

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

_____)	Docket Nos.	50-247-LR
In the Matter of)		and
)		50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.)		
)		
(Indian Point Nuclear Generating Units 2 and 3))		
_____)		

July 9, 2012

**HUDSON RIVER SLOOP CLEARWATER, INC.'S MOTION FOR LEAVE
TO ADD A NEW CONTENTION BASED UPON NEW INFORMATION
AND PETITION TO ADD NEW CONTENTION**

BACKGROUND

Hudson River Sloop Clearwater Inc. (hereinafter “Petitioner”) hereby submits this Motion to add a new contention, which seeks to plug the gaps in the safety analyses for the long-term storage of spent fuel at the Indian Point Energy Center (“IPEC”).

Recently the U.S Court of Appeals for the District of Columbia Circuit vacated the Waste Confidence Decision¹ and told the United States Nuclear Regulatory Commission (“NRC”) it must assess whether spent fuel can be safely stored at reactors indefinitely. The court said that spent fuel poses a “dangerous, long-term health . . . risk,” but the agency failed to examine the “future dangers and key consequences” of long-term storage of spent fuel in spent fuel pools.

Spent-fuel is a highly radioactive form of waste. Before it may be transported to another facility for reprocessing or disposal, it must remain at the nuclear reactor site for a period of time to allow the radioactivity in the waste to decay sufficiently. The designers of commercial nuclear reactor sites like IPEC assumed that such waste would remain on-site for only approximately five years and be reprocessed thereafter. However, the reprocessing plant at West Valley in New York proved incapable of processing any appreciable quantity of this waste and reprocessing in the United States ceased altogether in the 1970s due to both practical concerns about cost and policy concerns about proliferation. After that, the government planned to dispose of spent fuel and other

¹ Waste Confidence Decision Update, NRC-2008-0482, 75 Fed. Reg. 81037 (December 23, 2010) (“WCD Update”); Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation, Final Rule, NRC-2008-0404, RIN 3150-AI47, 75 Fed. Reg. 81032 (December 23, 2010) (“Temporary Storage Rule”).

wastes in deep underground repositories. After mandating the building of two repositories, Congress settled on Yucca Mountain in Nevada as the location for a single repository. Following repeated delays the current administration has now canceled the program to build that repository and has made it unlikely that a repository will ever open at that location. Instead, the Department of Energy (“DOE”) has convened a panel of experts to review all long-term options, but the panel has yet to make any recommendations regarding long-term waste disposal options.

In the absence of a central disposal facility, waste has accumulated at reactor sites like IPEC, turning those sites into long-term nuclear waste storage facilities in addition to nuclear waste producers. The NRC used the WCD to generically address the safety concerns and environmental impacts of on-site waste storage. The WCD Update extended the time period for which the Commission found waste could be safely stored on reactor sites. On June 8, 2012 in *State of New York v. Nuclear Reg. Comm.*, No. 11-1045, the U.S. Court of Appeals for the District of Columbia Circuit vacated the WCD Update. As such there is currently an incomplete analysis of safety and environmental concerns relating to long-term storage. Waste generated during any period of extended operation will continue to accumulate at IPEC, and no definite off-site disposal alternatives have been identified. Indeed, even if the administration were to revive the Yucca Mountain repository, it would not have the capacity to hold all the spent-fuel generated to date, let alone additional spent-fuel generated during any extended period of operation.

To comply with the requirements of the Atomic Energy Act (“AEA”), the NRC or the applicant must show that there is reasonable assurance that long-term on-site storage

is safe prior to any decision to grant renewed licenses. The contentions presented in this motion allege that generic work currently available combined with the Safety Evaluation Report (“SER”) related to IPEC lacks sufficient safety analysis to provide a reasonable assurance of safety for long-term fuel storage.

