

***Hearing***  
***Before the Committee on Energy and Commerce***  
***Subcommittee on Energy***  
***United States House of Representatives***

***September 6, 2017***

***Powering America: Reevaluating PURPA's Objectives  
and its Effects on Today's Consumers."***

**Written Testimony of Darwin Baas**  
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## Summary of Testimony

*Kent County, Michigan owns a waste-to-energy (WTE) facility that produces baseload, GHG mitigating renewable electricity and that is also part of the county's municipal waste processing infrastructure.*

*WTE facilities are unique renewable energy generators, because many are owned by local governments, and most of the remainder are public private municipal infrastructure partnerships. As such, they face unique and significant obligations unlike other QFs, and face barriers to participating in energy markets.*

*Kent County not only supports the reaffirmation of current PURPA provisions, but encourages modernization and improvement for WTE QFs.*

*Nationally, WTE QFs are facing challenges to their long-term viability for a number of reasons, including refusal by utilities to (1) enter into PPAs with new and existing QF facilities, or (2) offer economic avoided cost pricing terms or contract lengths reflecting the grid or environmental attributes of the power, contrary to the purpose of PURPA.*

*As a result, the viability of existing facilities is at risk. Many QFs are already shuttered, with a resulting loss to the grid of climate friendly, baseload, fuel diverse generation. Without current and enhanced PURPA provisions, that disturbing trend will continue.*

Chairman Upton, Ranking Member Rush, and distinguished members of the Subcommittee. Thank you for the opportunity to testify regarding the Public Utility Regulatory Policies Act (PURPA). My name is Dar Baas, and I am the Director of the Kent County Michigan, Department of Public Works. Like many other municipal and county governments, Kent County owns, as part of its municipal infrastructure, a Waste-to-Energy (WTE) facility.

WTE facilities are located across the nation--from New York to Florida, to California and Oregon, and I can assure you that our situation is similar to many other municipalities with WTE facilities, who are trying to serve the needs of their citizens to manage large volumes of solid waste and produce reliable, low cost power in their areas, yet have extremely limited financial resources. WTE facilities help us solve multiple problems with a single facility.

I am here today to express support for current rebuttable presumption of a mandatory purchase obligation under PURPA, and to encourage Congress to consider modifications to the law to enhance its application and effectiveness for WTE QFs. The current implementation and reach of PURPA poses challenges for municipalities like Kent County, and threatens the ability to continue to operate such plants.

The 76 WTE plants located across the nation have a baseload renewable electricity capacity of 2547 MW and generate over 14 billion kWh of electricity per year, avoiding nearly 30 million tons of greenhouse gas. Approximately half these facilities are owned by local governments; most of the remainder are public private partnerships between companies and municipalities. These plants have been serving communities for decades, and represent significant, long term public investment. Their shutdown would pose a significant problem for municipalities, ranging

from stranded investment to stranded infrastructure, and additional costs for infrastructure replacement.

Kent County DPW is responsible for spending and obligating public funds on municipal infrastructure to provide public services to our residents. One critical investment is our waste-to-energy facility, which provides two public goods – sustainable waste management and base-load renewable energy. In contrast to many other renewable energy technologies, WTE facilities generate baseload renewable energy typically located next to load centers. As our electrical grid becomes increasingly dependent on intermittent renewable power sources, baseload sources like WTE will help aid in grid stability and resiliency, fuel diversity and reliability, and will reduce long distance transmission burden and associated costs. Additionally, they provide the alternative to landfilling that local residents, business and industries demand.

While these facilities are municipal infrastructure, they must also remain competitive in energy markets. Unfortunately, many have closed and more are at risk of failure, stranding local government investments. A significant contributing factor to that is outdated or inadequate elements of PURPA policy which fail to value the unique local government role these power plants have.

It is critical that Congress retain and reaffirm the rebuttable presumption of utilities' mandatory purchase obligation from QFs with capacity up to 20 MW, and should consider expanding the rebuttal purchase presumption to WTE QFs up to 80 MW. I would assert that the presumption and obligation is essential for the survival of WTE QFs, as the experience of so many local governments with WTE facilities is that they do not have non-discriminatory access to competitive, organized markets.

