New York State Public Service Commission Case 03-E-1088 Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard

Comments Of The New York Public Interest Research Group In Opposition To The Petition By Covanta Energy Corporation On Renewable Portfolio Standard Eligibility

Introduction

The New York Public Interest Research Group (NYPIRG) submits these comments in opposition to the Covanta Energy Corporation's petition to include energy from waste (hereinafter referred to as "waste-to-energy" or "garbage incineration") in the main tier of New York's Renewable Portfolio Standard Program (RPS).

NYPIRG is New York's largest statewide nonprofit environmental and consumer advocacy organization, with tens of thousands of student members and community supporters across the state. NYPIRG is a leading voice in New York for sustainable solid waste management and clean and affordable energy choices.

NYPIRG strongly opposes including garbage incineration in the RPS for the following reasons:

- 1. Petitioner has not provided adequate justification to merit a change in the Public Service Commission's previous rulings on this issue;
- 2. Garbage incineration is not a clean, environmentally responsible energy technology;
- 3. Solid waste is not a renewable resource:
- 4. Petitioner makes false comparisons between landfills and incineration; and,
- 5. Approval of this petition will deplete funding for clean renewable energy.

Should the PSC consider including garbage incineration in the RPS, we believe that additional SEQRA review is required.

1. Petitioner Has Not Provided Adequate Justification To Merit A Change In The Public Service Commission's Previous Rulings On This Issue.

The Public Service Commission (PSC) ruled against including garbage incineration in the RPS in 2004 and again in 2010. In the 2004 order, the PSC stated that "substantial operational changes in the way the industry converts municipal solid waste-to-energy would need to be made in order to mitigate concerns expressed by parties to the proceeding as well as the general public, and which this Commission shares, in order for such facilities to participate in the program."

The PSC reiterated this position in 2010, adding that "Statewide ratepayers should not subsidize the general municipal solid waste management solutions of individual municipalities. As we have in the past, we decline to adopt a policy that uses statewide ratepayer funds to promote the burning of general municipal solid waste to produce electricity."

1.1 Energy-From-Waste: New Name, Same Technology

Other than changing the name from "waste-to-energy" to "energy-from-waste" (a term that is equally broad and can apply to a wide range of technologies), it is unclear what changes, if any, have occurred since 2004 - or 2010 - that merit a reconsideration of PSC's previous position.

While emissions of dioxin, mercury, NOx and other hazardous and criteria air pollutants have declined due to better emissions control technology (Covanta petition at number 34, henceforth referred to as CP34), these changes were largely brought about by stricter regulations and requirements that were in place well before 2004. Emissions from garbage incinerators are still significant, as will be discussed later in these comments.

The petition states that new incinerators will offer higher levels of performance than existing incinerators, but does not provide any information to corroborate this. The only technological advances the petition refers to are current facility proposals (CP at footnote 9) and patent-pending technology (CP44). Newer doesn't automatically mean better – there needs to be operational data to back up these contentions – and better still doesn't mean that it should be in the RPS.

Harrisburg, Pennsylvania stands out as a cautionary tale. The city embarked on an expensive \$120 million upgrade of its waste incinerator in 2003. In 2004, the city awarded the contract to a Colorado company that had developed and patented a new boiler and stoker technology that was supposed to reduce breakdowns and provide innovative pollution controls. Despite the promises of the new technology, the retrofit failed miserably, and the city is now on the brink of bankruptcy as a result.³ Similarly, many of the claims of the newer thermal waste treatment

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¹ New York State Public Service Commission (PSC) Case No. 03-E-0188, <u>Order Regarding Retail Renewable Portfolio Standard</u>, September 24, 2004, p. 8.

² New York State Public Service Commission (PSC) Case No. 03-E-0188, <u>Order Resolving Main Tier Issues</u>, April 2, 2010, p. 16.

