

Energy Advisory Committee

Washington Metropolitan Council of Governments
777 North Capitol Street, NE, Washington, DC

December 13, 2012 DRAFT Meeting Highlights

Attendance:

Olayinka Kolawole, Chair, DDOE
Garrick Augustus, Fairfax County (by teleconference)
Jeff Bond, Prince George's County
Kirsten Bowden, Pepco (by teleconference)
Eric Coffman, Montgomery County (by teleconference)
Bill Eger, Alexandria
Tyler Espinoza, Optony (by teleconference)
Mike Gurganus, Dominion Virginia Power (by teleconference)
Lisa Orr, Frederick County (by teleconference)
Said Said, Prince William County
Najib Salehi, Loudoun County (by teleconference)
Chris Scaggs, Northeast Maryland Waste Disposal Authority
Monisha Shah, WH Council on Environmental Quality
Steve Walz, NVRC

Staff:

Julia Allman
Leah Boggs
Jeff King
Joan Rohlf

Call to Order, Olayinka Kolawole

- The meeting was called to order at 10:05 a.m.

Approval of November 15, 2012 Meeting Summary

- The meeting summary was approved.

Frederick County Renewable Waste to Energy Project, Chris Scaggs, Northeast Maryland Waste Disposal Authority, and Michael Marshner, Frederick County

- The Northeast Maryland Waste Disposal Authority is a multi-county authority, covering eight counties. They handle waste disposal with an emphasis on energy creation. Energy projects include waste to energy (WTE) and landfill gas, as well as solar facilities.
- The Frederick/Carroll County waste facility project began with a 2005 study on long-term waste disposal options. The report identified a facility serving both counties, processing 1500 tons of waste per day would be the best option. The project provided

the lowest cost per ton among the options studied. The project was procured in 2008, and selection was made in 2009. Since then, political changes have made Carroll County re-evaluate their participation in the project.

- The RFP for this facility called for proposals that would create an energy product, but the energy type/technology was not specified. Lifecycle costs of the technology were considered in the process. Wheelabrator was selected for a design-build-operate contract. The site is located next to a water treatment plant, and will process some municipal solid waste.
- The project will generate up to 51 megawatts, enough to power 45,000 homes. Its output will be 625 kWh per ton, which is high compared to other WTE applications.
- When constructed, this will be the most heavily regulated WTE plant in the country, with several air quality controls in place. A human health impact study found that the plant would be safe, and in fact better from an air pollutant emissions perspective than landfilling.
- Financial benefits include long term cost stability for waste disposal, job creation, through construction and operations. By treating some municipal solid waste, it avoids the cost of additional digesters at the wastewater treatment plant.
- Currently, the project is waiting on air, solid waste, and water discharge permits. Public hearing will be held in January and February. The PJM interconnection study is underway. Final MDE permits are expected in Spring 2013. Construction will take 26 months, with an estimated opening of the plant in 2016 or 2017.

Discussion:

- How many wte facilities in md?
 - 3, currently.
- Why aren't there more WTE facilities?
 - Cost concerns. There is a large movement of waste out of Maryland to Virginia at a low cost, but costs are highly variable. Political leadership is needed to sell the idea of price stability.
- Why did the recent WTE project in Harsburg fail?
 - It was originally built as a non-generating incinerator, but a steam turbine was added. This required a major air pollution control upgrade, and required shut down. A heavy debt load and technology failure caused bankruptcy during construction.
- How does the construction cost compare to an additional landfill?
 - You have to look at all-in costs. Landfill construction is cheaper up front, but additional capacity additions, controls, operations, etc. add costs. WTE is higher costs up-front, but it is a long term solution.
- Are you able to take in trash from other counties?
 - The plant is sized for long-term Frederick County load, so initially there will be additional capacity.
- Did you look at liquid fuel options in the procurement process?
 - Yes, the initial RFP was open to all energy types. However, it is not yet a proven technology, and proposals could not meet our capacity needs.

- Do you need to sort the waste, to avoid some products that may impact the process?
 - Metals are recovered on the back-end through ferrous and non-ferrous removal processes for recycling.
- What are you doing with solar?
 - Solare is installed on the Montgomery county waste transfer facility, in a rooftop array that feeds the transfer station.
 - A second project is in Howard County, at a closed landfill next to an elementary school. Through a County and MEA grant, the solar array provides 90% of school energy needs.