WTE facilities are unique because many are owned by local governments, and regardless of ownership, most are public-private municipal infrastructure partnerships. As such, they face unique and significant obligations unlike other QFs, and face barriers to participating in organized and bilateral wholesale electricity markets.

A patchwork of renewable energy laws across the country, compounded by the absence of comprehensive federal renewable energy policy, has had a skewed impact on small QF generators. Varied markets and their instruments, guidelines and laws implementing PURPA have adversely impacted existing and new QFs. WTE's unique partnership with local governments sets it apart from other QFs, as it is affected by both market drivers and public infrastructure obligations. The negative impacts of discriminatory markets on WTE QFs have a direct impact on the ability of local governments to fulfill their duties and obligations.

Nationally, QFs are facing challenges to their long-term viability for a number of reasons, including refusal by utilities to: (1) enter into PPAs with new and existing QF facilities, or (2) offer economic avoided cost pricing terms reflecting the environmental and other attributes of the power, contrary to the purpose of PURPA.

As a result of all of these factors, the viability of existing WTE QF facilities is at risk. Many QFs already are shuttered, with a resulting loss to the grid of climate-friendly baseload generation. Domestic deployment of new baseload WTE QF generation has all but stalled, with only one greenfield WTE development financed and built in the last 20 years, contrary to the purpose of PURPA. These smaller QF operators or local governments also often lack adequate

time or financial resources to (1) fight discriminatory and unfair contracting treatment; and (2) keep up with the rising administrative costs and market hurdles faced by small QFs posed by utilities and market operators, again contrary to PURPA. Increases in administrative requirements and costs associated with interconnection and market participation, while often legitimate and not a market barrier for larger generators and utilities, are often not appropriate for, and have a punitive effect on local governments and their WTE QFs. Existing WTE facilities face an increased gap between energy prices in the market and the costs required to maintain facility economics and to cover burdensome administrative costs. As a result, existing WTE facilities have closed and face risk of closure, and local governments that want to expand or deploy new WTE generation will remain unlikely to do so.

PURPA's purpose (and the FERC's corresponding oversight authority) to ensure that small QFs continue to have access and fair compensation are as necessary today as when PURPA was first implemented. The Commission's policies implementing PURPA should strive to increase the ability of small QFs to provide baseload renewable power to energy markets. Over time, however, the implementation of PURPA has shifted in practice. The objective of PURPA was, and remains today, the development and marketplace deployment of renewable and energy efficient generation technologies that can help serve load and provide other benefits. Congress acknowledged that the development of renewable and energy efficient alternatives is dependent on new generation entrants having access to competitive markets.

The industry has evolved since PURPA's initial implementation. While some power markets are more competitive, other markets present new barriers to QFs not anticipated at the time of

PURPA implementation. The significant role that local governments play in the development, ownership and operations of renewable energy also was not anticipated. Local governments incorporating WTE into their municipal infrastructure have been providing base-load, clean power for decades. The need has not diminished – it has increased—to incentivize and encourage the development and deployment of environmentally beneficial alternative generation sources, such as WTE, as part of modernizing and upgrading our infrastructure.

Unlike solar, wind or other intermittent energy sources, QFs such as WTE provide power on a consistent and reliable basis to meet “baseload” electricity demand. New challenges such as the California “duck curve” occur due to the inability to meet non-coincident peak demand with intermittent electrical generation. Renewable, but non-intermittent QFs such as WTEs represent an ideal resource to confront these challenges.

The use of non-traditional, locally-sourced feedstock makes WTE a uniquely resilient energy source. Resiliency goes beyond being able to withstand disasters, either natural or manmade, to include the ability to recover quickly and fully. During Superstorm Sandy, for example, three WTE QFs were directly impacted by the storm in the New York/New Jersey region. While other generators were non-operational for a significant time period, one of those WTE QFs continued to export power to the grid uninterrupted, while the remaining two facilities were operational before most of the utility power was restored. Utilities and ISO/RTOs should include small baseload QFs and these positive attributes in their supply plans in order to promote reliable operations overall and to meet their daily demand curve.

Existing PURPA provisions addressing certain QFs fail to meet their intended purpose.

