

**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:	November 14, 2012

**HUDSON RIVER SLOOP CLEARWATER, INC.'S MOTION TO SUPPLEMENT THE  
RECORD WITH RELEVANT NEW INFORMATION THAT BECAME APPARENT AFTER  
HURRICANE SANDY**

The aftermath of Hurricane Sandy confirmed in vivid, shocking, and tragic detail that the inability to evacuate during, and to react quickly to, disasters such as floods, earthquakes, and nuclear accidents, or a combination of them, as happened at Fukushima, can have severe impacts on environmental justice populations. In addition to these impacts, during the hurricane, the Oyster Creek nuclear plant on the New Jersey shore 50 miles of New York City declared an alert, because rising flood waters threatened the recirculation pumps. Ex. CLE000068.<sup>1</sup> Like the Fukushima accident, this illustrates that combined natural disasters and nuclear emergencies are reasonably foreseeable, and that therefore they must be studied under NEPA.

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<sup>1</sup> Also available at <http://truth-out.org/news/item/12471-oyster-creek-nuclear-alert-as-floodwaters-fall-more-questions-arise>

To that end, Hudson River Sloop Clearwater, Inc. (“Clearwater”) hereby requests that the Atomic Safety and Licensing Board (the “Board”) supplement the hearing record with evidence of how Hurricane Sandy had a disparate impact on environmental justice populations, including low income individuals, the elderly and the disabled, as well as those in prisons, hospitals, and nursing homes. On November 9, 2012, the Board extended the deadline for Clearwater to file this motion to November 14, 2012.<sup>2</sup>

In accordance with the Board’s recent order, Clearwater is submitting this Motion to supplement the record within 15 days after New York City and Northern New Jersey were devastated by Hurricane Sandy on the evening of Monday, October 29<sup>th</sup>. As a result of this storm, some people died, and many people lost their homes or were subjected to living for extended periods without basic services such as heat, power, and water. The evidence proffered in the proposed Exhibits would directly refute some self-serving hearsay statements allegedly made by New York Department of Corrections that prisoners become docile during emergencies.” Hr’g Tr., 189. Directly contradicting this testimony, 15 inmates at Logan Hall halfway house in Newark, New Jersey fled during the storm. Ex. CLE000070.<sup>3</sup> As *The New York Times* reported, “[a]s Hurricane Sandy raged outside, dozens of male inmates burst into Logan Hall’s corridors. They threatened female inmates, tore apart furniture and ripped signs inscribed with inspirational sayings from the walls.” *Id.*

More generally, the proposed Exhibits severely undercut the Nuclear Regulatory Commission Staff’s (the “Staff”) thesis that mere existence of regulations for emergency planning within the 10 mile zone relieves it of any responsibility to consider disparate impacts for the 50 mile emergency planning zone. The reality is that regulations are often not enforced or actually serve to

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<sup>2</sup> During consultation, Entergy opposed this motion on grounds of relevance and the Staff opposed this motion on grounds of relevance and scope.

<sup>3</sup> Also available at <http://www.nytimes.com/2012/11/12/nyregion/15-inmates-escaped-from-new-jersey-halfway-house-during-hurricane-sandy.html?pagewanted=all>.

increase disparate impacts. That is why the NRC must now conduct a realistic disparate impact analysis and examine how to mitigate that impact.

## **I. New Information Available**

### **A. The Storm Had a Disproportionate Effect on Environmental Justice Populations within 50 Miles of the Indian Point Plant**

The storm had a disproportionate effect on environmental justice populations within 50 miles of the Indian Point Plant. The reasons are straightforward. First, it is much harder for low income people to evacuate in advance because of lack of money for hotels or other accommodation, inflexible work schedules, lack of private vehicles or money for gas, and a more localized network of family and friends. Ex. CLE000061.<sup>4</sup> Second, low income people tend to live in low quality housing that is less suitable for sheltering from an event. *Id.* The low income people who are also elderly are particularly vulnerable. *Id.* Race is a factor, because minority communities tend to have less access to levers of power. *Id.* Inability to speak English also plays a role because access to up to date information is especially difficult. *Id.*

