COG Built Environment and Energy Advisory Committee

Meeting Summary October 16, 2014

Attendees:
Jeanne Altavilla, Arlington County (by phone)
Jeffrey Bond, Prince George's County
Al Christopher, DMME (by phone)
Ellen Eggerton, Fairfax County (by phone)
Claire Fox, WMATA
Rachel Healy, WMATA
Tim Johnson, WMATA
Emil King, District Department of the Environment (Co-Chair)
Bob Lazaro, Northern Virginia Regional Commission
Danielle Leisten, Northern Virginia Soil and Water Conservation District
William Marsh, Fairfax County
Lisa Orr, Frederick County (by phone)
Luisa Robles, City of Greenbelt (by phone)
Said Said, Prince William County (by phone)
Najib Salehi, Loudoun County (by phone)
Teve Scheff, Chesapeake Sustainability
Khoa Tran, City of Alexandria (by phone)
Michelle Vigen, Montgomery County (by phone)
Bill Wolfe, Atlantic Energy (by phone)

COG Staff Present:
Leah Boggs, COG DEP
Maia Davis, COG DEP
Jeff King, COG DEP
Isabel Ricker, COG DEP

Welcome and Call to Order
Emil King, District Department of the Environment (Co-Chair)

Co-chair King welcomed the committee members and asked for approval of the September meeting summary. After review, the meeting summary was approved with one minor change.

The 2014 Virginia Energy Plan Update

Al Christopher, Virginia Department of Mines, Minerals and Energy (by phone)

The Virginia Energy Plan must be updated every four years according to statute, and an interim update must be released at the mid-term mark. The Virginia Department of Mines, Minerals and Energy (DMME) is responsible for overseeing the Plan update process. The complete 2014 Virginia Energy Plan Update is available available on DMME's website: http://www.dmme.virginia.gov/DE/2014_VirginiaEnergyPlan2.shtml. Drafts and public comments received are also available here: http://dmme.virginia.gov/DE/2014_VEP_Update.shtml

The plan was released October 1, and Governor McAuliffe made a formal presentation of the plan on October 14. He specifically called out two items:

(1) The state, and Northern Virginia in particular, has benefited greatly from federal, especially military spending in the past, but Virginians cannot count on this to continue going forward. Federal and military spending may become even tighter, which emphasizes the need to develop new industries.
(2) The governor wants Virginia to be a leader and does not like to be behind other states, particularly neighboring states like North Carolina and Maryland. Currently, Virginia is far behind on energy efficiency and renewable energy, but the plan aims to help make the state a leader on these issues.

The next big steps following the Plan release:

1. Increasing both utility and distributed renewable energy: The Plan Calls for establishment of solar energy authority, based on the model of the VA offshore wind authority.
2. Increasing the success of energy efficiency programs: The Governor will establish an Efficiency Board composed of stakeholders representing the issue from many angles, which will work to increase the scope and success of energy efficiency programs

On October 16, the governor will be talking about increasing energy efficiency in Virginia at the Division of Motor Vehicles Headquarters, which had a very successful energy savings performance contract recently.

Discussion:

In response to a question about the role of the planned Solar Development Authority in contrast to the Offshore Wind Development Authority, Mr. Christopher clarified that the two may not be exactly comparable. The Solar Development Authority may be established by executive order, which would differ from the legislatively-created Offshore Wind Development Authority. Currently, there is no operational offshore wind power in the U.S. except for a demonstration turbine off coast of Maine, which is at one-eighth scale. Dominion won the lease auction for the offshore wind development area in Virginia, and has a five year window to prepare a plan for up to 2000 MW of generation. Dominion is also partnering with DOE on a demonstration project for two turbines that would be used in the commercial design, which are scheduled to be in production by summer 2017.

The committee asked whether the plan establishes clear targets or future goals for emissions or for the state's energy mix, to which Mr. Christopher replied that it does set several goals but does not propose making the RPS mandatory. The plan has a 10 year horizon, but it will be updated every four years with the Governor's election, and progress must be reported on in 2 years. Stakeholder groups and the new Solar Development Authority will help determine how to achieve the Plan's goals for solar, and the Energy Efficiency Board will help determine how to achieve the efficiency goals. These groups will be convened within 60-90 days.

In response to a question about involvement or cooperation from Dominion, Mr. Christopher noted that the VA Energy Council includes representatives from industry, including from Dominion, who were chosen as subject matter experts to help review the draft plan and public input. Much of the plan discusses the state's current energy infrastructure, which relied on information from the utilities, particularly from their Integrated Resources Plans.

