

**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 17, 2012

CLEARWATER’S REPLY IN OPPOSITION TO ENTERGY’S MOTION IN LIMINE

PRELIMINARY STATEMENT

Entergy Nuclear Operations, Inc. (“Entergy”) has moved to exclude portions of the Opening Statement and supporting testimony submitted on behalf of Hudson Sloop Clearwater, Inc. (“Clearwater”). The Atomic Safety and Licensing Board (the “Board”) should reject Entergy’s thinly veiled attempt to obscure the difficult issues raised by Clearwater’s contention because Entergy has misconstrued the scope of the contention and mere assertions of counsel about the unreliability of sworn testimony cannot substitute for a showing of unreliability through the tools provided by the Part 2 rules. In fact, Clearwater’s testimony is carefully tailored to respond to the framework provided by the Atomic Safety and Licensing Board (the “Board”) in its decision admitting amended contention EC-3A. Any questions about its reliability should be reserved for the adjudicatory hearing, where Energy will have the chance to present counter-veiling evidence and cross-examine witnesses

where necessary. Moreover, Motion in Limine practice before the Board is generally disfavored because the evidentiary rules are more relaxed than in Federal Court, there is no jury to protect, and the Board is qualified and accustomed to weigh the evidence presented appropriately.¹

ARGUMENT

I. General Legal Standards on Reliability and Materiality of Evidence

Boards have broad discretion over evidentiary issues and may strike argumentative, repetitious, cumulative, unreliable, immaterial, or irrelevant evidence to prevent delays or reduce the size of the record. 10 CFR § 2.333(b); *Pa'ina Hawaii* (Materials License Application) CLI-10-18, 2010 WL 2753784 at *8 (“[A] licensing board normally has considerable discretion in making evidentiary rulings.”) *quoting Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-21, 60 NRC 21, 27 (2004). Importantly, however, “strict rules of evidence do not apply to written submissions.” 10 CFR § 2.319(d).

The reliability of evidence is generally tested at hearing and dealt with by according the testimony appropriate weight. For example, hearsay evidence is generally admissible. *Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC 346, 366 (1983); *Duke Power Co.* (Catawba Nuclear Station, Units 1 & 2), ALAB-355, 4 NRC 397, 411-12 (1976); *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), ALAB-802, 21 NRC 490, 501 n.67 (1985); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-863, 25 NRC 273, 279 (1987). The validity and sufficiency of any "hearsay" information upon which they are based generally is a matter to be tested in the context of an evidentiary hearing in which

¹ “Licensing Boards are accustomed to weighing evidence, including expert testimony, and determining its relevance to the issues presented.” *Amergen Energy LLC* (Oyster Creek Generating Station), Memorandum and Order (Ruling on Motions in Limine and for Clarification) at 2 (Aug. 9, 2007).

the Staff must provide adequate probative evidence to carry its burden of proof. *Indiana Regional Cancer Center*, LBP-94-21, 40 NRC 22, 31 (1994).

Because there is no jury and the Board will not be confused or misled by immaterial evidence, a determination on materiality is not an ironclad requirement prior to admitting testimony and exhibits. NUREG-0386, NRC Staff Practice and Procedure Digest, H 81 (2005). Determinations of materiality may therefore be safely left to a later date without prejudicing the interests of any party. *Public Service Company of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-520, 9 NRC 48, 50 n.2 (1979). In order for expert testimony to be admissible, it need only (1) assist the trier of fact, and (2) be rendered by a properly qualified witness. *Louisiana Power and Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1091 (1983). See Fed. R. Evid. 702; *Duke Power Co.* (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-669, 15 NRC 453, 475 (1982); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-808, 21 NRC 1595, 1602 (1985).

Finally, the fact that a witness is employed by a party, or paid by a party, goes only to the persuasiveness or weight that should be accorded the expert's testimony, not to its admissibility. *Waterford, supra*, 17 NRC at 1091; *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-85-39, 22 NRC 755, 756 (1985).