To illustrate these general points, Clearwater has collated a few sample stories from the aftermath of the storm that show in tragic, heart-rending detail how that theory translated into serious deprivation and, in some especially tragic cases, even death for members of environmental justice populations. For example, according to *The New York Times*, one lower-income community on Staten Island “became a deathtrap,” where the eight people killed “were mostly elderly – the youngest was 59. Most lived alone, and one was legally blind, paraplegic, and had cerebral palsy.” Ex. CLE000063.<sup>5</sup>

If the Board is not convinced that a nuclear accident would have similar disproportionate impact, Clearwater intends to offer further testimony while the record remains open. These events

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<sup>4</sup> Also available at [http://blog.nj.com/njv\\_editorial\\_page/2012/11/after\\_hurricane\\_sandy\\_understa.html](http://blog.nj.com/njv_editorial_page/2012/11/after_hurricane_sandy_understa.html)

<sup>5</sup> Also available at <http://www.nytimes.com/2012/11/11/nyregion/how-a-staten-island-community-became-a-deathtrap.html?ref=todayspaper>

are current, ongoing and still being investigated. They show beyond any doubt the rather obvious proposition that the most vulnerable suffer most in times of severe stress. However, the Staff has chosen to ignore this inconvenient truth relicensing after relicensing. For the sake of the millions of vulnerable individuals that live around the Indian Point plant, that must change. Clearwater will therefore continue to supply the Board with analysis of these tragic events as an attempt to ensure that the Staff's myopia is cured once and for all.

### **1. The Shelter-In-Place Approach Backfired at a Nursing Home in Queens**

The recent disaster illustrates how environmental justice populations are disparately impacted by poorly planned shelter-in-place policies. A deliberate decision to shelter-in-place caused residents of Promenade—a Queens nursing home—to be left without power, adequate food, or medications. Ex. CLE000067.<sup>6</sup> An article in *The New York Times* reports that “[a]s waves slammed against the building for hours, patients remained inside in the dark, growing steadily more hungry and cold.” *Id.* Far from allowing the residents to avoid the privations of evacuation, after enduring these conditions, they were evacuated in a manner that put them at risk and violated state regulations:

Cold, thirst, fear: The situation grew so dire that the next evening, as the vestiges of the storm blew across the peninsula, ambulances arrived, evacuated the nearly 200 patients over several hours and deposited them in emergency shelters in the city.

In most cases, no Promenade staff member accompanied the patients, and many patients traveled without their medical records. Both are *violations of state regulations*.

*Id.* (emphasis added).

After evacuation, things got a little better:

Promenade was dank and cold, and without lights. Dr. Shah, the health commissioner, asked for help from the hospitals of North Shore-LIJ Health System, which sent two safety officers out to the Rockaways at first light that Tuesday. Every street the officers tried was blocked by floodwaters or fire trucks fighting a blaze several hundred feet from the nursing home.

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<sup>6</sup> Also available at <http://www.nytimes.com/2012/11/10/nyregion/queens-nursing-home-is-faulted-over-care-after-storm.html?pagewanted=all>

They returned several hours later, and Tuesday night, a caravan of ambulance crews showed up to evacuate patients. Emergency Medical Service crews struggled to carry wheelchairs and patients with severe dementia down the stairs to waiting ambulances. But some records and medications did not follow.

‘Some records went with the wrong patients to other sites,’ said Brenda Stratten, a nurse in charge of the federal Disaster Medical Assistance Team based at the emergency shelter at Lehman College in the Bronx. ‘I had a few patients where more records arrived Day 2 and 3.’

The ambulances took Promenade residents to several different shelters. Slightly more than 100 patients were placed in four dimly lighted classrooms at Brooklyn Technical High School in Fort Greene, Brooklyn. Few of these patients, according to one federal and two city and officials who were there, had medical face sheets or proper medications.

Federal and city emergency workers grew so concerned that they conducted finger-stick and other blood tests on some patients, they said.

‘It was as if they had been abandoned,’ said a worker at the Brooklyn Tech shelter, who spoke on the condition of anonymity because he had been told not to speak to reporters. ‘The shelter staff worked heroically, but they were completely in the dark.’

