

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

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))		
)	March 25, 2014	

**HUDSON RIVER SLOOP CLEARWATER, INC.'S
COMBINED ANSWER IN OPPOSITION TO
THE APPLICANT'S PETITION FOR REVIEW AND
THE NRC STAFF'S PETITION FOR REVIEW
OF BOARD DECISION REGARDING
CONTENTION CW-EC-3A**

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Pursuant to 10 C.F.R. § 2.341(b)(3), Intervener Hudson River Sloop Clearwater, Inc. [hereinafter “Clearwater”] hereby submits the following combined answer in opposition to Applicant’s [Entergy Nuclear Operations, Inc.] February 14, 2014 Petition for Review (“Applicant’s Petition”) and to NRC Staff’s February 14, 2014 Petition for Review (“NRC Staff’s Petition”) of certain findings and rulings of the Atomic Safety and Licensing Board’s November 27, 2013 Partial Initial Decision (“PID”) regarding the adequacy of the NRC Staff’s environmental justice analysis as raised by Contention CW-EC-3A (Environmental Justice). For the reasons set forth below, the Commission should deny Applicant’s and NRC Staff’s petitions for review of CW-EC-3A. Further, the Commission should grant Clearwater’s February 14, 2014 Petition for Review concerning the separate findings and rulings of the Board that, upon determining the NRC Staff’s environmental analysis was deficient, such deficiency was cured by the subsequent administrative proceedings. See, February 14, 2014 Hudson River Sloop Clearwater Inc.’s Petition for Review and March 11, 2014 State of New York Answer in Support of Hudson River Sloop Clearwater Inc.’s Petition for Review. Clearwater further joins in the arguments and submissions contained in the aforesaid State of New York Answer.

I. INTRODUCTION

On November 27, 2013, the Atomic Safety and Licensing Board (the “Board”) found and ruled that NRC Staff’s environmental justice (“EJ”) analysis of the Indian Point Nuclear Generating Unit Nos. 2 and 3 set forth in the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (“GEIS”) as supplemented by the Final Supplemental Environmental Impact Statement for License Renewal of Nuclear Plants (“FSEIS”) failed to satisfy the “hard look” requirement of the National Environmental Policy Act, 42 U.S.C. § 4332

(1970) (“NEPA”). PID, 32, 358-86. NEPA requires all Federal agencies to assess “to the fullest extent possible” the environmental consequences of a Federal action. 42 U.S.C. § 4332. NEPA does not specifically refer to the concept of “environmental justice.” The concept was an outgrowth of the civil rights movement that recognized that burden of these “environment consequences” was more frequently suffered by communities of color and impoverished communities than on other communities. B.E. Hill, ENVIRONMENTAL JUSTICE (ELI / Washington DC 2009), 76-82; R. Austin & M. Schill, “Black, Brown, Poor, and Poisoned: Minority Grassroots Environmentalism and the Quest for Eco-Justice,” 1 Kan.J.L.&Pub.Pol. 69 (1991). Thus, a hard look under NEPA of EJ issues incorporates considerations not only of environmental consequences but of American concepts of fairness and racial equity embodied in the rights to equal protection of the laws and in the Civil Rights Act, 42 U.S.C. chapter 21 (1964). R.D. Bullard and B.H. Wright, “Environmentalism and the Politics of Equity: Emergent Trends in the Black Community,” 12 Mid-American Review of Sociology 21 (1987).

In February of 1994, President Clinton formalized this concept through the issuance of Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” which directed each Federal agency to “...make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. ...” Executive Order (“EO”) No. 12898 (Section 1-101), 59 Fed.Reg. 7629 (February 16, 1994). Independent agencies, such as the Nuclear Regulatory Commission, were not required to comply with the E.O., but were requested to do so by the President. In his letter of March 31, 1994, to the

President, NRC Chairman Ivan Selin committed the NRC to carrying out the measures set forth in the E.O.

In 1998, the Commission construed the E.O. in an adjudicatory licensing proceeding, *Louisiana Energy Services* (Clairborne Enrichment Center), CLI-98-3, 47 N.R.C. 77 (1998), and found, as here, that the EJ analysis in the environmental report was inadequate because it failed to fully assess the disproportionate socioeconomic impacts of the proposal on the adjacent African American communities. *La. Energy Servs.*, 47 N.R.C. at 110. There, the Commission opined that “[d]isparate impact analysis is our principal tool for advancing environmental justice under NEPA.” *Id.* at 100 (emphasis supplied). The Commission significantly emphasized that the President’s E.O. did not establish any new rights or remedies, but instead acknowledged the requirements of “existing law,” NEPA, as mandating the good faith EJ analysis. *Id.* at 102. *See also, Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-02-20, 56 N.R.C. 147, 153-55 (2002); *see also, accord. Communities Against Runway Expansion, Inc. v. Fed. Aviation Adm’n*, 355 F.3d 678, 689 (D.C.Cir. 2004); *Allen v. Nat. Institutes of Health*, ___ F.Supp.2d ___, 2013 WL 5434817, *25 (D.Mass. 2013).

In August, 2004, the Commission issued its “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions,” 69 Fed.Reg. 52040 (August 24, 2004), at 42046. The Commission announced that “...the goal of an EJ portion of the NEPA analysis is (1) to identify and assess environmental effects on low-income and minority communities by assessing impacts peculiar to those communities; and (2) to identify significant impacts, if any, that will fall disproportionately on minority and low-income communities.” *Id.* at 52048. This EJ analysis is, of course, an integral part of the “decision-making” process under NEPA. The “goal,” then, is to provide the decision-maker, the

Commission, with the information it needs to avoid making a decision that works an injustice upon minority and low-income communities. Clearwater would suggest that this goal seeking environmental justice is not only an embodiment of NEPA, but also of American core principles of equal protection of the law, due process of law, and civil rights as expressed by the American people in the US Constitution and the Civil Rights Act of 1964.

This begs the question of why it is a socioeconomic analysis seeking “justice” for communities of color and low-income communities. Why not an analysis with a goal of economic “justice” for majority white and relatively wealthy communities, or for Entergy itself? The absurdity of this question is self-evident, but indicative of the important remedial purpose underlying the requirement of an environmental justice analysis of the impacts upon minority and low-income communities. The civil rights movement culminating in the Civil Rights Act of 1964 grew out of the socially and morally difficult recognition of the reality of systemic, institutionalized, racism stemming back to this nation’s roots in slavery and economic oppression with vestiges of an under-class, of impoverished and powerless communities of color easily and disparately victimized by opportunistic industries that degrade their environments and place them at unequal risk. NEPA, of course, is not a civil rights act. But, it is a law with civil rights implications attendant to its goal of environmental justice, of fairness in assessing and addressing environmental impacts on American communities.