³ John Buntin, "Harrisburg's Failed Infrastructure Project," *Governing*, November 2010; Michael Cooper, "An Incinerator Becomes Harrisburg's Money Pit," *The New York Times*, May 20th, 2010.

processes, such as pyrolysis and gasification of solid waste, have proven to be greatly overstated.4

1.2 Public Opposition To Garbage Incineration Remains Strong.

In both its 2004 and 2010 orders, the PSC expressed concerns about the lack of public acceptance for including garbage incineration in the RPS. The RPS is funded by ratepayers, and should the public lose confidence in how these funds are used, it could jeopardize clean energy funding in the future.

In the 2010 order, the PSC wrote:

We also note the concern the ALJ reported from the opposition voices on this issue, namely that WTE technology is not one New Yorkers are likely to want to subsidize with additions to their monthly electric bills, along with the more generalized concern that the credibility of the RPS hinges in large part on public acceptance that this program will deliver environmental benefits.⁵

These are legitimate concerns. Public opposition to garbage incineration is as potent today as it was in 2004 when the RPS was established. Just last year, within days of learning about it, over a hundred citizens held a protest rally in the village of Freeport, Long Island, opposing a plan for a new waste-to-energy incinerator there. The citizens included villagers, neighboring Merrick residents, and members of the Rockville Centre Tea Party.6 The plan was tabled.

In addition to all the previous comments submitted to the PSC earlier in this proceeding opposing including garbage incineration in the RPS, thousands of comments are being submitted by members of the public in opposition to the current Covanta petition before the PSC.

2. Garbage Incineration Is Not A Clean, Environmentally Responsible Energy Technology

In its order establishing the Renewable Portfolio Standard, the PSC stated that the new policy created "the potential to build new industries in the State based on clean, environmentally responsible energy technologies."

Garbage incineration does not meet this goal. To begin with, the primary function of garbage incinerators is waste disposal, not energy production. More to the point, garbage incineration is not clean.

2.1 Garbage Is A Dirty Fuel Source

⁴ David Ciplet, "An Industry Blowing Smoke: 10 Reasons Why Gasification, Pyrolysis and Plasma Incineration are not "Green Solutions," Global Alliance for Incinerator Alternatives, June 2009.

⁵ NYSPSC, Order Resolving Main Tier Issues, April 2, 2010, p. 15-16.

⁶ Laura Rivera, "Freeport Protesters Criticize Incinerator Idea," Newsday, April 5, 2010.

⁷ NYSPSC, Order Regarding Retail Renewable Portfolio Standard, September 24, 2004, p. 2.

Mixed municipal solid waste (MSW) is a very dirty fuel source, containing an ever-changing mix of materials, some of which are hazardous to begin with, such as lead, cadmium and mercury, and some which combine with other wastes under high temperatures to form new hazardous chemicals, such as dioxins and furans. Any metals or other noncombustible materials that are not removed prior to combustion through source-separation programs end up in the emissions or ash residue.

The state is making slow headway toward reducing the hazardous component of the municipal waste stream. It finally established an electronic waste collection program in 2009. But a large quantity of toxic materials are still ending up in landfills and incinerators instead of being removed from the waste stream and properly managed. For instance, in 2005, the state phased out the sale of certain mercury-added consumer products such as mercury-containing thermostats. However, according to the Northeast Waste Management Officials Association (NEWMOA), an estimated 300,000 mercury thermostats are discarded in New York each year, only 1.3% of which are property collected and diverted from the waste stream. Each mercury-containing thermostat contains about 3-5 grams of mercury. That means over a ton of mercury is disposed at incinerators in landfills each year from this one source alone. It only takes one gram of mercury to pollute a 20-acre lake.8 Mercury is a highly potent neurotoxin that is especially harmful to pregnant women, developing infants and children. New York has issued health warnings against consuming fish from the Catskills, the Adirondacks, and nearly 100 other water bodies due to mercury contamination.