Later, on Oct. 31., Promenade staff members appeared at the shelter, greeting their patients with great hugs and helping to care for them. Within five days, however, Promenade had temporarily withdrawn these familiar faces from the shelters, saying it was too expensive to pay them, other shelter workers said.

In the days to come, the sickest of Promenade’s patients were farmed out to nursing homes across the region. Broadlawn Manor Nursing and Rehabilitation Center, 30 miles away in Amityville, N.Y., received 10 Promenade patients on Nov. 1. They arrived with medications but missing papers including instructions for end-of-life preferences.

For a week, Broadlawn social workers tried to reach Promenade. Finally, on Wednesday, nine days after the storm first hit, a Promenade social worker called and promised more information.

‘That’s the last we heard,’ said Terry Lynam, a spokesman for North Shore-LIJ Health System, which owns Broadlawn.

Relatives of patients described similar frustrations as they tried to get in touch with Promenade, efforts run through with anxiety and fear.

Some remain in limbo. Lillian DiViesti, with help from her son, Paul, has searched more than a week for her mother, Marie Salatino, a 93-year-old retired union seamstress from Sheepshead Bay, Brooklyn, who is blind and has dementia.

*Id.* Many relatives could not locate their loved ones. “Some family members are still desperately searching for their loved ones. It is not known how many Promenade patients remain lost to relatives.” *Id.* “Ms. DiViesti’s concern is more primal. ‘I don’t know where my mother is,’ she said. ‘I want to know where my mother is.’ *Id.*

This illustrates that far from reducing risk, shelter-in-place can increase them if preparations are not adequate and facilities are not sufficiently robust to provide shelter. It confirms that without site-specific assessments of the suitability of institutions for shelter-in-place, such a policy could give rise to significant disparate impact on environmental justice populations, such as low income elderly residents in nursing homes.

## **2. The Shelter-In-Place Approach Backfired at Various Area Hospitals**

New York City Mayor Michael Bloomberg’s decision to exempt hospitals in low-lying areas of the city from pre-storm evacuation orders as part of a deliberate plan to shelter-in-place resulted in three hospitals having to evacuate their patients during the storm. Ex. CLE000065.<sup>7</sup> Although some hospitals in the city evacuated before the storm hit, city officials, in consultation with the state, decided not to evacuate New York University Langone Medical Center (“NYU Langone”), Bellevue Hospital Center (“Bellevue”)—the city’s flagship public hospital—and Coney Island Hospital, another public institution. Ex. CLE000062.<sup>8</sup>

At 4:00 p.m. on October 29th, the public relations director at NYU Langone assured journalists that the hospital was not evacuating. *Id.* But by 9:30 that evening after the storm’s center had come ashore, ex. CLE000066,<sup>9</sup> staff at NYU Langone frantically called out to other regional hospitals “in a panic mode.” Ex. CLE000065. By the late evening hours, the worst case scenario had unfolded: power went out in the hospital and both backup generators failed causing NYU

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<sup>7</sup> Also available at <http://www.propublica.org/article/in-hurricanes-wake-decisions-not-to-evacuate-hospitals-raise-questions>.

<sup>8</sup> Also available at <http://www.nytimes.com/2012/11/07/opinion/hospital-evacuations-for-future-storms.html>.

<sup>9</sup> Also available at <http://newswatch.nationalgeographic.com/2012/11/02/a-timeline-of-hurricane-sandys-path-of-destruction/>

Langone to evacuate all 215 of its patients. Ex. CLE000069.<sup>10</sup> The “[s]taff had to hand pump oxygen to critically ill patients until patients could be taken by ambulance to another hospital.” *Id.* The evacuation ended the following afternoon but not before some patients spent more than 12 hours in the facility with little power. Ex. CLE000065.

A similar scenario unfolded at Bellevue Hospital, a few blocks away. *Id.* According to media reports, the situation at Bellevue was as follows:

The 25-story hospital was on partial backup power without working elevators, its basement flooded along with many hospital supplies. Its remaining working generators were being fed with fuel carried up the staircases to the 13th floor by hand. Even patient corridors smelled like diesel. According to a sign posted in the hospital, Bellevue’s largest generator, its sixth, was in the basement.

