

Draft Meeting Summary
COG Climate Energy and Environment Policy Committee (CEEPC)
January 23, 2013

Members and Alternates Present

Hon. Mary Cheh, District of Columbia
Hon. Ryan Spiegel, Gaithersburg
Hon. Roger Berliner, Montgomery County
Hon. Del Pepper, Alexandria
Hon. Jay Fissette, Arlington County
Hon. Penelope Gross, Fairfax County
Hon. Jonathan Way, City of Manassas
Hon. Bridget Newton, Rockville
Kambiz Agazi, Fairfax County
Ray Bourland, Pepco
Chris O'Brien, American University
David Hunter, EPRI
Olayinka Kolawole, DDOE
Didian Tsongwain, Prince George's County
Carolyn Petti, ACPAC Chair
Robin Snyder, General Services Administration
Kathy Magruder, Maryland Clean Energy Center
Mark Busciano, Casey Trees
Nicole Steele, Alliance to Save Energy
Melissa Adams, Washington Gas
Larisa Dobriansky, Global Energy Network
Jeff Platenberg, Loudoun County Schools
Jim Barrett, Applied Solutions

Others Present

Nicole Macon, Capital News Service
Kate Ryan, WTOP

Staff

Julia Allman, COG DEP
Leah Boggs, COG DEP
Amanda Campbell, COG DEP
Stuart Freudberg, COG DEP
Jeff King, COG DEP
Joan Rohlfs, COG DEP

1. Call to Order

Mr. Berliner welcomed and thanked CEEPC's new stakeholder members: David Hunter, EPRI; Chris O'Brien, Director of Sustainability at American University; John Andreoni, Institute for Market Transformation; Kara Reeve, National Wildlife Federation; Layton Golding, Cooper Carry; and Terry Daly, Maryland Clean Energy Center.

Mr. Berliner thanked Mr. Fisetto for his service to CEEPC from the initiation of the committee and presented him with a plaque.

2. Approval of Meeting Summary and Agenda Changes

The meeting summary for the November 28, 2012 meeting was approved with no changes.

One item was added to the agenda. Item 6 will include a discussion of committee priorities and meeting schedule. Ms. Rohlfs also solicited volunteers for the Advocacy committee.

3. Utility 2.0 Program Recommendations

Mr. Berliner provided opening remarks for the panel. Utility 2.0 is about the future of our electricity grid. The grid is antiquated and not particularly reliable. Pepco has announced that it will invest \$1 billion in strengthening the system, and hopefully that money will go toward the energy future we will talk about today.

Some of the leading experts in grid modernization will talk about what the new grid will look like. It will be resilient, greener, more driven by consumer choice, more reliable, and perhaps more decentralized. Technologies such as microgrids, renewables, solar, and backup battery power can allow communities to have power even when surrounding communities do not. In Montgomery County we have communities that have gone off the grid, and Chattanooga, Tennessee is an example of a self-healing modern grid. Hurricane Sandy and other storms have forced communities to lose power, and we must improve the grid, rather than simply rebuild it in the same way.

We'll talk about what needs to happen to get us to a modernized electricity grid.

John Jimison is the head of the Energy Future Coalition. They are creating a pilot in Maryland to demonstrate grid modernization practices.

John Kelly is from the Perfect Power Institute, will argue for a revolution in how we think about and invest in our grid, including needed changes to the regulatory system.

Ray Bourland, Vice President of Public Policy for Pepco Holdings, and Melissa Adams, Division Head for Sustainability and Business Development at Washington Gas, will provide the utility perspective on Utility 2.0 investment and opportunities.

