

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD**

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In re:

License Renewal Application Submitted by

**Entergy Nuclear Indian Point 2, LLC,
Entergy Nuclear Indian Point 3, LLC, and
Entergy Nuclear Operations, Inc.**

Docket Nos. 50-247-LR and 50-286-LR

ASLBP No. 07-858-03-LR-BD01

DPR-26, DPR-64

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**STATE OF NEW YORK, RIVERKEEPER, INC.,
AND HUDSON RIVER SLOOP CLEARWATER'S
JOINT CONTENTION NYS-39/RK-EC-9/CW-EC-10
CONCERNING THE ON-SITE STORAGE OF NUCLEAR WASTE
AT INDIAN POINT**

Filed on July 8, 2012

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PRELIMINARY STATEMENT

The State of New York, Hudson Riverkeeper, Inc., and Hudson River Sloop Clearwater, Inc. respectfully submit a new joint contention based on the United States Court of Appeals for the District of Columbia Circuit's recent decision in the matter of *State of New York v. Nuclear Regulatory Commission*, No. 11-1045 (June 8, 2012), which invalidated the NRC's Waste Confidence Decision Update and Temporary Storage Rule.

CONTENTION NYS-39/RK-EC-9/CW-EC-10

THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR INDIAN POINT FAILS TO COMPLY WITH THE REQUIREMENTS OF SECTIONS 102 (c) AND (e) OF THE NATIONAL ENVIRONMENTAL POLICY ACT AND 10 C.F.R. §§ 51.20(b)(2), 51.71(d), 51.90, 51.91(c), 51.92, 51.95(c)(1), 51.95(c)(2), AND 51.101(a), BECAUSE IT FAILS TO INCLUDE OR INCORPORATE A LEGALLY SUFFICIENT ANALYSIS OF THE ENVIRONMENTAL IMPACTS OF ON-SITE STORAGE OF NUCLEAR WASTE AFTER THE CONCLUSION OF THE EXTENDED OPERATING PERIOD, INCLUDING THE IMPACTS IN THE EVENT THAT NO PERMANENT REPOSITORY IS EVER ESTABLISHED, AND FAILS TO CONSIDER ALTERNATIVES TO MITIGATE THOSE IMPACTS; BECAUSE THERE IS NO VALID ANALYSIS OF THESE ISSUES, NRC MAY NOT REACH A FINAL DECISION ON WHETHER TO RENEW INDIAN POINT'S OPERATING LICENSES UNTIL SUCH A VALID ANALYSIS HAS BEEN COMPLETED IN COMPLIANCE WITH APPLICABLE FEDERAL LAW AND REGULATIONS.

NRC Staff's environmental review of the applications to operate two power reactors at Indian Point for an additional twenty years does not now include an analysis of the environmental impacts caused by the storage of nuclear waste at Indian Point following the end of the requested operating licenses nor an analysis of alternatives to proposed storage of spent fuel at Indian Point for an indefinite period of time in spent fuel pools. The absence of such a review and analysis violates the National Environmental Policy Act ("NEPA") and related regulations.

Neither the Final Supplemental Environmental Impact Statement for Indian Point NUREG-1437 Supplement 38 ("FSEIS") nor the Generic Environmental Impact Statement for License Renewal NUREG-1437 ("GEIS") has examined these impacts or alternatives because

NRC's Temporary Storage Rule barred such a review based on its findings that on-site storage of nuclear waste would have no significant impact for 60 years post-operation and that a permanent repository would be available when necessary. Because the United States Court of Appeals for the District of Columbia Circuit recently ruled that the Temporary Storage Rule, along with the Waste Confidence Update on which the rule was based, are invalid, such analysis is now required in this proceeding.

BASES

1. NEPA requires NRC to consider all the impacts of relicensing a nuclear reactor, including the impacts of storing nuclear waste at a reactor site for so long as waste remains at the site, and alternatives to such storage.

2. Until June 8, 2012, 10 C.F.R. § 51.23(a) provided that NRC believed that there was reasonable assurance that a mined geologic disposal site for spent fuel would be available when necessary and that storage of spent fuel at power reactor sites for 60 years after cessation of operation would have not have significant environmental impacts. *See* 10 C.F.R. § 51.23(a) ("Temporary Storage Rule"). That regulation was based on NRC's "Waste Confidence Findings." 75 Fed. Reg. 81037 (Dec. 23, 2010) ("Waste Confidence Decision Update" or "WCD Update"). The regulation provided further that (10 C.F.R. § 51.23(b)):

as provided in §§ 51.30(b), 51.53, 51.61, 51.80(b), 51.95 and 51.97(a), and *within the scope of the generic determination in paragraph (a) of this section*, no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the reactor operating license . . . is required in any environmental report, environmental impact statement, environmental assessment or other analysis

prepared in connection with the issuance or amendment of an operating license for a nuclear reactor.