I. New Information Available

On June 8, 2012, in *State of New York v. Nuclear Reg. Comm.*, No. 11-1045, (the “DC Circuit Decision”) the U.S. Court of Appeals for the District of Columbia Circuit issued a decision vacating the U.S. Nuclear Regulatory Commission’s (“NRC’s” or “Commission’s”) Waste Confidence Decision Update (75 Fed. Reg. 81,037 (Dec. 23, 2010)) (“WCD Update”) and its Temporary Storage Rule (“TSR”) (75 Fed Reg. 81,032 (Dec. 23, 2010)) and remanded them to the NRC. Prior attempts by Petitioner to assert claims regarding environmental and safety impacts of spent fuel storage upon the expiration of the operating license were denied by the Atomic Safety Licensing Board (“ASLB”) and by the NRC Staff for being premature or because of the Commission’s Waste Confidence Rule. However, the Court's new findings, the WCD Update and the TSR regarding the safety and environmental impacts of spent reactor fuel storage and disposal, no longer provide a legally valid basis for any NRC reactor licensing decision establish new information.

II. Nuclear Waste Management Has Been Fraught With Difficulty and Delay

A. History of U.S. Nuclear Waste Management

The history of U.S. nuclear waste management and the NRC’s WCD have been briefed at length in this proceeding, not only in previous filings from Clearwater and

Riverkeeper, but also by this Board.² In response to Clearwater's first proposed safety and environmental contentions regarding waste storage on-site, 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.

Entergy Nuclear Operations, Inc., (Indian Point Units 2 and 3), 72 N.R.C. 98, CLI-10-19, Memorandum and Order, (July 8, 2010).³ Thus, the Commission has already recognized that in the absence of the WCD Update being in place or imminent, both safety and environmental contentions are admissible in this proceeding.

Significantly, since the 1950s -- and still today-- the disposal of our country's nuclear waste is replete with false starts, delays, and substantial problems that has left us at a loss for how to safely dispose of the waste generated by the use of nuclear power. Gordon Thompson, *Environmental Impacts of Storing SNF & HLW from Commercial Nuclear Reactors: A Critique of NRC's Waste Confidence Decision & Environmental Impact Determination* (February 2009) ("*Environmental Impacts*"); See generally Jason Hardin, *Tipping the Scales: Why Congress and the President Should Create a Federal Interim Storage Facility for High-Level Waste*, 19 J. Land Resources & Env'tl. L. 293 ("*Tipping the Scales*"). As such, there is currently no long-term off-site storage of nuclear waste and facilities such as IPEC will continue to accumulate highly radioactive

² See Hudson River Sloop Clearwater's Motion for Leave to Add New Contentions Based Upon New Information dated Oct. 26, 2009 and Hudson River Sloop Clearwater, Inc. and Riverkeeper, Inc.'s Joint Motion for Leave to Add New Contentions Based Upon New Information and Petition to Add New Contentions dated Jan. 24, 2011. See also Licensing Board Memorandum and Order dated Feb. 12, 2010.

³ NRC Commissioner Apostolakis did not participate in the ruling on this matter.

spent fuel on-site for periods of time greater than had been conceived when IPEC was designed.

In fact, raising the allowable licensed amount of waste assemblies allowable onsite has become the norm at many reactors. See *The spent-fuel crisis: Region's nuclear plants pack pools with waste Special report: The canary in the nuclear plant*. Stamford Advocate. Apr. 5, 2011.⁴ At Millstone Nuclear Power Station in Waterford CT., the Unit 3 reactor pool was originally licensed to hold 756 assemblies, but now holds 1,040 assemblies, or 449 metric tons of waste, and is licensed to handle up to 1,860 assemblies. Additionally, while Millstone's Unit 2 reactor was originally licensed to hold 677 spent fuel assemblies, it now holds 909 assemblies, or 304 metric tons, and is licensed to handle up to 1,346 assemblies. *Id.* The Pilgrim Nuclear Power Generating Station in Plymouth, MA was also originally licensed to store 880 fuel assemblies in its spent fuel pool, but now has almost reached 3,000 such assemblies. Of course, IPEC is no exception to this trend. IP3 was originally licensed to handle 264 assemblies, but this number was raised to 840 assemblies. *Id.*

III. Storage On Site In Wet Pools and Dry Casks Is The Default Solution

Spent fuel will be stored on-site for at least the renewal period of the license. At first the spent fuel was stored in low-density pools, however because this waste has accumulated, pools are now tightly and densely packed with spent fuel. *Environmental Impacts* at 11. Many reactor spent fuel pools, including those at IPEC, have reached capacity and now some of the spent fuel waste from 45 reactors, including IPEC Units 2