Perhaps one of the more prominent examples of institutionalized racial and economic environmental injustice is found in the Mossville, Louisiana, African American community surrounded by fourteen industrial facilities that is often referred to as “Cancer Alley.” *See*, “Mossville Environmental Action Now v. United States: Is a Solution to Environmental Injustice Unfolding?,” 3 Pace Int’l L. Rev. Online Companion 173 (May 2012). In March of 2010, the

Inter-American Commission on Human Rights accepted a petition from the Mossville community alleging human rights violations:

In the present case, the petitioners allege that the issuance of environmental permits to industrial facilities by the US government and the resulting environmental pollution has a disproportionate impact upon the Mossville residents as African-Americans. ...The violation of the [human] right to equality in the present case occurs, according to petitioners, by affording unequal environmental protection based on race without any reasonable justification; creating a pattern of environmental racism that serves no legitimate aim; and establishing inadequate and ineffective means for achieving environmental protection, with knowledge that people of color bear the significantly disproportionate burden of such inadequate and ineffective measures. The IACHR recalls that the right to equal protection under international human rights law has been interpreted as prohibiting not only intentional discrimination, but also any distinction, exclusion, restriction or preference which has a discriminatory effect and that the notion of equality before the law set forth in the American Declaration [of the Rights and Duties of Man] relates to the application of substantive rights and to the protection to be given them in the case of acts by the State or others. Without prejudging on the merits of the petition, the IACHR finds that the allegations contained in the petition, if proven, could characterize a violation of the [human] right to equality before the law, as enshrined in Article II of the American Declaration.

Mossville Environmental Action Now v. United States, Inter-American Commission on Human Rights, Report No. 43/10 (March 17, 2010), at ¶42

(<http://www.cidh.oas.org/annualrep/2010eng/USAD242-05EN.doc> - 01/24/2012). Thus, a core purpose of the environmental justice analysis is not merely to engage in a dry technical analysis of the environmental impacts posed by the relicensing proposal, but to “fully” disclose and address, and remedy – to take a hard look at -- the historic, systemic, socioeconomic injustice that still exists towards our low-income communities of color which is manifested by the disparate environmental impacts that accompany the relicensing proposal. It is an expression by our governing bodies, including the Commission, that we will no longer tolerate or enable such injustice to continue whether as an “environmental” question or as a civil rights question. The

Commission therefore has a role and a mandate not only in protecting the environment and the general public, but also in protecting the historically oppressed from further victimization and injustice through environmental impact inequity.

Entergy, as a private, for profit, corporation, of course does not possess this mandate. Its mandate as a matter of the law of corporations is to realize profits for its shareholders. Social and environmental justice considerations, particularly when coupled with significant mitigation requirements, diminish the profits to Entergy from its project. Entergy profits by putting people of color and those with less economic resources at a greater risk in the event of a severe nuclear accident at Indian Point as it avoids the additional costs and delay inherent in remedying this risk and inequity. Thus, Entergy challenges the Board's consideration of the environmental justice implications in the adequacy of the Indian Point emergency preparedness plans by contending that the adequacy of such plans should not be an issue in a license renewal matter – regardless of whether or not disparate impacts exist. Applicant's Petition, 34; see also, NRC Staff's Petition, 33.

Entergy's argument attempts to hide legitimate consideration of environmental justice issues by the Board under NEPA's hard look requirement behind process contentions and thereby effectively gut the ability of the NRC to fulfill its EJ mandate in any license renewal matter. This argument ignores the fact that no EJ analysis was done at the time of the original issuance of its license, nor since. The argument improperly distorts the substantive focus of the Board in the PID from an EJ analysis under NEPA to a challenge of the emergency preparedness plans, sacrificing *pro forma* minority and low income populations to disparate risks of harm from the continuing operation of the plant under a renewed license. The Commission should not allow

this smoke to cloud the Commission's meeting of its EJ obligations nor the NRC Staff of its EJ duties.

II. BACKGROUND

In its Partial Initial Decision, the Board found that the NRC Staff did not take the requisite "...hard look under NEPA at whether relicensing Indian Point would cause disproportionate and adverse impacts on the minority and low-income populations within the 50-mile environmental impact area around the plant when compared to the impacts on the non-EJ population within that radius in the improbable, but not impossible, event of a severe accident at Indian Point that releases radiation into the natural environment." PID, 382. The Board further found that:

...the Staff failed to follow its own internal procedure by omitting steps 2 and 3 of its analytic process to determine the possible disproportionate and adverse effects of a severe accident at Indian Point on the EJ population. The Staff neglected to (1) determine whether there would be any potential human health or environmental defects to the minority and low-income populations in the event of an accident that caused a radiological release from Indian Point, and (2) determine if any of the effects may be disproportionate and adverse when compared to the health and environmental effects to the general population.

More specifically, the Staff failed to: (1) determine whether the EJ population would suffer disproportionate and adverse effects during the PEO from relicensing Indian Point in comparison to those effects that the non-EJ population would experience during the PEO, and (2) determine if the members of the low-income population who cannot afford to, or do not have the freedom to, self-evacuate or effectively shelter-in-place due to substandard housing would be disparately and adversely impacted in comparison to those who have the freedom, financial means, and readily available modes of transportation to self-evacuate or access adequate shelter. [The Board noted that no EJ analysis had been completed before the issuance of the original Indian Point operating licenses, and that, accordingly, no EJ comparison had ever been conducted by the NRC staff.]

In regards to the first item, we find that the Staff analyzed the wrong variables by comparing impacts of the EJ population during the PEO to the current impacts to this same group. The correct analysis would assess the effects of the PEO on the EJ population and non-EJ populations to ascertain any disparate impacts.

Relating to the second item, Staff Witness Ms. Milligan testified that “it is possible that special populations, such as those at Sing Sing[,] could receive radiation doses higher than other populations that are immediately able to self-evacuate[]”²⁰⁹⁶ In the next breath Ms. Milligan stated that she, on behalf of the NRC, does not “specifically look at EJ populations in the context of emergency preparedness because . . . [the NRC prepares] for all populations, not just EJ populations.” [Tr. At 2760-61]

The Board finds that this type of total population analysis without a specific EJ population analysis defeats the purpose of EJ analyses under NEPA. As the Commission made clear in *Louisiana Energy Services* [47 N.R.C. 77, 100 (1998)], “[d]isparate impact analysis is [the NRC’s] principal tool for advancing environmental justice under NEPA. The NRC’s goal is to identify and adequately weigh, or mitigate, effects on low-income and minority communities that become apparent only by considering factors peculiar to those communities.” By failing to consider factors peculiar to the EJ community in the event of an accident, the Board finds that the Staff failed to identify and adequately weigh effects on low-income and minority communities surrounding Indian Point. Thus, we find that the Staff failed to take a reasonably hard look at environmental effects of relicensing Indian Point on the EJ population, and thus has failed to comply with its EJ obligations under NEPA.

PID, 383-85.

