Hon. Jaclyn A. Brilling
Secretary to the Commission
New York State Public Service Commission
Agency Building 3
Albany, NY 12223-1350

June 18, 2012

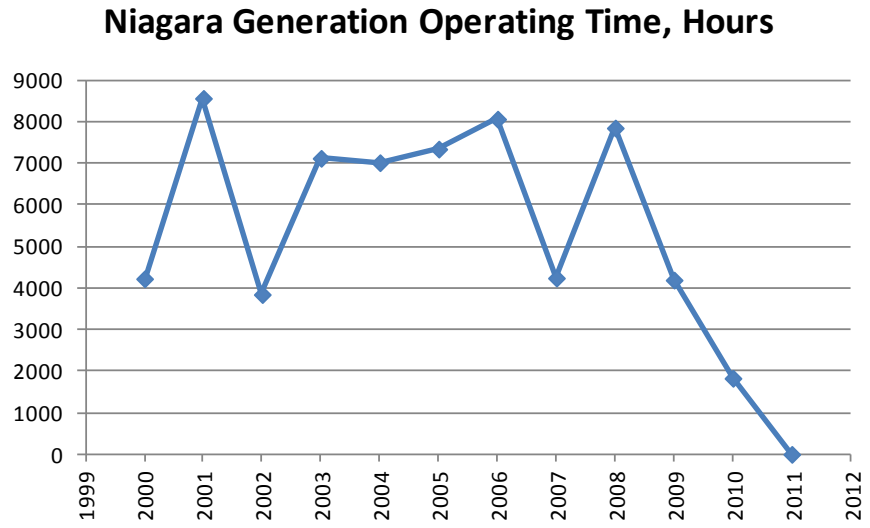
Re: Case No. 12-E-0149 / 03-E-0188 Verified Petition of Niagara Generation, LLC for Rulemaking to allow for up to ten percent glued wood within clean MRF fuel to be eligible for use as biomass fuel in the Renewable Portfolio Program.

Dear Secretary Brilling,

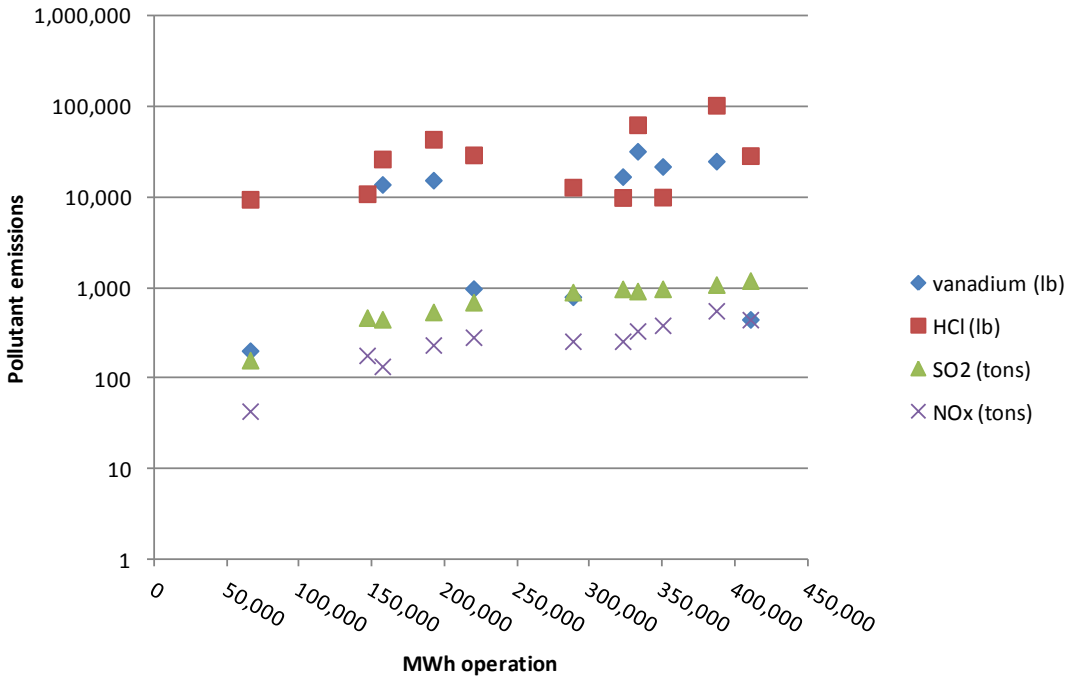
We are writing to urge you to reject the petition by Niagara Generation to include up to 10% glued wood in its fuel stream as RPS-eligible biomass. To grant the petition would weaken the RPS and increase emissions of air toxics, all for the sake of prolonging the life of a plant that is already a major source of air pollution.

