)	
In the Matter of)	Docket Nos.
)	50-247-LR
Entergy Nuclear Operations, Inc.)	and 50-286-LR
(Indian Point Nuclear Generating)	
Units 2 and 3))	October 3, 2014
<hr/>)	

**RIVERKEEPER CONSOLIDATED MOTION FOR LEAVE TO FILE A
NEW CONTENTION AND NEW CONTENTION RK-10 CONCERNING THE
ABSENCE OF REQUIRED WASTE CONFIDENCE SAFETY FINDINGS**

I. INTRODUCTION

Pursuant to 10 C.F.R. §§ 2.309(c), 2.309(f)(1), and 2.309(f)(2), Riverkeeper, Inc. (“Riverkeeper”) seeks leave to file a new contention that challenges the failure of the Nuclear Regulatory Commission (the “NRC”) to make and include Atomic Energy Act (“AEA”) required safety findings regarding the feasibility and capacity for spent fuel disposal in the license renewal proceeding for the Indian Point nuclear power plant. Such findings are a necessary condition precedent to making a decision on Indian Point’s license renewal proceeding. The contention is based on the NRC’s removal of AEA required safety findings in its recently issued rule titled, “Continued Storage of Spent Nuclear Fuel” (“Continued Storage Rule”) and accompanying “Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel” (Continued Storage GEIS”).¹ Because the NRC no longer makes generic safety findings concerning the feasibility and capacity of spent fuel disposal in the Continued Storage Rule (previously, the Waste Confidence Decision), the NRC must now make these findings in

¹ 79 Fed. Reg. 56,238 (Sept. 19, 2014) and 79 Fed. Reg. 56,263 (Sept. 19, 2014).

each licensing proceeding, including in the Indian Point license renewal proceeding. At this time, no such safety findings have been made in the license renewal proceeding for Indian Point Units 2 and 3. Therefore, Riverkeeper seeks leave to bring the instant contention.

II. FACTUAL BACKGROUND

The NRC has consistently interpreted the AEA to require that the agency make waste confidence safety findings regarding the safety of ultimate spent fuel disposal before issuing a reactor license. As the NRC stated in 1977, it “would not continue to license reactors if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely.”² Since 1984, the NRC also has repeatedly issued technical safety findings regarding the feasibility and capacity of spent fuel repositories.³ These findings were supported by a technical analysis of the feasibility and capacity of a repository, including geologic characteristics, waste packaging, and engineered safety barriers.⁴ In compliance with a U.S. Court of Appeals ruling in *Minnesota v. NRC*, 602 F.2d 412, 418-19 (D.C. Cir. 1979), the NRC used notice and comment rulemaking procedures to promulgate the Waste Confidence Decision (“WCD”) and its revisions.

As stated most recently in the 2010 WCD Update, the NRC’s relevant safety findings were as follows:

Finding 1: The Commission finds reasonable assurance that safe disposal of high-level radioactive waste and spent fuel in a mined geologic repository is technically feasible.⁵

² Denial of Petition for Rulemaking, 42 Fed. Reg. 34,391, 34,393 (July 5, 1977).

³ Waste Confidence Decision, 49 Fed. Reg. 34,658 (Aug. 31, 1984) (“1984 WCD”); Waste Confidence Decision Review, 55 Fed. Reg. 38,474 (Sept. 18, 1990) (“1990 Revised WCD”); Waste Confidence Decision Update, 75 Fed. Reg. 81,037 (Dec. 23, 2010) (“2010 WCD Update”). The 2010 WCD Update was vacated by the U.S. Court of Appeals in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012).

⁴ See, e.g., 2010 WCD, 75 Fed. Reg. at 81,058-59.

⁵ Waste Confidence Decision Update, 75 Fed. Reg. 81,037, 81,058 (Dec. 23, 2010) (vacated, *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012)).

Finding 2: The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary.⁶

The 2010 WCD Update, however, was vacated by the U.S. Court of Appeals in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012), for failure to comply with the National Environmental Policy Act (“NEPA”).⁷

In the Continued Storage Rule recently issued by the NRC on remand from the Court’s decision, the NRC chose not to replace the vacated Waste Confidence findings, stating instead that such findings are not necessary for the licensing of reactors.⁸

III. CONTENTION

A. Statement of Contention

10 C.F.R. § 2.309(f)(1)(i) requires that proffered contentions include “a specific statement of the issue of law or fact to be raised or controverted.” Riverkeeper Contention RK-10 asserts the following: The NRC lacks a lawful basis under the Atomic Energy Act (“AEA”) for renewing the operating licenses of Indian Point Units 2 and 3 in this proceeding because it has not made currently valid findings of confidence or reasonable assurance that the hundreds of tons of highly radioactive spent fuel that will be generated during the 20-year license renewal terms proposed in this proceeding for Indian Point nuclear Units 2 and 3 can be safely disposed of in a repository. The NRC must make and support these predictive safety findings in every

⁶ *Id.*; 75 Fed. Reg. at 81,037. The 2010 WCD Update also contained three other Findings related to the safety of spent fuel storage pending disposal (as opposed to the safety of spent fuel disposal itself). Without conceding the validity of these storage-related findings, they are not challenged in the attached Contention or the suspension petition referenced *infra* § V.