Jeff King: *What is Utility 2.0? What challenges will we face? What will we need to change to be successful? What is your anticipation for Governor O'Malley's task force on grid resilience?*

Mr. Jimison:

- The electricity grid represents the single largest investment in our society. We have leveraged tremendous technology and expertise toward what we have now, but a transition is underway. Grid modernization will mean a transformation of technology on the customer side of the meter. It also means that distributed generation, solar rooftops, and small power sources must be integrated into the grid while preserving voltage and reliability.
- Utilities will be deploying new technology as well. Maryland is a leader in advanced metering infrastructure (AMI) installations. New monitors, controls, and automated equipment will bring about a more reliable, predictable, and manageable system. But these technologies will also potentially make the grid more vulnerable to cyber threats.
- Some challenges include protecting the region's large amount of over-ground wire. In terms of economics, how can the revenue stream match the investment needs while keeping power affordable for the consumer?
- The Energy Future Coalition has suggested to Gov. O'Malley that a pilot project is designed to demonstrate the best new technologies and regulatory and economic strategies.

Mr. Kelly:

- Local government involvement is missing from the utility grid. Utilities and local governments need to work together, share information, and coordinate activities such as putting in conduit, tree trimming, etc. Increased local government involvement could be beneficial, because governments tend to take a much longer view, as opposed to the 2-3 year objective cycles for utilities. A pilot project is critical for showing how governments, private sector, and utilities can work together.
- Grid modernization is not just about reliability and resiliency, but also about decreasing the carbon footprint and increasing the efficiency of generation sources. It is also about economic efficiency. The system wastes \$350 billion per year through reliability losses, energy waste, inefficient markets, and emission costs. Investments should be targeted at driving waste out of the system. Greater automation, load shifting, local generation, and real time pricing are ways of increasing the efficiency of the system and reducing this waste.
- Princeton University is a case study of a "perfect power oasis." The university takes advantage of trigeneration through a boiler that makes power for free and provides steam-driven cooling. They utilize various technologies to respond to price signals, including thermal storage.
- The Pecan Street Consortium is a group of companies that work on how power is delivered to customers. They focus on increased automation that will allow customers to manage their appliances remotely and have them shut off automatically when they are away.

Mr. Bourland:

- This is an exciting time to be in the utility industry. There is an incredible amount of agreement between Pepco Holdings and the other panelists about the opportunities for grid modernization.
- Advances in computers, sensors, and meters are creating opportunities to improve customer options and reliability. Pepco and BGE got a jump-start on smart meters. Planning started in 2005, and \$100m in DOE funding for smart meters and other devices has accelerated installations.
- A key to achieving Utility 2.0 is advanced communications that have open-source capabilities, so that products and services from a multitude of suppliers and vendors can be integrated.
- Pepco is involved in a number of grid modernization activities:
 - Pepco has embraced the White House's Green Button Initiative, which gives customers the ability to analyze and control their energy use in new ways.
 - Pepco's Electric Vehicle Initiative represents an exciting new technology that will necessitate updates to the utility grid. Level 2 charging draws a lot of power, and planning is needed so that transformers are protected.
 - Pepco provided panelists to Gov. O'Malley's Grid Resiliency Task Force. We think there are good recommendations coming out of the Task Force, and have a rate case pending to address some regulatory issues.

Ms. Adams:

- Washington Gas supports open, competitive energy markets, and recognizes that energy efficiency is the cleanest and cheapest source of generation in the U.S.
- Washington Gas continues to focus on readily available, clean, and efficient energy sources that reduce GHGs and customer bills.
- Direct use of natural gas should be considered when discussing grid strain, resiliency, affordability.
- The Galvin Institute has found that 60% of primary energy is lost before it reaches the consumer. When also factoring in "vampire" use, up to 90% of primary energy can be lost before it's useful to the customer. Modernizing the utility grid will help make power generation sources and uses more efficient.

DISCUSSION:

- Ms. Dobrianski commended the presentation, noting that integrating multiple technologies into the grid can achieve an array of goals. We must use system approaches to undertake grid planning. The project in Illinois that Mr. Kelly has been involved in has demonstrated how microgrids benefit not only the campus but the whole service territory by avoiding additional investment in a substation and increasing resiliency. It shows best practices in dealing with utilities, campuses, and surrounding communities.
- Ms. Cheh asked, how can local governments encourage beneficial islanding to avoid air quality impacts on degree days? How can we push beneficial islanding, and is there an ideal system size that would make this work?