Niagara Generation was the camel's nose under the tent on the issue of contaminated fuel burning just two years ago. The company's original petition to expand RPS-eligibility to include construction and demolition waste (C&D) fuel from sorting facilities was granted because the company argued it needed an expanded fuel stream in order to continue operating. Now, the company again argues that without a further expansion in RPS-eligible fuels, it can't survive economically. This gives the Commission to the chance to step back, assess the consequences, and reach a different decision.

Niagara Generation is already permitted to burn 30% glued wood, but complains it needs subsidies for this fuel use, or it cannot survive economically. In fact, Niagara Generation is a facility on life-support, uncompetitive with other generation sources. According to EPA's "Clean Air Markets" report, the facility generated less and less power in recent years, and zero hours in 2011:



When Niagara Generation does operate, it is an exceptionally polluting facility. The following graph shows the relationship between pollutant emissions and MWh generated in each year at the plant between 2000 and 2010. Data on vanadium and HCl stack emissions are from EPA's Toxic Release Inventory[1]; data on sulfur dioxide and nitrogen oxides are from EPA's Clean Air Markets report, as are the generation data. The graph is presented on a log scale, to allow co-presentation of varying values; for instance, HCl emissions vary from 10,000 lb (5 tons) to 100,000 lb (50 tons) per year.



As is true for any combustion facility, the more Niagara Generation operates, the more it pollutes – however, in this case, what the company is saying is that unless it receives additional ratepayer-funded subsidies for polluting, it can't be financially viable.

We urge the Commission to consider what a further broadening of the RPS fuel standard on behalf of this one struggling facility will mean for the RPS as a whole. It will open the door to even more burning of contaminated wood, emitting more pollutants and new classes of contaminants. As more types of waste wood become RPS-eligible, more facilities will be built, putting further pressure on the waste wood supply, and leading to further calls to expand the percentage of contaminated wood that can be burned. This is truly a slippery slope. It is impossible to generate a truly "clean" fuel stream from MRF fuel, as fuel testing indicates, and creating a greater appetite for it in the state will only increase pressure to weaken standards further.

The company claims that the fuel testing data they submitted as part of their application (Appendix B) demonstrate that including up to 10% glued wood will not violate fuel standards. However, the company did not test for the contaminants one would expect to find in glued wood. Instead, they tested for the suite of contaminants that were selected for screening based on the original definition of RPS-eligible fuel, which assumed *a priori* that glued wood was excluded. Thus, the contaminants

[1] TRI data available at http://iaspub.epa.gov/enviro/tris_control.tris_print?tris_id=14304CHRSR5300F

include heavy metals that would be expected if pressure-treated wood were included, but not the organic toxics that are constituents of glued woods, such as formaldehyde.

Since any expansion in the RPS-eligible fuel stream would logically be assumed to lead to greater use of that fuel, no such expansion should even be contemplated without an extensive program of testing. The NYSERDA Biomass Guide makes it clear that authority for such testing exists, and that it does not need to be confined to the pollutants that are currently tested. Page 4-13 of the Guide states (emphasis added)

*"The sampling and screening analysis is intended to determine if any precursor compounds are present in the adulterated feedstock in levels that might lead to emissions of the air pollutants of concern at levels greater than those produced by unadulterated biomass. Thus, if **any** precursor elements or compounds are found in greater concentration than in the unadulterated biomass, a comparative air emissions test will be required for the air pollutant associated with that precursor*."

There is good reason to believe that emissions of organic hazardous air pollutants from combustion of glued wood can be significant. A study[2] of particleboard and plywood combustion found that emissions depended on combustion efficiency, and that certain conditions led to emissions of polycyclic aromatic hydrocarbons, toluene, and formaldehyde, with "major abundances" of benzene, naphthalene, acenapthylene and anthracene. Benzene emissions were observed to increase exponentially with carbon monoxide production.

As a facility that burns a variety of fuels of different moisture content, Niagara Generation is expected to have extremely variable carbon monoxide emission rates, which would correspond with high emission rates for air toxics. This is reflected in its permit, which allows the plant to emit 0.2 lb/MMBtu of carbon monoxide as an hourly standard, translating to about 505 tons per year. The facility does not have an oxidation catalyst, which is what would be required to reduce carbon monoxide and oxidize organic hazardous air pollutants such as those emitted by burning glued wood.

Allowing Niagara Generation to burn more contaminated fuels will also add more air pollution in what is already a highly impacted area. Tract-level estimates of air toxics concentrations from EPA's 2006 National Air Toxics Assessment (NATA) reveal that ambient concentrations of certain key pollutants emitted in high quantities by biomass, fuels and tire combustion already exceed health levels in the area. Compared to New York's annual exposure standards, which are derived to "protect the general population from adverse acute and chronic inhalation exposure",[3] EPA NATA data estimate that for the census tract where Niagara Generation is located, acetaldehyde levels are 292% of the annual health standard; arsenic concentrations are 261% of the standard, benzene concentrations are 1138% of the standard, and formaldehyde is 2690% of the standard. These are pollutants that are currently emitted by the plant and that would be reasonably expected to increase if the plant increased the amount of adulterated wood it was burning.