⁴ Available at <http://www.stamfordadvocate.com/local/article/The-spent-fuel-crisis-Region-s-nuclear-plants-1309964.php#ixzz2093bL0PW>.

and 3, is stored in dry casks on-site in addition to in high density spent fuel pools. *Id.* at 11-12; IPEC Newsletter⁵ There is currently no other option because a permanent waste disposal solution is as distant as ever and there are no civilian facilities to reprocess spent fuel in the United States. The reality is that it is highly likely that the additional waste generated during any period of extended operation would remain on the site for the foreseeable future. Indeed, the U.S. Court of Appeals in reviewing this issue concluded that “[a]t this time, there is not even a prospective site for a repository, let alone progress toward the actual construction of one.”

ARGUMENT

This argument demonstrates that Petitioner meets the substantive contention admissibility requirements of 10 C.F.R. § 2.309(f)(i)-(vi), in addition to the requirement for presenting new and significant environmental information, and all other applicable requirements.

I. Specific Statement of the Contentions

Petitioner must “provide a specific statement of the issue of law or fact to be raised or controverted.” 10 C.F.R. § 2.309(f)(1)(i). The waste confidence rule has been vacated; as such the NRC and/or applicant safety analysis and aging management plan provide an inadequate analysis of the effects of long-term on-site storage in spent fuel

⁵ Available at <http://www.safesecurevital.org/pdf/IPNewsletter071609.pdf>, last visited October 26, 2009. It is worth noting that according to the U.S. Department of Energy’s Office of Disposal Operations, by the end of 2010 the total U.S. stockpile of spent fuel was 64,500 tons, but only about 15,350 tons, or a little less than 25 percent, was stored in dry casks. While dry cask storage is a viable method to reduce the high density storage of spent nuclear fuel rods aggregating within the on-site storage pools, this procedure has not been practiced to an extent that has effectively relieved the dangers posed therein. *See* Feiveson, Harold et al *Managing nuclear spent fuel: Policy lessons from a 10-country study*. Bulletin of the Atomic Scientist, June 27, 2011. Available at <http://www.thebulletin.org/web-edition/features/managing-nuclear-spent-fuel-policy-lessons-10-country-study>

pools. NRC Staff and Entergy must assess the effects of long-term fuel storage and cannot ignore the very real impacts from such storage. Petitioner contends that additional site-specific safety analysis is required before a licensing decision can be reached.

The new contention is:

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The license renewal application requesting the relicensing of Indian Point Units 2 and 3 is inadequate because it provides insufficient analysis of the aging management of the spent fuel pools that could be used to store waste on the site in the long-term. In addition, both the applicant and the NRC Staff have failed to establish that any combination of such storage will provide adequate protection of safety over the long term.

II. Explanation of Basis

At this preliminary stage, Petitioner does not have to submit admissible evidence to support a contention, rather it has to “[p]rovide a brief explanation of the basis for the contention,” 10 C.F.R. § 2.309(f)(1)(ii), and “a concise statement of the alleged facts or expert opinions which support the . . . petitioner’s position.” 10 C.F.R. § 2.309(f)(1)(v). This rule ensures that “full adjudicatory hearings are triggered only by those able to proffer . . . minimal factual and legal foundation in support of their contentions.” *In the Matter of Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 N.R.C. 328, 334 (1999) (emphasis added).

Here, in addition to the factual basis for the contention discussed above, the contention is supported by the Expert Witness Declaration of Arnold Gundersen Regarding Aging Management of Nuclear Fuel Racks dated February 25, 2011 (submitted previously and annexed hereto) (“Gundersen Decl.”), the Prefiled Testimony Direct Testimony of Arnold Gundersen Regarding Consolidated Contention RK-EC-3/CW-EC-1 (Spent Fuel Pool Leaks) dated December 22, 2011 (Gundersen Test.), and an

NRC Staff report discussing spent fuel pool aging: *A Summary of Aging Effects and Their Management in Reactor Spent Fuel Pools, Refueling Cavities, Tori, and Safety-Related Concrete Structures*, Office of Nuclear Reactor Regulation NUREG/CR-7111 ORNL/TM-2011/410 (“SFP Aging Report”).

