UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Lawrence G. McDade, Chairman
Dr. Kaye D. Lathrop
Dr. Richard E. Wardwell

In the Matter of	)	Docket Nos. 50-247-LR
	)	and
	)	50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.	)	
	)	
(Indian Point Nuclear Generating Units 2 and 3)	)	
	)	Date: February 3, 2011

MOTION FOR LEAVE TO AMEND AND EXTEND CONTENTION EC-3 REGARDING ENVIRONMENTAL JUSTICE AND PETITION TO DO SO

PRELIMINARY STATEMENT

After much delay, the Staff of the Nuclear Regulatory Commission ("NRC") finally completed the Final Supplemental Environmental Impact ("FSEIS") statement[1] for the Indian Point relicensing on December 3, 2010. The FSEIS is materially different to the Applicant's Environmental Report in some respects, but merely parrots its assertions in others. This Petition to amend and extend concentrates on three major failures in the assessment of Environmental Justice ("EJ"). First, despite a ruling of the Atomic Safety and Licensing Board (the "Board") recognizing the potential for disparate impacts on potentially affected EJ populations that could be affected by the proposed action, the NRC has ignored this issue. Second, the NRC has failed to provide an adequate assessment of the EJ impacts of the no-

[1] NRC, NUREG-1437: Supplement 38 Regarding Indian Point Nuclear Generating Unit Nos. 2 and 3 (Dec. 2010) ("FSEIS") available in ADAMS at accession numbers ML103350405 (Volume 1), ML103350438, ML103360209, ML103360212 (Volume 2), and ML103350442 (Volume 3).

action alternative, which would involve plant closure, and has similarly failed to provide an adequate assessment of the air and EJ impacts of installing closed-cycle cooling at Indian Point.

On the first new issue, the comments about potential EJ impacts of the no-action alternative raised a health issue that is only mentioned in two inconsistent sentences in the FSEIS and was not addressed at all in the ER. A conclusory sentence that contradicts a prior conclusory sentence does not constitute a sufficient analysis of the potential disproportionate effects of the no-action alternative raised by the comments. These issues require careful analysis, particularly because some of the groups that made the allegation about the impacts of the no-action alternative have actually been funded by Entergy and may even have been encouraged by Entergy to submit such comments in an attempt to influence the outcome of license renewal.

With regard to the analysis of the air quality and environmental justice impacts of closed-cycle cooling, it suffers from three critical deficiencies. First, it is based purely on Entergy's assertions, not the NRC Staff's independent judgment. Second, it fails to consider the finding in the FSEIS that the air quality impacts from finding replacement power could be significant. Indeed, it implies that those impacts would be minimal in any given location due to the nature of NYISO market. Third, if the local impacts were as severe as the air quality analysis indicates, the EJ analysis should have analyzed whether there would be disproportionate impact on the local EJ populations.

Finally, Clearwater would like to stress that it believes that the EJ and air impacts of the no-action alternative and the cooling tower alternative have been exaggerated by Entergy and some of the comments. However, that does not mean that the NRC Staff can abdicate its responsibility to do serious analysis of potentially significant EJ issues and reach its own independent conclusions based upon scientific analysis. Clearwater is making these contentions for three main reasons. First, Clearwater believes many of the EJ impacts that could be caused by the proposed action and the alternatives could be mitigated, if they were properly assessed and recognized. Second, the NRC is in danger of drawing the wrong conclusions regarding the EJ impacts of the various alternatives if the Staff's analysis and

independent conclusions are incorrect, inconsistent, or missing. Third, EJ populations deserve and expect the same careful treatment and respect from the federal government as large corporations like Entergy. Here, the NRC exhibited a callous disregard for EJ populations, in marked contrast to the excess deference it showed to Entergy. Clearwater cannot allow such unfair, unjust, and illegal conduct to go unchallenged. This Petition therefore amends the EJ contention to reflect the NRC's failure to address potentially affected EJ populations and adds two new issues to those raised by the original EJ contention.

NEW INFORMATION AVAILABLE

I. The FSEIS Analysis of EJ Issues Fails to Assess Disparate Impacts of the Proposed Action on Potentially affected EJ Populations

Instead of analyzing the potential for disparate impact caused by the proposed action on potentially affected EJ populations, the FSEIS continues to attempt to rely on generic analysis, that simply does not address this issue at all. FSEIS at A-112 to A-113; A-117 to A-120. The NRC also makes an erroneous legal argument that emergency planning issues for EJ populations are outside the scope of this proceeding. *E.g. Id.* at A-113. As discussed more fully in the legal argument below, this assertion is not only incorrect, it directly contradicts the findings of this Board in this case. NRC made these errors despite Clearwater successfully proposing a contention on this issue and Clearwater and others commenting on the DSEIS pointing out this flaw. *Id.* at A-112; A-118; A-119.