2.2 Burning Garbage Releases Toxic Air Emissions and Contributes to Air Pollution

While there have been significant improvements in pollution control technology at waste to energy facilities as a result of tougher clean air regulations, garbage incinerators still release toxic air emissions both through routine emissions and during upset conditions (e.g. start-ups, shutdowns, and malfunctions). There are no safe levels of exposure to hazardous chemicals such as mercury and dioxin. Compliance tests currently required may not be adequate to determine the extent of these releases. A report by the National Academy of Sciences found extensive shortcomings in how incinerator emissions are tested, particularly during upset conditions.⁹

The petition states that "Covanta's EfW facilities consistently operate at emissions levels that are ... a fraction of those permitted by the applicable state and federal agencies." (CP40). However, just last month, Covanta paid \$400,000 in penalties to the state of Connecticut and had to shut down one of its units because of repeated violations of its permit conditions, with dioxin/furan emissions more than 250% higher than the allowable permit and regulatory level. 10

9 National Academy of Sciences, Incineration and Public Health, 2000.

⁸ http://www.newmoa.org/prevention/mercury/mercurylake.pdf.

¹⁰ Connecticut Department of Environmental Protection, News Release, Settlement Reached With Covanta for Air Emissions Violations at Plant in Wallingford, July 15, 2011.

Another emerging public health issue is inhalation of nanoparticles. New research indicates that modern incinerators in Europe are a major source of ultrafine particle emissions, which can cause lung disease, heart disease, cancer and premature deaths.¹¹

In addition to their hazardous emissions, incinerators generate large quantities of criteria air pollutants such as NOx, SOx, CO, and particulate matter. According to the American Lung Association's State of the Air Report 2010, over 50 percent of New Yorkers live in areas that receive failing grades for air pollution. Many parts of the state that have garbage incinerators are in nonattainment areas. Garbage incineration contributes to New York's air pollution problems.

The U.S. EPA's inventory of U.S. greenhouse gas emissions lists U.S. incinerators among the top 15 major sources of direct greenhouse gases to the environment. As discussed further in our comments below (section 4.3), incinerator CO2 emissions are dirtier than coal.

2.3 Incinerators Don't Eliminate The Need For Landfills

Incinerators generate a large quantity of ash that in turn must be disposed of. By mixing the very toxic fly ash from the scrubber system with the bottom ash, which is produced in larger quantities, incinerators have managed to avoid having to dispose of the ash as hazardous waste, even though it contains toxic materials. According to the DEC, New York's ten incinerators burn about 4 million tons of solid waste each year, and generate one million tons of ash. Incinerator ash is typically sent to specially designed "ashfills" or used as alternative daily landfill cover, potentially exposing the public to hazardous materials from ash resuspension and run-off.

3. SOLID WASTE IS NOT A RENEWABLE RESOURCE

Municipal solid waste (MSW) is not a renewable resource. Previous submissions to the PSC in this proceeding have explained how most of the materials in the waste stream come from non-renewable sources.¹³ For every ton of municipal discards wasted, an estimated 71 tons of waste are produced during manufacturing, mining, oil and gas exploration, agriculture, and coal combustion.¹⁴ The state's solid waste policy goal is to minimize solid waste through waste prevention, reuse, recycling and composting. In contrast, incinerators require a steady supply of garbage to burn as fuel.

MSW is also not "indigenous," as the petition repeatedly claims. Many of the materials in the solid waste stream are transported from long distances, requiring fossil fuels for their extraction, production, transport, and eventual delivery to disposal facilities. Truly indigenous fuels such as wind and solar are not imported and do not need fossil fuels for their delivery.

¹⁴ Stop Trashing the Climate.

¹¹ Professor Vyvyan Howard, Particulate Emissions and Health, June 2009.

¹² Brenda Platt, et al., Stop Trashing the Climate, June 2008, p. 30, attached to these comments as Exhibit 1.