The Board also ruled as a matter of law that the NRC Staff could not evade this responsibility through any assertion that the risk to the EJ population was “small.”

Staff witness Mr. Rikhoff testified that the Staff did not evaluate the effects of a severe accident on the EJ population because Table B-1 within 10 C.F.R. Part 51 “concludes that the probability of a severe accident is small” [Tr. at 2757] Based on this finding the Staff summarily concluded, without analysis, that since the probability-weighted consequences of a severe accident are small for all populations, including the EJ population, there is no disproportionate and adverse impact on minority and low-income populations due to a severe accident. [Tr. at 2756-58; Ex. NRC000063 at 17] However, “[o]nly if the harm in question is so ‘remote and speculative’ as to reduce the effective probability of its occurrence to zero may the agency dispense with the consequences portion of the analysis.” [*New York v. NRC*, 681 F.3d 471, 482 (D.C.Cir. 2012)] Here, Staff witness Mr. Rikhoff admitted it is possible that minority or low income populations could be disproportionately affected in the event of a severe accident at Indian Point despite the fact that the probability weighted consequences of an accident are small. [Tr. at 2757-58] Entergy provided similar testimony. [Ex. ENT000258 at 15]

While a regulation states that the probability weighted consequences of a severe accident at Indian Point are small, Staff witness Mr. Rikhoff conceded that there is no regulation exempting the Staff from considering the effects of a severe accident on the EJ population. [Tr. at 2758] Thus, the Board finds that there is no legal foundation for the Staff's failure to analyze the possible disproportionate and adverse impacts of a severe accident at Indian Point on the EJ population within the 50-mile radius of the plant.

PID, 385.

The Board properly concluded:

Therefore, the Board finds that the Staff's lack of EJ analysis regarding the possible disproportionate and adverse effects of an accident at Indian Point on the EJ population within the 50-mile radius of Indian Point fails to meet the NEPA reasonableness standard.

Id.

The 3-Step EJ analysis process referred to by the Board above utilized by the NRC Staff in the FSEIS, Sections 4.4.6 and 8.2 is as follows:

(1) identify[] the location of minority and low-income populations that may be affected by the continued operation of the nuclear power plant during the license renewal term and refurbishment activities associated with license renewal, (2) determin[e] whether there would be any potential human health or environmental effects to these populations and special pathway receptors, and (3) determin[e] if any of the effects may be disproportionately high and adverse.

Ex. NRC000063 at 11-12. As previously stated, the Board found that the NRC Staff had completely "omitted" steps 2 and 3 as to the Indian Point EJ population. PID, 383. However, the Board found that the Clearwater witnesses in regards to steps 2 and 3 had demonstrated that this was not a meaningless exercise by providing evidence of disparate risks to low-income communities and communities of color within the 50-mile radius of Indian Point in the event of a severe nuclear incident particularly in the areas of risks of exposures, in the difficulty in evacuation to safe areas, in sheltering in place, and in the availability of medical services. PID, 376-81, 387.

III. ARGUMENT

A. **Commission Review of Board Findings and Rulings Regarding The Adequacy of the NRC Staff's Environmental Justice Analysis Is Unnecessary As the Ultimate Decision Was In Favor of Applicant and NRC Staff on That Issue**

The Commission lacks authority to provide advisory rulings in licensing proceedings. The Commission's procedures make no provision for such rulings. 10 C.F.R. chapter 1, part 2. Such rulings are unnecessary where a party seeks review of a matter as here that was ultimately resolved in its favor. *Pub. Serv. Co. of Ind.* (Marble Hill Nuclear Generating Station, Units 1&2), ALAB-459, 7 N.R.C. 179, 202 (1978); *Consumer Power Co.* (Midland Plant, Units 1&2), ALAB-282, 2 N.R.C. 9, 10 n. 1 (1975). Petitioners contend that an exception to this rule exists where a licensing board's ruling could "have an impact on the course of many hearings" and involves a "legal issue of recurring importance." See, Applicant's Petition, 31 (citing *N. States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1&2), ALAB-252, 8 A.E.C. 1175, 1177-78 (1975)). However, this exception is limited to "legal" rulings that may have a broad impact on future decisions, not case specific factual determinations that are limited to the specific licensing proceeding before the agency. *Id.* Therefore, it is unnecessary for the Commission to review the factual findings of the Board regarding the sufficiency of the NRC Staff's environmental justice analysis as those findings are limited to this licensing proceeding and no other. EJ contentions assert specific facts which are particular to the case at hand. *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ASLB-50-306-LR, 68 N.R.C. 234, 241 (1989).

The exception is further limited to those rulings on matters of law that are likely to “have an impact on the course of many hearings” and involves a “legal issue of recurring importance.”

Id. In the 20 years since the EJ analysis has been formally recognized, out of the many hundreds if not thousands of hearings and matters that have come before the Commission, only a handful have had issues surrounding the EJ analysis, and only one, *Louisiana Energy Services* (Clairborne Enrichment Center), CLI-98-3, 47 N.R.C. 77 (1998), prior to the Board’s decision below, has found a deficient EJ analysis in the environmental review or statement. The history of Commission adjudications and decisions demonstrates that this is *not* a matter of law likely to have an impact on the course of many hearings or a legal issue of recurring importance. Environmental justice issues in adjudicatory matters before the Commission are few and far between. See, e.g., U.S. Nuclear Regulatory Commission Staff Practice and Procedure Digest: Commission, Appeal Board and Licensing Board Decisions, July 1972-September 2010, Section 6.16.18.6.

Furthermore, the rulings of the Board on narrow issues of law, particularly questions of mixed fact and law that are specific to this licensing proceeding, do not rise to the level of importance that would support an exception to the rule. For example, Entergy seeks to have the Commission review certain of the Board’s evidentiary rulings as to Entergy’s motion in limine, even though it ultimately received a decision in its favor. Application’s Petition, 36.

**B. The Board Findings and Rulings Regarding the Adequacy
Of the NRC Staff’s Environmental Justice Discussion
Are Supported In the Record and Must Be Affirmed by the Commission**

**1. Legal Standards Applicable to Reviewing
Findings and Rulings by the Board**

Pursuant to 10 C.F.R. § 2.341(b)(4), the Commission may take discretionary review of the licensing board's initial decision where in relevant part there is a substantial question with respect to "a finding of material fact [that] is clearly erroneous," "a necessary legal conclusion is without governing precedent or is a departure from or contrary to established law," or there has been raised "a substantial and important question of law, policy, or discretion." 10 C.F.R. § 2.341(b)(4)(i), (ii), and (iii). The Petitions of Entergy and NRC Staff appear to seek advisory rulings from the Commission on each of these as they pertain to the Board's findings and ruling that the NRC Staff's environmental justice analysis was deficient.