II. The FSEIS Analysis of the Impact of the No-Action Alternative on Distant EJ Populations Is New But Inadequate

With the final filing of the FSEIS and the conclusion of the environmental review process, it is clear that there will be no substantive discussion of the environmental impact of alternatives to licensing renewal on distant low-income or minority populations in New York City, unless the Board admits

Clearwater's first proposed additional issue. In the Environmental Report ("ER")[2] Entergy provided only a limited discussion of the "no-action" alternative to relicensing. It stated that "a decision not to renew the IP2 and IP3 licenses" would "necessitate the replacement of its approximately 2,158 gross MWe capacity with other sources of generation." ER at 7-1 within Section 7.3 No-Action Alternative. The Draft SEIS similarly lacked an adequate discussion of the availability and environmental impacts of alternatives to relicensing. Clearwater, Riverkeeper, and others pointed out that Section 8.2 of the DSEIS was flawed because it did not consider and analyze new information about various measures that could be taken if the no-action alternative were implemented as compared to the detrimental impact of relicensing the plant. FSEIS at A-153. These omissions were addressed obliquely in the FSEIS, but the NRC failed to adequately address the issue. *E.g.* FSEIS at A-154.

In addition, comments concerning the DESEIS alleged a major flaw in the environmental analysis, stating that the analysis had failed to assess the impact of the no-action alternative on environmental justice populations in areas of New York City where fossil fuel power plants are located. FSEIS at A-110. The comments alleged that the no-action alternative would cause serious disproportionate health impacts on minority and low income populations in these areas. *Id.* Interestingly, the language of the comments mirrors Entergy's public relations slogans. The comments state "Indian Point provides clean, safe, and affordable electricity . . ." FSEIS at A-110.[3] The language an Entergy Vice-president used before the New York City Council was very similar:

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[2] Entergy, Applicant's Environmental Report: Operating License Renewal Stage: Indian Point Energy Center (Appendix E to the license renewal application) (the "ER") available at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/indian-point.html (last visited February 3, 2011)

[3] These key words were originally identified by a public relations firm working for the nuclear industry in an effort to make nuclear power appear more acceptable. http://www.sourcewatch.org/index.php?title=Clean_and_Safe_Energy_Coalition. The nuclear industry also established proxy front groups such as the Clean and Safe Energy Coalition (CASEnergy Coalition) to advocate for nuclear power. *Id.* This group used paid spokepeople like Christine Todd Whitman and Patrick Moore who are often quoted without any disclosure of their paid role as public relations consultants to the nuclear industry. *Id.*

> That is my background, now to why I am here today and why I feel so passionate about Indian Point. I trust that when I finish my testimony, you will have a clearer picture of why Entergy and many elected officials, government agencies and business organizations – some of whom you will hear from today – believe Indian Point is *safe, secure and vital*.
> There is a lot of misinformation and half-truths floating about in the media about the Indian Point Nuclear Power Plants – most of that is misinformation spread by those who have always been opposed to nuclear power and are using the horrific events of September 11 to further that cause.
> Here are just some of the facts:
> There are two operating nuclear units at Indian Point, not one. Each one produces more than 1,000 megawatts of electricity to New York City and Westchester County for a total of about 2,000 megawatts of *clean, low-cost, electricity* or enough electricity to supply 2 million homes;

http://www.safesecurevital.org/newsroom/government-affairs/environmental-protection-hearing.html (last visited February 2, 2011) (emphasis added). Even more strikingly, another document on Entergy's public relations website states:

> Said Entergy Nuclear President and Chief Nuclear Officer Michael R. Kansler, "Entergy Nuclear has a strong track record of generating *safe, clean, reliable, and low-cost energy* across the Southern and Northeastern United States."

http://www.safesecurevital.org/newsroom/archives/news-archive-2007/indian-points-economic-and-environmental-value-to-new-york-far-outweigh-political-considerations.html (last visited February 2, 2011) (emphasis added).

These similarities are not just coincidences. One of the groups that made these comments has close ties to the nuclear industry and at least two have been directly funded by Entergy. For example, 100 Black Men made comments about the EJ impacts of the no-action alternative. FSEIS at A-4; A-110. The same group has received grant funding from Entergy.[4] Similarly, 100 Black Women made comments about the EJ impacts of the no-action alternative. FSEIS at A-6; A-110. The same group has

[4] http://www.tnj.com/entergy-gives-grant-100-black-men-new-york-chapter (Entergy Corp. donated a $25,000 program grant to the New York Chapter of 100 Black Men)

received grant funding from Entergy.[5] In addition, the African American Environmentalist Association made comments about the potential EJ impacts of the no-action alternative. FSEIS at A-212 to A-216. This group is known as a nuclear "astroturf group" i.e. it is designed to look like a real community group, but is actually a counterfeit group that represents the interests of corporations like Entergy.[6] Another similar example is the New York Affordable Reliable Electricity Alliance (NY AREA).[7] The African American Environmentalist Association is listed as a member of the NY AREA.[8] It therefore appears likely that many of the groups that submitted comments regarding the EJ impacts of the no-action alternative have been encouraged to submit these comments by Entergy or one of its proxies, such as NY AREA. In addition, some of the groups making comments have been directly funded by Entergy. At minimum, it would have been preferable had these groups and Entergy disclosed these financial links. Moreover, because many of these comments may effectively be the self-interested public relations statements of the applicant itself, the FSEIS should have treated them with great care. Instead, the FSEIS appears to endorse these comments because they "are generally supportive of nuclear power and license renewal." FSEIS at A-110.