Domion Virginia Power Solar-Power Demonstration Project, Mike Gurganus, Dominion Virginia Power

- Legislation passed in 2011 allowed Dominion Virginia Power (DVP) to apply for a solar generation program. The first component, the Solar Partnership Program, was approved two weeks ago, including \$80M to install up to 15 MW of rooftop solar on large commercial and industrial facilities under a blanket permit.
- The Solar Partnership component was designed to help customers who are interested in renewable energy but don't have the capital to invest. Commercial and industrial customers then enter into a lease with Dominion to install solar PV on their roof space. These customers have the option of buying solar RECs from the system. The roof must be 5 years old or newer (to ensure it outlives the solar system), have over 75,000 square feet of available, sun-exposed space, and the customer must be willing to enter a long-term agreement with Dominion.
- As solar comes closer to grid parity, this programs is designed to give Dominion valuable information on how large-scale solar resources will impact the grid, how to develop better models to manage intermittent power, and how to assess compatibility with other initiatives such as smart meter integration and voltage reduction.
- The second component, the Solar Purchase Program, is awaiting approval. It would create a feed-in-tariff of 15 cents per kWh for up to 3 MW of solar capacity which is owned by the customer. The fixed price will be offered for 5 years with potential renewals.
- Approval was also given to install 4 public demonstration sites in Richmond, Virginia Beach, Charlottesville, and Northern Virginia. These sites will be accessible to the public, providing learning opportunities for school groups and others.

Discussion:

- With respect to the intermittency of solar resources, are you considering storage?
 - In addition to solar projects, we are looking at storage. A microgrid installation in a North Carolina facility will include battery storage for wind and solar. It will be on-line in 2013. We are also looking at the feasibility of battery backup in the distribution grid to help neighborhoods through short-duration outages.

However we are not looking at storage in conjunction with the solar program currently. We have not found a cost-effective option yet.

- Is there a website?
 - An initial website is available to provide basic information and FAQs. Dominion will be improving the website and adding more information.
- Is it possible to apply for a building currently in planning or construction stages?
 - Yes, add zeros on the web form for the Dominion account number.
 - This is not a first-in program – we want a review all applications and choose the best sites for demonstration.
- What is the long-term lease agreement time?
 - 5 years with 2 5-year renewal periods. We are looking for sites with roofing materials expected to last longer than the solar facility.
- What is the size of public demonstration sites?
 - It depends on site – probably between 5 and 50 kW. The sites are more about public accessibility and engagement opportunities at the site than large generation potential.
- Does the website submission allow for documentation upload?
 - Not yet, as the website is in early stages, But can work directly with you to submit documentation.

Green Button Initiative, Monisha Shah, White House Council on Environmental Quality

- The Green Button Initiative is part of a broader focus at the White House on open data initiatives. It helps customers view and analyze their own energy usage, by offering data in a common format.
- The Green Button Initiative was developed out of the Blue Button Initiative, which was created for veterans to manage health information. It has now expanded to 1.5M users in Medicare and active duty.
- Green Button launched in January 2012. Suppliers in 32 states and DC have committed to provide data to 36 million homes and businesses. Currently 16 million users have access to their data through Green Button.
- Several companies are working on applications to utilize utility data, including right-sizing home solar energy systems and conducting virtual energy audits. DOE has hosted the Apps for Energy Contest to promote development of energy applications that help homeowners visualize their data. Entrants ranged from game-style apps to practical apps that assist in uploading to portfolio manager. The Energy Data Initiative was launched this spring to encourage entrepreneurs to develop new data management prototypes.

Discussion:

- Have you seen evidence of energy efficiency gains being made by having data?
 - It's a bit too early to tell, but EE professionals are excited about potential applications.
- Is Green Button available for Dominion customers?

- Currently, only for dynamic pricing customers. If you do not have access, encourage your utility to make it available.
- How easy is it for utilities to participate if they have older databases and technology, etc?
 - It varies utility by utility. There are some pilots among municipal utilities.
- How can local governments help engage citizens on this?
 - You can advocate for citizens to get involved with energy efficiency, and include links to Green Button in those and other outreach efforts
- Are you involved in any other app challenges?
 - Yes, from “Hackathons” that last 24 to 48 hours, to months-long App challenges. Competitions are a low-cost way to spur some innovation and encourage public awareness.

Legislative Update, Julia Allman, COG DEP

- The Maryland Clean Energy Center hosted an Energy Caucus in early December, in which Maryland state legislators discussed bills they were introducing in the 2013 session. Issues included adding thermal energy from biomass to the list of Tier 1 renewables under the RPS, offshore wind, potential changes to the greenhouse gas reductions program and EmPower Maryland, and enabling financing structures for energy efficiency improvements.
- In Virginia, legislators and stakeholders are considering adding solar thermal energy to the state’s RPS, reintroducing a bill to allow power purchase agreements, commercial PACE, and a legislative study of the multiple benefits of district energy generation.

Roundtable Exchange

- Lisa Orr – We are developing the Solarize Frederick County solar purchase initiative. It will enable solar thermal and PV volume purchasing with incentive grants. Part will be neighborhood-based, with other opportunities available to the community at large.
- Jeff Bond – Prince George’s County’s Sustainability Policy has been introduced for County Council approval. The Sustainability Department has applied for a grant with COG on energy education and sustainability, which includes the boy scouts and girl scouts.
- Said Said – Prince William county has begun converting parking lot lighting to LED, and is considering induction lighting as well. The county is looking for information on this technology. Additionally, the County has undertaken several water conservation projects by retrofitting fixtures in county buildings.

Adjournment

- The next meeting will be held January 17th.