Commissioner Joe Martens
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

June 20, 2012

RE: Haverstraw Water Supply Project

Dear Commissioner Martens:

Scenic Hudson, Inc., Riverkeeper, Inc. and Hudson River Sloop Clearwater are writing to request that the public be given an opportunity to raise substantive and significant issues with regard to the Draft Environmental Impact Statement ("DEIS") and draft permits for United Water's Haverstraw Water Supply Project before an Administrative Law Judge ("ALJ") at a Legislative Hearing and Issues Conference. The public hearing that took place on March 6, 2012 was insufficient for a large, unprecedented project that has been the object of so much public scrutiny. The location where the hearing was held could accommodate no more than 130 people, leaving many concerned citizens waiting outside the building and unable to voice their concerns or to hear and consider the concerns of other members of the community. To allow a project of this size and scope to go forward without a meaningful opportunity for the public to raise these issues would deny the public their right to participate in the State Environmental Quality Review ("SEQR") process.[1]

The implications of constructing a long-term water supply project in the sensitive and unique environment of Haverstraw Bay are of great concern to tens of thousands of citizens of Rockland County and the surrounding region, as well as environmental non-governmental organizations including Scenic Hudson, Riverkeeper and Clearwater. Further, the extremely high energy usage necessary for the reverse osmosis ("RO") process that is proposed to desalinate the water withdrawn from the Hudson River and the potential for contaminants – including radioactive materials – that cannot be completely removed by the RO process to be introduced into the public water supply present a serious threat to human health. The numerous adverse human health and environmental impacts that could potentially result from this project are significant, and the construction and operation of a desalination plant is completely unprecedented in this region with its abundant rainfall.

There are a number of substantive and significant issues regarding the proposed project that meet the standard for adjudication set forth in 16 NYCRR § 624.4(c). Given the unprecedented scope of this project in New York and that tens of thousands of citizens from the Hudson Valley have expressed concern about a multitude of environmental issues related to the proposed project, the significance of this project clearly meets the threshold for a Legislative Hearing and Issues Conference to determine if there are disputed issues that are ripe for adjudication pursuant to 16 NYCRR § 624.

Substantive and significant issues that warrant consideration by an ALJ at an Issues Conference include, but are not limited to, the following:

(1) Aquatic Habitat Impacts

Haverstraw Bay is a unique Hudson River resource, serving as a home and nursery to several endangered and/or declining species of fish, including the Shortnose sturgeon, Atlantic

[1] *See* 6 NYCRR Part 621.

sturgeon, American shad and Atlantic tomcod. It is recognized by the State of New York as the most highly valued Significant Coastal Fish and Wildlife Habitat ("SCFWH") as designated pursuant to 19 NYCRR Part 600.[2] The Shortnose and Atlantic sturgeon are listed as endangered species, and this designation has significant bearing on the project as both sturgeon species reside in or traverse Haverstraw Bay during important portions of their lifecycle.[3]

According to the DEIS, approximately 45,000 square feet of benthic habitat would be temporarily disturbed and at least 2,400 square feet of river bottom will be permanently altered by the construction and operation of the intake structures, screens and cofferdam. If a design with wedge-wire screens with 1.0 or 0.5 mm slot sizes is selected, an even larger permanent footprint on the river bottom would be required.

The proposed project would withdraw up to 10 million gallons of water per day ("MGD") from Haverstraw Bay. Given Haverstraw Bay's vital role as a spawning, feeding and overwintering ground for several important species, many of which are in decline and two of which are listed as endangered, the impacts of impingement and entrainment pose a serious risk to fish populations. Studies have shown that desalination results in 100% mortality for entrained fish eggs, larvae and other aquatic organisms.[4] Further, the time that the most water would be needed is in the summer – the same time when Haverstraw Bay's ecological productivity is at its peak. The project would also discharge up to 2.44 MGD of high salinity RO concentrate that has the potential to create a change in the salinity of Haverstraw Bay in the immediate area of the discharge, despite mixing it with wastewater effluent.