¹³ See affidavit of Allen Hershkowitz, Ph.D. before the New York State Public Service Commission, Case 03-E-0188, September 25th, 2003, attached to these comments as Exhibit 2.

Furthermore, in most of its energy programs and policies, New York State does not recognize garbage incineration (WTE) as renewable energy. In 2009, in its most recent expression of legislative intent, the State Legislature excluded the combustion or pyrolysis of MSW from the definition of renewable energy sources.¹⁵

3.1 New York Is Charting A New Direction In Sustainable Materials Management; State's New Goal Is 86% Waste Reduction By 2030.

On December 27, 2010, New York released the first major update of its solid waste management plan in over a decade. The new plan, called *Beyond Waste: A Sustainable Materials Management Strategy for New York State* (hereafter referred to as *Beyond Waste*), sets an ambitious goal of reducing the amount of municipal solid waste disposed of in New York to .6 pounds per capita, or an 86% reduction, by 2030. As its title suggests, the plan lays out a new approach to solid waste management, decreasing reliance on waste disposal and instead emphasizing materials management.

The Executive Summary of *Beyond Waste* explains:

The materials management system envisioned in this Plan would capture the economic value of our materials, conserve their imbedded energy, and minimize the generation of greenhouse gases and pollution. The New York State Department of Environmental Conservation (DEC) projects that implementing this plan could reduce nearly 21 million metric tons of CO2 equivalent greenhouse gas emissions annually, save more than 280 trillion BTUs of energy each year—as much energy as is consumed by more than 2.6 million homes—and create 67,000 jobs by 2030 and economic opportunity in the process.¹⁷

3.2 Garbage Incinerators Compete With Recycling Programs For Materials.

If the state were to meet its waste reduction targets, simply out, there would not be enough remaining waste to fuel garbage incinerators. All but 12% of New York's municipal solid waste (MSW) can be recycled, composted, or reused. ¹⁸ Garbage incinerators require a steady stream of "fuel" in order to operate. Many communities are under "put or pay" contracts to deliver tonnage to garbage incinerators, creating a powerful economic disincentive to divert recyclable materials and organics from their waste stream. ¹⁹ While 9% of the waste stream is metal and glass, which are not combustible, paper, wood, textiles, plastic and organic waste comprise 79% of the waste stream – these materials could be recycled or composted, but instead are destroyed in the combustion process. Recycling and composting saves 3-5 times the energy that incineration recovers. ²⁰

http://www.epa.gov/climatechange/wycd/waste/calculators/Warm home.html.

¹⁵ Chapter 497, Laws of 2009.

¹⁶ N.Y.S. Department of Environmental Conservation, *Beyond Waste: A Sustainable Materials Management Strategy for New York State* (December 27, 2010), p. 5.

¹⁷ Beyond Waste, p. 1.

¹⁸ Beyond Waste, Figure 7.1, p. 94.

¹⁹ Beyond Waste, p. 189.

²⁰ EPA's Waste Reduction Model (WARM),

3.3. Covanta Is Banking On The State's Failure To Meet Its Recycling And Waste **Prevention Goals.**

Nowhere in Covanta's petition does it recognize the state's goal of 86% waste reduction. Instead, Covanta appears to be banking on the state's failure to meet its recycling and waste prevention goals. The petition repeatedly says that even if the state triples its current dismal recycling rate of 20%, there would be plenty of material left over to incinerate (CP8).

3.4 Being Better Than The State Average Recycling Rate Is Not Good Enough.

Covanta's petition points to the Onondaga County Resource Recycling Agency (OCRRA) as evidence that robust recycling can go hand-in-hand with operating an incinerator. It is true that OCRRA has achieved strong recycling rates in Onondaga County, thanks to dedicated staff and an aggressive public education and outreach program, including outreach to businesses and institutions. In addition, OCRRA has demonstrated its support for recycling by partnering with environmental groups in advocating for waste reduction and recycling laws, such as expansion of the state's bottle bill, electronic waste collection, and reduction of mercury in the waste stream.