Many specific aspects of the contention are within the standard scope of relicensing safety contentions, which is the aging management of long-lived passive components, such as the Spent Fuel pool, the fuel pool liner, and the fuel assemblies. However, the agency must go beyond this narrow scope before it can issue any license for the extended operation of IPEC. The D.C. Circuit Decision found that the finding of safety regarding on-site fuel storage was inadequate:

We further hold that the Commission’s evaluation of the risks of spent nuclear fuel is deficient in two ways: First, 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. Second, *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.*

DC Circuit Decision, Slip op. at 3 (emphasis added). The decision also emphasized that at present the agency cannot predict when the spent fuel will go off-site, because “the Commission has no long-term plan other than hoping for a geologic repository.” *Id.* at 13. The NRC therefore must take account of the possibility of indefinite on-site storage. *Id.*

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). Thus, the safety of indefinite storage of spent fuel on-site must be resolved before the two IPEC reactors can be granted a license to generate yet more waste that cannot be disposed of off-site.

Thus, either the applicant or the Staff must now examine the future dangers of spent fuel storage for an indefinite period on-site. To the extent that the contention goes beyond the normal scope of AEA contentions on relicensing, the legal basis for the contentions is that the NRC is required to comply with the AEA when issuing a license. Under the AEA, to issue a license the NRC must find that there will be "adequate protection to the health and safety of the public." 42 U.S.C. § 2232(a). This has been interpreted by NRC Commission to mean that it must be able to find "reasonable assurance that the health and safety of the public will not be endangered by operation of the facility. . . ." 10 C.F.R. § 50.35(c); see also *id.* §§ 50.40(a), 50.57(a)(3). The "reasonable assurance" standard was upheld by the Supreme Court in the landmark case of *Power Reactor Development Co. v. Int'l Union, Electrical Workers*, 367 U.S. 396, 81 S. Ct. 1529, 6 L. Ed. 2D 924 (1961). That case held that the Commission must make a “definitive finding” on safety at the time the license to operate is granted. *Id.*

Because the Commission cannot predict when the waste will leave a reactor site, the NRC Staff and the applicant are obligated to analyze the safety of storing waste on-site indefinitely after the license has expired. *Minnesota v. NRC* 602 F.2d 412 (D.C. Cir.

1979). In *Minn. v. NRC*, the court remanded a petition challenging an NRC licensing decision for a determination whether there was “reasonable assurance” that spent fuel could be stored safely at sites. *Id.* Neither the NRC Staff nor Entergy has addressed the safety of long-term storage of waste at Indian Point. Thus, this showing must still be made.

Because the U.S Court of Appeals vacated the WCD Update and long-term or indefinite storage of additional wastes on the IPEC would be the foreseeable result of allowing the reactor to continue operating, to comply with the Atomic Energy Act (“AEA”) the NRC must perform a thorough analysis of the safety issues raised by the potentially indefinite on-site storage of the additional spent fuel to be generated, which is one of the foreseeable outcomes of licensing an extended period of operation. Thus, the applicant must provide the NRC with a basis to conclude that such storage meets the safety requirements of the AEA or the NRC Staff must devise its own basis. At present, there is no good basis for such a finding.

In general, the Entergy aging management plan is inadequate because it fails to extend beyond the period of extended operation. It is also inadequate in specific areas even during the period of extended operation, as discussed in detail below.

A. The NRC Must Perform Further Safety Review

As the D.C. Circuit Court has twice recognized, in light of the reasonable prospect of indefinite storage at reactor sites well beyond this timeframe, the Atomic Energy Act requires site-specific review of the safety impacts of indefinite onsite storage. *Minnesota v. NRC*, 602 F.2d 412 (D.C. Cir. 1979), accord *Potomac Alliance v. NRC*, 682 F.2d 1030, 1038 (D.C. Cir. 1982). Because it is somewhat unclear to Petitioner who is responsible

for this task, Petitioner contends that it should be done by either the Applicant or the NRC Staff. In addition, because the casks and pools in which some of the spent fuel is already stored, and in which more will be stored in the future, along with ancillary equipment like the fuel cladding and the flexible boron wrapping, are long-lived passive components that the licensee cannot assume will require no inspection of maintenance indefinitely, the Applicant must provide an adequate aging management plan for these components and associated equipment. In addition, the current aging management plan is inadequate because the plan does not include full inspection of the liner and concrete.