II. The Scope of the Environmental Justice Contention Includes Institutionalized and Transport-dependent Environmental Justice Populations

The Board has accurately recognized the scope of the Environmental Justice (“EJ”) contention. The amended contention stated, “Entergy’s environmental report and the Final Supplemental Environmental Impact Statement contain seriously flawed environmental justice analyses 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.” *In the Matter of Entergy Nuclear Operations*. (Indian Point Nuclear Generating Units 2 and 3), ASLBP No. 07-858-03-LR-BD01, 60 (2011). As the Board noted, “[t]hese populations include not only the Sing Sing prisoners mentioned by the Board in LBP-08-13, but also other EJ populations within 50 miles of Indian Point in pre-schools, nursing homes, shelters, hospitals, and minority and low-income residents in the region who lack access to private transportation.” *Id.* at 56 (emphasis added). The Board therefore recognized that the basis for the contention covered these areas. Entergy’s assertion that the scope of the EJ contention is limited to institutional EJ populations is therefore incorrect. *Entergy Motion in Limine re: EJ Contention*, dated January 30, 2012 (“EJ MIL”) at 5.

III. The Contention Challenges the Adequacy of the Analysis of Disproportionate Impacts and the Mitigation Thereof

Despite repeated attempts by the Board to explain the nature of the contention, Entergy still clings to the notion that Clearwater is raising an emergency planning issue. EJ MIL at 6. In fact, as the Board has recognized, Clearwater is raising a NEPA issue about the analysis of disproportionate impacts and their mitigation. When first admitting the contention the Board found that the contention does not challenge the validity of the emergency plans, rather it challenged the sufficiency of the analysis of disproportionate impacts in the environmental report:

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. . . . 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.

In the Matter of Entergy Nuclear Operations (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13, 202 (2008). In admitting the amended contention, the Board not only rejected the argument regarding emergency planning once again, it also recognized that the contention extended to the adequacy of the mitigation of disparate impacts. *In the Matter of Entergy Nuclear Operations* (Indian Point Nuclear Generating Units 2 and 3), ASLBP No. 07-858-03-LR-BD01, 56 (2011).

The Board’s decisions are based upon the requirements of NEPA itself and on NRC guidance. For example, the Commission requires the NRC Staff “(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. *Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions*, 69 Fed. Reg. 52,040, 52,048 (August 24, 2004). It is undisputed that this EJ impacts assessment must include consideration of the effects of severe accidents. *See* Clearwater Initial Statement of Position, Ex. CLE00003 at 10-11; 14-15. If this assessment is to be the required “hard look” under NEPA, it must take account of the extent to which the emergency plans alter these impacts.

Thus, evidence showing that severe accidents would cause disproportionate impacts upon EJ populations within 50 miles of Indian Point in prisons, pre-schools, nursing homes, shelters, hospitals, and on minority and low-income residents in the region who lack access to private transportation is directly relevant to the contention. This evidence

must necessarily consider the effectiveness of the emergency plans, not to determine if they meet safety standards, but to determine whether they mitigate or exacerbate EJ impacts.² Finally, having determined what significant EJ impacts remain, the staff is obliged to determine whether any feasible additional mitigation is possible. *See* Clearwater Initial Statement of Position, Ex. CLE00003 at 14-16.

IV. Entergy's Understanding of NEPA is Incorrect

Although Entergy seeks to suggest that safety issues are beyond the scope of NEPA, this is completely incorrect. *EJ MIL* at 5-6. As discussed extensively in Clearwater's Initial Statement, the Severe Accident Mitigation Analysis is required by NEPA, not by the safety rules. Clearwater's Initial Statement at 10-16. This shows that safety and environmental impact are closely intertwined and the NRC must meet both the requirements of the Atomic Energy Act and the requirements of NEPA at the same time. Now that the Commission has already recognized the need to evaluate EJ impacts and the impacts of severe accidents, it would be absurd to exclude consideration of the effect of evacuation plans when conducting the analysis of the impact of severe accidents on EJ populations. Instead, this Board should ensure that the EJ analysis for the severe accident case is based upon the most realistic prediction of impact given the current evacuation plans. Indeed, failure to do so would violate NEPA's command for a rational and scientific analysis of predicted impacts.