Nevertheless, even OCRRA's recycling rate of 51%, while well above New York's statewide average, pales in comparison to what the City of San Francisco is achieving. San Francisco is aggressively working to reach its goal of "Zero Waste" by 2020. San Francisco, which does not incinerate its waste, has already achieved a 77% diversion of its waste stream.²¹

3.5 Garbage Incinerators Compete With Recycling Programs For Both Materials And Financial Resources In Cash-Strapped Communities.

The Hudson Falls incinerator in Washington County is a cautionary tale on the financial risks communities incur when they build garbage incinerators. Owned jointly by Warren and Washington Counties, the debt-plagued incinerator has saddled residents with exorbitant bills for debt service, operating losses, and other expenses. In 2009, Washington County taxpayers had to make up a \$1.75 million shortfall at the incinerator. As a result, this has depleted funds for recycling. The county has no money for a recycling coordinator or for public education about recycling. In 2010, the Board of Supervisors cut \$300,000 in recycling equipment costs from the county budget and attempted to reduce hours and staffing at transfer facilities. Warren and Washington Counties have some of the lowest recycling rates in the state.22 Meanwhile, the need to keep feeding the incinerator – which was built to handle more than three times as much garbage as the two counties produce annually -- provides a powerful disincentive to recycling and waste reduction programs.²³ Dutchess County's incinerator has experienced similar financial problems.24

²¹ http://www.sfenvironment.org/our_programs/overview.html?ssi=3, 8/17/11.

²² Beyond Waste, p. 137.

²³ Tracy Frisch, "Burning Trash And Cash: Taxpayers Still On The Hook For Incinerators Born In '80s Waste Crisis," *Hill Country Observer* (May 2010) (excerpted directly from article)

²⁴ Mary Beth Pfeiffer, "Dutchess County Resource Recovery Agency: Inefficient, Expensive & In Debt," Poughkeepsie Journal, May 10, 2009.

3.6 Success Of Recycling Programs Is Based On Factors Other Than Garbage Incineration.

Covanta's petition cites a survey by Citizens Campaign for the Environment as further evidence that garbage incineration and recycling efforts go hand in hand (CP48).²⁵ While the petition notes that the four communities in which Covanta facilities are located received scores for their recycling programs ranging from B+ to A+, it fails to note that all but three of the12 Long Island towns surveyed by CCE received scores in this range. In other words, the success of the recycling programs was due to factors other than the proximity to a garbage incinerator.

In addition, contrary to the recycling rates cited in Covanta's petition (CP22), according to the DEC most of the towns on Long Island are below the statewide recycling average, including two of the incinerator host communities (the other two are only slightly above the state average).²⁶

The petition cites a national study that found that in 2004, average actual recycling rate of MWC communities across the country was 34%, compared to the national average of 31%. This study is also cited in *Beyond Waste*; however, presumably because of insufficient data, the DEC did not compare the recycling rates in MWC host communities in New York.²⁷

One of the reasons for the high recycling rate in some incinerator host communities, such as Onondaga, is the strong local opposition to these facilities when they were proposed. In Onondaga, the permits and sizing of the incinerator were based on OCRRA meeting aggressive recycling goals.²⁸

Beyond Waste concludes that "Success in recycling in New York State has a stronger correlation to the level of investment in recycling outreach, education and infrastructure in the facility's service area than the type of facility, the facility's financing, facility permit conditions, and flow control or other legal support structures."²⁹

3.7 Funding For Recycling Programs Is Woefully Inadequate.

Unfortunately, funding for municipal recycling programs in New York is woefully inadequate. As of this spring, there was a backlog of over \$55 million in applications for municipal recycling grants from the NYS Environmental Protection Fund (EPF). At the current level of EPF funding, the waiting list to receive a recycling grant is estimated at twelve years³⁰

We agree with Covanta's statement (CP45) that "continued burial of the waste resource represents a tremendous lost opportunity." However, the state's dismal recycling rate is NOT a justification for encouraging more garbage incineration. NYPIRG has called for a moratorium on the processing of permit applications or other approvals for new incinerators or expansions,

²⁷ Beyond Waste, p. 189.