- Islanding usually relies on gas or diesel generation. This isn't good for real time pricing, and there are restrictions on the amount of time that diesel can be used. It's intended for a few hours of use, but if you're looking at multi-day or multi-week islanding, you'll need other resources. Generally, bigger systems have better economics, especially with the right bundle of incentives.
- Mr. Fisette requested additional information the Green Button Initiative. He noted that in the Princeton example, district energy was a key technology. It's a focus for Crystal City and Rosslyn as well.
- Mr. Spiegel noted that public outreach is a very important aspect of this issue. In Gaithersburg, we have had issues with customers not being notified in advance about smart meter installation. They are given the choice to refuse, and may not have all the information they need. Utilities should focus on advance notification and education about the benefits of smart meters.
- Ms. Magruder noted that real time pricing seems to be critical to the success of this initiative. What will it take to be implemented?
 - Real-time pricing is a huge challenge. It takes a shift in perspective and acceptance of new technology to be receptive to the idea. Additionally, finding the right pricing is an impediment. The cost to produce electricity varies wildly between time of day and time of year. It's hard to compete against standard offer service.
- Mr. O'Brien noted that tech advancements have tremendous potential. What can be done to help change customer behavior that will complement technological changes?
 - The customer has to invest. New apps will tie utility data and efficiency programs to appliance purchases in stores (showing energy cost of various appliances) to help make better, more informed choices.

Upon the conclusion of the discussion, COG Executive Director Chuck Bean briefly addressed the committee. Mr. Bean thanked Mr. Berliner and Mr. Fisette for their service.

4. Climate & Energy Action Plan, 2013-2016: Review of Comments, Revisions, Maia Davis, COG Staff

- The proposed plan sets interim targets for reducing greenhouse gases and energy use in the Washington region. COG staff and a committee of CEEPC members worked to formulate the current list.
- COG staff is developing a summary of each item, including suggested resources and best practices from around the region.
- The 2013-2016 plan will be presented to CEEPC at the March meeting.

5. Advocacy Report, Julia Allman, COG Staff

- The Virginia General Assembly session ends on February 23.
- Some issues being considered in the Virginia legislature this session include community net metering, opening opportunities for power purchase agreements, and making changes to the Renewable Portfolio Standard.
- The COG Board has adopted a set of legislative priorities for 2013. Among them is Energy Efficiency and Productivity. COG calls for new energy efficiency financing programs to be established, for local governments to receive technical assistance for energy savings performance contracts, and for federal-local partnerships on energy projects to be explored.

6. Staff Updates

- Joan Rohlf: The committee has been given a handout on suggested meeting topics for the year. Please review and provide feedback. Ms. Gross noted that a joint meeting of the Chesapeake Bay Policy Committee and CEEPC is planned for July.
- Jeff King:
 - The solar collaborative purchase is close to issuing an RFP, and Round Two is being developed. Dominion Virginia Power has been in contact with the identified Virginia sites, and they are pursuing the possibility of including some of these sites in Dominion's solar commercial rooftop pilot project.
 - COG has been participating in a discussion with NVRC and the northern Virginia jurisdictions on developing a common greenhouse gas inventory. The next meeting of the Energy Advisory Committee will host a panel exploring best practices and lessons learned in the region.
- Jeff King: The Tree Canopy Workgroup is developing recommendations for tree canopy practices and policy. The report will be presented to CEEPC in July.
- Leah Boggs: On February 1, COG will be hosting a pre-event to the Washington Auto Show, presenting a panel on the business case for electric vehicles.
- Maia Davis: On February 20, COG will host a webinar with GSA on a new online tool for sustainable facilities.

7. Adjournment and Next Meeting Date

- The meeting was adjourned at 11:45am.
- Member feedback will be sought on scheduling the next meeting in March.