In further response, the NRC stated that because these impacts "are discussed in Chapter 8 in the SEIS," these comments did not warrant a change in the SEIS. *Id.* Confirming that the only analysis of the no-action alternative is contained within Chapter 8, the discussion of Environmental Justice in

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[5] http://blog.nola.com/tpmoney/2009/06/entergy_new_orleans_awards_gra.html (Entergy made grant to National Coalition of 100 Black Women)

[6] *See http://www.sourcewatch.org/index.php?title=African_American_Environmentalist_Association* (The African American Environmentalist Association "is listed as a member of the nuclear astroturf groups"); http://www.sourcewatch.org/index.php?title=Norris_McDonald (Norris McDonald, the president of the African American Environmentalist Association has close ties to the nuclear industry).

[7] http://www.sourcewatch.org/index.php?title=New_York_Affordable_Reliable_Electricity_Alliance (New York Affordable Reliable Electricity Alliance (NY AREA) is "funded at least partly by Entergy, Indian Point's owner" [c*iting* Michael Risinit, Relicensing battle brews at Indian Pt, The Journal News (Westchester County, NY), March 30, 2005)]. Entergy spokesperson Jim Steets told PR Watch that his company "was 'instrumental in the founding of New York AREA,' but said he didn't know 'how much of New York AREA's funding comes from Entergy.' He added, 'There's no question that there's a strong association' between Entergy and NY AREA).

[8] http://en.wikipedia.org/wiki/African_American_Environmentalist_Association (African American Environmentalist Association is listed as a member of the New York Affordable Reliable Electricity Alliance)

Chapter 8 states at the outset: "The NRC staff addresses environmental justice impacts of continued operations in Section 4.4.6." *Id.* at 8-18. However, the environmental justice analysis in Chapter 8 deals exclusively with the alternative of installing closed cycle cooling, not the no-action alternative. *Id.* In Section 8.2, under a heading entitled "No-Action Alternative" the FSEIS provides a limited discussion and a summary table of anticipated impacts. *Id.* at 8-20 to 8-21. The summary table of anticipated impact states that the impact on air quality of the no-action alternative would be "SMALL" because "emissions related to plant operation and worker transportation will decrease." *Id.* at 8-21. It further states that the environmental justice impacts of this alternative would be "SMALL" because "Impacts are not anticipated to be disproportionately high and adverse for minority and low-income populations." *Id.*

The "analysis" of air quality impacts states, in its entirety:

> In Chapter 4 of this SEIS, the NRC staff adopted the findings in the GEIS that the impacts of continued plant operation on air quality would be SMALL. When the plant stops operating, there will be a reduction in emissions from activities related to plant operation (e.g., use of diesel generators and vehicles to transport workers to the site). As such, the NRC staff concludes that the impact on air quality from shutdown of the plant would be SMALL.

Id. at 8-23. In contrast to the air quality impacts "analysis" the EJ impacts states "Some minority and low-income populations located in urban areas could be affected by reduced air quality and increased health risks due to the burning of fossil fuel in existing power plants used to replace the lost power generated by Indian Point." *Id.* at 8-26. The FSEIS contains no further analysis of the air quality impacts of the no-action alternative.

The ER's discussion of environmental justice impacts was even more limited. Entergy stated: "For environmental justice, NRC does not require information from applicants, but noted that it would be addressed in individual license renewal reviews (10 CFR Part 51, Appendix B, Table B-1, Footnote 6). Entergy has included environmental justice demographic information in Section 2.6.2." ER at 4-6. The analysis contains no discussion at all of the environmental justice impacts of the no-action alternative.

ER at 4-78 to 4-79; ER at Chapter 8. The only specific Section on the no-action alternative makes no mention whatsoever of EJ issues. *Id.* at 8-57.

In summary, the comments about potential EJ impacts of the no-action alternative raised an issue that had only been mentioned in two inconsistent sentences in the DSEIS and the FSEIS and had not been addressed at all in the ER. In addition, Clearwater's comments raised issues about mitigation of the no-action alterantive. These issues require careful analysis, particularly because some of the groups that made the allegation about the impacts of the no-action alternative have actually been funded by Entergy and may even have been encouraged by Entergy to submit such comments in an attempt to influence the outcome of license renewal.