As to the first consideration regarding factual findings:

"A finding is 'clearly erroneous' when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed." *United States v. United States Gypsum Co.*, 333 U.S. 364, 395, 68 S.Ct. 525, 542, 92 L.Ed. 746 (1948). This standard plainly does not entitle a reviewing court to reverse the finding of the trier of fact simply because it is convinced that it would have decided the case differently. The reviewing court oversteps the bounds of its duty under Rule 52(a) if it undertakes to duplicate the role of the lower court. "In applying the clearly erroneous standard to the findings of a district court sitting without a jury, appellate courts must constantly have in mind that their function is not to decide factual issues *de novo*." *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 123, 89 S.Ct. 1562, 1576, 23 L.Ed.2d 129 (1969). If the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently. Where there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous. *United States v. Yellow Cab Co.*, 338 U.S. 338, 342, 70 S.Ct. 177, 179, 94 L.Ed. 150 (1949); see also *Inwood Laboratories, Inc. v. Ives Laboratories, Inc.*, 456 U.S. 844, 102 S.Ct. 2182, 72 L.Ed.2d 606 (1982).

Anderson v. City of Bessemer, 470 U.S. 564, 573-74, 105 S.Ct. 1504, 1511, 84 L.2d 518 (1985).

Licensing Boards are the Commissions primary fact-finding tribunals. *Northern Indiana Pub.*

Serv. Co. (Bailly Generating Station, Nuclear-1), ALAB-303, 2 NRC 858, 867 (1975). The Commission therefore will defer to the Board on its fact-finding absent a showing that the Board’s findings were clearly erroneous, meaning that, in light of the record viewed in its entirety, the findings were not even plausible. *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-05-16, 62 N.R.C. 1, 3 (2005). Where the Board’s decision for the most part rests on its carefully rendered factual findings, as here, the Commission has repeatedly declined to second-guess plausible Board decisions. See, *Hyrdo Resources, Inc.*, CLI-01-04, 53 NRC 31, 45 (2001); *La. Energy Servs.*, 47 N.R.C. at 93.

Board rulings on contention admissibility are affirmed absent a showing of an abuse of discretion or an error of law. *Nuclear Management Company* (Palisades Nuclear Power Plant), CLI-06-17, 63 N.R.C. 727, 729 (2006). “Abuse of discretion” means a firm conviction that a decision rests on a clearly erroneous finding of a material fact or is the result of a failure to apply the correct law. *Conservation Northwest v. Sherman*, 715 F.3d 1181, 1185 (9th Cir. 2013).

Regarding evidentiary rulings such as the Board’s rulings on Entergy’s Motions in Limine, only serious errors affecting substantial rights and which may have improperly influenced the outcome of the hearing merit exception and briefing on appeal. *Northern Indiana Public Serv. Co.* (Bailly Generating Station, Nuclear-1), ALAB-204, 7 A.E.C. 835, 836 (1974). None of the purported errors raised by Entergy rise to the level of those that merit Commission consideration as they clearly did not influence the outcome of the hearing even if they were valid evidentiary objections.

2. Legal Standards Applicable to Environmental Reviews of License Renewal Applications Under NEPA

The National Environmental Policy Act, 42 U.S.C. §§ 4321, *et seq.*, establishes a “national policy [to] encourage productive and enjoyable harmony between man and his

environment.” *Dept. of Trans. v. Public Citizen*, 541 U.S. 752, 756 (2004) (quoting 42 U.S.C. § 4321 (2011)) (internal citations and quotations omitted). It was created to reduce or eliminate environmental damage and to provide “the understanding of the ecological systems and natural resources important to the United States.” *Id.* (internal citations and quotations omitted). 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 die otherwise cast.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The purposes of the statute are (1) to ensure that the agency will have and consider detailed information concerning “every significant aspect of the environmental impact of a proposed action,” and (2) to ensure that the public can both contribute to the body of information and can access the information that is made public. *Baltimore Gas and Elec. Co. v. N.R.D.C., Inc.*, 462 U.S. 87, 97 (1983).

The Commission, in addressing environmental justice issues under NEPA stated, “[t]he NRC’s goal is to identify and adequately weigh, or mitigate, effects on low-income and minority communities that become apparent only by considering factors peculiar to those communities.” *Louisiana Energy Servs.*, 47 N.R.C. at 100. By doing so, the Commission is better able to “make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.” *Dept. of Transp. v. Public Citizen*, 541 U.S. at 769. Obviously, *post hoc* rationalizations about actions presented after the environmental analysis is complete are unacceptable, since complete information and analysis are needed to meet NEPA’s goals. *See, Sierra Club v. Bosworth*, 510 F.3d 1016, 1026 (9th Cir. 2007);

Wilderness Watch & Pub. Employees for Env'tl Resp. v. Mainella, 375 F.3d 1085, 1094 (11th Cir. 2004).

NEPA specifically mandates that for every major action significantly affecting the quality of the human environment, the NRC must provide 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). This “action-forcing” requirement for preparation of an Environmental Impact Statement (“EIS”) assesses the environmental impacts of the proposed action and alternatives is the primary method by which NEPA ensures that its mandate is met. *Robertson*, 490 U.S. at 350-51. The EIS must be searching and rigorous, providing a “hard look” at the environmental consequences of the agency’s proposed action. *Id.*; *Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 374 (1989).

The EIS must consider “reasonably foreseeable” impacts which have “catastrophic consequences, even if their probability of occurrence is low.” 40 C.F.R. § 1502.22(b)(1) (2011). As noted above, in the case of nuclear power facilities, “[o]nly if the harm in question is so ‘remote and speculative’ as to reduce the effective probability of its occurrence to zero may the

agency dispense with the consequences portion of the analysis.” *New York v. NRC*, 681 F.3d 471, 482 (D.C.Cir. 2012). Here, Staff witness Mr. Rikhoff admitted it is possible that minority or low income populations could be disproportionately affected in the event of a severe accident at Indian Point despite the fact that the probability weighted consequences of an accident are small. Tr. at 2757-58. Entergy itself provided similar testimony. Ex. ENT000258 at 15.

The Board opined further on this:

The Board also notes that regulations, such as 10 C.F.R. § 50.47(a)(1)(i), require nuclear power reactors to have emergency plans in place to respond to accidents despite the fact that Table B-1 within 10 C.F.R. Part 51 concludes that the environmental impacts of both design basis and severe accidents at a nuclear reactor are small for all plants. This is a clear indication that the NRC, while cautiously optimistic that a potentially severe accident will not occur at a licensed nuclear reactor, believes it necessary to prepare for just such a possibility. Thus, it escapes logic that the NRC would use this finding – that the probability-weighted consequences of a severe accident at a nuclear reactor are small – as the basis to exempt itself from evaluating the possible disproportionate and adverse effects of a severe accident on the EJ population. Also, to accept this position would run counter to the NRC requirements that nuclear reactor licensees create plans and devote resources to protecting the public from the consequences of a severe accident.

