Good afternoon:

This morning, members of the House Appropriation Subcommittee on Homeland Security, including Congresswoman Lowey from New York, had the unique occasion to participate in an aerial tour of the Indian Point nuclear plant and surrounding area, including the Tappan Zee Bridge. Riverkeeper supports Mayor Bloomberg's efforts to ensure adequate federal antiterrorism funding for New York City and the region, and we encourage Congresswoman Lowey and the other members of the Subcommittee to consider increased funding for New York City and New York State for this purpose.

In particular, Riverkeeper greatly appreciates and supports Congresswoman Lowey's efforts to address the many significant concerns surrounding the operation of the Indian Point nuclear power plant, in the wake of the catastrophe at the Fukushima nuclear facility just one year ago, including her recent effort to expand NRC evacuation plan requirements to include areas within 50 miles of a nuclear facility. Given these concerns, we also respectfully request that Congresswoman Lowey and the other members of the Subcommittee consider specific funding to increase waterborne security at Indian Point, which is greatly needed due to its location on the Hudson River. Subcommittee members should be aware that New York State funding for a NYS Naval Militia vessel to be stationed on the Hudson River at Indian Point was cut several years ago. At the current time, there is no waterborne security presence, or any type of floating water barrier in the Hudson River in front of Indian Point. The Coast Guard "exclusion zone" in the Hudson River is simply marked with several white buoys which do not present a physical barrier to approaching the facility by water.

Riverkeeper encourages Congresswoman Lowey and the other members of the committee to use the tour as an opportunity to hold NRC's feet to the fire and follow-up with pointed questions, including the following:

• Why does NRC refuse to require Entergy to move as much spent fuel as possible from the densely packed, leaking pools to dry cask storage? Reducing the density of the fuel in the pools (to the amount they were intended to hold when IP2 and IP3 were designed) is the most effective and reliable option for lessening the risk of a spent fuel pool fire and associated severe radiological releases which could result from an accident or intentional attack. Requiring this is justified since the costs of moving the fuel (as low as \$20 million) far surpasses the billions of dollars in damage and health impacts that would result from the release of radiation during a pool fire. See, Gordon Thompson, Risk-Related Impacts from Continued Operation of the Indian Point Nuclear Power Plants (November 2007), at pages 51-52, available at, <u>http://www.riverkeeper.org/wp-content/uploads/2011/05/Risk-related-to-impacts-from-Continued-operations-of-IndianPoint.pdf</u>.

• Why won't NRC provide the same conservative assumptions that were afforded to American residents in Japan by requiring evacuation planning for a 50-mile radius surrounding U.S. nuclear plants? Ample evidence demonstrates that radiation resulting from an accident or intentional attack at a nuclear power plant will go well beyond 10 miles. Evidence of the spread of contamination from the Fukushima reactor meltdowns and spent fuel pool fire(s) once again shows that a 10 mile emergency planning zone is an artificially small construct and not relevant (for example, an area 40 km (app. 25 miles) from Fukushima was found to be contaminated with cesium at levels more than twice as high as areas around Chernobyl that were permanently evacuated, see http://www.nytimes.com/2011/04/01/world/asia/01clean.html). In addition, just recently, NRC once again acknowledged that "If this [Fukushima] happened in the US, we would go out to **50 miles**." See

http://www.pittsburghlive.com/x/pittsburghtrib/business/s 783581.html

- Why does NRC refuse to review and assess issues related to the adequacy of emergency preparedness in the Indian Point license renewal proceeding? The determination about whether emergency evacuation would be feasible at Indian Point was made decades ago, before a significant population surge. If the NRC was making an initial licensing decision today about siting a nuclear plant where Indian Point is situated, it is doubtful it would be approved given the unique circumstances of that location. This is an issue that is squarely relevant when thinking about whether or not it is appropriate to allow Indian Point to continue to operate another 20 years.
- If necessary because of a serious accident or attack (for example, one of similar magnitude to the incident at Fukushima) how would NRC ensure that the 20 million people within 50 miles of Indian Point would be safely evacuated? The former director of FEMA, James Witt, concluded in a 2003 report that the emergency evacuation plan for Indian Point is completely unworkable, and would not adequately protect the public in the event of an actual emergency. See Witt Report, http://www.riverkeeper.org/wp-content/uploads/2011/03/Final-Witt-Report-issued-03-07-03.pdf. NRC has never addressed the concerns posed by the high population density surrounding the plant, and the litany of issues raised in the Witt Report.
- What is the NRC and Entergy's basis for summarily stating that Indian Point is
 properly equipped to handle earthquakes of other natural phenomenon? A new
 analysis of seismic information by Columbia University's Earth Institute shows that the
 area around Indian Point is susceptible to a magnitude 7.0 earthquake, when Entergy
 has stated that the plant was only built to withstand a 6.1. See
 http://www.earth.columbia.edu/articles/view/2235. Additionally, NRC's own
 (September 2010) report shows that Indian Point Unit 3 is at the highest risk of all U.S.
 nuclear reactors for core damage from an earthquake. Furthermore, while content with
 the ability of Indian Point to deal with earthquakes, NRC has actually recognized that a
 re-evaluation of risks to nuclear plants posed by seismic activity is necessary, and plans
 to do so, albeit through an improperly protracted process.
- Why does the NRC refuse to consider new seismic information in the Indian Point license renewal proceeding? Indian Point was constructed based upon a different

scientific understanding about the potential for, and impact of, earthquakes in the region surrounding the plant. New information, which suggests more severe earthquakes are possible near Indian Point, is relevant to the question of whether a 20 year license extension for Units 2 and 3 is appropriate.

- Are the backup diesel generators at Indian Point susceptible to failure of any kind from natural phenomenon, including floods, storm surges, hurricanes, tornadoes, etc., and are the fuel tanks and associated piping for the backup diesel generators so susceptible? During the Fukushima nuclear catastrophe, the backup diesel generators failed due to the devastating Tsunami, demonstrating "a single point vulnerability" of the "redundant" backup systems. Understanding the extent to which backup generators may be vulnerable at Indian Point via any number of natural phenomenon is necessary to avoid similar failures in the event of an emergency situation at the plant.
- In the event of a serious accident or intentional attack, can NRC and Entergy guarantee that the area will not be subject to a large-scale radiological release? Since the devastating accident at the Fukushima nuclear power plant one year ago, Entergy spokespeople have been quick to make unsubstantiated claims about how "it can't happen here." Such public distortions include misleading statements about whether Entergy could avoid large-scale radiological releases from Indian Point during an accident due to the build-up of hydrogen that can lead to explosions and breach of containment. Entergy's PR spinner has indicated that this is not a concern, but the science and the facts dictate otherwise. A Riverkeeper expert consultant has explained why hydrogen explosions can and will happen at Indian Point under accident scenarios. http://www.riverkeeper.org/general/how-an-indian-point-meltdown-could-cause-a-large-radiological-release/

Riverkeeper is available to discuss any of these questions, so please do not hesitate to contact us in the future. I can be reached at <u>phillip@riverkeeper.org</u> or by phone at (914)478-4501 x224.

Once again, we appreciate Congresswoman Lowey's work toward shutting down Indian Point, and look forward to further collaboration in the future.

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