*Id.*

To be sure, not all hospitals that sheltered-in-place were evacuated. In fact, hospitals in Long Island’s North Shore-LIJ hospital system remained opened during the storm and were able to accept evacuated patients from NYU Langone, Bellevue, and Coney Island during the storm. *Id.* Moreover, as of the Thursday following the storm, no patient died in any storm-related accident. *Id.* At the very worst, however, the evacuation of these three hospitals during the height of the storm—two of which are public hospitals serving a disproportionately high number of the environmental justice population—illustrates that reliance on regulations and process is illusory. Simply put, regulations fall apart when they are overcome by nature. As experts recognize, “the irony of the NYU generator failure is that New York City’s hospitals and health department have taken preparedness more seriously than nearly everyone else in the country, particularly since 9/11/01.” Ex. CLE000069. Indeed, after Hurricane Irene, NYU Langone had invested money in raising generators out of flood-prone areas and the system had been tested several times. Ex. CLE000065.

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<sup>10</sup> Also available at <http://www.propublica.org/article/why-do-hospitals-generators-keep-failing>

At best, these incidents illustrate that site-specific assessments of the suitability of institutions for shelter-in-place are critical. One commentator speculates that while generators at NYU Langone had been moved out of flood-prone areas, “key elements that allow electricity to flow through the system remained at flood level.” *Id.* Poorly planned shelter-in-place policies can also divert resources during a disaster. First responders and members of the National Guard were deployed to evacuate patients to other area hospitals during the storm. And the evacuations put the patients and first-responders’ lives at risk.

### **3. Asian Immigrant Populations Were Disproportionately Affected**

Asian immigrants who rely on ethnic media outlets in their native languages were disadvantaged during the storm because it was difficult for them to obtain information about the disaster and what to do as the situation worsened. Ex. CLE000064. Without the ability to publish print editions due to storm-related disruptions, only ethnic papers with an online presence were able to disseminate information to their readers. *Id.* In some instances, members of these communities had to resort to calling journalists on their cell phones. *Id.* While ethnic newspapers were resourceful in their approach to disseminating information to their constituents, the solutions they came up with would not solve the problems of the most vulnerable. For instance, publishing newspapers online presupposes that members of these communities have access to the internet—a fact which cannot be taken as universally true— and that people in these communities did not lose electrical power. Moreover, it is clear that most members of these communities were not able to call journalists on their cell phones for updates as the storm progressed.

#### **4. A Low-Income Staten Island Neighborhood Became a Deathtrap**

Eight residents of Staten Island’s Midland Beach drowned during Hurricane Sandy. Ex. CLE000063. Midland Beach in Staten Island suffered the highest concentration of deaths attributable to the storm. *Id.* The community was once predominantly Irish-American, but has become more diverse as Italian-Americans, Latinos, and immigrants from the former Soviet Union arrived. *Id.* All eight residents who died were over 55 and one was disabled. *Id.* The media reported that “the neighborhood turned into a lake that was more than nine feet deep in some places—nearly enough to fill the victims’ homes.” *Id.*

#### **5. Poor People in Other Areas Were Disproportionately Affected**

*New York Magazine* reports that the predominately African-American neighborhood of Far Rockaway, Queens, was “more forgotten than most.” Ex. CLE000071.<sup>11</sup> One resident described the scene as follows:

‘Far Rock is another country. A whole other deal. No power, no heat, no hot water just ain’t the same thing for us as it is for them,’ said Ronald Williams, a ‘born and bred’ resident of the so-called ‘Forty Projects’ on Beach Channel Drive who in the midst of the storm had walked ‘through Hell and high water’ to check on his elderly, disabled aunt who lives in an apartment on Mott Avenue, the area’s downtrodden major shopping street.

*Id.* The article continues:

A man in his late 20’s who referred to himself only as Todd said you couldn’t compare post-Sandy life in Far Rock with what was happening ‘up the beach.’ The assumption was the people of Breezy and Belle Harbor, no matter how many houses had been wrecked, would take care of their own. ‘They got someone to call, who we gonna call?’