PID, 385. The irony here is that the NRC Staff itself takes the position in its Petition that the environmental justice implications admittedly present in the Part 50 emergency plans in place to respond to a catastrophic event such as a severe accident at Indian Point are beyond the scope of the Board’s considerations and that the NRC Staff should therefore not be required to consider such EJ implications in its environmental analysis. NRC Staff’s Petition, 33-35. The NRC staff and Entergy employees at Indian Point would have plans in place to protect themselves from a severe nuclear accident, plans that provide for their evacuation to safe areas, while arguing that the innocent mostly minority victims of their activities who cannot evacuate or properly shelter in place due to their relatively impoverished conditions should be abandoned along with the environmental justice considerations.

The very fact that the NRC Staff, as public servants tasked to protect the public from this risk of catastrophic harm, fails to recognize or even acknowledge the moral and ethical contradictions in its position is a reflection of the systemic nature of the problem of racial and economic inequality that the EJ analysis under NEPA is clearly intended to address. Furthermore, the same NRC Staff that argues against an environmental justice analysis of emergency planning that includes racially and economically disparate impacts, is the very entity tasked with assessing those disparate impacts and the same entity that the Board found had come up short in their responsibilities to the EJ communities. It is not suggested here that this is an example of knowing or intentional environmental racism by the NRC Staff, but instead that it is an example of a systemic problem that will remain hidden and empowered so long as the environmental analysis is prevented from shedding the light of day on it. There would be no requirement of a proper EJ analysis if it was not a problem of historic and systemic racial and economic discrimination in regards to environmental impacts.

The Claiborne Enrichment Center case, for example, illustrates the way in which race discrimination can undermine the objectivity of a NEPA analysis. In Claiborne, as here, those charged with preparing the environmental justice analysis conducted an insufficient survey of the existence of minority and impoverished communities within the impact area. *Louisiana Energy Servs. (Claiborne Enrichment Center)*, LBP-97-8, 45 NRC 367, 387-88 (1998). The licensing board concluded that the “racial and economic-based quality of life considerations” of the persons preparing the EJ analysis improperly affected the low scoring of the EJ population in the impact area. *Id.* at 394. Yet, rather than draw a conclusion that the process was discriminatory, the Board concluded that an “inference” of discrimination was raised and remanded the decision to the Staff for further inquiry. *Id.* at 392. The Commission then reversed the Board, holding

that NEPA is not a tool for investigating racial discrimination. *Louisiana Energy Servs.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 101-104 (1998).

Again, it is a question of focus: systemic racial and economic discrimination is the acknowledged reason why there are disparate environmental impacts. NEPA requires the rigorous investigation, the “hard look,” of all substantive environmental impacts, including the disparate burden those impacts place on the affected population, and requires the discussion of adverse environmental impacts that can be avoided through mitigation measures. In the case of disparate impacts this would entail mitigation measures that would alleviate the inequity. Thus, as the Commission rule in *Louisiana Energy Servs.*, NEPA is not a tool for investigating racial discrimination, but it is a tool for investigating and mitigating disparate environmental impacts. In that sense, although not a civil rights law, the EJ analysis does perform the collateral function of exposing and alleviating racial and economic inequity as it exposes and alleviates environmental impact inequity as required by NEPA. The Commission in *Louisiana Energy Servs.* did not toss out the EJ requirement, but merely refocused the NEPA discussion to environmental inequities that often attend minority and impoverished communities as a result of their historic conditions and place in American society.

NEPA also requires that the environmental impact statement include as component of the “hard look,” among other information, a “detailed” statement of “any adverse environmental effects which cannot be avoided should the proposal be implemented.” 42 U.S.C. §4332(2)(C)(ii). The Supreme Court in *Robertson*, 490 U.S. at 351, construed this provision to require “a detailed discussion of possible mitigation measures.” “[O]ne important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences. ...[O]mission of a reasonably complete discussion of possible mitigation

measures would undermine the ‘action-forcing’ function of NEPA.” *Robertson*, 490 U.S. at 351-52; *see also*, *South Fork Band Council of Western Shoshone of Nev. V. U.S. Dept. of Int.*, 588 F.3d 718, 727 (9th Cir. 2009); *Limerick Ecology Action, Inc. v. U.S. N.R.C.*, 869 F.2d 719 (3rd Cir. 1989); *Calvert Cliffs 3 Nuclear Project, LLC*, LBP-09-4, 69 NRC 170, 228-29 (2009).

The implementing NRC regulation listing the information that must be included in the ER, 10 C.F.R. § 51.45(b)(2), restates this NEPA mandate. NRC regulation 10 C.F.R. §51.103(a)(4) also requires the Commission to state in the record of decision whether it “has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the alternative selected, and if not, to explain why those measures were not adopted. Summarize any license conditions and monitoring programs adopted in connection with mitigation measures.”

As the Supreme Court emphasized in *Robertson*, a detailed discussion of mitigation measures cannot be had without the gathering of the information necessary for that discussion. As the NRC itself has noted, “the population distribution in the vicinity of the site affects the magnitude and location of potential consequences from radiation releases.” 48 Fed.Reg. at 16,020. In regards to mitigating environmental justice issues here, that requires a full examination of all of the impacted EJ communities and institutions within the 50-mile radius of Indian Point, not of just a few. In *Limerick*, for example, the Circuit Court found that the Commission in a licensing proceeding violated NEPA and abused its discretion in failing to consider the training of civilian drivers who would be employed in the evacuation of inmates from a Pennsylvania prison near a nuclear facility in the event of a severe nuclear accident. *Limerick Ecology*, 869 F.2d at 754. The Court noted that emergency offsite responses to such nuclear incidents have been “dominated by an atmosphere of almost total confusion.” *Id.*, at

748. When discussing the Indian Point EJ population at Sing Sing, Dr. Edelstein testified to what he termed “a social disintegration” at the prison in New Orleans during the Katrina situation and compared that to Fukushima. Tr. at 2796-97, 2800; see also, Tr. at 2814-16 (Dr. Larsen opining on this in regards to Sing Sing). Dr. Larsen also testified about the impact on the availability of medical services to minority and low-income populations in such situations. Tr. at 2807-16.

3. Legal Standards Applicable to Environmental Justice Analysis

As discussed above, although not expressly bound by the Executive Order on Environmental Justice, EO 12,898 (1994), the NRC has committed to undertake environmental justice reviews. *Dominion Nuclear North Anna, LLC*, CLI-07-27, 66 N.R.C. 215, 237-38 (2007).