The committee asked whether and how the plan addresses alternative fuels and alternative fuel vehicles (AFVs). Mr. Christopher noted that the Plan includes goals for increasing the number of AFVs in the state fleet. A process to facilitate state fleet conversion to AFVs was developed at the end of the McDonald Administration through a public private partnership, which McAuliffe is continuing to support. This collaborative group includes compressed natural gas and propane supply chain partners, among others. VA Clean Cities Coalition will also play an important role coordinating support at the local level, identifying interested fleets, and locations for charging/fueling stations.

The committee asked whether Virginia is planning to begin offering a tax credit or rebate program for renewable energy given the likely sunset of the federal Investment Tax Credit. Mr. Christopher stated that Virginia intends to create a tax credit that will be equivalent to the ITC, likely a property tax credit for up to 30-35% percent of the value of the renewable energy generation profits. DMME is developing guidelines for implementation of the program, in expectation that the general assembly will enact and fund the program in the 2015 session.

Solarize NOVA

Bob Lazaro, Director of Regional Energy Planning, Northern Virginia Regional Commission

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Currently, there are approximately 418 solar arrays and 2,580 kW of installed solar PV in Northern Virginia, which means that it is a "target rich environment" - there is a lot of potential for growth in the solar market. The NVRC Board adopted a 1,000-solar-rooftop-challenge and hopes to double to goal. The Solarize NOVA program is intended to help achieve this goal by coordinating with community leaders and advocates to mobilize a large number of homeowners to go solar at a reduced price.

Solarize NOVA launched on September 24. Northern Virginia Regional Commission (NVRC) is working with the non-profit Local Energy Alliance Program (LEAP) to implement solarize campaigns in numerous communities in the region. LEAP organized a successful solarize program earlier in the year in Charlottesville. This project uses LEAP's model, but they expect to tweak this to improve success rates as new projects are initiated.

It can be difficult to get attention for community projects near the District, but grassroots efforts can be very in smaller cities and towns. They chose to start with Leesburg because there was already momentum there, but they plan to expand to Falls Church and Herndon in the spring. There are several other solarize-type programs in the region; Community Power Network recently began a solar coop in Arlington.

The program sunsets with federal Investment Tax Credit because the solar is not economically feasible without the 30% credit. LEAP charges a small fee on each contract signed through the program, but the program is also receiving funding from donations and in-kind efforts from NVRC. They are also working with local banks to help get funding and loans for participants.

The program is supporting local industry by requiring local installers using all American materials. LEAP vetted five installers and selected three (Green Brilliance, Prospect Solar and Solar Odyssey) to participate based on price and customer satisfaction rates. The program will be able to offer a price at 20 percent below market rates. RECs are open to the homeowner to sell or keep.

When someone signs up by sharing their name and address, they automatically qualify for a free home energy checkup and energy saving recommendations from a LEAP Energy Coach. Dominion customers receive the audit, as well as about $200 worth of energy efficient household goods, such as light bulbs and smart strips, for free through Dominion's Home Energy Check-up Program.

The economics of solar are very different across the region. In Washington, DC the payback for an average residential solar installation is 5 years; in VA it is about 15 years. Having a mandatory portfolio standard makes a huge difference: renewable energy credits are worth about $400 per year in Virginia, versus $2,000 per year in DC. This cost difference is one reason that solarize programs and bulk discounts are so important in Virginia.

There are currently 80 participants signed up, with a goal of 500 by the program end on November 30. It can be challenging to get press interest in such a program so they are asking participating local governments to endorse the program to lend credibility, as well as to host meetings and help get the word out. NVRC and LEAP are looking for grant funding to help publicize the program further and spread it to new communities. A resource like Mapdwell.com to estimate solar potential and costs would be incredibly helpful.

The program is available to all residents in Loudoun County, but they are keeping communications focused on Leesburg at the moment, although Chairman York has shared information on the project. Small businesses are also eligible, and some in downtown Leesburg have expressed interest in joining. They expect the average installation size to be about 5kW.

In response to a question about the contractor fee, Mr. Lazaro clarified that it is part of the per kWh price the project advertises to residents. The referral fee is very reasonable, especially given the savings customers are getting; one firm (that was not selected because they use foreign produced panels)

offered a price of $2.65 per kWh. Lisa Orr of Frederick County noted that Frederick's Solarize program did not have a contractor fee because County Commissioners were worried it would be seen as an additional cost on residents. However, customers save more through participating in the bulk purchase than the fee adds, and the fee is what will enable a program to be self-sustaining without government support.

