Energy Advisory Committee

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

January 17, 2013 DRAFT Meeting Highlights Held at COG Headquarters

Attendance:

Olayinka Kolawole, Chair, DDOE
Larisa Dobriansky, Global Energy Network
Jeannine Altavilla, Arlington County
John Morrill, Arlington County
Linda Welch, American Fuel Alternative
Tony Pavlo, American Fuel Alternative
Dr. Sam Hancock, Emerald Planet/Emerald Planet TV
Najib Salehi, Loudoun County
Bill Eger, City of Alexandria
Sosina Tadesse, DDOE
Emil King, DDOE
John Nelson, Wall Street Without Walls
Andy Jones, American Fuel Alternative

Staff Julia Allman

Leah Boggs Amanda Campbell Jeff King Joan Rohlfs

Overview of Energy Assurance Planning, Larisa Dobrianski, Global Energy Network

- Ms. Dobrianski gave an overview of energy assurance planning (EAP), and highlighted the connections with COG programs and regional goals.
- EAP encourages leveraging integrated planning approaches to bring about resilient, secure, and sustainable communities. It is particularly important due to aging infrastructure and increased vulnerability to extreme weather events.
- Sustainability and EAP are mutually enhancing. They both focus on integrated energy systems
 and promote a holistic approach to planning. The economic, environmental, and equity impact
 of various energy choices are considered under the EAP framework, and an accurate assessment
 of costs and benefits are required. With these tools, EAP enables city officials and key
 stakeholders to structure and fund more cost-effective energy programs.
- EAP also presents an opportunity for change by working across "silos of excellence." By
 assessing community assets and vulnerabilities, EAP can help communities make the most
 efficient use of their resources. It encourages "clustering" of uses that reduce the urban
 footprint, minimize energy consumption, and stabilize costs.

• EAP is connected to the COG agenda primarily through the proposed 2016 CEEPC Climate Action Plan. EAP can help integrate EV infrastructure, renewable energy sources, district energy/CHP, distributed generation, and microgrids, which are highlighted in the plan.

Discussion -

- What is the role of the Global Energy Network and General Microgrids in EAP?
 - Through these organizations I've had hands-on experience in EAP processes. The
 process involves interdisciplinary "crosswalks" and integration that make the best use of
 limited resources. The outcome is to not just to meet each crisis as it comes, but
 improve preventative and everyday capabilities.

DC's Energy Assurance Plan, Sosina Tadesse, DDOE

- Ms. Tadesse provided information about the update to the District's Energy Emergency Plan, which incorporates a greater emphasis on energy assurance and integration of renewables, and reflects a shifting of roles in various agencies within the DC and federal governments.
- The 2005 District Energy Emergency Plan identified DDOE as having key roles in emergency response. However, many of these roles are now taken care of by the DC Homeland Security Management Agency (DC HSEMA). An update to the emergency plan was needed in 2012 to reflect current capabilities and roles.
- DDOE now plays an information-sharing and coordinating role in emergency preparedness and response. Pepco and Washington Gas are the first responders in an energy emergency, but DDOE serves to assist them and share information with DC HSEMA.
- In addition to emergency response, the District has an increased role in promoting energy
 resiliency through ongoing activities. These activities include energy efficiency and
 conservation programs; infrastructure programs such as critical infrastructure protection, smart
 grid, and cyber security; and energy diversification through renewable energy and distributed
 generation.
- Emil King from DDOE provided an update on the Renewable Energy Incentive Program. Funding has been extended one year through the Sustainable DC Act. After one year, the program will be revamped, using non-compliance payments from the RPS to support direct incentives and other financial mechanisms to better integrate renewable energy.

Discussion:

- You work on Inauguration planning and preparatopm what is DDOE's role?
 - o We will be working with DC HSEMA, doing monitoring throughout the weekend.
- There are many organizations and agencies that could be chosen to lead the EAP effort. Why
 did it shift to the environment department, and how that will benefit the evolution of EAP over
 time?
 - Even though we're named as a lead in the ESF-12, we don't have the power to direct Pepco, and other utilities. We ask them for info that's needed and share with homeland security.
 - That said, I don't know how the decision came about, but responsibility has shifted a lot.
 It makes DDOE have info sharing role instead of operations.