As part of that commitment, the Commission issued a Policy Statement in 2004, setting out its position on the treatment of environmental justice issues in the agency's licensing and regulatory activities. The Policy Statement re-stated and expanded upon the “environmental justice” doctrines then emerging from a handful of the NRC's adjudicatory decisions and also from two Staff guidance documents. Although the Policy Statement charged the Staff with diligently investigating potential adverse environmental impacts on minorities and low-income populations, it directed the Staff to conduct an even more detailed examination in situations where the Staff finds that “the percentage in the impacted area exceeds that of the State or the County percentage for either the minority or low-income population.” Under those circumstances, the Commission charged the Staff to consider environmental justice “in greater detail.” As explained below, the Board has suggested that we clarify the meaning of the quoted phrase and determine whether the Staff's FEIS satisfied our “greater detail” standard in this proceeding.

Id., at 238 (citations omitted).

“Environmental justice, as applied at the NRC, ...means that the agency will make an effort under NEPA to become aware of the demographic and economic circumstances of local communities where nuclear facilities are to be sited, and take care to mitigate or avoid special

impacts attributable to the special character of the community.” *Private Fuel Storage, LLC*, 56 N.R.C. at 156. “‘Disparate impact’ analysis is our principal tool for advancing environmental justice under NEPA. The NRC’s goal is to identify and adequately weigh, or mitigate, effects on low-income and minority communities that become apparent only by considering factors peculiar to those communities.” *La. Energy Servs.*, 47 N.R.C. at 100.

This detailed environmental justice examination is mandated by NEPA to fulfill its purposes.

NEPA has twin aims. First, it places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action. Second, it ensures that the agency will inform the public that it has indeed considered environmental concerns in its decision-making process. ... Congress did not enact NEPA, of course, so that an agency would contemplate the environmental impact of an action as an abstract exercise. Rather, Congress intended that the ‘hard look’ be incorporated as part of the agency’s process of deciding whether to pursue a particular federal action.

Baltimore Gas and Elec. Co., 462 U.S. at 97, 100 (citations omitted). Environmental justice issues concern “adverse impacts” that fall heavily on minority and impoverished citizens. *Louisiana Energy Servs.*, 47 N.R.C. at 100.

NEPA promotes its sweeping commitment to prevent or eliminate damage to the environment and biosphere by focusing Government and public attention on the environmental effects of proposed agency action. By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.

Marsh, 490 U.S. at 371.

To establish an environmental justice claim there must be evidence of (1) the “existence of adverse impacts or harms on the physical or human environment,” and (2) that “disproportionately affect poor or minority communities in the vicinity of the facility at issue.” *Southern Operating Company* (Early Site Permit for Vogtle ESP Site), ASLB-52-011-ESP, 65 N.R.C. 237, 262 (2007).

4. The Board Properly Admitted CW-EC-3

Entergy, and by implication the NRC Staff, expands its argument that emergency planning issues are outside the scope of a relicensing proceeding, and that, therefore, the Board erred in admitting Clearwater's EJ contention, CW-EC-3, to the extent that it is a challenge to the adequacy of the Indian Point emergency plan. Entergy's Petition, 33-35; NRC Staff's Petition, 32-35. Board rulings on contention admissibility are affirmed absent a showing of an abuse of discretion or an error of law. *Nuclear Management Company*, 63 N.R.C. at 729. "Abuse of discretion" means a firm conviction that a decision rests on a clearly erroneous finding of a material fact or is the result of a failure to apply the correct law. *Conservation Northwest*, 715 F.3d at 1185.

This argument as discussed above rests on ignoring that the focus of the EJ analysis, and the Board's decision, was not on challenging the severe accident response emergency plan, but rather on the disparate burden of the environmental impacts upon communities of color and the low-income population within the 50-mile radius of Indian Point. As the Board found, minority and poor communities within that radius were more likely to suffer significant risk of exposure from radiation released during such events because they were less likely to have personal transportation than white, affluent, communities who could self-evacuate at will, because the public transportation infrastructure upon which low-income and communities of color were more dependent for evacuation in the event of a severe accident did not appear to be adequate to the task, and because low-income and communities of color lacked sufficient resources to safely shelter in place during such an event. It was the disparity in the availability

of those resources to communities of color and low income communities when compared to more affluent white communities within the 50-mile radius, not the lack of a sufficient emergency plan, that evidence (1) the "existence of adverse impacts or harms on the physical or human environment," (2) that "disproportionately affect poor or minority communities in the vicinity of the facility at issue" and established the environmental justice claim. *Southern Operating Company*, 65 N.R.C. at 262. The lack of an adequate emergency plan is not the issue here. The issue here and the EJ issue determined by the Board is the insufficient NRC Staff analysis regarding disparity in environmental impacts, the risk of exposure, to low income and communities of color within the 50-mile radius in the event of a severe accident at Indian Point, not the lack of an adequate emergency plan. PID, 385; also, FSEIS, Sections 4.4.6 and 8.2 (setting forth the 3-step EJ analysis process in which the NRC Staff admittedly omitted steps 2 and 3 as to the Indian Point EJ population. PID, 383.

Revising the emergency plan to address and ameliorate this inequity is one of many possible mitigation measures. The discussion of mitigation measures, although required by NEP A, is not a requirement for a finding of an environmental justice violation from a deficient or incomplete environmental justice analysis by the drafters of the environmental review or environmental impact statement. Other mitigation measures which could be *outside and independent of or within the emergency plan itself*, for example, might include the training of public bus drivers of such an event as in *Limerick Ecology*, 869 F .2d at 754, the training of prison guards and law enforcement personnel and the addition of buses for transportation of inmates in such situations (e.g., testimony of Dr. Edelstein, Tr. at 2795 and Mr. Papa, Tr. at 2795), creation of adequate facilities to shelter in place with supplies of potassium iodine pills (e.g., testimony of Mr. Papa, Tr. at 2805-2806; Dr. Larsen, Tr. at 2807-2809; testimony of Dr.

Edelstein, Tr. at 2801-2803), and so forth, and the improvement of available medical services within the radius (e.g., testimony of Dr. Larsen, Tr. at 2809-2812). PID, 376-81, 387.

Thus, contrary to the efforts of Entergy and the NRC Staff to convert the EJ analysis into an attack upon the emergency plan, the EJ analysis and the Board's EJ deficiency findings and EJ violation ruling were separate and independent of the required discussion of mitigation measures under NEPA, including the mitigation alternative of revisions to the emergency plan.