⁷ 42 U.S.C. §§ 4321-4370h.

⁸ 79 Fed. Reg. at 56,254. *See also* NUREG-2157, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel Rule at D-30 (Sept. 2014).

⁹ 42 U.S.C. § 2011, et seq.

reactor licensing decision, including in the Indian Point license renewal proceeding decision, in order to fulfill its statutory obligation under the AEA to protect public health and safety from the risks posed by irradiated reactor fuel generated during the reactor's license term.¹⁰

B. Statement of Basis for the Contention

Riverkeeper hereby offers the following “brief explanation of the basis for the contention,” in accordance with 10 C.F.R. § 2.309(f)(1)(ii):

The NRC historically made generic findings regarding the safety of spent fuel disposal in its 1984 Waste Confidence Decision (“WCD”), as updated in 1990 and 2010.¹¹ As stated most recently in the 2010 WCD Update, the relevant findings were as follows:

Finding 1: The Commission finds reasonable assurance that safe disposal of high-level radioactive waste and spent fuel in a mined geologic repository is technically feasible.¹²

Finding 2: The Commission finds reasonable assurance that sufficient mined geologic repository capacity will be available to dispose of the commercial high-level radioactive waste and spent fuel generated in any reactor when necessary.¹³

The 2010 WCD Update, however, was vacated by the U.S. Court of Appeals in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012), for failure to comply with the National Environmental Policy Act (“NEPA”).¹⁴ In the final rule recently issued by the NRC, on September 19, 2014, on

¹⁰ See Atomic Energy Act Section 182, 42 U.S.C. § 2232; *Union of Concerned Scientists v. NRC*, 824 F.2d 108 (D.C. Cir. 1987); and other authorities cited in Section B.1 below.

¹¹ Waste Confidence Decision, 49 Fed. Reg. 34,658 (Aug. 31, 1984); Waste Confidence Decision Review, 55 Fed. Reg. 38,474 (Sept. 18, 1990); Waste Confidence Decision Update, 75 Fed. Reg. 81,037 (Dec. 23, 2010). The 2010 WCD Update was vacated by the U.S. Court of Appeals in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012).

¹² 2010 WCD Update, 75 Fed. Reg. at 81,058 (capitalization of some words omitted).

¹³ *Id.*, 75 Fed. Reg. at 81,038. The 2010 WCD Update also contained three other Findings related to the safety of spent fuel storage pending disposal (as opposed to the safety of spent fuel disposal itself). Without conceding the validity of these storage-related findings, this contention does not challenge those findings.

¹⁴ 42 U.S.C. § 4321 et seq.

remand from the Court’s decision, the NRC chose not to replace the vacated Waste Confidence findings.¹⁵

The Commission’s failure to make required safety findings is incorrect and unfounded. In the absence of generic Waste Confidence safety findings, the NRC can no longer claim to satisfy the AEA’s requirement to provide adequate protection of public health and safety from the significant health and safety risks posed by Indian Point’s generation and storage of spent fuel. The NRC, therefore, must either deny the Indian Point license renewal application or make the findings on a case-specific basis in this proceeding.¹⁶

1. The Atomic Energy Act requires the NRC to make findings regarding the safety of spent fuel disposal in its reactor licensing decisions

Under the plain language of the AEA, the NRC’s longstanding interpretation of the AEA, and judicial precedents, the NRC is required to provide reasonable assurance that the spent fuel generated by a reactor will not pose an unreasonable risk to public health and safety, *i.e.*, that the radioactivity of such spent fuel can be safely contained as long as it exists. While the courts have upheld the NRC’s discretion to forecast the safety of future repository disposal in predictive terms of “confidence” rather than the more rigorous findings it makes for the operation of the reactor itself,¹⁷ there is no question that the AEA requires the NRC, before licensing or renewing the license of a reactor, to have reasonable confidence that public health and safety will be protected from the hazards posed by spent reactor fuel.

¹⁵ Final Rule, Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,238, 56,243-44 (Sept. 19, 2014) (“Continued Storage Rule”). *See also* NUREG-2157, Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel Rule at D-9 (Sept. 2014) (“Continued Storage GEIS”).