Many experts also have safety concerns as a result of increasing fuel pool density. *See* The spent-fuel crisis: Region's nuclear plants pack pools with waste Special report: The canary in the nuclear plant. Stamford Advocate. Apr. 5, 2011.⁶ David Lochbaum, a former nuclear power plant operator and a member of the Union of Concerned Scientists, testified before the Blue Ribbon Commission on America's Nuclear Future 2010. *Id.* He testified that limited space causes the rods to increase in temperature at a faster rate if there are any significant reductions in cooling water. *Id.*

Examples of specific issues that site-specific and generic safety analyses fail to address, include without limitation:

- I) The Applicant relies upon a one-time inspection of only 40% of the liner of the spent fuel because the fuel density is too great to allow more thorough inspection. *See* Prefiled Gundersen Testimony at p. 7.
- II) The long-term degradation of the liner and the concrete for the spent-fuel pool must be monitored and action taken when these components no longer fulfill their

⁶ Available at <http://www.stamfordadvocate.com/local/article/The-spent-fuel-crisis-Region-s-nuclear-plants-1309964.php#ixzz2093bL0PW>.

safety function. The SFP Aging Report discusses aging problems at many reactors, including IPEC. In another instance, The U.S. Department of Energy's Idaho National Laboratory, which holds damaged fuel rods from Unit 2 of the Three Mile Island Plant, has also experienced concrete deterioration. While the concrete modules were built in 1999 with the expectation they would last for fifty years, they are "showing significant cracking and degradation" according to an NRC letter dated April 7, 2011.⁷ The walls are two feet thick and are apparently worsening in their structural integrity due to freezing and thawing of water that has found its way into the concrete infrastructure. This has caused pieces of concrete to break away from the modules, indicating that they are no longer watertight. In 2008, the Department of Energy found that what was initially deemed as "cosmetic" by the NRC in 2000, now appeared to hinder the module's ability to shield the fuel rods from natural phenomena and the public from any radiation emitted there from. See Alvarez, Robert. *Spent Nuclear Fuel Pools in the US: Reducing the Deadly Risks of Storage*, Environmental Defense Institute News on Environmental Health and Safety Issues, June 2011.⁸

III) The long-term degradation of the Boraflex or other wrapping around the fuel assemblies in the spent-fuel pool.⁹ As Mr. Gundersen shows, the applicant's proposals in this regard are inadequate. Gundersen Decl. ¶¶ 15-37.

⁷ Available at NRC ADAMS ML11097A028 <http://pbadupws.nrc.gov/docs/ML1109/ML11097A028.pdf>

⁸ Available at <http://www.environmental-defense-institute.org/publications/News.11.June.Final.pdf>

⁹ Degradation of Boraflex has been recognized as potentially problematic for over 10 years, while the Staff has more recently highlighted degradation of alternatives. <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/1996/secy1996-122/1996-122scy.html> & <http://edocket.access.gpo.gov/2010/2010-10389.htm> (both last visited January 24, 2011).

- IV) The potential for ongoing leaks of radioactivity from existing spent-fuel pools is going to get worse over the long term. *See* maps showing current plume of radioactivity extending from the spent-fuel pool to the Hudson River available at Exhibit A to ML081340325.
- V) Finally, as shown in the Thompson Report cited above (Environmental Impacts), Petitioner contends that long-term wet storage of spent-fuel in high-density racks does not meet the NRC requirements for adequate protection and renders the plant excessively vulnerable to terrorism. Even the analysis from Sandia National Laboratories cited in the Temporary Storage Rule recognizes that a spontaneous propagating spent fuel pool fire could occur. *See* Temporary Storage Rule at 81,034. This suggests that the NRC consider moving spent-fuel more expeditiously from wet storage to dry storage. This analysis must now be done on a site-specific basis for IPEC.