The DEIS fails to analyze the significant adverse impacts and evaluate all reasonable alternatives as required by SEQRA in its discussion of impacts to the endangered Shortnose and Atlantic sturgeon. The DEIS claims there will be no significant impact on these species because they prefer deep riverine areas and thus there will be none, or very few, sturgeon in the area of the pump. However, Haverstraw Bay has been identified as an area in which Atlantic sturgeon over-winter and, when not spawning, they spend a significant portion of their lives near the rocky banks.[5] Further, studies have found that the greatest frequency of Atlantic sturgeon catches has been in water 19.5 feet or deeper with soft bottom sediment.[6] Based on the proposed location of the intake structure, the area around the intake site is likely to be in or immediately adjacent to this highly favorable habitat. Moreover, some of the largest catches of sturgeon in a single net set came from areas with hard bottoms and shallow (less than 20 feet) depths.[7]

The potential for impingement and entrainment of larval and juvenile stage sturgeon by the proposed project's intake structures require that an incidental take permit be obtained pursuant to both the federal and New York State Endangered Species Acts.[8] The DEIS only

[2] See NYS Department of State Coastal Fish and Wildlife Rating Form, available at: http://www.dos.ny.gov/communitieswaterfronts/consistency/Habitats/HudsonRiver/Haverstraw%20Bay.pdf
[3] *Atlantic Sturgeon*, NOAA Fisheries: Office of Protected Resources, available at: http://www.nmfs.noaa.gov/pr/species/fish/atlanticsturgeon.htm; *see also Shortnose Sturgeon*, NOAA Fisheries: Office of Protected Resources, available at: http://www.nmfs.noaa.gov/pr/species/fish/shortnose sturgeon.htm.
[4] Hogan, Tim. *Environmental Impacts of Desalination Intakes*, at 1. Alden Research Laboratory, Inc.
[5] *See id.*
[6] 5 Sweka, J.A., et.al. *Juvenile Atlantic Sturgeon Habitat Use in Newburgh and Haverstraw Bays of the Hudson River: Implications for Population Monitoring*. U.S. Fish and Wildlife Service, 2007.
[7] Id.
[8] *See* 16 U.S.C. § 1539(a)(1)(B) and NYS ECL § 11-0535.

discusses the disturbance to benthic organisms and habitats in the area, and fails to recognize the importance of this critical food source to the overall ecology of the area.

The construction of a new drinking water treatment facility and intake pipe, with attendant benthic habitat disruption, construction noise, and the threat of impingement and entrainment as well as turbidity, within the designated SCFWH and Essential Fish Habitat of Haverstraw Bay poses a significant threat to the low number of remaining sturgeon and other struggling species.

(2) Health and Drinking Water Impacts

The proposed plant's water intakes are just 3.5 miles downstream of Entergy's Indian Point nuclear power plant, which has a documented history of both permitted releases of radioactive material and unpermitted leaks, including tritium and strontium-90. Neither RO nor any other available water treatment technology can remove tritium from the water, and the DEIS itself states that the RO process does not remove all of the strontium-90 from water.[9] Further, even United Water has conceded that the RO process does not always remove all radionuclides that are released from Indian Point.[10] Indian Point is allowed to make unreported batch releases of radioactive material from their facility.[11] A classification of this area of the Lower Hudson River for use as drinking water would be inconsistent with Indian Point's operation and release of radioactive materials.

The Lower Hudson River at Haverstraw Bay is currently classified as "Class SB" waters, with its best usages established as "primary and secondary contact recreation and fishing."[12] Notably, the best usages of Class SB waters do not include use as a public drinking water supply. If the project is approved, pursuant to Section 17-0301 of the Environmental Conservation Law and long-established anti-degradation requirements of state and federal law, DEC will be required to reclassify this part of the Hudson River to protect the new "existing use" as a drinking water source.

The establishment of a new "existing use" of the Lower Hudson River as a drinking water source will likely have impacts on other users of the Hudson, including industrial users, since once this new use is established this area of the estuary will need to be reclassified to protect the new use. For example, Indian Point's current permits rely on the fact that the Hudson River is not a source of drinking water in the vicinity of the plant; if the proposed project goes forward, the necessary change in designated use would impact the conditions of Indian Point's operation.

(3) Land Use and Energy Impacts

The New York State Smart Growth Public Infrastructure Act went into effect in 2010, enacted for the purpose of minimizing "unnecessary costs" of development associated with sprawl.[13] The statute precludes state agencies from approving a public infrastructure project

[9] DEIS at 8B-26.
[10] See Memorandum from CDM in association with HydroQual, DEIS Support Technical Memorandum, available at: http://haverstrawwatersupplyproject.com/images/stories/deis%202012/Appendices/_APPENDIX%208B.4.pdf
[11] Indian Point Nuclear Generating Unit Nos. 1, 2, and 3, Annual Radioactive Effluent Release Report, Dockets 50-3, 50-247 and 50-286 (2008), available at: http://pbadupws.nrc.gov/docs/ML0912/ML091260208.pdf.
[12] 6 NYCRR § 701.11.
[13] NYS ECL § 6-0105.

unless it is consistent with enumerated smart growth criteria, and specifically lists expanding water resources availability as one of the public projects that may induce sprawl.[14]

Current land use patterns in Rockland County have produced an abundance of impervious surfaces, resulting in excess surface runoff. In fact, according to the 2011 USGS Groundwater Study, these impervious surfaces currently send 14 billion gallons of rainfall annually into the Hudson River.[15] By providing a virtually unlimited supply of water, this project will perpetuate sprawling development and unsustainable site designs that generate impervious surfaces and intensive water demands in Rockland County. It also has the potential to induce increased sprawl in a region already suffering from the negative impacts of sprawl.