III. The FSEIS Analysis of the Impact of Adding Closed-Cycle Cooling on Air Quality and EJ Populations Is Inadequate

In Section 8.1, the ER provides some assessment of the impacts of closed-cycle cooling. ER at 8-1 to 8-19. The ER contains no EJ analysis of this alternative. *Id.* In the FSEIS, for the first time the NRC Staff begins to analyze the impacts of closed cycle cooling on local environmental justice communities. FSEIS at 8-17 to 8-18. A number of comments were submitted regarding the adequacy of the analysis of the impacts of closed-cycle cooling causing the NRC Staff to update its analysis in the FSEIS. FSEIS at A-154 to A-155. However, those updates did not result in an adequate analysis of this issue. Mirroring the inadequacies of the assessment of the issue raised by the comments about potentially affected EJ populations, the NRC Staff parroted Entergy's assertions about air quality impacts:

> Entergy contractors indicate that prolonged outages of IP2 and IP3, such as would be required to install cooling towers (TRC Environmental Corp [TRC] 2002) would require replacement 33 power from existing generating facilities within the New York City metropolitan area. They assert that replacement of IP2 and IP3 energy output during cooling tower installation would result in substantial increases in regulated air pollutants. To the extent that coal- and natural gas-fired facilities replace IP2 and IP3 output, the NRC staff finds that some air quality effects would occur. The NRC staff finds that these effects would largely cease when IP2 and IP3 return to service, with the exception of any output lost to lower efficiency and new parasitic loads from the closed-cycle cooling system (an average of approximately 88 MW, with peak 40 losses of

> 157.6 MW. Additional air quality impacts could result from power that replaces these parasitic and efficiency losses.

FSEIS at 8-12. The assessment continues:

> Operation stage impacts could be more significant. As previously discussed, the cooling towers would emit tower drift consisting of water, salt, and suspended solids. These emissions would be considered PM10, and some portion may include PM2.5. Because IP2 and IP3 are located in a nonattainment area for PM2.5, a conformity analysis for the cooling towers would be necessary and may result in additional restrictions on emissions, additional compensatory measures, or further control of drift from the towers. Entergy's feasibility and cost study indicates that particulate emissions would be so great that it may not be possible to obtain construction and air permits (Enercon 2010).
> Should operational air quality impacts cause air quality to worsen and thus further exceed limits, the effect would be MODERATE or greater, though some level of emissions trading would limit this impact. During construction, air quality effects would be controlled by site practices and compensatory measures required to maintain compliance with the Clean Air Act (CAA) (should a conformity analysis show the need to take other action). Also, replacement power would be required to comply with CAA requirements (and it would be short lived). Overall, the air quality effects would be driven by operational impacts, and could be SMALL to LARGE, depending on the towers' compliance with CAA requirements and the availability of PM2.5 allowances.

Id. Thus, it is clear that the finding of the air quality impacts of the closed cycle cooling alternative is both too indeterminate to be useful and entirely dependent on the assertions of Entergy, that Staff failed to question or pass independent judgment upon. In fact, when an independent engineer examined the asserted need for a long outage to install closed-cycle cooling at the Oyster Creek nuclear power plant, he found it was unnecessary. Letter from Bill Powers, Powers Engineering to Pilar Patterson, NJDEP, dated March 15, 2010.[9] He also found that the PM10 emission estimates provided by the applicant in that case were overestimated by over five times. *Id.* at 8-9. Furthermore, the Staff fails to discuss and draw independent conclusions on whether the asserted parasitic losses are accurate or whether Entergy could up-rate the plants slightly to make up for those losses.

[9] Available at http://www.dec.ny.gov/docs/legal_protection_pdf/eeclbtaexh2.pdf (last visited February 3, 2011)

Although, the FSEIS EJ analysis of closed-cycle cooling continues to rely upon Entergy's direct assertions, the conclusion indirectly contradicts the air quality analysis by stating:

> As noted earlier in this section, replacement power required during a 42-week outage could increase air quality effects in minority and low-income communities, depending on the location and characteristics of generator units used to replace IP2 and IP3 output. These effects are likely to be short-lived (most will be no longer than the outage period), and may vary with time of year, scheduled outages at other facilities, and generator pricing on the New York Independent System Operator (NYISO) grid. Additionally, impacts would occur near existing facilities and would result from incremental increases rather than new effects. As a result, impacts are likely to be small.

FSEIS at 8-18. The FSEIS then concludes that the EJ impacts from closed-cycle cooling would be small. *Id.* This "analysis" is wrong on three grounds. First, it is based purely on Entergy's assertions, not the NRC Staff's independent judgment. Second, it fails to consider the finding that the air quality impacts from finding replacement power could be significant. Indeed, it implies that those impacts would be minimal in any given location due to the nature of NYISO market. Third, if the local impacts could be as severe as the air quality analysis indicates, the EJ analysis should have analyzed whether there would be disproportionate impact on the local population.