These are very real safety concerns that have created incidents at other facilities. In reviewing the past thirty years of spent fuel pool management, there have been at least sixty occasions where substantial losses of spent fuel water has occurred at U.S. reactor sites. *See* Alvarez, Robert. *Spent Nuclear Fuel Pools in the US: Reducing the Deadly Risks of Storage*, Environmental Defense Institute News on Environmental Health and Safety Issues, June 2011.¹⁰ Ten such occurrences happened after September 11, 2001, when the government alleged it would strengthen nuclear safety mechanisms. *Id.* In addition, the passage of time has inherently caused the corrosion of barriers that halt nuclear reactions from occurring in spent fuel pools. *Id.* This degradation has been so

¹⁰ Available at <http://www.environmental-defense-institute.org/publications/News.11.June.Final.pdf>

severe at some reactor sites that these barriers do not function correctly. In June 2010, the NRC fined Florida Power and Light \$70,000 for failing to report its spent fuel pool criticality safety margin had been exceeded for five years at the Turkey Point reactor. *Id.* Self-reporting mechanisms caused the NRC to be unaware of the extensive deterioration of neutron absorbers in the Turkey Point pools and that there were significant delays in replacing them. *Id.*

III. The Court of Appeals Decision Is “New and Significant” Information

The June 8, 2012 court decision vacating the WCD is undoubtedly new information regarding the site-specific assessment that must be performed as part of the license renewal process. Moreover, the Commission can no longer be said to have made generic findings on the safety of on-site spent fuel storage. The current contention is designed to ensure that the agency plugs this gap.

IV. The New Contention is Within The Scope of License Renewal

Although the existing rules do not contemplate the assessments that Petitioner contends are missing, it is clear that to issue a valid license, the NRC must comply with the AEA. This Board has already determined that these issues are within the scope of license renewal, despite the fact that the Commission ultimately determined that the contentions were barred because of the imminent WCD Update that has now been vacated.¹¹ Indeed, this Board found “that the proposed contentions raise significant legal and policy issues and that resolution of these issues would materially advance the orderly disposition of this proceeding.” The issue of the safety on indefinite waste storage on-site while previously inadmissible as outside the scope of this proceeding is now open for litigation.

¹¹ CLI-10-19.

Second, as discussed above the safety contention raises issues about the aging of long-lived passive components, which are at the heart of the relicensing safety review, and requests the agency to comply with the AEA, which is of course mandatory.

V. The New Contention Raises Multiple Material Disputes

The regulations require petitioner to “[d]emonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding.” 10 C.F.R. § 2.309(f)(1)(iv). A showing of materiality is not an onerous requirement, because all that is needed is a “minimal showing that material facts are in dispute, indicating that a further inquiry is appropriate.” *Georgia Institute of Technology*, CLI-95-12, 42 N.R.C. 111, 118 (1995); *Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process*, 54 Fed. Reg. 33,171 (Aug. 11, 1989).

At present because there is no generic study on impacts of on-site storage, licensing decisions must now be supported by work analyzing the safety of indefinite on-site storage. *Minnesota v. NRC*, 602 F.2d 412 (D.C. Cir. 1979); accord *Potomac Alliance v. NRC*, 682 F.2d 1030, 1038 (D.C. Cir. 1982).

As mentioned above under the basis section, in its application Entergy has also failed to put forward an effective aging management plans for the spent-fuel pool liners and concrete, for the spent-fuel pools themselves, or for associated components, such as the boron wrapping of the fuel assemblies. In the absence of such analyses it is clear there is a material dispute about what constitutes compliance with AEA. In addition, as mentioned previously, in its order dated Feb. 12, 2010 this Board found that “the issues would materially advance the orderly disposition of this proceeding.”¹² Moreover,

¹² See Feb. 12, 2010 Order at 1

Petitioner expects that the answers to this Petition will demonstrate further sharp factual and legal disputes between the parties that will need to be resolved through a hearing.