In response to a question about coordination with local banks, Mr. Lazaro noted that they are working with Middleburg Bank, John Marshall Bank is helping with publicity, and the UVA credit union has sponsored workshops for customers to let them know about the opportunity.

The committee discussed policy and financial mechanisms that would be helpful to spur the Virginia renewable energy industry. Having a mandatory RPS would go a long way toward supporting renewable energy industries in the state. Conservative North Carolina is beating Virginia on renewables because of their RPS. Virginia's energy mix sometimes looks pretty good on renewables because it is 6% wood. Wind and solar together only account for 0.06 % of the energy mix. Amendments to PACE legislation to get banks comfortable with and interested in doing loans through PACE would also be helpful.

In response to a question about local permitting or zoning barriers, Mr. Lazaro replied that he had not heard of any permitting challenges in Loudoun, but a consistent permitting and inspections process across the region would be very helpful for installers working in multiple jurisdictions. Local zoning laws have not yet been a problem, but because Leesburg is a historic district solar is prohibited if it faces street. However, most will be flat to the roof or on the back of the street, which are compliant.

The biggest local impediments in Virginia are homeowners' association (HOA) limitations. Some HOAs ban solar in certain locations, or have a stringent architectural review process, or require neighbors to agree. They are working with the Cascades HOA in Loudoun County to help spread the word about the new state law banning complete solar prohibitions in HOA covenants, and to promote solar friendly HOA policy.

Co-chair King mentioned that a local non-profit Groundswell recently completed a study on how to implement a solarize program for DC. The city is now developing an RFP for a contractor to run the program. Groundswell selected Sustainable Energy Systems for their regional solar program, which is very similar to solarize.

WMATA's New Net-Zero Largo Water Treatment Facility

Rachel Healy, Sustainability Project Manager, WMATA

WMATA has built a new net-zero water treatment facility near the Largo Town Center to treat stormwater coming out of metro tunnels. The facility was built to meet regulatory requirements under the Chesapeake Bay Restoration Plan, which require that WMATA treat the stormwater before discharging it into the Patuxent River because of the acidic soil at the site.

The building is net zero partly due to its very low energy use: it uses gravity to treat the water, and compressed air to circulate water for treatment. The building also has solar, battery storage and a green roof. WMATA estimates energy usage will be about 13,767 kWh per year, but there are no performance measures yet for the new building. When available, WMATA plans to post the energy usage online.

WMATA has 130 miles of metro rail, half of which are underground. They have to pump groundwater out in order to keep the tunnels dry. There are 58 pumping stations throughout the system, which pump about 1.4 million gallons of water out of the metro system per day. The Largo location deals with 27,000 gallons per day.

The project was intended was to demonstrate to the region and WMATA itself that metro can be sustainable. WMATA is currently doing a study to assess its overall solar potential, as part of sustainability plan and the 30% renewable energy commitment by 2025. It will examine infrastructure improvements, such as renovations of old parking lots, which solar or EV charging stations could be rolled into.

COG is helping to organize an open house to tour the facility on Thursday, November 13.Contact leah Boggs at lboggs@mwcog.org for more information.

Roundtable Updates

- **Joint MWAQC-CEEPC Meeting Outcomes:** MWAQC and CEEPC held a joint meeting on October 2 to discuss regional collaboration to improve air quality and greenhouse gas emissions from the transportation sector. The group passed resolution to ask all relevant committees at COG to reaffirm the COG greenhouse gas reduction goals, and to have TPB participate in a regional multi-sector workgroup to discuss using greenhouse gases as a screen for transportation funding through the constrained long-range plan.
- **ETOP Energy Emergency Exercise:** COG has a $100,000 grant to facilitate a tabletop exercise on catastrophic energy emergency. Contract with CNA is signed, the planning team kickoff will be October 28. Structure will be a series of workshops leading to a larger tabletop exercise.
- **DC Community Solar Regulations:** the DC PSC released the Notice of Proposed Rule Making in September and comments were due October 12. The Final Rule is expected in January.
- **Exelon-Pepco Acquisition**: The Virginia SCC has approved the merger and cases are pending with FERC and the various state PSCs. The DC PSC will hold public hearings in November and the MD PSC will hold hearings in January. Email Isabel Ricker at iricker@mwcog.org for more information.

Next Meeting Date, Proposed Topics, Other Announcements and Adjournment

- BEEAC Planning Call – November 6, 2014
- COG Solar Workshops – November 17, 2014
- CEEPC Meeting – November 19, 2014
- BEEAC Meeting – November 20, 2014