10 C.F.R. § 51.23(b)(emphasis added).

3. Based on the predecessor to 10 C.F.R. § 51.23, neither the potential environment impacts of continued storage of spent fuel at power reactor sites after cessation of operation nor the alternatives to that storage are addressed in the 1996 GEIS (NUREG-1437), 10 C.F.R. Part 51, Appendix B, Table B-1, which embodies the findings in that GEIS, or the FSEIS for Indian Point (NUREG-1437 Supplement 38). Such alternatives would include alternatives to Entergy's storage plan including, without limitation, transferring all spent fuel from pools to dry casks.

4. On June 8, 2012, the United States Court of Appeals for the District of Columbia Circuit ruled that NRC's Waste Confidence Decision Update and Temporary Storage Rule were invalid under NEPA. The Court ruled, first, that the WCD Update violated NEPA because it failed to analyze the environmental impacts of the finding that a permanent repository will be available when necessary, including the impacts of failing to establish a repository when one is needed. The Court also ruled that the environmental analysis underlying NRC's finding in the Temporary Storage Rule that the continued storage of spent fuel at power reactor sites for 60 years post-operation would have no adverse environmental impacts did not meet the requirements of NEPA because (1) the analysis of the environmental impacts of leaks from spent fuel pools was deficient; and (2) the consequences of spent pool fuel fires were not examined. The Court has not yet issued the mandate.

5. As a result of the Court’s ruling, NRC may no longer rely on the Temporary Storage Rule and Waste Confidence Decision to meet its obligation under NEPA to analyze the potential environmental impacts of the on-site storage of spent fuel at Indian Point following the end of extended operating licenses.

6. Because NRC has not conducted a valid NEPA analysis of the environmental impacts of the on-site storage of spent fuel at Indian Point following the end of extended operating licenses — including the impacts in the event that a permanent repository is never established — NRC may not reach a final decision on whether to renew Indian Point’s operating licenses until such a valid analysis has been completed and complies with applicable federal law and regulations.

SUPPORTING EVIDENCE

A. Procedural History

7. On October 9, 2008, the Commission issued a draft rule revising the waste confidence findings. With respect to Waste Confidence Finding Two, the Commission proposed “remov[ing] its expectation that a repository will be available by 2025” and acknowledged that its previous finding that sufficient disposal capacity would be available within 30 years after any reactor’s licensed life “is not supportable.” *See* 73 Fed. Reg. 59551, 59558, and 59561 (Oct. 9, 2008)(“Waste Confidence Decision Update”). The Commission proposed revising Waste Confidence Finding Four to state that waste could be safely stored on-site for 60 years beyond the licensed operating life of a facility. 73 Fed. Reg. at 59551.

8. The Commission also proposed amending 10 C.F.R. § 51.23 to reflect these revised policies, stating in an open-ended fashion and without a date certain (*i.e.*, without even the 60-year reference from its proposed Finding Four revision) that “spent fuel generated in any reactor can be stored safely and without significant environmental impacts beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either on-site or offsite independent spent fuel storage installations until a disposal facility can reasonably be expected to be available.” 73 Fed. Reg. 59547 (Oct. 9, 2008)(“Temporary Storage Rule”).

9. The NRC’s pronouncements in the October 9, 2008 Federal Register meant that the NRC expects that spent fuel will remain at power reactor sites or Independent Spent Fuel Storage Installations (“ISFSIs”) for decades longer than anticipated, if not indefinitely.

10. By the Temporary Storage Rule, the Commission refused to undertake any analysis of post-license impacts of waste storage either generically or site-by-site.

11. The State of New York submitted proposed Contention NYS-34 on February 27, 2009, arguing that the December 2008 draft Supplemental Environmental Impact Statement for Indian Point (“DSEIS”) was insufficient in light of NRC’s October 9, 2008 Federal Register statements which, the State argued, constituted new and significant information as that term is defined under NEPA and regulations promulgated by the Council on Environmental Quality and the NRC. State of New York Contentions Concerning NRC Staff’s Draft Supplemental Environmental Impact Statement (Feb. 27, 2009) ML090690303.

