Wheelabrator
TECHNOLOGIES

November 15, 2018

Robert Fernandez
Interim President & CEO
New York Independent System Operator
10 Krey Boulevard
Rensselaer, NY 12144

RE: Comments on Carbon Pricing Draft Regulation

Dear Mr. Fernandez:

This letter sets forth Wheelabrator Technologies' comments to Carbon Pricing Draft Regulations proposed by the New York Independent System Operator (NYISO). We strongly urge you to exclude waste to energy facilities from the proposed regulations. If waste to energy facilities are not excluded, the regulations will have a significant negative financial impact on Wheelabrator's and the other waste to energy facilities in New York, and in turn on the municipalities and businesses that dispose of their solid waste there. In addition, instead of reducing Greenhouse Gas (GHG) emissions as intended, including waste to energy in these regulations will actually lead to an increase in GHG emissions and other adverse environmental impacts.

Adverse Financial Impact of the Proposed Regulations

Wheelabrator operates three waste to energy facilities in New York:

- Wheelabrator Dutchess which serves Dutchess County
- Wheelabrator Hudson Falls which serves Warren County and the municipalities of Glen Falls, Fort Edward, Colonie, Whitehall, Castleton and Day
- Wheelabrator Westchester which serves Westchester County

In addition, there are 7 other waste to energy facilities in the State.

New York's waste to energy facilities are a critical part of the state's solid waste management infrastructure, providing 11,000 tons per day of waste management capacity. Waste to energy facilities manage roughly 23% of the State's total municipal waste remaining after recycling. Specifically, New York City relies on waste to energy for approximately 33% of its waste management and to help advance its goal to be zero landfill by 2030. On Long Island, roughly ¾ of the municipal waste generated is disposed of at waste to energy facilities, saving over 160,000 truck trips annually through New York City and recovering 90,000 tons of metal recovered for recycling annually.

We estimate that the inclusion of Wheelabrator's waste to energy facilities in the carbon pricing program alone will cost $38 million in 2022, using the marginal emissions rate supplied by the ISO from the Brattle Group. This amount is certain to increase as the New York supply stack continues to add renewable generation include the proposed off shore wind projects. The total impact on all waste to energy facilities in New York will be $131 million in 2022.

If waste to energy facilities are faced with these costs, they will either close or, to the extent they can, pass these costs onto their municipal and commercial customers. In either event, the cost of waste disposal to the municipalities and businesses that dispose of waste at these facilities will increase. If the facilities close the municipalities and businesses that used those facilities will be forced to transport and dispose of their waste at landfills much further away, in some cases more than 200 miles. If the facilities remain open, municipal customers at privately owned facilities will pay the increased costs of operating the waste to energy facilities through the change in law provisions in their contracts. At municipally owned facilities the municipalities will pay all of those costs themselves.

Adverse Environmental Impact of the Proposed Regulations

As described above by including waste to energy in the proposed regulations more waste will be disposed at distant landfills as waste to energy facilities close. Landfills are a major source of the greenhouse gas methane. Methane is a potent short-lived climate pollutant that is more than 30 times stronger than CO_2 over 100 years, and 80 times stronger over 20 years, when all of its impacts are considered. Transporting waste over longer distances for disposal at landfills will also require significantly more truck traffic on New York roads, including 188,000 round truck trips coming from the four Long Island and Westchester facilities along, resulting in higher carbon dioxide emissions.

If waste to energy facilities remain open under the regulations they will continue to process waste and not produce energy because it will be uneconomic to do so. Stack emissions will remain the same and power production will be significantly decreased, resulting in more CO_2 emissions.

Ensuring that New York's waste to energy facilities remain open and financially viable will in fact result in GHG mitigation. Waste to energy facilities are the only major source of electrical generation that are net carbon negative: the stack GHG emissions of fossil CO_2 are more than offset by the GHG emissions avoided by keeping wastes out of landfill.

This GHG benefit of WTE is widely recognized, including by the U.S. EPA;[i,ii] U.S. EPA scientists;[iii] the Intergovernmental Panel on Climate Change;[iv] the World Economic Forum;[v] the European Union;[vi,vii] CalRecycle;[viii] California Air Resources Board;[ix] and the Joint Institute for Strategic Energy Analysis.[x] Waste to energy facilities generate carbon offsets credits under both the Clean Development Mechanism of the Kyoto Protocol and voluntary carbon offset markets.[xi,xii]

While the intent of the policy is to harmonize carbon policy in the state, the current proposal is strictly focused on New York's Clean Energy Standard (CES). At the outset the CES is not the appropriate basis to determine which facilities are included or excluded from the proposed regulations. The CES was intended to encourage the construction of certain types of renewable facilities not to control emissions. As a policy matter waste to energy was excluded from the CES. However it does not follow that the CES policy rationale should apply to these proposed regulations.

Moreover relying on the CES ignores other state and federal policy that includes waste to energy as renewable. Waste to energy is recognized as renewable under the NY Energy Law, preferred to landfilling under the state's solid waste management hierarchy,[xiii] and excluded from a carbon standard under Part 251. New York's waste to energy facilities are excluded from RGGI, not because of their size, but because they are not fossil-fuel fired electric generating units (EGUs).[xiv] Waste to energy's generation is included in the state's 2014 25% renewable baseline.[xv] New York State's solid waste management plan prefers energy recovery over landfilling consistent with the waste hierarchy and concluded that waste to energy offers GHG benefits relative to landfilling.[xvi] Many of New York's neighbors, with which New York shares grid interconnections, already define waste to energy as renewable including Connecticut, Massachusetts, New Jersey, and Pennsylvania.