The priority recommendations to come out of the 2011 Rockland County Comprehensive Plan include developing a comprehensive county water policy and promoting water conservation.[16] The Comprehensive Plan also recommended that land use patterns change to concentrate growth in existing centers, which would help alleviate the intensive water demand and the wasted resource of excess runoff.[17] Given these goals of the County and the findings of the 2011 USGS Groundwater Study that in addition to conservation, additional development of groundwater resources, capture of storm flows in retention basins or reservoirs, and recycled wastewater are viable options to sustain Rockland County's water supply[18], an energy-intensive and expensive desalination plant is not the best way to address the County's water needs.

The impact of this energy-intensive project on the already congested Mid-Atlantic National Transmission Corridor should also be carefully examined. Desalination is among the most energy-intensive and costly ways to produce drinking water, and the DEIS predicts that it will take between 4,000 to 6,000 kilowatt hours per million gallons of water to produce potable water for Rockland County.[19] In addition to the high cost to use a total of 39 million kilowatt hours of electricity per year, the large amount of energy will create an increase in greenhouse gas emissions that contribute to global climate change and attendant sea level rise.

The wetlands that the project intends to tunnel beneath represent one of the most valuable ecosystem services for addressing sea-level rise and climate change. The New York State Sea Level Rise Task Force's 2010 report emphasized the likelihood of increased coastal flooding and storm surges, powerful storm events that pose a threat to public infrastructure, and the possible permanent inundation of low-lying areas.[20] The minimum sea level rise projected by the Task Force report of 2 to 5 inches may jeopardize project that are close to the shoreline, such as the Raw Water Intake proposed by United Water. The proposed project disregards the findings of this report by locating its infrastructure in the 100-year floodplain of the Hudson River and consuming a large amount of energy which will add to the anthropogenic causes of climate change.

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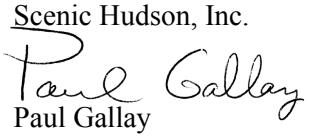
[14] Id.
[15] *See* Heisig, Paul M. Water Resources of Rockland County, New York, 2005–07, with Emphasis on the Newark Basin Bedrock Aquifer. U.S. Geological Survey, 2011.
[16] Rockland County Comprehensive Plan at 12.8, 2011.
[17] Id at 5.5.
[18] Heisig, Water Resources of Rockland County, New York, 2011.
[19] DEIS at 11.4.2.1.
[20] *See* Pete Grannis et. al., New York State Sea Level Rise Task Force: Report to the Legislature, 2010.

In 2009, then-Governor Paterson directed the development of a State Climate Action Plan under Executive Order No. 24. The goal of this Plan is to reduce greenhouse gas emissions in the State by 80% by 2050. Given the state objective of reducing its carbon footprint, and in light of the proposed minimum lifespan of 30 years for this facility, such an energy-intensive source of water should only be permitted as an absolute last resort.

It is essential that the significant issues raised by concerned citizens be taken into serious consideration before the proposed project is considered for approval. A project of this size and scope clearly warrants an Issues Conference to allow an ALJ to determine if there are substantive and significant issues ripe for adjudication. If this project goes forward, it will impact human health and the environment in Rockland County and the surrounding region for decades to come.

Respectfully yours,

Hayley Carlock, Esq.
Scenic Hudson, Inc.



Paul Gallay
Riverkeeper, Inc.

/s/Manna Jo Greene/
Manna Jo Greene
Hudson River Sloop Clearwater

Cc: Willie Janeway (NYSDEC)
Basil Seggos (NYS Office of Governor)
George Stafford (NYSDOS)
Scott Vanderhoef (Rockland County Executive)
David Carlucci (NYS Senate)
Ellen Jaffee (NYS Assembly)
Ken Zebrowski (NYS Assembly)
Harriet Cornell (Rockland County Legislature)
Alden H. Wolfe (Rockland County Legislature)
Nancy Low Hogan (Rockland County Legislature)
Ed Day (Rockland County Legislature)