12. The State also argued that NRC's October 9, 2008 statements also reflected other new and significant information concerning the Commission's acknowledgment that demonstrate any high level waste disposal facility that was to have been available by 2025 will not have capacity sufficient to receive more than the amount of wastes which will be generated by existing plants during their initial 40-year operating license terms. 73 Fed. Reg. 59556-57.

13. The State argued that the NRC Staff's failure to examine such new and significant information violated NEPA and regulations promulgated by the Counsel on Environmental Quality ("CEQ") and the NRC. 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.9(c)(1)(ii); 10 C.F.R. §§ 51.72(a)(2), 51.92, 51.95(a).

14. Entergy and NRC Staff opposed the State's proposed contention on grounds that, *inter alia*, 10 C.F.R. § 51.23 barred consideration of the environmental impacts of the post-operation of on-site storage of nuclear waste. NRC Staff's Answer to Amended and New Contentions Filed by the State of New York and Riverkeeper, Inc., Concerning the Draft Supplemental Environmental Impact Statement (Mar. 25, 2009) ML090840116.

15. On June 16, 2009, the Board rejected the State's proposed Contention NYS-34 on grounds that the State's contention was premature, and, alternatively, that the contention would be barred by 10 C.F.R. § 51.23. *Entergy Nuclear Operations, Inc.*, (Indian Point Units 2 and 3), Order (Ruling on New York State's New and Amended Contentions), slip op. at 13-16 (June 16, 2009). The Board stated:

Both of the publications that New York cites as new and significant information are proposed revisions. At this point, the Commission has not made a final determination vis-à-vis the waste confidence rule. Therefore, it is premature to

use these publications as the bases for a new contention, as the regulations now in force, specifically 10 C.F.R. § 51.23(b), do not permit “discussion of any environmental impact of spent fuel storage” at nuclear reactor sites.

ASLB June 16, 2009 slip op. at 16.

16. In September 2009, the NRC Commissioners made additional public statements about the waste confidence process. The three then-sitting Commissioners recognized that the administrative record does not provide “reasonable assurance” that a permanent disposal facility for high level radioactive waste will exist by a particular date. This recognition was reflected in the voting notations of the three Commissioners who deferred any final action on a proposed revision to § 51.23 pending further input from the public on the proposal and further development of a waste disposal policy by the Executive and Legislative authorities. *See* Notation Vote, September 2009 Response Sheets of Chairman Jaczko, Commissioner Klein, and Commissioner Svinicki (publicly released on September 25 and 28, 2009).

17. On October 26, 2009, Clearwater submitted proposed new contentions concerning waste confidence. Hudson River Sloop Clearwater, Inc.’s Motion for Leave to Add a New Contention Based Upon New Information (Oct. 26, 2009) (corrected version filed Nov. 6, 2009) ML093200503. Clearwater sought leave to file two new contentions, a safety contention under the Atomic Energy Act and an environmental contention under NEPA.

18. On November 19, 2009, the State of New York submitted an Answer in support of Clearwater’s submission. The State’s Answer noted that much had changed during the Indian Point license renewal proceeding. Answer of the State of New York to Hudson River Sloop Clearwater, Inc.’s Petition Presenting Supplemental Contentions EC-7 and SC-1 Concerning

Storage of High-Level Radioactive Waste Generated at Indian Point (Nov. 19, 2009)

ML1008200028. The State's Answer underscored the further evolution of the factual record on this issue since the State's presented its "premature" Contention NYS-34.

19. Riverkeeper, the State of Connecticut, and the Town of Cortlandt also submitted answers supporting Clearwater's proposed contentions.

20. On February 12, 2010, the ASLB issued a decision certifying a question to the NRC Commissioners concerning the continued viability of the Temporary Storage Rule.

Entergy Nuclear Operations, Inc., (Indian Point Units 2 and 3), Memorandum and Order (Certification to the Commission of a Question Relating to the Continued Viability of 10 C.F.R. § 51.23(b) Arising From Clearwater's Motion for Leave to Admit New Contentions) (Feb. 12, 2010). Specifically, the Board

ask[ed] the Commission to advise the Board whether we should: (1) defer ruling on Clearwater's Motion until the Commission undertakes an evaluation of the impact, if any, that these recent developments will have on the viability of the Commission's Waste Confidence Rule; (2) rule on Clearwater's pending motion consistent with the current language of Section 51.23; (3) admit Clearwater's new contentions notwithstanding Section 51.23; or (4) take some other action to be specified by the Commission.