Second, Entergy seeks to suggest that where a matter is beyond the control of the agency, it need not evaluate that issue. *EJ MIL* at 10-12. However, the law cited is totally irrelevant to this case, where the NRC has complete control on whether to relicense the plant. Thus, it has an obligation to assess the foreseeable EJ impacts of that relicensing, including

² The single case that Entergy cites to the contrary on this point is irrelevant because it concerned issues that had been addressed in the generic environmental impact statement, not EJ issues that are beyond the scope of that analysis. *See EJ MIL* at 6 n. 30.

the impacts of severe accidents. Control may affect the feasibility of a mitigation measure, but even then its effect is muted. Lack of site ownership, for example, does not preclude consideration of alternative sites.

Third, Entergy suggests that psychological impacts are excluded from NEPA. Entergy MIL at 10. Once again, Entergy views the law through rose-tinted glasses. As Entergy correctly concedes, the holding of *Metropolitan Edison* was that impacts that have a reasonably close causal relationship with the release of radiation (a change in the physical environment) must be considered. *Id.* Unlike the objectors in *Metropolitan Edison*, Clearwater is not suggesting that the fears caused by normal operation of the plant on the general population must be evaluated. Instead it is alleging that the impacts on the prison population in Sing-Sing (and other correctional facilities) that would be associated with radiation release need to be assessed. This causal chain is extremely direct. Release of radiation would induce extreme fear and anxiety, which would in turn lead to violence and physical harm to both prison officers and inmates. The close causal connection of the physical harm to the radiation release, which is a foreseeable physical consequence of the proposed action, means that this impact must be considered in the NEPA analysis.

V. The Challenged Testimony is Admissible

A. All of Michael Edelstein's Testimony is Admissible

Entergy's basis for objecting to much of Dr. Edelstein's testimony remain obscure. He straightforwardly addresses the potential impacts that would be caused by a severe accident on the prisoners in Sing-Sing. The NRC has an obligation to assess these impacts, but has totally failed to do so. Its lack of authority over the prison is irrelevant because it has authority over license renewal and the effect on the prison is caused by license renewal.

Similarly, the physical state of the prison and the psychological state of the prisoners are both important factors in assessing those impacts and devising appropriate mitigation. For example, Dr. Edelstein notes that the lack of ability to seal the prison building would mean that exposures for prisoners under a shelter-in-place scenario would be higher than for the general population. Ex. CLE000003 at A.11. This point is directly relevant to the critical issue of whether a severe accident would have a disproportionate effect on the prison population. Given this problem, it is hardly surprising that Dr. Edelstein believes that a mitigation measure that should be considered is improving the ability to exclude outside air while maintaining a livable indoor atmosphere. *Id.* at A14. Although Entergy suggests that Dr. Edelstein does not have sufficient expertise to make these points, no special expertise is required to state the obvious in testimony. Similarly, Dr. Edelstein's statements about Fukushima are entirely obvious and require no special expertise. Furthermore, the likelihood that the Fukushima accident will prompt additional safety rules does not change the need for the NRC to analyze the effects of a severe accident, which Fukushima showed could involve a sustained high level radiation release.

With regard to Dr. Edelstein's reliance on an interview done by Ms. Shapiro, *id.* at A.16, Entergy has provided no grounds to exclude this interview on the basis of unreliability. The Part 2 rules allow for additional discovery and cross-examination where the credibility of a witness is properly at issue. If Entergy seeks to challenge Ms. Shapiro's report of her interview, it should seek to use those tools.³ It cannot simply use an allegation in arguments of counsel as a basis to exclude this testimony as unreliable.