Mandatory purchase contract lengths are unrealistically short, and avoided cost pricing has evolved to where it often no longer reflects the intent of PURPA or the value of attributes which should be prioritized today. Facilities between 20 and 80 mw do experience discriminatory pricing, and the pace of contract renewal combined with artificial barriers have significantly eroded terms and pricing for energy.

More specifically, in Michigan, we are engaged with the PSC to fight for fair, reasonable and stable avoided costs. The utility we deal with has had \$759 million in rate increases since 2008, with another proposed increase of \$172 million pending before the PCS. They are claiming the 2% of their portfolio generated from QFs is to blame for a 50% residential rate hike. Meanwhile, they are trying to devalue our contract by 24%. This will not allow me the revenue necessary to make routine capital refurbishments, forcing me to seriously consider premature closing.

Artificially low avoided cost calculation for mandatory purchases from small baseload QFs is a national issue. I'll note both a WTE QF example, and one from outside the WTE context, however there are examples of this throughout the country.

**Florida:** Calculated avoided costs offered to WTE QFs have been below the fuel-only cost of natural gas generation. One example is, a county-owned 77 MW WTE QF facility in Florida that is unable to obtain a nondiscriminatory market for its power, realizing annually millions of dollars of lost energy revenue. Utilities are forgoing contracting with small QFs and instead are building their own renewable generation,



however avoided cost rates do not reflect the price of building such new incremental renewable facilities. (*Florida Power and Light Company*, Florida Public Service Commission, Docket Nos. 160021-EI, 160061-EI, 160062-EI, Order No. PSC-16-0472-PCO-EI).

**South Dakota:** Prelude, L.L.C., a wind energy developer, filed a complaint on May 2, 2014 alleging that six South Dakota energy co-ops failed and refused to enter into good faith negotiations of respective long term PPAs and offered arbitrarily low avoided cost prices that discouraged development of alternative energy projects.  
<https://puc.sd.gov/commission/dockets/electric/2014/e114-042/complaint.pdf>).

Given the current discrimination against small baseload QFs, we have urged FERC to exercise its oversight authority to ensure that avoided costs calculations used throughout the country have a level of consistency and logic given PURPA's purpose to develop, finance and deploy efficient and clean technologies. The definition of avoided cost must be consistent with this purpose and ensure non-discrimination of small baseload WTE QFs.

We urge Congress to clarify PURPA as necessary requiring that "avoided costs" paid to WTE QFs by utilities should incorporate short-run and long-run avoided costs for capacity and energy and include the value of other environmental and operational externalities such as the value of baseload renewable energy, diversity of generation mix, proximity to load centers for voltage and VAR support, GHG mitigation, landfill diversion, reliable and resilient power. The unique role they have as critical municipal infrastructure and interplay with local governments should

also be valued. I have attached comments filed with the FERC on behalf of several municipalities and WTE operators that discuss our issues in greater detail. It is my hope that these comments would be useful to the Committee as it deliberates on any PURPA changes and we would be pleased to have the opportunity to participate in such discussions.

Local governments across the country own assets which require electricity, as well as those which produce electricity. However, they face a catch-22: currently, a local government cannot sell to itself or other local entities the WTE renewable power it generates at reasonable prices and, instead, must buy fossil power from the utility grid at a significantly higher price to service those government buildings. Instead, local governments owning or contractually obligated to WTE facilities should be able to sell WTE power to other entities that are contiguous or not contiguous but near to the WTE facility, into a community's localized autonomous micro-energy transmission system ("microgrid"), and otherwise sell power on a self-service basis directly to other contiguous and non-contiguous local government buildings, and net meter its energy purchased from a utility with the WTE generation it sells to the same utility.

Regulations prevent us from using power we generate for our airports, waste water treatment facilities or court houses. It is therefore critical that WTE QFs up to 80 MW are provided an opportunity to obtain realistic energy pricing and contract terms given the inequities, false market signals and uncertainty in today's energy markets. It is risky decision-making to invest in maintenance and operations of a facility without knowing whether there will be energy revenue to pay off that investment. Modifications to PURPA are necessary to ensure long term

viability of this infrastructure, and I would welcome the opportunity to work with on the Committee on modifications which could address these issues.

Thank you for the opportunity to appear before you today and I would be pleased to answer any questions that you may have regarding these issues.