¹⁶ 42 U.S.C. §§ 2133(d), 2232(a) (requiring the NRC to protect public health and safety in licensing decisions); Continued Storage GEIS at D-9 (explaining that AEA safety determinations “would be made as part of individual licensing actions”).

¹⁷ *See infra* note 26.

Section 182 of the AEA, for instance, “requires the Commission to ensure that ‘the utilization or production of special nuclear material will . . . provide adequate protection to the health and safety of the public.’”¹⁸ The “utilization . . . of special nuclear material” (*i.e.*, uranium fuel) results in the generation of undisputedly dangerous material: highly radioactive “spent fuel” that will pose an extreme hazard to public health and safety for thousands of years if it is unprotected.¹⁹ Congress has established a federal policy of disposing of this hazardous spent reactor fuel in a repository to be licensed by the NRC.²⁰ But Congress has made no determination that safe repository disposal of spent fuel is, in fact, feasible or that there is sufficient repository capacity in the United States to accommodate all of the spent fuel that will be generated by licensed reactors.²¹ That function is left to the NRC. Thus, before allowing the creation and continued generation of highly radioactive nuclear waste through the “utilization” of reactor fuel in a reactor, the NRC must have some basis for confidence that the spent fuel can be safely disposed of when it is necessary.

Similarly, Section 103(d) of the AEA prohibits the NRC from licensing a reactor “if, in the opinion of the Commission, the issuance of a license to such a person would be inimical to . .

¹⁸ See AEA, 42 U.S.C. § 2232; see also *Union of Concerned Scientists*, 824 F.2d at 109 (interpreting 42 U.S.C. § 2232(a)).

¹⁹ Spent nuclear reactor fuel “poses a dangerous, long-term health and environmental risk. It will remain dangerous ‘for time spans seemingly beyond human comprehension.’” *New York*, 681 F.3d at 474 (quoting Blue Ribbon Commission on America’s Nuclear Future, *Report to the Secretary of Energy* at 10-11 (2012)). See also 40 C.F.R. § 197 (2008) (EPA citing risks of radioactive material at times after 10,000 years and up to 1 million years after disposal).

²⁰ See Nuclear Waste Policy Act (“NWPA”) of 1982, as amended, 42 U.S.C. § 10101 et seq. (1992).

²¹ While Congress has directed the U.S. Environmental Protection Agency (“EPA”) and the NRC to establish standards for a single repository at Yucca Mountain, it has not made any preclusive determination as to whether such a repository should be licensed; nor has it made any determination that the capacity of Yucca Mountain (in metric tons) is sufficient to accommodate all of the spent fuel to be generated by U.S. licensed reactors. The NWPA states only that a repository will provide a reasonable assurance of adequate protection if it is sited, built, and operated: “The purposes of this part are – to establish a schedule for the siting, construction, and operation of repositories that will provide a reasonable assurance that the public and the environment will be adequately protected from the hazards posed by high-level radioactive waste and such spent nuclear fuel as may be disposed of in a repository.” 42 U.S.C. § 10131(b)(1).

. the health and safety of the public.”²² Given that the issuance of a reactor license is for the very purpose of using reactor fuel to produce electricity, the NRC is both authorized and required to deny the issuance of a license if the use of reactor fuel would create a permanent and uncontainable public health hazard.²³

Finally, AEA Section 161(b) empowers the NRC to “prescribe such regulations or orders as may be necessary . . . to govern the possession and use of special nuclear materials . . . in order to protect health and to minimize danger to life or property.”²⁴ Thus, the AEA both authorizes and requires the NRC to take regulatory actions needed to protect public health and safety whenever the NRC becomes aware of such a need.

a. The NRC has interpreted the AEA to require Waste Confidence findings for reactor licensing

For over 35 years, between 1977 and 2014, the NRC consistently interpreted the AEA to require Waste Confidence safety findings. In 1977, the NRC asserted that it “would not continue to license reactors if it did not have reasonable confidence that the wastes can and will in due course be disposed of safely.”²⁵ Thus, in 1984 the NRC issued Waste Confidence findings

²² 42 U.S.C. § 2133.

²³ The NRC has argued that AEA Section 103(d) applies only to the activities described in the reactor license application, *i.e.*, activities to be performed by the licensee itself rather than disposal of spent fuel by the federal government. Denial of Petition for Rulemaking, 42 Fed. Reg. at 34,391. But the plain language of Section 103(d) contains no such limitation. Instead, the NRC must refuse a license if its issuance would lead to a result that is “inimical” to public health and safety. *See also Minnesota*, 602 F.2d at 419 (concurring opinion of Judge Tamm that Section 103(d) of the AEA and Section 102(2)(C) of NEPA (42 U.S.C. § 4332(C)) “mandate” the NRC’s Waste Confidence findings). Issuance of a reactor license to any person would necessarily be “inimical” to public health and safety if it led to the production of highly radioactive material from which the public could not be adequately protected.