Even if Entergy and the NRC Staff were correct in their assertions that the Clearwater EJ contention was in fact a challenge of the Indian Point severe accident emergency plans that are purportedly foreclosed by a GEIS in licensing renewals, their reliance on the 1991 Statement of Consideration is misplaced. Entergy's Petition, 33 n. 126; NRC Staff's Petition, 34 n. 180 (citing to "Environmental Review of Renewal for Operating Licenses," 56 Fed. Reg. 47,016 (Sept. 17, 1991)). As was noted in *Union Electric Company* (Callaway Plant, Unit 1), LBP-12-15, 76 N.R.C. 14, n.3 (2012), subsequent to the issuance of the 1991 Statement, severe accident mitigation alternatives ("SAMAs") were included as Category 2 items requiring a plant-specific analysis if one had not been done previously. The Commission stated then:

Based on an evaluation of the comments, the Commission has reconsidered its previous conclusion in the draft GEIS concerning site-specific consideration of severe accident mitigation. The Commission has determined that a site-specific consideration of alternatives to mitigate severe accidents will be required at the time of license renewal unless a previous consideration of such alternatives regarding plant operation has been included in a final environmental impact statement or a related supplement. Because the third criterion required to make a Category 1 designation for an issue requires a generic consideration of mitigation, the issue of severe accidents must be reclassified as a Category 2 issue that requires a consideration of severe accident mitigation alternatives, provide this consideration has not already been completed. The Commission's reconsideration of this issue of severe accident mitigation for license renewal is based on the Commission's NEPA regulations that require a consideration of mitigation alternatives in its [EISs] and supplements to EISs, as well as a previous court decision that required a review of severe mitigation alternatives (referred to as

SAMDAs) at the operating license stage. See, *Limerick Ecology Action v. N.R.C.*, 869 F.2d 719 (3rd Cir. 1989).

Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,480 (June 5, 1996). In *Limerick*, the court adopted the rule that the NRC cannot use a generic environmental impact statement “as a proxy for the more individualized consideration of a particular expansion proposal that NEPA would appear to require.” *Limerick*, 869 F.2d at 738 n. 21. In the NRC relicensing matter of *Massachusetts v. United States*, 522 F.3d 115, 120 (1st Cir. 2008), the court noted that GEIS findings had been codified by the NRC through rule-making (citing the 1996 Statement and 10 C.F.R. part 51, subpt. A, app. B), and defined “Category 2” issues as “those non-generic issues that require site-specific analysis for each individual licensing proceeding.” The court elaborated:

These categories affect how the NRC handles the NEPA-mandated EIS requirements. The process of creating the EIS for an operating license (or relicensing) proceeding begins with the applicant, although producing the EIS is ultimately the NRC’s responsibility. Under the regulations, each applicant must submit to the agency an environmental report that includes plant-specific analysis of all Category 2 issues. [10 C.F.R.] § 51.53(c)(3)(ii). The regulations generally relieve applicants of having to discuss Category 1 issues, instead allowing applicants to rest on the GEIS findings. *Id.* § 51.53(c)(3)(i).

Most recently, in *Massachusetts v. U.S. Nuclear Regulatory Commission*, 708 F.3d 63, 68 (1st Cir. 2013), on this issue the court, citing 10 C.F.R. § 51.53(c)(1), held that a severe accident mitigation alternatives analysis is a Category 2 issue that must be included in the applicant’s site specific environmental report with its relicensing application.

The environmental justice analysis, though deficient, was included in Entergy’s environmental review and in the FSEIS and the agency is bound by that procedure regardless of whether or not it is a Category 1 or a Category 2 matter. The resting of an issue on the GEIS is discretionary. Furthermore, the NRC Staff’s reasoning that it was proper to rest on the GEIS

because the “generic determinations apply, without exception, to all populations and all plant” is fundamentally flawed. NRC Staff’s Petition, 36. A “generic” determination treats “all” people, all populations, as if they were identical, that the impacts of radiation exposures from a severe nuclear accident would be identical. That is a fiction that is purposefully exposed in the environmental justice analysis. As the testimony in this matter demonstrated, those from the better off white communities have the resources to flee to safety and those without such resources from the minority and poor communities are forced to shelter in place and endure the toxic assault. There is nothing generic about it. A reliance on a generic EIS that purportedly dispenses with a full environmental justice analysis is a blatant violation of NEPA, let alone the NRC’s own rules in regards to site-specific Category 2 consideration of SAMAs.

Entergy also asserts that Clearwater failed to show the likelihood or probability of any adverse environmental impacts upon the EJ populations as a result of license renewal. Entergy’s Petition, 35-36. This argument ignores the likelihood, admitted by Entergy’s own witness (Ex. ENT000258 at 15), of the risk significant radiation exposure to the socioeconomically trapped EJ populations in the event of a severe nuclear accident at Indian Point. PID, 385. It is the probability of inequitable radiation exposure to the EJ community in the event of a severe nuclear accident, not the likelihood of a severe nuclear accident that satisfied the criteria for admitting Clearwater’s EJ contention. *Id.* As the Board opined: “Only if the harm in question is so ‘remote and speculative’ as to reduce the effective probability of its occurrence to zero may the agency dispense with the consequences portion of the analysis. *New York v. NRC*, 681 F.3d 471, 482 (D.C.Cir. 2012).” *Id.*

The NRC Staff further asserts that the Staff’s was relieved of the obligation to engage in an EJ analysis by reason of the Staff’s reliance on the “generic” findings in the GEIS that the

probability-weighted consequences of severe accidents are small for all plants and all populations. NRC Staff's Petition, 36-39. The NRC Staff contends that such generic declarations dispense any obligation to consider such matters in site specific supplemental EISs. *Id.* at 37.

Entergy and the NRC Staff have wholly failed to demonstrate any "abuse of discretion" by the Board in admitting Clearwater's environmental justice contention. *Nuclear Mgmt. Co.*, 63 N.R.C. at 729.

5. The Board Did Not Err in Concluding That the NRC Staff's Environmental Justice Analysis Was Deficient

The Board's decision adequately analyzes the evidentiary record and rationale it used in reaching its conclusions that "the Staff failed to identify and adequately weigh effects on low-income and minority communities surrounding Indian Point, ... failed to take a reasonably hard look at environmental effects of relicensing Indian Point on the EJ population, and thus has failed to comply with its EJ obligations under NEPA." Much of that Board discussion of the relevant evidence supporting its determinations is set forth above. "The Board finds that the Staff's lack of EJ analysis regarding the possible disproportionate and adverse effects of an accident at Indian Point on the EJ population within the 50-mile radius of Indian Point fails to meet the NEPA reasonableness standard." PID, 383-85.

The Clearwater witnesses "illustrated" (the Board's term) the EJ population treatment disparities through a part of the EJ population of concern. There was, and has not yet been, any sufficient EJ analysis of the entire EJ population at risk, identified by the NRC Staff and Clearwater in step 1, as required by NEPA.

For example, as discussed by the Board [PID, 376-78], witnesses Dr. Michael Edelstein, an environmental psychologist, and Mr. Anthony Papa, a former inmate at the Sing Sing prison, “focused” their testimony on Sing Sing prison, only one of 26 such institutions within the 50-mile radius of Indian Point, to illustrate the large minority and low-income populations of such institutions, the nearly insurmountable difficulty in evacuating a prison population in the event of a radiological release, and the in-suitability of Sing Sing prison as a shelter-in-place. *See*, Tr. at 2795; Ex. CLE000004, generally. Dr. Edelstein clearly limited the specifics of his testimony to Sing Sing prison:

DR. EDELSTEIN: ...In the case of Sing Sing, which I particularly looked at ...we have issues that in fact were missed entirely by the current analysis.