²⁵ Citizens Campaign for the Environment, 2009 Long Island Recycling Report Card.

²⁶ Beyond Waste, p. 137.

²⁸ Beyond Waste, p. 189.

²⁹ Beyond Waste, p. 190.

³⁰ Laura Haight, New York Public Interest Research Group, testimony Before The Joint Senate Finance And Assembly Ways And Means Committee Regarding the Executive Budget 2010-2011: Environmental Conservation Albany, N.Y. February 8, 2011.

including newer, commercially unproven thermal technologies such as gasification, pyrolysis and plasma arc, until the state reaches its recycling goals. The moratorium should also extend to the expansion in capacity of the state's major landfills exceeding one million tons per year disposal.³¹

4. Petitioner Makes False Comparisons Between Landfills and Incineration

Covanta's main argument is that its technology outperforms landfill gas-to-energy (LFGTE) in relation to greenhouse gas emissions and energy generation. Since landfill gas recovery systems are eligible for the RPS, and use waste as a "feedstock," Covanta argues that its technology should also be eligible.

4.1 Landfill Gas Recovery Is A Mitigation Strategy.

Covanta's petition misses a key point. Landfills emit large quantities of methane, a potent greenhouse gas, and capturing it for energy recovery is a way to <u>mitigate</u> this problem. Thus, including landfill gas in the RPS is actually beneficial for the environment because it results in a net reduction in greenhouse gas emissions. But it would be ludicrous to think someone would purposefully build or expand a landfill for the purpose of generating energy. WTE incinerators, by contrast, must be fed a steady supply of waste, most of which is recyclable or compostable, as "fuel" in order to produce electricity. Including LFGTE in the RPS will hardly be an incentive to build or expand more landfills; however, including incineration in the RPS could tip the scales to make garbage burning more financially viable and would encourage new incinerators and expansions. Both incineration and landfilling are at the bottom of New York's solid waste hierarchy because they are polluting and wasteful – the RPS should not be used to encourage their expansion.

4.2 Burning Garbage Is A Waste Of Energy.

By framing the issue as "bury or burn," Covanta has pushed the needle back twenty years in the solid waste management debate. Rather than comparing garbage incineration to landfilling, as Covanta does in its petition, the real energy savings can be found by comparing incineration to the state's preferred solid waste options. Most of the waste disposed of at landfills and incinerators is either recyclable (about 50%) or compostable (about 30%). Recycling these materials saves 3-5 times more energy than burning them generates. MSW is an extremely inefficient fuel source, ranging from 4,500-6,000 BTU/lb, compared with natural gas which has a value of approximately 24,000 BTU/lb. According to Beyond Waste, "a landfill gas-to-energy project can provide about 105 kWh per ton of MSW as compared to 585 kWh per ton from MWC [municipal waste combustion] and 2,250 kWh per ton of energy saved through recycling."

³¹ New York Public Interest Research Group, Rebuild New York, 30 Steps the New Governor Can Immediately Take To Restore Confidence in New York, December 2010.

³² EPA WARM model.

³³ Beyond Waste, p. 188.

