

Covanta's Microgrid Proposal: Costly, polluting, and unreliable

(all page numbers are a reference to the PDF page number in www.ci.camden.nj.us/wp-content/uploads/2020/05/5-18s-2020.pdf)

Covanta's incinerator is near the end of its life

Covanta's Camden incinerator is 29 years old. The average lifespan of the 30 incinerators that closed since 2000 is just 22 years. Only one has made it to its 40th birthday, and it's been falling apart. Much younger Covanta incinerators face increasing downtime for maintenance, as these aging incinerators break down more often and get costly to repair. We cannot expect many more years of operation at this incinerator.

Trash incineration is NOT clean energy

Covanta's Camden trash incinerator is, by far, the #1 air polluter in the county, according to the U.S. Environmental Protection Agency.¹ Trash incineration is dirtier than coal-burning, harms public health, and should not be the sort of energy we rely on.²

No pollution reductions guaranteed

"The eventual owner of the microgrid project will negotiate a power purchase agreement with Covanta to obtain this power, which the owner will then dispatch to various loads locally within the microgrid. As a condition of this agreement, Covanta will renovate its Camden plant to reduce particle pollution and other negative impacts on the community.... Renovations at the Covanta facility will have an immediate positive impact on air quality and community health..." (p.36)

This proposal admits that Covanta has negative impacts on air quality and has been harming community health for 29 years, including with excessive pollution (they're the largest particulate matter pollution source in the county). However, **there is no guarantee that they will install pollution controls to reduce their air emissions.**

Fine particulate matter (PM2.5) causes respiratory ailments. Just a small increase of PM2.5 in the air is associated with a **15% increase in COVID deaths.**³

¹ U.S. EPA National Emissions Inventory. See data summarized at: www.energyjustice.net/nj/camden/covanta2017.pdf

² U.S. EPA data at: www.energyjustice.net/incineration/worsethancoal

³ "Harvard Study: The tiniest bit of air pollution makes COVID-19 more deadly," April 9, 2020. www.grist.org/justice/study-even-the-tiniest-amount-of-air-pollution-makes-covid-19-more-deadly/

Covanta: Dangerous and unreliable

"Covanta's excess energy production capabilities need to be reliable and resilient for the microgrid operation to exceed utility grid reliability." (p.46)

Covanta's newest incinerator is in Montgomery County, MD. When it was just 21 years old, in 2016, the incinerator experienced more downtime than usual, due to "much-needed plant maintenance." The incinerator's capacity and availability was reportedly "below industry standard" resulting in "high waste inventories" (larger piles of trash stored inside the plant). A report stated that "this reduced availability and capacity is a result of a lack of maintenance and repair on the boiler and air pollution control systems."⁴

Covanta also has an incinerator in Montgomery County, PA. Since 2018, that plant has had regular malfunctions causing severe odors in the community.

Covanta has also had a problem with uncontrolled fires. In 2015-2016, their Montgomery County, MD plant had six fires requiring emergency response in just two years, one of which involved their indoor

waste pile catching fire for nearly two weeks. Just a few months later, their incinerator in Lorton, Virginia had their three-story waste pile catch fire for nearly two weeks, consuming much of the plant and shutting it down for 11 months. Covanta admits that these "fires are becoming more prevalent"⁵ and that, in just a five-year span around 2011-2016, over half of their facilities had uncontrolled fires that required emergency responders.⁴ Only some of their incinerators have since installed modern fire detection and suppression equipment. Has Covanta Camden?



⁴ Covanta & Montgomery County, MD Department of Environmental Protection. See pp. 4 & 49 in www.montgomerycountymd.gov/SWS/Resources/Files/rf/RCA%20Documents.pdf & p.89 for fire frequency.

⁵ Washington, DC City Council Committee Hearing on Department of Public Works Budget, April 26, 2017. See: 53:20 in http://dc.granicus.com/MediaPlayer.php?view_id=2&clip_id=3913.

Covanta's electricity will be expensive

Trash incineration is the most expensive way to make electricity.⁶ Covanta aims to prop up their ailing industry, as they have a hard time competing with cheap gas, wind, and solar prices. They've been seeking more and more "renewable energy" subsidies and have turned to burning more dangerous wastes to stay profitable.

The microgrid proposal states that Covanta "currently sells electricity at a rate of \$0.02/kWh but would like to establish new power purchase agreements at a higher rate" (p.62). They want to go from selling at wholesale rates to retail rates, increasing their energy price to at least \$0.07/kwh by selling through an unidentified "third party" microgrid operator that might also be part of Covanta.

The feasibility study says: "our analysis suggests that the project scope, as currently envisioned, is not commercially viable or financeable..." and that the project could work if the battery storage is ditched (making it less reliable), and that one way to make it work would be "negotiation of a lower energy purchase price from Covanta (i.e., lower than \$0.07/kWh)" (p.63). Another option to make it financially viable is to charge CCMUA and other local companies higher prices for energy or for "black-start fees" (to start Covanta up when power goes out).

Solar is cheaper?

The same study points out that PSE&G's solar power purchase agreement is just \$0.0483/kwh (p.56). Rather than go solar, Covanta wants to more than triple their energy sales price, but claims they'd send CCMUA electricity at a lower price (p.56).

Cheaper dumping on Camden?

"It is also likely that the project will result in the reduction of tipping fees paid to Covanta by surrounding municipalities." (p.36)

It's unlikely Covanta will lower their tipping fees unless they need to drop their price to compete with landfills and attract waste from other areas. However, why make it cheaper for municipalities outside of Camden city to burn their waste in the city??

City residents could end up paying more

If CCMUA ends up running the micro-grid, or ends up stuck with higher costs, CCMUA could raise fees on city ratepayers. The proposal mentions costs of CCMUA building a line to send wastewater to Covanta, and to possibly run the microgrid. It states: "NJIEIT could provide all the financing needed for the construction of the water-related assets. CCMUA can also issue low cost bonds to cover the construction costs" (p.62). **Bonds mean debt for future taxpayers paying to save Covanta money on water bills.**



"CCMUA is proposing to own and operate the proposed distribution system between CCMUA and Covanta Camden. CCMUA is proposing to pay a fee in addition to the cost of the purchase of the electrons from Covanta to provide a long-term maintenance of the interconnection. In addition, CCMUA is proposing to own, operate and maintain the extension of the proposed distribution system beyond the initial connection between Covanta and CCMUA. CCMUA is proposing to charge a nominal fee to operate and maintain the distribution system for those facilities connected to the Camden Microgrid. CCMUA is already an NJ BPU regulated entity and has authority to charge rate-payers various fees for the use of its systems." (p.63) **Will this deal mean higher water bills?**

Will Covanta own and operate this microgrid? Should they?

"Covanta could choose to operate as a **retailer**, providing power directly to off-take customers, and/or it could operate as a **wholesaler**, selling to a third-party who would in turn act as a retail distributor. While retail price points might seem attractive to Covanta, **operating as a retailer could require Covanta to own and operate the microgrid and its assets, including battery storage.**" (p.62)

"This larger investment could prove challenging to Covanta's balance sheet. It should also be noted that **microgrid operation and battery dispatch are not a part of Covanta's core competency.**" (p.98)

⁶ "Updated Capital Cost Estimates for Utility Scale Electricity Generating Plants," U.S. Energy Information Administration, April 2013, p.6, Table 1.

www.eia.gov/outlooks/capitalcost/pdf/updated_capcost.pdf Summarized in charts at: www.energyjustice.net/incineration/expensive-energy