²⁴ 42 U.S.C. § 2201(b).

²⁵ Denial of Petition for Rulemaking, 42 Fed. Reg. 34,391, 34,393 (July 5, 1977) (pet. for rev. dismissed sub nom. *Natural Resources Defense Council v. NRC*, 582 F.2d 166 (2d Cir. 1978)). *See also* Continued Storage Rule, 79 Fed. Reg. at 56,240.

regarding the ultimate safety of spent fuel disposal, and revised them at periodic intervals.²⁶

Before finalizing the Waste Confidence findings, the NRC issued the findings and their supporting technical analyses in draft form for public comment, as required by *Minnesota v. NRC*, 602 F.2d 412 (D.C. Cir. 1979). As the NRC acknowledged, the Waste Confidence findings “fulfill[ed] NRC’s important responsibilities under the AEA”²⁷

With respect to the safety of spent fuel disposal, the Waste Confidence findings address both the technical feasibility of siting a repository and the sufficiency of repository capacity. For instance, the 1984 Waste Confidence findings stated:

(1) The Commission finds reasonable assurance that safe disposal of high level radioactive waste and spent fuel in a mined geologic repository is technically feasible.

(2) The Commission finds reasonable assurance that . . . sufficient repository capacity will be available within 30 years beyond expiration of any reactor operating license to dispose of existing commercial high level radioactive waste and spent fuel originating in such reactor and generated up to that time.²⁸

These findings were supported by a technical analysis of the feasibility and capacity of a repository, including geologic characteristics, waste packaging, and engineered safety barriers.²⁹

The NRC explained the role of this technical analysis in the WCD as follows:

The conclusion that safe radioactive waste disposal is technically feasible is based on consideration of the basic features of repository design and the problems to be solved in developing the final design. A mined geologic repository for disposal of high-

²⁶ 1984 WCD, 49 Fed. Reg. 34,658; 1990 WCD Revision, 55 Fed. Reg. 38,474; 2010 WCD Update, 75 Fed. Reg. 81,037.

²⁷ Brief for Respondents at 20, *New York v. NRC*, Docket No. 11-1045 etc. An excerpt of the NRC’s brief is attached to this contention as Attachment A.

²⁹ 1984 WCD, 49 Fed. Reg. at 34,660.

²⁹ See, e.g., *id.* at 34,667-79; 1990 WCD Revision, 55 Fed. Reg. at 38,475-79; 2010 WCD Update, 75 Fed. Reg. at 81,059-67.

level radioactive waste, as developed during the past three decades, will be based on application of the multi-barrier approach for isolation of radionuclides. The high-level radioactive waste or spent fuel is to be contained in a sealed package and any leakage from the package is to be retarded from migrating to the biosphere by engineered barriers. These engineered barriers include backfilling and sealing of the drifts and shafts of the mined repository. We believe that the isolation capability and long-term stability of the geologic setting provide a final barrier to migration to the biosphere.³⁰

In each revision to the WCD, the NRC purported to update the technical analysis underlying Findings 1 and 2. In the 1990 WCD Revision, for example, the NRC updated its supporting technical analysis in light of Congress' passage of amendments to the Nuclear Waste Policy Act and the U.S. Environmental Protection Agency's ("EPA's") promulgation of repository standards.³¹ In the 2010 WCD Update, the NRC revised its technical analysis to assert, for the first time, that bedded salt – which was previously assumed to be an ideal geologic medium for spent fuel disposal – is not suitable.³² The 2010 WCD Update also revised other aspects of the technical analysis, including reporting on the progress of the Yucca Mountain repository and repository development in other countries. In addition, the 2010 WCD Update discussed the effects of changing fuel characteristics on repository feasibility.³³

Thus, the Waste Confidence findings issued between 1977 and 2010 included both general safety findings and purported supporting technical analyses.

³⁰ 1984 WCD, 49 Fed. Reg. at 34,667.

³¹ 1990 WCD Revision, 55 Fed. Reg. at 38,475-77, 38,477-79, respectively.

³² 2010 WCD Update, 75 Fed. Reg. at 81,059.