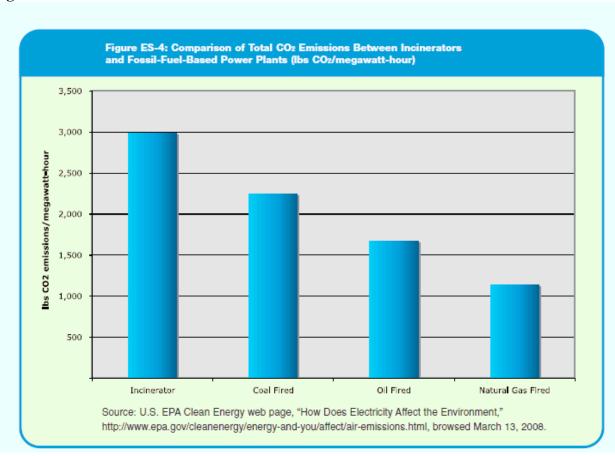
(emphasis added)³⁴ Reducing the amount of waste going into our landfills and incinerators is "one of the fastest, cheapest, and most effective strategies to protecting our climate."³⁵

4.3 Burning Garbage Is Dirtier Than Coal.

Covanta is only able to make its claim that there is a net carbon reduction from burning garbage by a series of mathematical calculations, which include discounting the greenhouse gas emissions from the biogenic portion of the waste stream (CP26). This practice, which has been widely criticized,³⁶ treats all bioenergy as carbon neutral. Thus the carbon dioxide from the combustion of biomass, which represents a significant portion of MSW, is not counted as an emission – only the CO2 released from the combustion of plastics, which are petroleum-based, is counted.

In fact, the actual CO2 emissions from garbage incinerators are far greater than coal, oil, or natural gas (see Figure 1).





³⁴ Beyond Waste, p. 189.

35 Stop Trashing the Climate.

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³⁶ Timothy Searchinger, et al. Fixing a Critical Climate Accounting Error, *Science 23 October 2009: Vol. 326 no. 5952 pp. 527-528.*

³⁷ Reprinted from Stop Trashing the Climate, p. 9.

The other assumptions going into this equation are also debatable. The petition states:

EfW mitigates four major greenhouse gas related processes (Figure 3): (1) anthropogenic, or fossil CO2, caused by GHG emissions from combustion of waste components (plastics, textiles, etc.) made from fossil fuels such as oil and natural gas; (2) avoidance of CO2 from fossil fuel fired power plants on the local grid which is replaced by the renewable electrical power generated by the EfW facility; (3) avoidance of methane emissions from waste, including factoring-in methane capture, that would have been landfilled in the absence of the EfW facility; and (4) avoidance of extraction and manufacturing GHG emissions due to ferrous metal recovery and recycling at EfW facilities. (CP26)

- (2) As noted in the EPA chart above, garbage incinerators are dirtier than fossil fuel plants, so <u>any</u> power that is replaced by incinerators will result in <u>increased</u> CO2 emissions, not avoidance.
- (3) While methane emissions would be avoided, there are better ways to reduce methane emissions from landfills (see 4.4).
- (4) This assumes that source separation does not occur when waste is landfilled. This is not true, state law requires source separation for all solid waste. In addition, any metals that end up in landfills are not destroyed and can be "mined" at a later date.

This debate is a distraction from the real comparison that should be made for the purposes of the RPS, which is to clean renewable energy sources such as wind and solar. Any calculation that is conducted to compare greenhouse gas emissions with these clean technologies should also factor in – at a minimum - the fossil fuel used to transport waste to incinerators as well as the waste ash from incinerators to landfills.

4.4 Landfills And Biomass Pose Problems, But The Solution Is Not Garbage Incineration.

The Covanta petition states that garbage incineration emissions compare favorably with biomass and landfill emissions (CP34). While these technologies do pose significant environmental concerns, that is not a justification for including garbage incineration in the RPS.

The best way of reducing the serious problem of methane emissions from landfills is to divert the organic portion of the waste stream. Materials such as yard waste, food scraps, and other biodegradable organics in the waste stream can be composted, including through waste-to-energy technologies such as anaerobic digestion, which not only produces a valuable soil additive but generates energy (which in the case of yard waste is truly sustainable biomass).