*Id.*

## **II. Record Should be Supplemented Because Information is New, Different, and Highly Material**

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<sup>11</sup> Also available at <http://nymag.com/daily/intel/2012/11/ruins-rumors-and-resilience-in-rockaway.html>

Although the hearing on Contention CW-EC-3A has happened, the record has not closed. In such circumstances, petitioners may add new contentions after filing their initial petition, so long as they act in accordance with 10 C.F.R. § 2.309(f)(2). Entergy Nuclear Vermont Yankee, L.L.C. (Vermont Yankee Nuclear Power Station), LBP-05-32, 62 NRC 813 (2005). The Commission's regulations allow for a "new contention" to be filed upon a showing that:

(i) The information upon which the amended or new contention is based was not previously available;

(ii) The information upon which the amended or new contention is based is materially different than information previously available; and

(iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(f)(2)(i)-(iii).

The Board should adopt a similar standard for relevant new evidence that arises after the hearing but before the record closes. The new material set forth above meets this standard because it shows for the first time that members of the environmental justice population have been subject to major disparate impacts and even death during a major emergency that affected part of the 50 mile zone around Indian Point. Although the evidence previously submitted concerning the disasters at Fukushima and during Hurricane Katrina was somewhat similar, the new information presented here is even more relevant because it shows that the mere presence of regulations without adequate site-specific study of follow up can actually increase disparate impact, rather than reducing it.<sup>12</sup>

### **III. Even Where Record Has Closed New Material Has Been Allowed Into the Record**

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<sup>12</sup> Both the Staff and Entergy oppose this Motion on grounds of scope and relevance. Because the Board has repeatedly over-ruled these objections at the contention admission stage (both at the outset and after the FSEIS was available) and in response to Entergy Motions in Limine, Clearwater has not repeated the briefing provided. If the Staff and Entergy choose to extensively brief this issue, Clearwater requests an opportunity to reply.

Even if the record had closed in this proceeding, the new evidence raises an issue of public health and would therefore be admissible. Adjudicatory decisions must be supported by evidence properly in the record. Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-580, 11 NRC 227, 230 (1980); Philadelphia Elec. Co. (Limerick Generating Station, Units 1 & 2), ALAB-836, 23 NRC 479, 499 n.33 (1986). The Licensing Board may not base a decision on factual material which has not been introduced into evidence. However, if extra-record material raises an issue of possible importance to matters such as public health, the material may be examined on review. If this examination creates a serious doubt about the decision reached by the Board, the record may be reopened for the taking of supplementary evidence. Tenn. Valley Auth. (Hartsville Nuclear Plant, Units 1A, 2A, 1B & 2B), ALAB-463, 7 NRC 341, 351-52 (1978). See also Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 & 2), ALAB-937, 32 NRC 135, 150-52 (1990).

Where the presentation of new matter to supplement the record is untimely, its possible significance to the outcome of the proceeding is of no moment, at least where the issue to which it relates is devoid of grave public health and safety or environmental implications. Puerto Rico Elec. Power Auth. (North Coast Nuclear Power Plant, Unit 1), ALAB-648, 14 NRC 34, 38-39 (1981), citing Kan. Gas & Elec. Co. (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 338 (1978); Northern Ind. Pub. Serv. Co. (Bailly Generating Station, Nuclear-1), ALAB-227, 8 AEC 416, 418 (1974); Hartsville, ALAB-463, 7 NRC at 351.

A Licensing Board decision which is pending on appeal will be vacated when, subsequent to the issuance of the decision, circumstances have changed so as to significantly alter the evidentiary basis of the decision. Where a party seeks to change its position or materially alter its earlier presentation to the Licensing Board, the hearing record no longer represents the actual situation in the case. Other parties should be given an appropriate opportunity to comment upon or to rebut any new information which is material to the resolution of issues. Kerr-McGee Chem. Corp. (West Chicago Rare Earths Facility), ALAB-944, 33 NRC 81, 115-17 (1991).

## CONCLUSION

For the reasons set forth above the attached Exhibits should be added to the hearing record and the Board should continue to receive additional information on relevant topics as more analyses of the disparate impact of Hurricane Sandy become available.

Respectfully Submitted,

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/s/

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