ASLB February 12, 2010 slip op. at 2.

21. On July 8, 2010, in response to the Board's certified question, the Commissioners issued CLI-10-19 that directed the ASLB to reject the Clearwater contentions. *Entergy Nuclear*

Operations, Inc., (Indian Point Units 2 and 3), 72 N.R.C. 98, CLI-10-19, Memorandum and Order (July 8, 2010).¹ The Commissioners stated:

We are continuing our deliberations on the waste confidence update, and in any event will not conclude action on the Indian Point license renewal application until the rulemaking is resolved.

72 N.R.C. at 100, CLI-10-19, slip op. at 3. This Commissioner ruling in this proceeding controls here, because the rulemaking “is [not] resolved.”

22. NRC issued the final Waste Confidence Decision Update and Temporary Storage Rule on December 23, 2010. 75 Fed. Reg. 80132-37 (Dec. 23, 2010); 75 Fed. Reg. 80137-76 (Dec. 23, 2010). When the Commission adopted the WCD Update and TSR, it declared that:

The Commission reaffirms the three remaining findings. Each finding and the reasons for revising or reaffirming the finding are discussed below. In keeping with revised Findings 2 and 4, the Commission is concurrently publishing in this issue of the Federal Register conforming amendments to 10 CFR 51.23(a), which provides a generic determination of the environmental impacts of storage of spent fuel at, or away from, reactor sites after the expiration of reactor operating licenses, and expresses reasonable assurance that sufficient geologic disposal capacity will be available when necessary.

75 Fed. Reg. 81037, 81038 (Dec. 23, 2010).

B. Proceedings in the United States Court of Appeals for the District of Columbia Circuit

23. On February 15, 2011, a coalition of states led by New York and a coalition of environmental organizations including Riverkeeper challenged the Temporary Storage Rule and the Waste Confidence Decision Update respectively, in the United States Court of Appeals for

¹ NRC Commissioner Apostolakis did not participate in the ruling on this matter.

the District of Columbia Circuit. The Prairie Island Indian Community, a federally-recognized Indian tribe, also filed a challenge. Those legal challenges were consolidated and heard together.

24. On June 8, 2012, the D.C. Circuit vacated the Waste Confidence Decision Update and the Temporary Storage Rule. *New York v. NRC*, slip op., No. 11-1045 (June 8, 2012). The Court held that the WCD Update “constitutes a major federal action necessitating either an environmental impact statement or a finding of no significant environmental impact” and that “in concluding that permanent storage will be available ‘when necessary,’ the Commission did not calculate the environmental effects of failing to secure permanent storage—a possibility that cannot be ignored.” *Id.* The Court also held that the environmental analysis that led to the finding of no significant impact in the Temporary Storage Rule was deficient because, in “determining that spent fuel can safely be stored on site at nuclear plants for sixty years after the expiration of a plant’s license, the Commission failed to properly examine future dangers and key consequences.” *New York v. NRC*, slip op. at 3.

25. The Court also held that “we grant the petitions for review, vacate the WCD Update and TSR, and remand for further proceedings consistent with this opinion.” *New York v. NRC*, slip op. at 21.

26. As the United States Court of Appeals for the District of Columbia Circuit has vacated the WCD Update and the TSR, there is currently no bar in place to the requirement pursuant to NEPA that the NRC analyze the potential environmental impacts of the on-site storage of spent fuel at Indian Point following the end of the requested extended operating licenses. Because the D.C. Circuit decision finds that such impacts could be significant, that

those impacts have not been adequately analyzed by NRC, that the process for analysis of those impacts constitutes a major federal action, and because the FSEIS in this proceeding contains no such analysis, the FSEIS is legally deficient under NEPA.

C. NRC's Reliance on the Temporary Storage Rule and Waste Confidence Decision in this Relicensing

27. The FSEIS for Indian Point relies on the now-vacated § 51.23 in multiple places. In the Executive Summary, Staff states that “the supplemental environmental impact statement prepared at the license renewal stage need not discuss ... any aspect of the storage of spent fuel for the facility within the scope of the generic determination in 10 CFR 51.23(a) [‘Temporary storage of spent fuel after cessation of reactor operation—generic determination of no significant environmental impact’] and in accordance with 10 CFR 51.23(b).” FSEIS at xvi.

28. The FSEIS also relies on § 51.23 in finding that neither the Applicant's ER (FSEIS at 1-5) nor the Staff's SEIS (FSEIS at 9-1) needs to discuss “any aspect of the storage of spent fuel within the scope of the generic determination in 10 CFR 51.23(a) in accordance with 10 CFR 51.23(b).”