With regard to Dr. Edelstein's report, Entergy has no basis for its proposed exclusions. For example, the failures of prison evacuation during the Katrina disaster

³ Clearwater believes that there is no basis for these accusations.

provide important lessons for assessing impact on prisoners of a severe accident. To ignore those lessons would be myopic in the extreme.⁴ Similarly, Entergy seeks to exclude Dr. Edelstein's detailed analysis of the unique nature of the prison population, which relies on academic literature in the field, and lays the foundation for the assessment of impact. Ignoring this background would render any impact analysis fundamentally flawed. Thus, far from being irrelevant, it is essential background that the agency has completely failed to consider.

Entergy challenges various statements regarding the likelihood and effect of a severe accident, but fails to note that in the challenged section (CLE000012 at 16-19), Dr. Edelstein relies upon the conclusions of other experts, which is entirely permissible. Similarly, Dr. Edelstein's introduction to the mitigation section relies on the Witt report, the ACLU report, and the Westchester Emergency Plan, which is once again entirely proper. Entergy's other objections are similarly baseless and rest upon a flawed understanding of the scope of the contention and the reach of NEPA. This Board should therefore admit Dr. Edelstein's testimony in its entirety.

B. All of Anthony Papa's Testimony is Admissible

Mr. Papa's testimony contains valuable background on the nature of prison life and the potential of prisoners in Sing-Sing to reform and contribute positively to society. It also contains information that is directly relevant to this proceeding, such as the time needed to prepare prisoners for evacuation, the lack of suitable facilities to which Sing-Sing prisoners could be transported, and the danger of violence within the prison. He also discusses the age and poor condition of the prison buildings, which make them

⁴ To avoid any argument about the referenced ACLU report, which has been previously disclosed and is publicly available, Clearwater attaches it to this response and has posted to EIE as Exhibit CLE000044.

unsuitable for sheltering in place, the lack of drills for evacuation, and the need to treat prisoners, who are among the vulnerable members of society, with dignity. Entergy's attempt to exclude this testimony, which the NRC Staff supported, is not only illogical, it also illustrates that Entergy and the NRC would rather ignore prison impact issues than deal with them forthrightly. Fortunately, NEPA does not allow these issues to be swept under the rug. Instead, the NRC must assess the impact of a severe accident on the prison population and analyze feasible mitigation. This Board should therefore admit Mr. Papa's testimony in its entirety.

C. All of Dr. Erik Larsen's Testimony is Admissible

Entergy incorrectly argues that Dr. Erik's Larsen's testimony should be excluded in its entirety because it concerns general populations and because it involves the emergency plans. As discussed above, the Board has recognized that the scope of Clearwater's contention includes impacts and mitigation concerning environmental justice "populations within 50 miles of Indian Point in . . . hospitals ..." ASLBP No. 07-858-03-LR-BD01 at 56. Moreover, in raising issues relating to the Emergency Plan, the Board has acknowledged that Clearwater is not challenging the evacuation plan but rather whether there was an adequate assessment of potential disparate environmental justice impacts in the event of an emergency event at Indian Point. *In the Matter of Entergy Nuclear Operations* (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13, 202 (2008).

First, Dr. Larsen's testimony provides general background, as well as direct experience of the circumstances that environmental justice populations are likely to face upon arrival at the major regional medical facility in the region in the event of a nuclear

emergency. As Dr. Larsen testified, “the Westchester County Department of Emergency Services at Valhalla . . . is the major Level 1 trauma center for a 50-mile area or more and had the highly specialized equipment and trained staff to address this radiological emergency, where most other facilities within the 10-mile emergency evacuation zone or even within the 50-miles radius would not.” Testimony of Dr. Erik Larsen, Q4, A4.