³³ *Id.* at 81,058-60.

b. The Courts have interpreted the AEA to require Waste Confidence findings for reactor licensing

Federal courts have long upheld the AEA's requirement for Waste Confidence safety findings. In *Natural Resources Defense Council*, the U.S. Court of Appeals for the Second Circuit concluded that:

[T]he NRC's long-continued regulatory practice of issuing operating licenses, with an implied finding of reasonable assurance that safe permanent disposal of [spent reactor fuel] can be available when needed, is in accord with the intent of Congress underlying the AEA and the [Energy Reorganization Act].³⁴

While the Court also upheld the NRC's decision to postpone more definitive findings about the safety of repository disposal of spent fuel until the time of repository licensing, this holding was conditioned on the NRC's promise that in the meantime, it "would not continue to license reactors if it did not have reasonable assurance that the wastes can and will in due course be disposed of safely."³⁵

In *Minnesota*, the U.S. Court of Appeals for the D.C. Circuit affirmed the NRC's reliance for reactor licensing on duly promulgated technical findings of "'reasonable confidence' that solutions [regarding spent fuel disposal] would be available when needed."³⁶ Looking back to the Second Circuit's decision in *Natural Resources Defense Council*, the Court observed:

The Second Circuit found that Congress was well-informed that disposal solutions were not currently feasible, yet it permitted continued licensing of nuclear plants. We do not read that opinion, however, to hold as a matter of law that storage and disposal concerns are never relevant to the licensing of nuclear plants. Rather, as the NRC itself recognized, Congress has chosen to rely

³⁴ 582 F. 2d at 170. See also, *id.* at 174n. 13 ("Clearly, the Congress has, to date, shared [the NRC's] confidence.")

³⁵ *Id.*, 582 F.2d at 174 n. 13.

³⁶ *Minnesota*, 602 F.2d at 417.

on the NRC's (and its predecessor's) assurances of confidence that a solution will be reached.³⁷

Recently, in *New York*, the D.C. Circuit summed up the *Minnesota* decision as a “mandate . . . to ensure that plants are only licensed while the NRC has reasonable assurance that permanent disposal of the resulting waste will be available.”³⁸ In *New York*, the D.C. Circuit also held that the WCD constitutes a licensing decision because it enables reactor licensing and because the NRC relies on its conclusions as uncontestable in any individual reactor licensing proceeding.³⁹

Accordingly, under the plain language of the AEA and the NRC's longstanding regulatory practice as affirmed by multiple court decisions, predictive findings regarding the ultimate safety of spent fuel disposal constitute a prerequisite to reactor licensing under the AEA. By failing to promulgate new Waste Confidence findings after the Court of Appeals vacated the 2010 WCD Update, the NRC has eliminated a necessary element of its AEA- required safety determination necessary for the relicensing of Indian Point Units 2 and 3.

2. The NRC's rationale for eliminating Waste Confidence findings ignores the role of the AEA

In the Continued Storage GEIS, the NRC asserts that it is “no longer necessary” to make Waste Confidence findings regarding the safety of spent fuel disposal, because the same technical findings are now included in the GEIS as assumptions underlying the NRC's analysis of continued spent fuel storage impacts.⁴⁰ In presenting this rationale, the NRC ignores the role

³⁷ *Id.*, 602 F.2d at 418-419.

³⁸ *New York*, 681 F.3d at 476.

³⁹ *Id.*, 681 F.3d at 476-77.

⁴⁰ Continued Storage GEIS at D-33 – D-34. *See also* Continued Storage Rule, 79 Fed. Reg. at 56,251.

in reactor licensing played by AEA findings and environmental analysis under NEPA. While the concerns of these statutes overlap, they also impose different obligations.⁴¹

The NRC claims to recognize the distinction between AEA safety findings and NEPA analyses. For instance, the NRC cautions in the Continued Storage GEIS that: “AEA safety determinations should not be confused with environmental analysis under NEPA.”⁴² But no AEA safety determinations regarding spent fuel disposal can be found in either the Continued Storage Rule or the GEIS. The “reasonable assurance” language that appeared in all three iterations of Findings 1 and 2 does not appear in the final rule or the GEIS. Instead, the Continued Storage Rule and the GEIS assert, without any level of assurance, that spent fuel disposal is “technically feasible.”⁴³

Thus, the NRC has not fulfilled its statutory responsibility under the AEA to make findings of “confidence” or “reasonable assurance” that spent nuclear fuel can, in due course, be disposed of safely. In the absence of such findings, the NRC lacks a legal basis to re-license any reactor, including Indian Point Units 2 and 3.

3. Technical findings regarding feasibility of spent fuel disposal and repository capacity must be supported by a NEPA analysis.

The assertions in the Continued Storage GEIS regarding technical feasibility and repository capacity are also inadequate to satisfy the AEA, NEPA, and the Court’s decision in *New York* because they themselves are not supported by an environmental impact statement (“EIS”) or environmental assessment (“EA”). As the Court held in *New York*, the WCD

⁴¹ *Citizens for Safe Power v. NRC*, 524 F.2d 1291, 1299 (D.C. Cir. 1975); *Limerick Ecology Action v. NRC*, 869 F.2d 719, 729-31 (3rd Cir. 1989).

⁴² 42 U.S.C. § 2133(d).

⁴³ Continued Storage GEIS at D-30.