The potential air impact of closed-cycle cooling at Indian Point is being addressed by separate administrative proceedings before the New York Department of Environmental Conservation ("DEC") in which Entergy is a party. Clearwater believes that New York State, Riverkeeper, and Entergy intend to present expert testimony on the air quality impacts of closed-cycle cooling at Indian Point in those proceedings. Clearwater will, at minimum, keep the Board apprised of the expert testimony presented in the DEC proceedings on this issue. Clearwater will also endeavor to present its own expert testimony on this issue, if necessary.

ARGUMENT

I. Legal Requirements of NEPA

The National Environmental Policy Act, 42 U.S.C § 4321, et seq. ("NEPA") mandates that federal agencies involved in activities that may have a significant impact on the environment must complete a detailed statement of the environmental impacts and project alternatives. NEPA requires, in pertinent part, that all agencies of the Federal Government, including the NRC, take a "hard look" at environmental impacts of proposed actions. Specifically, the NRC must include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on –

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

42 U.S.C. § 4332(c).

NEPA establishes a "national policy [to] encourage productive and enjoyable harmony between man and his environment," and was intended to reduce or eliminate environmental damage and to promote "the understanding of the ecological systems and natural resources important to" the United States. *Dept. of Transp. v. Pub Citizen*, 541 U.S. 752, 756 (2004) (*quoting* 42 U.S.C. § 4321). The application of NEPA's requirements, under the rule of reason relied on by the NRC, is to be considered in light of the two purposes of the statute: first, ensuring that the agency will have and will consider detailed information concerning significant environmental impacts; and second, ensuring that the public can both contribute to the body of information and can access the information that is made public. *San Luis*

Obispo Mothers For Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006). The Supreme Court has identified NEPA's "twin aims" as "plac[ing] upon an agency the obligation to consider every significant action[, and] ensur[ing] that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Counsel, Inc.*, 462 U.S. 87, 97 (1983)

NEPA is the "basic charter for protection of the environment." 40 C.F.R. § 1500.1. Its fundamental purpose is to "help public officials make decisions that are based on understanding of environmental consequences, and take decisions that protect, restore and enhance the environment." *Id.* NEPA requires federal agencies to examine the environmental consequences of their actions before taking those actions, in order to ensure "that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast." *Robertson v. Methow Valley Citizens Council (Robertson)*, 490 U.S. 332, 349 (1989).

NEPA goes beyond the Atomic Energy Act ("AEA") in mandating that the NRC consider alternatives to its licensing actions that may have detrimental effects on the environment. 10 C.F.R. § 51.71(d). The primary method by which NEPA ensures that its mandate is met is the "action-forcing" requirement for preparation of an EIS, which assesses the environmental impacts of the proposed action and alternative actions. *Robertson*, 490 U.S. at 350-51. An EIS must be searching and rigorous, providing a "hard look" at the environmental consequences of the agency's proposed action. *Id.* at 349; *Marsh v. Oregon Natural Resources Council*, 490 U.S. 260, 374 (1989). The environmental impacts that must be considered in an EIS include "reasonably foreseeable" impacts which have "catastrophic consequences, even if their probability of occurrence is low." 40 C.F.R. § 1502.22(b)(1). The Commission has held that probability is the "key" to determine whether an impact is "reasonably foreseeable" or whether it is "remote and speculative" and therefore need not be considered in an EIS. *Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station)*, CLI-90-7, 32 NRC 129, 131 (1990). *See also Limerick Ecology Action v. NRC,* 869 F.2d 719, 745 (3rd Cir. 1989)*, citing Vermont*

Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 551 (1978). On the issue of terrorism, the Ninth Circuit found it had to be assessed, but the Third Circuit disagreed. *San Luis Obispo Mothers For Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006) *contra New Jersey Environmental Protection v. NRC*, 561 F. 3d 132 (3d Cir. 2009).

The Council on Environmental Quality ("CEQ") has promulgated regulations that implement NEPA. These regulations require federal agencies to fully analyze all feasible alternatives and explain the bases for their acceptances or rejection. 40 C.F.R. §§ 1503.4, 1505.1(e). The Commission has also recognized that NEPA requires an extensive analysis of alternatives:

> NEPA twice refers to the consideration of "alternatives." In addition to the "alternatives" language in section 102(2)(C)(iii), quoted above, NEPA section 102(2)(E) requires federal agencies to "study, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources."

Pa'ina Hawaii, LLC, CLI-10-18, 22 (July 8, 2010). In the same decision, the Commission also noted that Section 102(2)(E) of NEPA requires the NRC to give "full and meaningful" consideration to all reasonable alternatives. *Pa'ina Hawaii, LLC* at 22.