29. The Staff reiterated this in response to the State's comment that the SEIS does not analyze offsite land use impacts of continued operations and the additional storage of spent fuel on real estate values in the surrounding areas (FSEIS, Appendix A, at A-22) and in response to a comment indicating that the GEIS does not adequately evaluate the long term impacts and safety of the generation and long-term storage of radioactive waste (FSEIS at Appendix A, A-138) (“Accordingly, no discussion of the environmental impact of spent fuel storage in reactor facility

storage pools or independent spent fuel storage installation is required for an environmental impact statement associated with license renewal.”)(emphasis omitted).

30. Staff also raised § 51.23 in response to comments indicating that storage of spent fuel in dry casks, while safer than spent fuel pool storage, will not reduce the amount of spent fuel in the pools (*id.* at A-147) and questioning the adequacy of decommissioning process regarding spent fuel (*id.* at A-160) .

31. Staff also relied on the now-vacated Waste Confidence Decision in concluding that there are “no offsite radiological impacts (collective effects) from the uranium fuel cycle during the renewal term beyond those discussed in the GEIS.” FSEIS at 6-4.

32. During the May 8, 2012 site visit to the Indian Point facilities by the Atomic Safety and Licensing Board, Entergy representatives made the following statements about Entergy’s plans for spent nuclear fuel at Indian Point:

- (A) All of the spent fuel generated during since the start of commercial operation of Indian Point Unit 3 remains in the Indian Point Unit 3 spent fuel pool (as of the date of the site visit);
- (B) Entergy has no current plans to construct an additional dry cask storage area (in addition to the existing dry cask storage area); and
- (C) At the end of operation under any 20-year extension of the current operating licenses, Entergy estimates that the existing dry cask storage area would be filled to capacity and that the Indian Point Unit 2 spent fuel pool and the Indian Point Unit 3 spent fuel pool would be filled to capacity as well.

33. All of the above-listed references to 10 C.F.R. § 51.23 or the Waste Confidence Findings have now been invalidated as a result of the D.C. Circuit’s invalidation of both the Waste Confidence Decision and the Temporary Storage Rule, and as a result NRC must now

evaluate, before a decision on Indian Point's operating licenses can be made: the environmental effects of on-site storage of waste after the period of extended operation; offsite land use impacts of continued operations and the additional storage of spent fuel on real estate values in the surrounding areas; the impacts and safety of the generation and long-term storage of radioactive waste; the impacts of spent fuel storage in pools versus in dry casks; the implications of on-site storage of waste for decommissioning; alternatives to mitigate any of these adverse consequences, among other issues.

34. In a recent legal filing submitted to the Commission in another proceeding, NRC Staff has acknowledged that although "[t]he Commission has not yet indicated how it intends to respond to the D.C. Circuit's ruling, no final decision to grant a ... renewed operating license should be made ... until the NRC has appropriately dispositioned the issues remanded by the court ..." NRC Staff's Answer to Petition to Suspend Final Decisions in All Pending Reactor Licensing Proceedings Pending Completion of Remanded Waste Confidence Proceedings, at p. 4 (June 25, 2012) (*filed in* Calvert Cliffs 3 Nuclear Project, LLC, et al., Docket No. 52-016-COL).²

35. This contention alleges that a final decision on whether to issue a renewed operating licenses for the Indian Point facilities cannot be made until the NRC has completed a legally-sufficient analysis of the environmental impacts associated with the long-term and

² In the same filing, Staff also noted that "With respect to license renewal proceedings, Indian Point is perhaps the closest to a final decision by the Board." NRC Staff's Answer to Petition to Suspend Final Decisions in All Pending Reactor Licensing Proceedings Pending Completion of Remanded Waste Confidence Proceedings, at p. 4, n.3 (June 25, 2012) (*filed in* Calvert Cliffs 3 Nuclear Project, LLC, et al., Docket No. 52-016-COL).

indefinite storage of spent fuel at the Indian Point site and considers alternatives to mitigate those impacts.

CONCLUSION

The issues raised in the proposed joint Contention NYS-39/RK-EC-9/CW-EC-10 are material to the findings the NRC must make to take action upon the applicant's request. For all the reasons stated in this Contention and the accompanying Motion for Leave, the State of New York, Riverkeeper, and Clearwater request that this joint contention be admitted.

Respectfully submitted,

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