⁴³ Continued Storage GEIS at B-2; Continued Storage Rule, 79 Fed. Reg. at 56,240, 56,251.

constitutes a licensing decision and therefore is a “major federal action requiring either a FONSI [finding of no significant impact] or an EIS.”⁴⁴ In fact, the NRC does not identify any EIS or FONSI that would support the conclusions presented in the Continued Storage Rule and the Continued Storage GEIS regarding the technical feasibility of spent fuel disposal. And, to the best of Riverkeeper’s knowledge, none exists:

- By its own terms, the Continued Storage GEIS addresses only the environmental impacts of spent fuel *storage*, not disposal.⁴⁵ The NRC’s technical findings regarding feasibility and capacity of repository disposal are incorporated as assumptions, and therefore are not analyzed;⁴⁶
- The U.S. Department of Energy’s (“DOE’s”) EIS for the proposed Yucca Mountain repository is not sufficient to support general findings regarding the technical feasibility or capacity of repositories because it addresses only the impacts of a single repository. In addition, the Yucca Mountain EIS is unfinished.⁴⁷ Therefore, the environmental impacts of disposal of spent fuel at Yucca Mountain have not been established;
- Finally, the 1974 “Environmental Survey” relied on by the NRC in initial reactor licensing proceedings for the conclusion that the environmental impacts of repository disposal are insignificant⁴⁸ does not, by its own terms, constitute an EIS or an EA.⁴⁹

⁴⁴ 681 F.3d at 476-77.

⁴⁵ Continued Storage GEIS at xxvi.

⁴⁶ Continued Storage GEIS at D-33-D-34; Continued Storage Rule, 79 Fed. Reg. at 56,251.

⁴⁷ See Continued Storage GEIS at D-28.

⁴⁸ See 10 C.F.R. § 51.75, which provides that draft EISs in construction permit, early site permit, and combined license proceedings should incorporate the values of Table S-3 regarding the environmental effects of the uranium fuel cycle. This regulation was re-published in the Final Continued Storage Rule, 79 Fed. Reg. at 56,261.

Thus, no EA or EIS exists that could support the NRC's findings regarding the feasibility and capacity of repository disposal of spent fuel as required by the Court of Appeals in *New York*.

C. Demonstration that the Contention is Within the Scope of the Proceeding

Riverkeeper Contention RK-10 is within the scope of the Indian Point license renewal proceeding, in accordance with 10 C.F.R. § 2.309(f)(1)(iii) for the reasons that follow: The contention is within the scope of the proceeding because it challenges the absence of safety findings required by the AEA for the re-licensing of Indian Point Units 2 and 3. Such findings must be made prior to NRC making any reactor relicensing decision, and thus, falls squarely within the scope of the instant proceeding. There is no longer any currently valid WCD or update that could generically preclude the admission of this contention. In addition, the NRC has stated that henceforth, it will make all AEA-based safety findings in individual licensing proceedings.⁵⁰

In addition, the contention is not limited by 10 C.F.R. Part 54. Part 54 applies to the operation of a reactor's "systems, structures, and components" during a license renewal term.⁵¹ Only issues related to aging and degradation of certain passive systems, structures, and components may be considered.⁵² As the Commission has recognized, the hazards posed by this

⁴⁹ See WASH-1248, "Environmental Survey of the Uranium Fuel Cycle" at iv-v (April 1974) (stating that the Environmental Survey is not "intended to be a detailed environmental statement as defined in the National Environmental Policy Act of 1969"). In addition, the Environmental Survey's central assumption, *i.e.*, that salt deposits constitute safe geologic media for spent fuel disposal, has been repudiated by the most recent WCD Update. Compare 2010 WCD Update, 75 Fed. Reg. at 81,059, with Environmental Survey at G-6 – G-7.

⁵⁰ Continued Storage GEIS at D-9 ("It is important to note that in this GEIS and Rule, the NRC is not making a safety determination under the Atomic Energy Act (AEA) to allow for the continued storage of spent fuel. AEA safety determinations would be made as part of individual licensing actions.").

⁵¹ See 10 C.F.R. § 54.4.

⁵² *Id.*

equipment become “fully mature” during the operation of the reactor.⁵³ Therefore, the NRC makes “definitive” safety findings before approving their operation.⁵⁴ In contrast, “[t]he hazards associated with permanent disposal will become acute only at some relatively distant time when it might be no longer feasible to store radioactive wastes in facilities subject to surveillance.”⁵⁵ Thus, the findings made by the NRC with respect to the safety components in a reactor are more “definitive” than the “implicit finding of reasonable assurance that methods of safe permanent disposal can be available when they are needed.”⁵⁶ Accordingly, Waste Confidence findings fall into a different regulatory category than safety findings under 10 C.F.R. Part 54.