Federally, waste to energy facilities are regulated under stationary combustion and not electricity generation for purposes of GHG reporting under 40 CFR §98. Waste to energy facilities are also not subject to 40 CFR 75. In addition, since waste to energy facilities are not defined as electric generating units, they are excluded from the CAIR NO_x Ozone Season Trading Program[xvii] and do not report data through the U.S. EPA's Clean Air Markets Division (CAMD) database. Owing to its GHG benefits, waste to energy was recognized as a compliance option for reducing GHG emissions from electricity generation in the final version of the U.S. EPA's Clean Power Plan promulgated in 2015.[xviii,xix]

Other parts of the New York's solid waste management infrastructure are *not* covered by the proposal, even those that have GHG emissions and generate electricity. If waste to energy facilities are included, this will establish an uneven playing field, creating a significant perverse economic incentive that will incentivize landfills, the least preferred method of solid waste management. Specifically, despite the fact that landfills are a major source of GHG emissions, the current proposal imposes absolutely no compliance burden on electricity derived from waste.

Due to the material adverse financial and environmental impacts on the municipalities and citizens of New York State by including waste to energy facilities in the Carbon Pricing Draft Regulations, we strongly urge the NYISO to exclude waste to energy facilities from the regulations.

Very truly yours,

Michael O'Friel
Senior Vice President
and General Counsel

[i] U.S. EPA Webpage, Energy Recovery from the Combustion of Municipal Solid Waste (MSW), accessed September 19, 2016. https://www.epa.gov/smm/energy-recovery-combustion-municipal-solid-waste-msw

[ii] U.S. EPA Archived Webpage, Air Emissions from MSW Combustion Facilities, accessed September 19, 2016. https://archive.epa.gov/epawaste/nonhaz/municipal/web/html/airem.html

[iii] Kaplan, P.O, J. DeCarolis, and S. Thorneloe, 2009, Is it better to burn or bury waste for clean electricity generation? *Environ. Sci. Technology* 43 (6) pp1711-1717. Available at: http://pubs.acs.org/doi/abs/10.1021/es802395e

[iv] EfW identified as a "key mitigation measure" in IPCC, "Climate Change 2007: Synthesis Report. Contribution of Work Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change" [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp. Available at: http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm

[v] EfW identified as a key technology for a future low carbon energy system in World Economic Forum. *Green Investing: Towards a Clean Energy Infrastructure.* January 2009.

[vi] EU policies promoting EfW as part of an integrated waste management strategy have been an overwhelming success, reducing GHG emissions over 72 million metric tonnes per year, see European Environment Agency, *Greenhouse gas emission trends and projections in Europe 2009: Tracking progress towards Kyoto targets* http://www.eea.europa.eu/publications/eea_report_2009_9

[vii] European Environmental Agency (2008) Better management of municipal waste will reduce greenhouse gas emissions. Available at: http://www.eea.europa.eu/publications/briefing_2008_1/EN_Briefing_01-2008.pdf

[viii] CalRecycle. 2012. CalRecycle Review of Waste-to-Energy and Avoided Landfill Methane Emissions. Available at: http://www.calrecycle.ca.gov/Actions/PublicNoticeDetail.aspx?id=735&aiid=689

[ix] See Table 5 of California Air Resources Board (2014) *Proposed First Update to the Climate Change Scoping Plan: Building on the Framework, Appendix C – Focus Group Working Papers, Municipal Solid Waste Thermal Technologies.* https://www.arb.ca.gov/cc/waste/mswthermaltech.pdf

[x] Joint Institute for Strategic Energy Analysis (2013) *Waste Not, Want Not: Analyzing the Economic and Environmental Viability of Waste-to-Energy (WTE) Technology for Site-Specific Optimization of Renewable Energy Options.* http://www.nrel.gov/docs/fy13osti/52829.pdf

[xi] Clean Development Mechanism: *Large-Scale Consolidated Methodology: Alternative waste treatment processes, ACM0022.* Available at: https://cdm.unfccc.int/methodologies/PAmethodologies/approved

[xii] Verified Carbon Standard Project Database, http://www.vcsprojectdatabase.org/ See Project ID 290, Lee County Waste to Energy Facility 2007 Capital Expansion Project VCU, and Project ID 1036 Hillsborough County Waste to Energy (WtE) Facility 2009 Capital Expansion Unit 4.

[xiii] NYS DEC (2012) New York State Solid Waste Management Policy Guidance (DSH-SW-05-01) https://www.dec.ny.gov/docs/materials_minerals_pdf/sw0501pp.pdf

[xiv] Sources regulated under RGGI are limited to fossil-fuel fired units. See 6 NYCRR 242-1.4(a) and the definition of unit under 6 NYCRR 242-1.2(b)(78)

[xv] 25% renewable baseline of 35,756 GWh of electricity from NYISO 2015 Power Trends report. Data for the Power Trends report is from the 2015 Gold Book, which includes refuse in its renewables totals.

[xvi] See p52 of NYS DEC (2010) *Beyond Waste: A Sustainable Materials Management Strategy for New York State* http://www.dec.ny.gov/docs/materials_minerals_pdf/frptbeyondwaste.pdf

[xvii] 6 NYCRR 243-1.2(b)(38)

[xviii] 40 CFR 60.5800

[xix] 40 CFR 60.5845