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January 24, 2014

Mr. Christopher M. Hogan

NYSDEC Headquarters

625 Broadway

Albany, NY 12233

Re: Huntley Generating Station, SPDES Renewal NY-0001023

Dear Mr. Hogan:

Please accept these comments on behalf of Buffalo Niagara Riverkeeper regarding the New York State Department of Environmental Conservation's draft State Pollution Discharge Elimination System (SPDES) permit for the NRG Huntley Steam Generating Station (Huntley), located at 3500 River Road, Tonawanda, New York.

Buffalo Niagara Riverkeeper is a regional not-for-profit organization dedicated to the restoration and protection of Western New York's fresh water resources, including the Niagara River – one of the Great Lakes internationally designated "Areas of Concern" (AOC). Due to the limitations caused by historic and ongoing contamination of the river, every effort must be made to minimize pollution from industrial sources to expedite the recovery of the Niagara River's severely impacted fish populations, sediment and water quality.

Huntley Generating Station has had a long term and substantial impact on the local ecology of the Niagara River. It is of great concern that several of the operating systems at Huntley are approaching 60 years old and utilize a "once-through cooling system," a technology that is highly impactful to the River's ecosystem, due to impingement and entrainment. The Niagara River Area-of-Concern (AOC) is an important migratory pathway for the emerald shiner and for birds that use the river for staging and nesting.

The Niagara River AOC Remedial Action Plan (RAP) Stage II Addendum (2012) identifies seven Beneficial Use Impairments (BUIs) to the Niagara River, including "Degradation of Fish and Wildlife Populations," which identifies "significant water diversions and withdrawals as possible causes of declines in fish populations." In addition, the RAP identifies the need for maintenance of the fish communities on the U.S. side of the river at levels that meet the objectives of the binational fish-community agreement.

Emerald shiners are an important native prey-species that fuel the food webs of sport fishes and act as a keystone species in the Niagara River ecosystem, sustaining predatory fish and piscivorous migrating birds in the Niagara flyway. The Niagara River has been designated an international Important Bird Area (IPA) by Bird Life International and its partners.



The emerald shiners play a paramount role in local sport fish growth and condition and are a vital food source for the brood success of the NYS threatened common tern in the Niagara River and for other migrating birds¹. Therefore, the health of the emerald shiner in the Niagara River ecosystem provides enormous regional ecological benefits. Huntley's 2006-07 impingement studies confirm that 98% of the 96.7 million fish impinged are emerald shiner, a keystone species to the Niagara River ecosystem.

Buffalo Niagara Riverkeeper does support many of the Department's additions to the permit: we support the Department's requirement to install variable speed pumps, and the requirement to operate at less than 15% of generating capacity. We also agree with the impingement mortality and entrainment reductions (i.e.: more than 80% entrainment reduction, and 90% impingement reduction).

However, there is still an opportunity for the Department to require Huntley to achieve a reduction in environmental harm that meets the "Best Technology Available" standard under Section 316(b) of the Clean Water Act. A closed-cycle cooling system will offer a 98% reduction in water withdrawals, thermal pollution and fish kills. Closed-cycle cooling is the best technology available at Huntley.

We are concerned that the measures described above, on their own, will not meet the 80% entrainment and 90% impingement mortality reduction required by DEC and will not meet the BTA standard. Therefore, we ask DEC to strengthen the cooling system requirements in the permit by requiring Huntley to reduce its water withdrawals, undertake seasonal outages during biologically significant periods, and measure its 80% reduction in entrainment and 90% reduction in impingement mortality against current levels of fish kills. Also, the installation of the variable speed pumps could be implemented more quickly, rather than in 2019.

In addition, the ongoing discharge of several heavy metals that bioaccumulate within the ecosystem continues to impair both the Niagara River and the receiving waters of Lake Ontario. Of particular concern is the unrestricted discharge of mercury. A 2008 study by Karst-Riddoch² concludes that "Despite the reduction in mean mercury concentrations in LNR lake trout, concentrations remained significantly greater ($p < 0.001$) than those in ELE lake trout over the entire sampling period (1984 – 2004) with the exception of 2002, suggesting continued Niagara River sources of mercury."

DEC should require Huntley to reduce mercury discharges to a level that is consistent with use of the Best Available Technology Economically Achievable (BAT), as is required under the federal Clean Water Act and state law. There are operating coal-fired power plants that utilize bioreactors, evaporation systems or other zero liquid discharge techniques to dramatically reduce or even eliminate the discharge of mercury. In addition, the Department has an established statewide limit requiring industrial facilities to cut mercury discharges to less than 50 nanograms per Liter. By only requiring Huntley to monitor the discharge of mercury, rather than setting an effluent limit for direct discharges, the Niagara River ecosystem will continue to be negatively impacted.

The lack of mercury limits at Huntley is of great concern because, in recent years, Western New York has seen an influx of immigrants and refugees from Burma and other countries that traditionally rely on subsistence fishing as a mainstay of their diets.

1 Dr. Alicia Perez-Fuentetaja, Emerald Shiner Habitat and Conservation Study in the Upper Niagara River: Importance for Sportfish, Common Terns, and Public Education (2013)

2 Tammy L. Karst-Riddoch, Donald A. Jackson, and Satyendra P. Bhavsar, "Changes in Contaminant Burdens in Niagara River Sportfish Following Remedial Actions to Reduce Toxic Loadings Since 1986-87 Contamination" (2008), available at <http://www.ene.gov.on.ca>.



The Niagara River in Tonawanda and Grand Island are popular fishing access points for these anglers, who neither understand or read in English nor understand NYS fish consumption advisories. It is known that both pregnant woman and children in these communities consume a variety of fish species from the Niagara River. Of particular concern is the species take, size, the tendency of full body consumption and their proximity to discharge points from facilities like Huntley.

The high risk of exposure for this vulnerable population can be mitigated by improved BTA's at the Station. For example, some of Huntley's mercury pollution results from the power plant's continued practice of using clean, fresh water to sluice coal ash into settling ponds and then discharging the contaminated water into the Niagara River. This unsafe and outdated method of handling coal ash wastes can be improved. An increasing number of power plants nationwide have adopted dry ash handling systems. DEC should set a zero discharge standard on water pollution from ash transport to significantly reduce the ongoing contamination of the upper Niagara River and to reduce water withdrawals from the river.

Ultimately, Buffalo Niagara Riverkeeper supports several of the Department's additions to the Huntley SPDES permit. We express our strong support of the Department implementing these changes as quickly as possible, for the benefit of the Niagara River and the Western New York population that live, work and recreate on this globally significant freshwater resource.

Sincerely,



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