Furthermore, the analyses of impact must contain "high quality" information and "accurate scientific analysis." 40 C.F.R. § 1500.1(b); *Conservation Northwest v. Rey*, 674 F.Supp. 2d (W.D. Wash. 2009) *citing Center for Biological Diversity v. U.S. Forest Service*, 349 F.3d 1157, 1167 (9th Cir. 2003). Therefore, general statements about possible effects and some risk are inadequate unless there is a good reason why better information cannot be obtained. *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1380 (9th Cir. 1998). Similarly, the analysis cannot be based on incorrect assumptions or data. 40 C.F.R. § 1500.1(b); *Native Ecosystems Council v. U.S. Forest Service*, 418 F.3d 953, 964-65 (9th Cir. 2005). Moreover, the NRC Staff must "independently evaluate and be responsible for the reliability of all information used in the draft environmental impact statement." 10 C.F.R. § 51.70(b); *see also* 10 C.F.R. § 51.92(a).

The NRC's also regulations require the FSEIS to contain an analysis of significant problems and objections raised in comments to the DSEIS. 10 C.F.R. § 51.71(b). In addition the FSEIS must discuss and respond to any opposing view not adequately discussed in the DSEIS. 10 C.F.R. § 51.71(b).

The NRC has committed to making environmental justice assessments of the potential impacts of decommissioning nuclear power plants and to do so on a site-specific basis. NUREG-0586 Supplement 1 (Nov. 2002) at 4-65. This is more than just a commitment; it is a legal obligation. Executive Order 12898 (59 FR 7629), dated February 16, 1994, directs Federal executive agencies to consider environmental justice under the National Environmental Policy Act 1969 (NEPA). This is also reflected in the regulations which state that the GEIS simply does not assess environmental justice impacts at all. 10 C.F.R. Part 51, Sub-part A, Appendix B (stating "The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews'). This policy of providing site-specific EJ analysis is also discussed in the FSEIS. *E.g.* FSEIS at A-117.

In 2008, despite NRC and Entergy claims to the contrary, the Board agreed with Clearwater that a site-specific analysis of the impact on potentially affected EJ populations is required when it admitted Clearwater contention EC-3. In the Matter of Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13, 196-203 (2008). The Board found that NEPA required a review of "environmental factors peculiar to minority or low-income populations that may cause them to suffer harm disproportionate to that suffered by the general population. *Id.* at 200 *accord Louisiana Energy Services* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 100 (1998). The Board then admitted Clearwater's contention regarding potentially affected EJ populations:

> Finally, Clearwater identifies minority and low-income populations located in numerous institutions located near Indian Point who would not be evacuated in the event of a severe accident. Specifically, Clearwater identifies Sing Sing, a maximum security correctional facility located less than ten miles from Indian Point that houses more than 1,750 predominately minority inmates. Clearwater also identifies twenty five other prisons and jails located within fifty miles of Indian Point.1033 Clearwater then contends that Entergy's ER is deficient because it does

> not address the impact of a severe accident at Indian Point on these EJ populations.
>
> Both Entergy and the NRC Staff attempt to dismiss this contention as an "emergency planning issue" which is outside the scope of a license renewal proceeding. (The Commission noted in Millstone that emergency planning is, by its very nature, not germane to age-related degradation.) However, Clearwater EC-3 is a Part 51 Environmental Contention brought under NEPA. It is not a Part 54 Safety Contention based on emergency planning. Clearwater has not contended that Entergy's emergency plan is deficient. Rather the Petitioner has contended that Entergy's ER is deficient because it does not supply sufficient information from which the Commission may properly consider, and publicly disclose, environmental factors that may cause harm to minority and low-income populations that would be "disproportionate to that suffered by the general population." We agree.

LBP-08-13 at 202.

II. Legal Requirements for Amendments to Contentions

A. Specific Statement of the Contentions

Petitioners 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). As set out by the Board in LBP-08-13,the existing contention is:

> Entergy's environmental report contains a seriously flawed environmental justice analysis that does not adequately assess the impacts of Indian Point on the minority, low-income and disabled populations in the area surrounding Indian Point.

LBP-08-13 at 196. Because the FSEIS is similarly deficient to the ER, Clearwater proposes to amend its admitted contention to state:

> Entergy's environmental report *and the Final Supplemental Environmental Impact Statement* contain seriously flawed environmental justice analys*e*s that do not adequately assess the impacts of *relicensing* Indian Point on the minority, low-income and disabled populations in the area surrounding Indian Point.

(amendments shown in italics). This is referred to below as the first proposed amendment. In addition, Clearwater proposes to add the following sentences to the admitted contention:

> In addition, the assessment of the impact of the no-action alternative on potentially affected environmental justice populations is inadequate. Furthermore, the assessment of the impact of adding closed cycle cooling on air quality and on potentially affected local environmental justice populations is inadequate.

This is referred to below as the second proposed amendment. The individual sentences of this proposed amendment are referred to as the first and second proposed addition, respectively.

B. Explanation of Basis

At this preliminary stage, Clearwater does not have to submit admissible evidence to support its contentions, 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). Thus, the Commission has indicated that where petitioners make meritorious contentions based upon diligent research and supported by valid information and adequate legal briefing, the requirement for an adequate basis is more than satisfied.