Most importantly, Dr. Larsen directly addresses the ways that environmental justice populations will be disproportionately impacted by a radiological incident at Indian Point. For example, Dr. Larsen testified that patients without insurance coverage are likely to be refused non-acute medical treatment, and that “patients whose ability to pay for medical services is compromised [because they are] at a severe disadvantage for obtaining follow up treatment, medication, etc. as compared with patients who have insurance coverage or can afford to pay for additional care.” *Id.*, Q8, A8. Dr. Larsen also notes that people with access to transportation are more likely to arrive in emergency rooms first and receive access to medical care before those without vehicles. Moreover, Dr. Larsen testified that the current medical emergency planning is insufficient to both treat patients and to avoid disproportionate impacts on EJ populations including those who are non-ambulatory. *Id.*, Q9, A9.

D. All of John Simms’ Testimony is Admissible

Entergy argues that all of John Simms testimony should be excluded because it raises issues concerning non-EJ populations, because he lacks first-hand knowledge, and because it raises issues concerning the emergency plan. Again, Entergy’s argument is beside the point. Mr. Simms raises issues that concern non-ambulatory residents of nursing homes, which the board has recognized are within the scope of the contention.

Because 85% of the residents of the home in which Mr. Simms lives are non-ambulatory, CLE000006 at A.6, Mr. Simms has personal knowledge of these issues.

E. All of Dolores Guardado's Testimony is Admissible

Entergy seeks to exclude Ms. Guardado's testimony on the grounds that it is outside the scope. This objection is completely incorrect. First, the Board noted that relevant populations include not only Sing Sing prisoners mentioned by the Board in LBP-08-13, but also other EJ populations within 50 miles of Indian Point including "minority and low income residents in the region who lack access to private transportation." ASLBP No. 07-858-03-LR-BD01, 56 (2011). Ms. Guardado's testimony identifies potential disproportionate impacts that could affect the Hispanic community of Peekskill, a minority and low-income group residing within 50 miles of Indian Point many of whom lack access to private transportation. Thus, Ms. Guardado's testimony clearly falls under the scope of contention CW-EC-3A.

Second, the testimony proffered by Ms. Guardado does not challenge the adequacy or validity of the emergency plans. Instead it challenges the sufficiency of the analysis of disproportionate impacts on environmental justice communities undertaken by NRC in case of an emergency at Indian Point and measures to mitigate such impacts. Ms. Dolores Guardado's testimony considers emergency plans only to show that a radiological accident at Indian Point would cause disproportionate impacts upon this relevant EJ population and the effects the plans themselves have upon these significant EJ impacts. ASLB No. 07-858-03LR-BD01 at 56.

To prove the claim that Ms. Guardado's testimony challenges the emergency plans, Entergy asserts that by stating that a "language barrier" will result in evacuation

difficulties, Ms. Dolores Guardado is substantively challenging the contents of the emergency plans. *EJ MIL* at 23. Entergy's claim is a flawed interpretation and an intentional mischaracterization of Ms. Guardado's testimony. It is clear that Ms. Guardado has identified a "language barrier" as a potential cause of disproportionate impact affecting the Hispanic community of Peekskill in case of an emergency at Indian Point. Entergy cannot just waive away this issue, which is squarely within the scope of the contention.

Third, as mentioned above, Ms. Dolores Guardado is providing testimony based on her personal knowledge. As a resident of Peekskill and active member of the Hispanic community of Peekskill, Ms. Guardado testifies only to what is known by her as a member of this environmental justice community. Ex. CLE008 at A1 to A7. Entergy's claim that she lacks personal knowledge about the potential adverse impacts that may affect Hispanic residents who live in Peekskill in case of an emergency at Indian Point is ludicrous, insulting, and entirely without foundation.

F. All of Aaron Mair's Testimony is Admissible

Contrary to Entergy's argument, Mr. Mair's testimony is directly material to issues that this Board has ruled within scope, i.e. assessing disparate impacts and mitigation concerning environmental justice "populations within 50 miles of Indian Point in pre- schools, nursing homes, shelters, hospitals, and minority and low-income residents in the region who lack access to private transportation." ASLBP No. 07-858-03-LR-BD01 at 56. Mr. Mair's testimony falls entirely within these parameters. His testimony concerning the demographics of Peekskill establishes the existence of an environmental justice community in the area, and his testimony concerning other industrial impacts in Peekskill re-

emphasizes the existence of this community, and demonstrates that the EJ impacts from non-Indian Point sources compound and exacerbate the impacts from Indian Point.