D. Demonstration that the Contention is Material to the Findings the NRC Must Make to License This Reactor

The “issue raised in [Riverkeeper] contention [RK-10] is material to the findings the NRC must make to support the action that is involved in the proceeding,” in accordance with 10 C.F.R. § 2.309(f)(1)(iv). That is, the contention is material to the findings that the NRC must make in order to license Indian Point Units 2 and 3 because it asserts that safety findings required by the AEA for licensing of these reactors have not been made.

The findings are material because this reactor, under a renewed license, will generate an additional quantity of spent fuel that was not contemplated in the original NRC licensing decision. Thus, the NRC must address the questions of (a) whether it is feasible to dispose of the spent fuel to be generated during the license renewal terms for Indian Point Units 2 and 3, and (b) whether there will be sufficient repository capacity to accommodate that spent fuel.

⁵³ Denial of Petition for Rulemaking, 42 Fed. Reg. at 34,393.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

E. Concise Statement of the Facts or Expert Opinion Supporting the Contention, Along with Appropriate Citations to Supporting Scientific or Factual Materials

This contention primarily makes legal arguments rather than factual arguments. Factual assertions regarding the hazards posed by unprotected spent fuel are well-established and therefore not in dispute.⁵⁷

F. A Genuine Dispute Exists with the Applicant on a Material Issue of Law or Fact

There is “sufficient information to show that a genuine dispute exists” regarding a material issue of law or fact, in accordance with 10 C.F.R. § 2.309(f)(1)(vi). That is, this contention raises a genuine dispute with the applicant, Entergy Nuclear Operations, Inc., regarding whether a license renewal should be granted in this proceeding. Unless or until the NRC cures the deficiencies caused by the failure to make and include AEA required safety findings or the applicant withdraws its application, this dispute will remain alive.

IV. THE CONTENTION IS TIMELY PURSUANT TO 10 C.F.R. §§ 2.309(c) and 2.309(f)(2)

The contention meets the timeliness requirements of 10 C.F.R. § 2.309(c) and § 2.309(f)(2), which call for a showing that:

(i) The information upon which the amended or new contention is based was not previously available;

(ii) The information upon which the amended or new contention is based is materially different than information previously available; and

(iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

⁵⁷ See note 20 and accompanying text.

First, the information on which the contention is based – i.e., the issuance of the Continued Storage Rule – was not publicly available until September 19, 2014.

Second, the information in the Continued Storage Rule is materially different than previously available information because the Continued Storage Rule does not include the safety findings that were included in all the prior versions of the Waste Confidence Decision and on which the NRC previously relied for licensing of reactors.⁵⁸

Third, the Contention is timely because it has been submitted within 30 days of September 19, 2014, the date the NRC issued the Continued Storage Rule and GEIS. In this proceeding, the Atomic Safety and Licensing Board has ordered that a new contention shall be deemed timely under 10 CFR § 2.309(f)(2) “if it is filed within thirty (30) days of the date when the new and material information on which it is based first becomes available.”⁵⁹

V. SUPPORT AND REQUEST FOR SUSPENSION OF RELICENSING DECISION

On or about September 29, 2014, a number of parties around the United States filed contentions similar to RK-10 in other pending nuclear reactor licensing and relicensing proceedings, and in conjunction therewith, jointly filed a petition to suspend final licensing decisions in all current NRC licensing and relicensing proceedings pending the completion of the required safety findings regarding spent fuel disposal.⁶⁰ Riverkeeper supports this request and believes it should be equally applicable to the Indian Point license renewal proceeding. In any

⁵⁸ See *New York v. NRC*, 681 F.2d 471, 476-77 (D.C. Cir. 2012).

⁵⁹ In the Matter of Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3), Docket Nos. 50-0247-LR and 50-286-LR, ASLBP No. 07-858-03-LR-BD01, Scheduling Order (July 1, 2010), at ¶ F.2.

⁶⁰ Petition to Suspend Final Decisions in All Pending Reactor Licensing Proceedings Pending Issuance of Waste Confidence Safety Findings (September 29, 2014), as amended by Errata to Petition to Suspend Final Decisions in All Pending Reactor Licensing Proceedings Pending Issuance of Waste Confidence Safety Findings (October 1, 2014).

event, contemporaneously filed with this contention, Riverkeeper is filing with the Commission a similar request for the suspension of any final relicensing decision in the Indian Point license renewal proceeding pending completion of the required safety findings regarding spent fuel disposal.⁶¹

VI. CONCLUSION

For the foregoing reasons, Riverkeeper respectfully requests that the Atomic Safety and Licensing Board grant leave to file and admit the proffered Riverkeeper Contention RK-10 into the Indian Point license renewal proceeding, and suspend any final relicensing decision in this proceeding unless and until required safety findings under the AEA are made.