As discussed in the basis section, a number of specific safety issues are problematic. For example, the many reports produced by Dr. Gordon Thompson make it plain that he believes that storage of spent fuel in wet pools is far less safe than the NRC Staff believe and that the Staff should take further steps to improve the safety of spent fuel pools. However, to date this issue has been legally excluded from the proceeding because of the Waste Confidence Rule. Because the Court of Appeals vacated the WCD Update and the Commission envisions long-term on-site use of wet pools as well as dry casks, this material dispute is properly raised by the safety contention as are the other specific issues mentioned in the basis section.

VI. The New Contention is Timely

In accordance with paragraph F.2 of the ASLB's July 1, 2010 Scheduling Order, Petitioner's new contention is timely pursuant to 10 C.F.R. §2.309(f)(2), because it has been "filed within thirty (30) days of the date when the new and material information it is based first becomes available". *See* Scheduling Order, ASLBP No. 07-858-03-LR-BD01 (July 1, 2010) at 6. Nonetheless, out of an overabundance of caution, Petitioner shows below that it actually meets the timing requirements set forth in 10 C.F.R. § 2.309(f)(2), as well as 10 C.F.R. § 2.309(c).

Petitioners may add timely new contentions after filing their initial petition, so long as they act in accordance with 10 C.F.R. § 2.309(f)(2). *Entergy Nuclear Vermont Yankee, L.L.C.* (Vermont Yankee Nuclear Power Station), LBP-05-32, 62 NRC 813 (2005). The Commission's regulations allow for a new contention to be filed upon 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.

10 C.F.R. § 2.309(f)(2)(i)-(iii). Thus, when the Board found that action by the licensee mooted an admitted contention, the Board allowed the intervenors to file a new contention, but required the new contention to be timely in accordance with 10 C.F.R. § 2.309(f)(2). *In the Matter of AmerGen Energy Company* (License Renewal for Oyster Creek Nuclear Generating Station), LBP-06-16, 63 N.R.C. 737, 744-45 (2006). Similarly, the Board in the Vermont Yankee license renewal proceeding recently recognized that the time to file contentions is placed at a very early stage, when the renewal application is docketed. *Entergy Nuclear Vermont Yankee L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-07-15, slip op. at 6 n. 12 (November 7, 2007) *available at* ML073110424. After the initial time to present contentions has expired, new contentions must meet a timeliness test. When significant new information becomes available this test should be a relatively simple matter to meet. *Id.* at 5; 10 C.F.R. § 2.309(f)(2). However, in the absence of new information the applicable test is more stringent. LBP-07-15 slip op. at 6. The Board also noted that “normally a great deal of new and material information becomes available to the public after the docketing” through application amendments or the safety evaluation report. LBP-07-15, slip op. at 6 n. 12. This information can then be used to file new contentions, satisfying the AEA requirement that the public must be afforded an opportunity to request a hearing on all material safety issues. *Id.*

Here, the new contention meets the requirements of 10 C.F.R. § 2.309(f)(2) because they are based upon new information that was “not previously available,” and is “materially different than information previously available,” that is because on June 8, 2012 in *State of New York v. Nuclear Reg. Comm.* the U.S. Court of Appeals issued an

order vacating the WCD.¹³ Turning to the last element, the ASLB in this proceeding has provided that contentions filed within 30 days of new information are considered timely. *See* Scheduling Order at 3.¹⁴ Because this motion is based on the U.S. Court of Appeals decision dated June 8, 2012, it is within the timeliness requirement of 10 C.F.R. § 2.309(f)(2)(iii).

NRC Staff and Entergy may argue that the regulations require Petitioner to meet the timeliness test for a late-filed contention contained in 10 C.F.R. § 2.309(c). Although this is not correct, even if the 10 C.F.R. § 2.309(c) standard applies, Petitioner meets that standard. The standard contained in Section 2.309(c) is that late-filed contentions will be admitted based upon a balancing of the following factors:

- (i) Good cause, if any, for the failure to file on time;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding;
- (iv) The possible effect of any order that may be entered in the proceeding on the requestor's/petitioner's interest;
- (v) The availability of other means whereby the requestor's/petitioner's interest will be protected;
- (vi) The extent to which the requestor's/petitioner's interests will be represented by existing parties;
- (vii) The extent to which the requestor's/petitioner's participation will broaden the issues or delay the proceeding; and
- (viii) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record.