Furthermore, the low level of automobile ownership in Peekskill and the lack of sufficient egress roads from Peekskill, together with their hilly, curvy and narrow nature, goes directly to the question of whether the large EJ populations of Peekskill will suffer a disparate impact because for them, compared to non EJ populations in the surrounding area, evacuation would be so much more difficult. Entergy's argument that that the testimony is irrelevant is entirely consistent with its lack of concern for environmental justice populations throughout the relicensing process: Happily, NEPA requires the NRC to analyze and mitigate these impacts. The Board should therefore deny Entergy's attempt to exclude facts that are directly relevant to the required analysis.

G. All of Stephen Filler's Testimony is Admissible

Again, Entergy ignores the ruling of the Board in admitting Clearwater's contention and argues, in knee jerk fashion, that arguments mentioning the evacuation plan are irrelevant. As discussed above, Entergy again argues that Clearwater's contention only applies to institutionalized populations, and ignores the fact the Board ruled that the contention covered, not just prisoners, but also, "EJ populations within 50 miles of Indian Point in pre- schools, nursing homes, shelters, hospitals, and minority and low-income residents in the region who lack access to private transportation." *Id.*

The questions addressed in Mr. Filler's testimony are specifically whether the Westchester, Rockland and New York State Emergency Plans "imply that there could be a disparate impact on environmental justice populations." Mr. Filler reviewed these Emergency Plans and highlighted those provisions, which suggested that disabled, minority, transportation-dependent and other EJ populations would be disparately

impacted in the event of a radiological incident. Reasons identified from the plans include: EJ populations are much more likely to suffer from insufficient transportation resources, much more likely to be sheltered-in-place when other populations would be evacuated, much more likely to receive higher doses of radiation than non-EJ populations, and much more likely to be deprived of water, food and adequate ventilation in the event of a radiological incident. This testimony is directly related to the contention as admitted by the Board and should therefore be admitted.

H. All of Manna Jo Greene’s Testimony is Admissible

Again, Entergy misconstrues Clearwater’s evidence and argues that Ms. Greene’s testimony should be struck for four reasons: 1) that Ms. Greene lacks relevant “expertise” and the interviews are unreliable; 2) that the testimony challenges the adequacy of the evacuation plan; 3) that the testimony concerns non-EJ and non-institutionalized populations; and 4) that the testimony concerns impacts of toxins ruled outside the scope of the hearing by the Board. *EJ MIL* at 15-18.

First, as discussed above, in spite of Energy’s repeated statements to the contrary, the Board was very clear that the Clearwater contention included the question of whether there might be disparate EJ impacts in the event and aftermath of an emergency event at the plant. *In the Matter of Entergy Nuclear Operations* (Indian Point Nuclear Generating Units 2 and 3), LBP-08-13, 202 (2008). Second, the Board was similarly clear that the scope of the contention included “EJ populations within 50 miles of Indian Point in pre-schools, nursing homes, shelters, hospitals, and minority and low-income residents in the region who lack access to private transportation.” ASLBP No. 07-858-03-LR-BD01 at 56.

Indeed, Ms. Greene's testimony, and the many interviews that form the basis of much of her testimony, were an effort by Clearwater to conduct the very assessment that was ignored, and should have been completed, in both Energy's Environmental Report and in the Final Supplemental Environmental Impact Statement (FSEIS). Entergy's arguments concerning Ms. Greene's supposed lack of expert qualifications to conduct interviews -- and the "inherent unreliability" of the Clearwater interviewers and their interviews -- go, if anything, to their weight, and not their admissibility. Certainly the Board is capable of reviewing this testimony and giving it the weight it determines is appropriate. But beyond this, Entergy does not make any direct challenges to interview answers other than with unsubstantiated claims that proper protocols were not followed and that Ms. Greene, and other Clearwater interviewers, did not have adequate expertise. Significantly, Energy has presented no evidence whatsoever that the testimony is unreliable, and has presented no counter-evidence. Instead it has made mere assertions which provide no basis whatsoever for exclusion of this sworn evidence.