Respectfully submitted,

Signed (electronically) by
Deborah Brancato, Esq.
Phillip Musegaas, Esq.
Riverkeeper, Inc.
20 Secor Road
Ossining, NY 10562
(914) 478-4501
dbrancato@riverkeeper.org
phillip@riverkeeper.org

October 3, 2014

⁶¹ Petition to Suspend Final Decision in Indian Point Relicensing Proceeding Pending Issuance of Waste Confidence Safety Findings (October 3, 2014) (“Riverkeeper’s Suspension Petition”).

Certification pursuant to 10 C.F.R. § 2.323(b) and ASLB Scheduling Order

Pursuant to 10 C.F.R. § 2.323(b) and the ASLB's July 1, 2010 Scheduling Order ¶ G.6, I certify that I have made a sincere effort to contact the other parties in this proceeding, to explain to them the factual and legal issues raised in the contention and request for licensing decision suspension, and to resolve those issues, and I certify that my efforts have been unsuccessful. While the State of New York does not oppose this filing and Clearwater supports the filing, counsel for NRC Staff has indicated that NRC Staff is likely to oppose the filing, and counsel for Entergy has indicated that Entergy opposes the filing.

Signed (electronically) by

Deborah Brancato, Esq.
Riverkeeper, Inc.
20 Secor Road
Ossining, NY 10562
(914) 478-4501
dbrancato@riverkeeper.org

Attachment A

TO

**RIVERKEEPER CONSOLIDATED MOTION FOR LEAVE TO FILE A
NEW CONTENTION AND NEW CONTENTION RK-10 CONCERNING THE
ABSENCE OF REQUIRED WASTE CONFIDENCE SAFETY FINDINGS**

No. 11-1045 (consolidated with Nos. 11-1051, 11-1056, 11-1057)

ORAL ARGUMENT HAS NOT BEEN SCHEDULED

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

**STATE OF NEW YORK, *et al.*,
Petitioners,
v.**

**UNITED STATES NUCLEAR REGULATORY COMMISSION and
THE UNITED STATES OF AMERICA,
*Respondents,***

**STATE OF NEW JERSEY, *et al.*
*Intervenors.***

**On Petition for Review of Orders by the
United States Nuclear Regulatory Commission**

BRIEF FOR RESPONDENTS

IGNACIA S. MORENO
Assistant Attorney General

STEPHEN G. BURNS
General Counsel

JOHN E. ARBAB
Attorney
Appellate Section
Environmental and Natural
Resources Division
U.S. Department of Justice
P.O. Box 23795
Washington, D.C. 20026-3795

JOHN F. CORDES, JR.
Solicitor

ROBERT M. RADER
Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory Commission
301-415-1955

Television, 129 S. Ct. at 1810. *See also Transcontinental Gas Pipe Line Corp. v. FERC*, 518 F.3d 916, 919 (D.C. Cir. 2008).

SUMMARY OF THE ARGUMENT

The Waste Confidence decision and related environmental rule in 10 C.F.R. § 51.23(a), like those that preceded it since 1984, faithfully adhere to the instructions in this Court's remand in *Minnesota v. NRC*, 602 F.2d 412 (D.C. Cir. 1979), and also fulfill NRC's important responsibilities under the AEA and the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.* Based on a full record, NRC reasonably found that safe disposal of HLW in a geologic repository will be available when necessary, and that spent nuclear fuel can be stored safely and without significant environmental impacts until ultimate disposal.

Contrary to petitioners' views, the Waste Confidence decision on its face is *not* a licensing decision. Rather, the Waste Confidence decision supports NRC reactor licensing decisions with generic findings that can be utilized to determine environmental impacts associated with spent fuel generated by licensed reactors. Hence, the Waste Confidence decision carries out this Court's directive in *Minnesota*, which created the framework for the Waste Confidence rulemaking.

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

ATOMIC SAFETY AND LICENSING BOARD

_____)	
In the Matter of)	Docket Nos.
)	50-247-LR
Entergy Nuclear Operations, Inc.)	and 50-286-LR
(Indian Point Nuclear Generating)	
Units 2 and 3))	October 3, 2014
_____)	

CERTIFICATE OF SERVICE

Pursuant to 10 CFR § 2.305 (as revised), I hereby certify that copies of the foregoing “Riverkeeper Consolidated Motion for Leave to File a New Contention and New Contention Concerning the Absence of Required Waste Confidence Safety Findings,” dated October 3, 2014, have been served upon the Electronic Information Exchange (the NRC’s E-Filing System), in the above-captioned proceeding.

Signed (electronically) by
Deborah Brancato, Esq.
Riverkeeper, Inc.
20 Secor Road
Ossining, NY 10562
(914) 478-4501
dbrancato@riverkeeper.org