JUDGE McDADE: In this particular instance, a subset of the minority population such as Sing Sing

Tr. at 2791. And so forth, Dr. Edelstein focused almost his entire testimony regarding this “subset” of 26 detention institutions on Sing Sing prison. Tr. at 2791-2806. As to the subset, Dr. Edelstein opined in comparison to Sing Sing that “... the similarities are few, and the differences are many....” Tr. at 2795. Mr. Papa’s testimony was focused wholly on Sing Sing prison. The NRC Staff witnesses also focused solely on Sing Sing. Tr. 2768-71. Some testimony was provided by Clearwater witness Manna Jo Greene in regards to the Rockland County Jail. Ex. CLE000010 at 27-29. But, contrary to the assertion of the Board, there has neither been sufficient development by these witnesses, the NRC Staff, nor anyone else of the EJ analysis of the institutionalized minority and impoverished populations at the other 24 prisons or detention institutions within the 50-mile radius of Indian Point.

In regards to the ability of the low-income and minority population within the 50-mile radius of Indian Point to evacuate or shelter-in-place as discussed in the Board's decision [PID, 378-81], general testimony was provided by Clearwater witnesses, Dr. Larsen, Dr. Kanter, and Manna Jo Greene, however the only specific testimony was in regards to the community of Peekskill, New York, by Clearwater witnesses Aaron Mair and Dolores Guardado. Tr. at 2806-46, 2852-57; Ex. CLE000010 at 4-26. Peekskill, New York, is found in just one of the many minority population "Census Block Groups" the NRC Staff identified in its step 1 EJ analysis. Tr. at 2745-49; Ex. NRC000133B. The record contains a specific discussion or analysis by very few, if any, of these identified minority communities other than Peekskill within the 50-mile radius of Indian Point.

In the matter at bar, that mandated gathering of information and the discussion and analysis of the disparate impact upon the Indian Point EJ population are sorely incomplete. The hard look requires an examination of the circumstances and conditions and discussion and analysis of not just one or two but each of the movement restricted institutions or communities within the EJ population to determine the specific nature and scope of the risk, impact, and disparity so that a transparent and informed public discussion can be had and an informed decision can be made by the Commission.

The Commission is to apply a "clearly erroneous" standard of review to the Board's findings of fact, 10 C.F.R. § 2.341(b)(4), and must defer to the findings of the Board absent a showing that they "were not even plausible" when the record is viewed in its entirety. *Private Fuel Storage*, 62 N.R.C. at 3. It is not the role of the Commission to second guess plausible Board decisions. *Hydro Resources, Inc.*, 53 N.R.C. at 45; *La. Energy Servs.*, 47 N.R.C. at 93.

6. The Board Did Not Err in Denying Entergy's Motions in Limine Related to CW-EC-3A

Finally, assuming that these evidentiary issues are even properly before the Commission, Entergy contends that the Board erred in denying Entergy's motions in limine. Entergy's Petition, 36-37. At the root of this argument is once again Entergy's assertion that the core of Clearwater's issue was a challenge to the emergency plan rather than to the environmental justice analysis, and that the Board was unable to keep itself from considering evidence "critiquing the adequacy of the emergency plan." *Id.* As discussed above, evidentiary rulings by the Board on Entergy's Motions in Limine should be considered only when they constitute serious errors affecting substantial rights and which may have improperly influenced the outcome of the hearing merit exception and briefing on appeal. *Northern Indiana Public Serv. Co.*, 7 A.E.C. at 836.

In support of its argument, Entergy insists that the Board "actively elicited" testimony concerning the adequacy of the emergency plans. For its only evidence, Entergy cites to three cherry-picked questions by Board Judge McDade from the entirety of the transcripts of the proceedings: (1) "Is there anything about the patterns of automobile ownership or public transportation in Peekskill that would affect the "EJ" population?" (2) "[P]rior to your involvement with this proceeding, were you aware that there were Spanish language sources of information with regards to emergency planning?" (3) "[I]n your direct testimony you talked about some of the circumstances that would be applicable to people in assisted living and in nursing homes in the event of a disaster in the area. Correct?" Entergy's Petition, 36-37 n. 191. All three are quite clearly directed at *environmental justice* issues. The first examines the disparity in available resources in the EJ community of Peekskill in the event of a severe nuclear

accident. The second examines the issue of racial (Hispanic) discrimination and disparity in available information about how to respond to a severe nuclear accident. The third considers the economic inequity that would be experienced by low-income persons who lacked the financial resources to evacuate and would be left with inadequate medical resources to meet their needs in the event of a severe nuclear accident. Two of the questions never mention or even allude to any emergency plan. The one other question mentions “emergency planning” information – not the emergency plan developed under NRC rules – and then only in the context of racial or ethnic discriminatory impacts. Additionally, Entergy fails to cite to anything at all in the record that demonstrates that Judge McDade or the other members of the Board’s panel were influenced at all, let alone improperly, by such evidence in rendering their decision. Assuming that there was improper evidence regarding the emergency plan, it’s Entergy’s burden her to demonstrate that the evidence influenced the determinations of at least 2 of the 3 members of the panel in order to have influenced the ultimate Board decision.

Furthermore, as discussed at length above, the analysis of severe accident mitigation alternatives, SAMAs, is *required* by the NRC rules and is wholly proper as a Category 2 issue. Severe accident mitigation alternatives include measures that would alleviate economic and racial disparity in the environmental impacts to EJ communities during a severe nuclear accident. A relicensing proceeding before the Board is not fatally tainted just because there is a discussion of issues that require mitigation or of the mitigation measures that address them, mitigation issues and measures that might also be included in an emergency plan. In fact, it would be fatally taint if it *did not* discuss the disparity and the appropriate and available mitigation measures. This issue raised by Entergy is patently frivolous.

IV. CONCLUSION

For the foregoing reasons, the Commission should deny Entergy's Petition for Review and the NRC Staff's Petition for Review of the Partial Initial Decision as to Contention CW-EC-3A (Environmental Justice).

Respectfully Submitted,

Signed (electronically) by Andrew B. Reid

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Dated: March 25, 2014, Denver, Colorado.

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305 (as revised), I certify that, on this date, copies of the **HUDSON RIVER SLOOP CLEARWATER, INC.'S COMBINED ANSWER IN OPPOSITION TO THE APPLICANT'S PETITION FOR REVIEW AND THE NRC STAFF'S PETITION FOR REVIEW OF BOARD DECISION REGARDING CONTENTION CW-EC-3A** were served upon the Electronic Information Exchange (the NRC's E-Filing System), in the above-captioned proceeding.

Dated: March 25, 2014.

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