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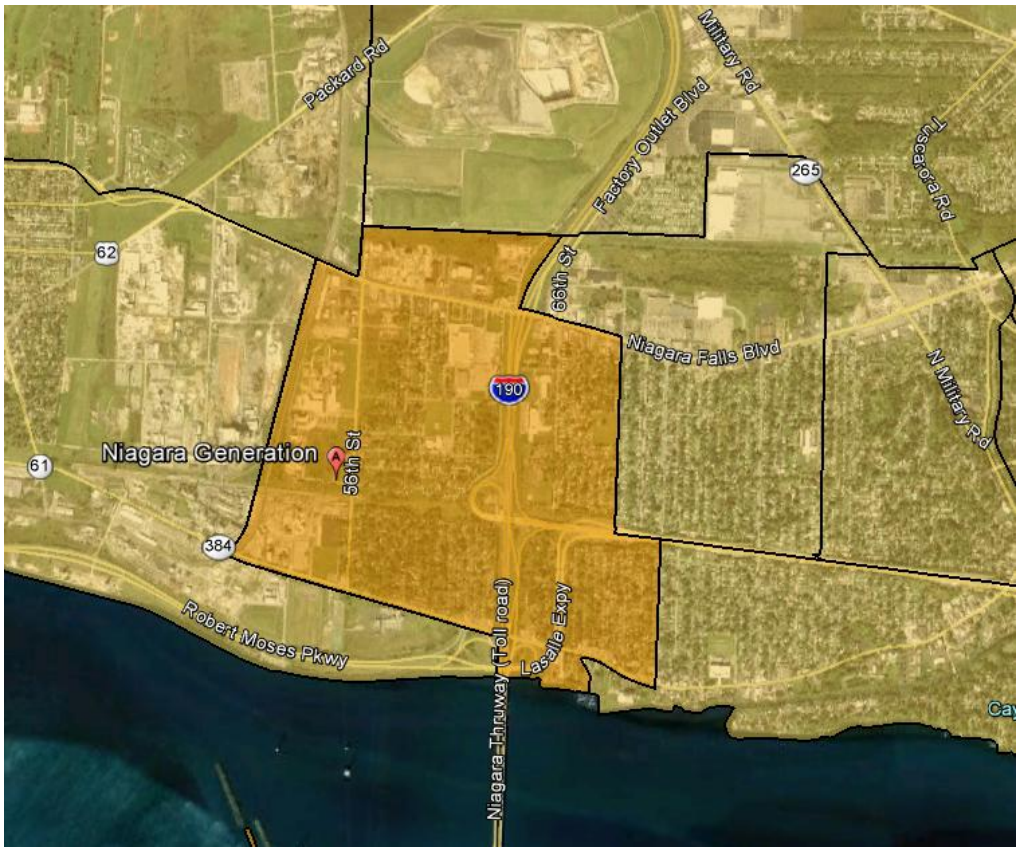
[2] Hoerning, J. et al. 1995. Organic Emissions From Combustion of Plywood And Particleboard. Argonne National Laboratory Symposium on Direct Coal Liquefaction. 1995, Chicago. Available at http://web.anl.gov/PCS/acsfuel/preprint%20archive/Files/40_3_CHICAGO_08-95_0676.pdf.

[3] New York State Department of Environmental Conservation, Division of Air Resources, Air Toxics Section. 2010. DAR-1 AGC/SGC Tables. October 18, 2010, Albany, NY.

The Niagara Generation facility is located directly next to residential neighborhoods, which are impacted by the pollution that it and other sources emit. NATA data show that the census tract where the facility is located already an elevated cancer risk compared to the surrounding tracts (darker color indicates elevated risk). While NATA does not explicitly link cancer to industrial pollution, it provides co-mapping of industrial facilities and cancer rates by tract.



Recognizing the potential for C&D wood combustion to emit significant levels of air toxics, Massachusetts has rendered C&D-derived fuel ineligible for the RPS in its recently proposed biomass regulations,[4] and has further recognized the greenhouse gas emission consequences of burning all types of biomass, including "waste" wood from non-C&D sources. Far from loosening standards for C&D-derived material under the RPS, New York should be tightening them and helping the RPS achieve an ever-higher standard for truly clean, emissions-free renewable energy. If a facility can't make a go of it under the current rule, the answer is not to further loosen the rules. The commission should send a message about the kind of renewable energy they want built in New York by rejecting Niagara Generation's petition, and further, encourage the New York DEC to conduct stack testing for the air toxics that the plant is currently emitting.

Thank you for the opportunity to comment.

Mary S. Booth, PhD.

[4] http://www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/biomass/renewable-portfolio-standard-biomass-policy.html