As shown in the legal briefing above, NEPA requires the Staff to take a hard look at each issue and reach an independent scientifically sound conclusion based upon verified assumptions and inputs. As shown in the factual briefing above, the first proposed contention amendment has a sound basis because the FSEIS suffers from exactly the same deficiencies as the ER in that it fails to provide a site-specific analysis of the potential for relicensing to cause disparate impacts on potentially affected EJ populations. In addition, the analysis of the environmental justice impact of the no-action alternative fails to meet the onerous statutory and regulatory requirements because it is contradictory and conclusory. Moreover, the Staff failed to verify the assumptions and inputs and failed to employ any science whatsoever in reaching its conclusions in this regard. With regard to the analysis of the air quality and environmental justice impacts of closed-cycle cooling, it suffers from three critical deficiencies. First, it is based purely on Entergy's questionable assertions, not the NRC Staff's independent judgment. Second, it fails to consider

the finding that the air quality impacts from finding replacement power could be significant. Indeed, it implies that those impacts would be minimal in any given location due to the nature of NYISO market. Third, if the local impacts were as severe as the air quality analysis indicates, the EJ analysis should have analyzed whether there would be disproportionate impact on the local population.

C. Clearwater Has Standing

As recognized by the Board in LBP-08-13, Clearwater has adequately demonstrated representational standing.

D. The Scope of License Renewal Includes Environmental Justice Issues

Petitioners are required to demonstrate that the issues raised in their contentions are within the scope of the proceeding, 10 C.F.R. § 2.309(f)(1)(iii). Clearwater's EJ contentions and amendments thereof are within the scope of the license renewal because the Board has already confirmed that EJ concerns are a legal part of any NEPA analysis of licensing activity. Furthermore, the issues addressed by the proposed amendments are clearly in scope because they concern the adequacy of the FSEIS. Finally, NRC Staff and Entergy may not now allege that these EJ issues are out of scope because that issue is *res judicata*.

E. The New Contention Additions Raise Material Disputes

The regulations require petitioners to "[d]emonstrate that the issue raised in the contention is material to the findings the N.R.C. 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. Licensing cannot legally proceed unless the NRC satisfies the requirements of NEPA, irrespective of whether the licensee and the Staff satisfy the NRC's own regulations regarding environmental impact assessment. *See San Luis Obispo Mothers For Peace v. NRC,* 449 F.3d 1016 (9th Cir. 2006). Therefore, an allegation of a NEPA violation is necessarily material to licensing.

F. This Request Is Timely

Petitioners may add or amend contentions based upon data or conclusions in the FSEIS that differ significantly from those in the applicant's environmental report. 10 C.F.R. § 2.309(f)(2). Otherwise, intervenors may add new contentions after filing their initial petition, so long as they act in accordance with the three prong test give in 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). These prongs require 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).

New information regarding safety and environmental impacts routinely emerges in relicensing proceedings. For example, when the ASLB found that AmerGen's new commitment to increase the frequency of monitoring mooted an initial contention regarding the inadequacy of the proposed UT monitoring for the sandbed, the ASLB 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). *In the Matter of AmerGen Energy Company (License Renewal for Oyster Creek Nuclear Generating Station)*, LBP-06-16 (slip op. at 8-10), (June 6, 2006). Subsequently, the ASLB found that Citizens had made a timely new contention that the frequency of the UT monitoring was inadequate, because Citizens based their new contention based upon the new commitment. *In the Matter of AmerGen Energy Company (License Renewal for Oyster Creek Nuclear Generating Station)*, LBP-06-22 (slip op. at 14-20, 28-30) (October 10, 2006).

Finally, the Commission interprets the "timely fashion," requirement of 10 C.F.R. § 2.309(f)(2)(iii) as being anywhere from twenty to thirty days from the availability of the new information upon which the new contention is based. In the Matter of Louisiana Energy Services, L.P., LBP 04-826

(June 30, 2005). In this case, the Board allowed intervenors until February 3, 2011 to file new or amended contentions based upon the FSEIS.

Because the first and second additions are based upon conclusions reached in the FSEIS that are significantly different from the applicant's ER, this Petition is timely. In addition, Clearwater was entitled to assume regulatory of process during this proceeding. It therefore expected that NRC Staff would remedy the deficiencies of the DSEIS indentified in the comments. It could not have known that the NRC Staff would fail to remedy these deficiencies prior to the publication of the FSEIS. Furthermore, even if this Board finds that, despite the plain language of the regulations, these amendments have to meet the three prong test for new contentions that are not connected to the FSEIS, they meet that test. Finally, irrespective of the NRC's regulations, the NRC must comply with NEPA. Because these contentions are designed to assist the Staff with NEPA compliance, the Board should admit them as timely because they are submitted long before any decision on the licenses at issue will be made.