At the hearing, the Board's review of the interview questions and answers will confirm that the questions were fairly asked and answered. Far from being patently false or exaggerated, the interview results and Ms. Greene's conclusions reveal extremely fair-minded questioning and results that were predictable and unsurprising. Ms. Greene concluded that the research showed a wide variance in emergency preparedness, and that EJ populations would be disproportionately impacted because of a need for "[m]uch more consistent outreach . . . to assure clarity about emergency plans, clear channels of communication and reliable communications equipment and potassium iodide distribution." *Manna Jo Greene Testimony*, Q163, A 163. In addition, Ms. Greene

concluded, again unsurprisingly, that: (a) “people who lack personal transportation and need to depend on buses will be at a severe disadvantage;” (b) that “[p]eople who are institutionalized because they need assistance with mobility or have severe cognitive disorders, especially the elderly, will be extremely difficult to evacuate;” (c) that “[s]helter and transportation deficits are evident for all institutionalized populations, from people in homeless shelters or nursing homes to jails and prisons,” and (d) that [r]euniting children with their parents is also problematic for those without personal transportation, especially when bus routes are overridden by emergency orders, and this problem will be more prevalent for low-income families.” *Id.*

In order to reduce the potential impacts on EJ communities, Ms. Greene further concluded that “much better outreach and disaster preparedness is needed for institutions that house poverty-stricken or low-income, disabled, minority and non-English-speaking populations,” including better communication capacity and more transportation resources. *Id.*, at Q164, A164. She also identified a number of other deficiencies in the FSEIS including cumulative other impacts disproportionately impacting EJ populations, as well as disregard of the consequences of limited access to transportation, limited English proficiency, impairment of cognitive or sensory functions needed to follow instructions, limited mobility, and the lack of established methodologies to evaluate potential Environmental Justice impacts. *Id.*, at A165, Q 165.

Ms. Greene’s testimony does not purport to be the final word concerning analysis of the disproportionate impacts on EJ populations in institutions such as hospitals, nursing homes, child care facilities, or schools, or on those who are transit dependent. The obligation to conduct such an analysis falls squarely on the NRC, not Clearwater.

Ms. Greene's testimony is plainly relevant and supportive of Clearwater's position that the NRC has failed to take a "hard look" at disproportionate impacts upon identified populations within fifty miles of Indian Point. It should therefore be admitted in its entirety.

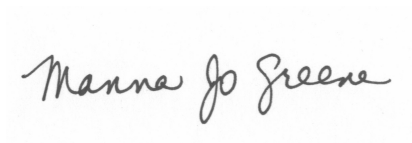
I. Entergy's Attempts to Exclude Exhibits Are Also Unfounded

Finally, Entergy attempts to exclude a number of supporting exhibits based upon its misunderstanding of the scope of the contention, the scope of NEPA, or the nature of the exhibit. For example, Exhibit CLE000032 is a partial listing of institutions that could contain EJ populations within 50 miles of the plant. This is relevant because the NRC has failed to check whether these institutions contain EJ populations and, if so, if there would be disproportionate impacts. As an example, this listing shows there are 4 jails in Rockland and Westchester counties, two of which have been shown by Clearwater to contain EJ populations. Ex. CLE000032 at 2. It is directly relevant that there are two more jails, both of which probably contain EJ populations. Entergy's attempt to exclude this and other probative information in the exhibits attached to the testimony should therefore be rejected.

CONCLUSION

For the foregoing reasons, Entergy's Motions in Limine regarding the EJ contention should be denied in its entirety.

Respectfully submitted,

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

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