¹³ Timely filing is within 30 days, except when the 30th day falls on a weekend and then it is the next business day. 10 C.F.R.s 2.306(a). "The last day of the period so computed is included unless it is a Saturday or Sunday...in which event the period runs until the end of the next day...." Here 30 days fell on Sunday July 8, 2012 and the next day is Monday, July 9, 2012,

¹⁴ Generally, the Commission and on occasions the Board has interpreted the "timely fashion" requirement of 10 C.F.R. § 2.309(f)(2)(iii) as being 30 days from the availability of the new information upon which the new contention is based. *E.g. Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-4, 59 NRC 31, 46 (2004).

In evaluating the admissibility of a late-filed contention, the first and foremost factor is whether good cause exists that will excuse the late filing of the contention. *See Commonwealth Edison Co.* (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-8, 23 NRC 241, 244 (1986). The good cause element has two components that may impact on a presiding officer's assessment of the timeliness of a contention's filing: (1) when was sufficient information reasonably available to support the submission of the late-filed contention; and (2) once the information was available, how long did it take for the contention admission request to be prepared and filed. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-3, 49 NRC 40, 46-48 (assessing late-filing factors relative to petition to intervene), *aff'd*, CLI-99-10, 49 NRC 318 (1999); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-13, 53 NRC 319, 324 (2001).

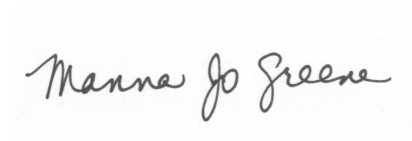
First, and most importantly, Petitioner has good cause for not submitting the contention earlier, because according to prior decision of the Commission the WCD barred the Petitioners from raising this contention; however the June 8, 2012 order in *State of New York v. Nuclear Reg. Comm.* vacated the WCD Update. Second, Petitioner is already a party to this proceeding. Third, as demonstrated in the declarations filed with Clearwater's initial petition to intervene dated December 10, 2007, Clearwater has individual members who live close to the plant and have intense interest in the potential environmental impacts license extension could cause. Fourth, if the proposed contentions were admitted it would have a material effect on the licensing decision that is before the Commission. Fifth, Petitioner currently has no other available means to protect its interests because in the absence of an admitted contention, the required analyses would

not be performed. Sixth, the other parties in this proceeding do not have any admitted contentions that would require a similar analysis. Seventh, not admitting the contention could lead to more delay if a Circuit Court were to find on appeal that analysis of the spent fuel issues is essential to comply with AEA. Finally, at present the record is insufficient to allow the Commission to conclude that the environmental and safety analysis supporting the IPEC relicensing is adequate. Thus, admitting the contentions would assist the Commission in developing a sound record.

CONCLUSION

For the foregoing reasons, this Board should admit Petitioner's proffered contention into this proceeding.

Signed (electronically) by

A handwritten signature in cursive script that reads "Manna Jo Greene". The signature is written in dark ink on a light-colored background.

Manna Jo Greene, Environmental Director
Hudson River Sloop Clearwater, Inc.
724 Wolcott Ave.
Beacon, NY 12508
(845) 265-8080 ext. 7113
mannajo@clearwater.org

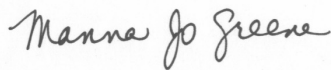
Dated: July 9, 2012

10 C.F.R. § 2.323 Certification

Pursuant to 10 C.F.R. § 2.323(b) and the Board's July 1, 2010 scheduling order, I certify that I have made a sincere effort to contact counsel for NRC Staff and Entergy in this proceeding, to explain to them the factual and legal issues raised in this motion, and to resolve those issues, and I certify that my efforts have been unsuccessful.

Said consultation took place on July 9, 2012.

Signed (electronically) by

A handwritten signature in cursive script that reads "Manna Jo Greene".

Manna Jo Greene, Environmental Director
Hudson River Sloop Clearwater, Inc.
724 Wolcott Ave.
Beacon, NY 12508
(845) 265-8080 ext. 7113
mannajo@clearwater.org

Dated: July 9, 2012