The first amendment is merely a technical change to reflect that the NRC Staff chose not to rectify the already identified deficiencies of the ER regarding potentially affected EJ populations in the FSEIS. Once again, it is timely because Clearwater could not have known that the NRC Staff would fail to remedy these already identified deficiencies prior to the publication of the FSEIS.

III. First Proposed Amendment Meets the Legal Requirements to be Admitted

The first proposed amendment is just a technical change to the already admitted contention. All of the arguments presented in favor of that contention are hereby incorporated by reference. The Board found that contention EC-3 met the legal requirements to be admitted. For the same reasons, contention EC-3 as amended by the first proposed amendment meets all the legal requirements to be admitted. Furthermore, NRC Staff and Entergy may not object to this amendment on the same grounds that they originally objected to EC-3, because those issues are *res judicata*.

IV. First Proposed Addition Meets the Legal Requirements to be Admitted

As shown above, Clearwater has provided a specific statement of the first proposed addition, Clearwater has standing, this motion is timely, and the first proposed addition is within the scope of this proceeding. Coupled with the factual and legal briefing above, this Section further confirms that the first proposed addition has an adequate basis and raises material disputes. This addition should therefore be admitted by the Board as it meets the requisites for amendments to contentions under 10 C.F.R. Sec. 2.309(f)(1)(i).

Clearwater does not have to submit admissible evidence at this point in the proceeding to support its contention but "only a brief explanation of the basis for the contention." 10 C.F.R. Sec. 2.309(f)(I)(ii). As explained above, contrary to the requirements of NEPA, although the FSEIS made an minimal attempt to analyze the environmental impact on distant EJ communities of choosing a "no-action" alternative as opposed to relicensing the Indian Point nuclear reactors, the NRC's assessment of this issue consists primarily of two contradictory sentences which completely fail to reach any reasoned independent conclusion. The requirement for independent analysis was particularly important here, because some of the comments were made by organizations that may received funds from Entergy. Showing this connection, the language of some of the comments even adopted the language of Entergy's own public relations. Clearwater submits that this is not the "hard look" envisioned by NEPA and amounts to an abdication of responsibility on the part of the NRC. Where is the safety net for EJ these communities if the NRC fails to diligently review these EJ issues?

Clearwater also underscores that at this stage of the proceedings it is unnecessary to produce concrete evidence as to whether there will actually be an adverse environmental impact on EJ communities of relicensing versus a no-action alternative. This is precisely the analysis the NRC is mandated to do under NEPA. Because compliance with NEPA is at issue, Clearwater's first addition raises a disputed and material point.

By virtue of its first addition, Clearwater raises the issue and disputes the adequacy of the NRC's EJ assessment with respect to the "no-action" alternative to relicensing. Clearwater maintains that the NRC did not follow NEPA's direction by applying a "hard look" to the issue of whether there would be a disparate impact on EJ communities disproportionate to that suffered by the general population should the renewal of the license be approved rather than be allowed to expire. In fact, Clearwater contends that had the NRC followed its NEPA obligations to conduct a detailed analysis of the EJ impact of the "no-action" alternative to relicensing, the NRC could have arrived at a different determination. By summarily concluding that there was no significant difference in environmental impact between allowing the relicensing of Indian Point for an additional 20 years and a cessation of activity, the NRC failed to fully take into account potential impacts on the EJ communities that could be affected by decisions regarding licensing. This failure of analysis means that the NRC has failed to comply with its NEPA obligation to fully analyze the no-action alternative.

V. Second Proposed Addition Meets the Legal Requirements to be Admitted

As shown above, Clearwater has provided a specific statement of the second addition, Clearwater has standing, this motion is timely, and the second addition is within the scope of this proceeding. Coupled with the factual and legal briefing above, this Section confirms that the second addition has an adequate basis and raises material disputes. This amendment should therefore be admitted by the Board because it meets the requisites for amendments to contentions under 10 C.F.R. § 2.309(f)(1)(i).

As explained above, Clearwater has a factual basis to allege that the assessment of the air quality and EJ impact of the closed-cycle cooling alternative in the FSEIS was wholly inadequate because there was no hard look analysis leading to independent judgment as demanded by NEPA.

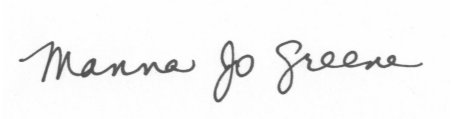
This contention is material because to comply with NEPA such a hard look analysis leading to independent judgment is essential prior to any licensing decision. Clearwater also underscores that at this stage of the proceedings it is unnecessary to produce definitive evidence as to what the impact of the closed-cycle cooling alternative would be. This is precisely the analysis that the NRC is mandated to do

under NEPA. Because compliance with NEPA is at issue, Clearwater's second addition raises a disputed and material point.

CONCLUSION

For the forgoing reasons, the Board should grant leave for Citizens to amend and Clearwater contention EC-3 as proposed above and should so amend the contention.

Respectfully submitted,



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