Recently, serious concerns have been raised about biomass, both in terms of its sustainability and its potential adverse environmental impacts. The Manomet study commissioned by the Commonwealth of Massachusetts has shed new light on the greenhouse gas implications of

shifting from fossil fuels to forest biomass.³⁸ These concerns may merit the PSC revisiting the inclusion of biomass in the RPS in the future.

5. Approval Of This Petition Will Deplete Funding For Clean Renewable Energy

Separate and apart from concerns about the environmental impacts of burning garbage, approving Covanta's petition could potentially drain substantial resources away from solar, wind and other clean renewable energy projects. Allowing garbage incineration to be eligible for main tier funding would allow the state's existing garbage incinerators, many of which are failing financially, to petition the PSC for funding under the RPS "maintenance" category if they can demonstrate financial hardship. This would drain significant resources away from clean and renewable technologies.

5.1 Garbage Incineration Is The Most Expensive Form Of Power

According to the U.S. Department of Energy, garbage incinerators have the highest capital and operating costs of any type of power plant.³⁹ As Covanta notes in its petition, the economics of operating incinerators are more influenced by waste inputs than power revenues (CP21). While garbage incinerators in New York may not be eligible for clean energy subsidies, they have been heavily subsidized through a variety of state and local financing mechanisms, including publicly-held bonds, local "put or pay" contracts, flow control agreements, and state grants. Yet despite these subsidies, as well as revenue from tipping fees and power, many garbage incinerators are struggling. Even if no new incinerators were built in New York, allowing garbage incineration into the RPS would open the door to economically failing incinerators seeking access to maintenance funds.

5.2 Incineration Would Take Funding Away From Clean Renewables

Since garbage incinerators receive most of their revenues from tipping fees, they will be in a position to underbid cleaner technologies, such as wind power, that do not have other sources of revenue. This would set the state back in both its goals to increase its reliance on clean renewable energy and to reduce greenhouse gas emissions.

6. Additional SEQRA Review Is Required

The Short Environmental Assessment Form (EAF) that Covanta filed together with its petition is not adequate. The petitioner should have filed a Full EAF to ascertain whether the impacts of this action are significant. Question 7 on the Full EAF asks will the proposed action affect air

38 Manomet Center for Conservation Sciences, Biomass Sustainability and Carbon Study, June 2010.

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http://www.manomet.org/sites/manomet.org/files/Manomet_Biomass_Report_Full_LoRez.pdf ³⁹ U.S. Department of Energy, U.S. Energy Information System, "Updated Capital Cost Estimates for Electricity Generation Plants," November 2010.

quality (yes/no) and advises a "yes" in this box if, for example, "Proposed Action will result in the incineration of more than 1 ton of refuse per hour," which certainly applies to the Covanta petition (CP62).

The Generic Environmental Impact Statement (GEIS) prepared in 2004 does not adequately address the adverse environmental impacts that may occur due to the changes requested by Covanta. While the technology hasn't significantly changed since 2004, there are a number of adverse environmental impacts that were not considered in the 2004 EIS, including:

- environmental justice impacts of siting garbage incinerators
- greenhouse gas emission impacts
- impacts on recycling and composting programs
- impacts resulting from reducing funding for clean renewable energy
- comparison of incineration vs. recycling and composting
- more thorough analysis of air emissions and other environmental impacts.

Conclusion

In conclusion, garbage incineration is not a clean energy source that should be supported through the Renewable Portfolio Standard. This is an issue that has been brought repeatedly to the Public Service Commission, and the Commission has been correct to reject it.

NYPIRG also supports the comments submitted on the Covanta petition by the Alliance for Clean Energy New York, American Lung Association, Citizens' Environmental Coalition, and the Natural Resources Defense Council.

Thank you for your consideration of these comments.

Respectfully submitted,

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Xam Haight

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August 19, 2011

Attachments:

Exhibit 1: Stop Trashing the Climate Exhibit 2: Allen Hershkowitz affidavit