- It could beneficial because you're linking info sharing with sustainability efforts. It could show how sustainability must evolve- for example integrating too many variable renewable energy resources could impact resiliency and reliability. You could also impact how new technologies are integrated over time.
- What are the interesting lead agencies you've seen? (Directed to Ms. Dobrianski)
 - Economic development offices can assess deficiencies and capital requirements. It was
 felt that they could best work with jurisdictions on investment plans. This selection can
 also mitigate controversy/turf protection, and many localities have done it this way.
 - o Traditionally, emergency management heads EAP efforts. But it became clear that emergency management was often not up to date on the use of new technology they are focused on refining traditional approaches, but did not strive for integrated planning that incorporated sustainability.
 - (Ronda Mosley) My immediate thought was that it should fall to the environment or energy division. There's such an important energy component, that it must be integrated. It's about a team planning process – give everyone a voice.

Energy Assurance Support for Local Governments, Ronda Mosely and Steve Foute, Public Technology Institute

- The presentation began with a video produced by the Department of Energy on the value of local energy assurance planning (LEAP). It can be viewed here: http://www.energyassurance.us/video
- Ms. Mosely and Mr. Foute spoke about PTI's LEAP planning framework and the resources that are available for local governments to assist them in undertaking LEAP efforts. All resources are available free of charge.
- PTI is a member-based organization, created by local government organizations. PTI received two grants from DOE since 2005 to create EAP resources. More recently there has been a focus on EAP for local governments, and ARRA funding was provided to develop resource in this area.
- 43 cities received ARRA grants to develop EAPs. 41 have completed their plans, and two are still
 in the process. These plans included state, regional, and city-to-city excercises that created a
 strong network of contacts across government and utilities. Currently, PTI is working with 50
 local governments across California to further develop LEAP resources. An similar project will be
 undertaken in South Carolina.
- The goal of energy assurance is to ensure that key assets will function during an energy emergency. It requires that key assets are identified, and that goals and processes are formed to ensure that these assets will function. Questions inclue: How long will outages last? Where are emergency resources such as shelters, food, water police, fire, traffic signals, etc.?
- EAP must take an "All-Hazards Approach" that includes consideration of both man-made and natural disasters. The EAP can be a stand-alone plan or can be a part of a climate action plan or energy emergency plan.
- There is more than one way to create EAPs, but PTI has developed a model to guide local governments.
 - o Forming a Team:
 - Identify an EAP working group which includes those who will be significantly affected by loss of power. Most stakeholders include: Emergency managers,

general services, communications, 911, police and power utilities. Others might include IT services, procurement offices, churches, hospitals, and emergency shelters. Councils of Governments, state energy offices; public service commissions, regional government leaders, and the private sector are also important players.

- Developing the EAP:
 - Build a community energy profile that considers energy supply, use/demand/consumption and energy infrastructure for delivery in area.
 - Indentify key assets what is critical to maintaining health, safety, welfare, and econ vitality of community?
 - Identify gaps in energy assurance manmade threats, natural disasters, and possible system failures
 - Assessing manmade threats, nat disasters, and poss system failures (eg transformer
- o Finalize and implement the EAP.
- PTI has a number of resources available, including websites, books, and guidance documents.

Utility Data Analysis, Julia Allman, COG DEP

- Ms. Allman provided an overview of data reflecting regional energy consumption since 2005.
- COG conducts an annual data request for electricity and natural gas consumption from the region's utilities. This information is used to conduct periodic greenhouse gas inventories and to indicate gains in energy efficiency over time.
- Electricity consumption has increased 6% between 2011 and 2005, with use by sector remaining roughly proportional. One half of electricity use comes from the commercial/industrial sector, a third from residential, and one-sixth from government. Over that same period, natural gas consumption decreased 6%.
- Some notable factors impacting energy use across the region include the closing of a large industrial facility in Frederick County, which drove down utility consumption in that jurisdiction, and population growth and increasing numbers of data centers driving electricity consumption in Loudoun County and Manassas.
- Despite an overall increase in electricity consumption in the region, electricity is becoming less carbon-intensive, and the region is making efficiency gains in the residential sector. Grid-connected renewables have tripled between 2005 and 2011.

Northern Virginia Greenhouse Gas Inventory, Steve Walz, NVRC

- Mr. Walz provided an update on discussions about conducting an integrated greenhouse gas inventory (GHGi) for northern Virginia jurisdictions.
- Several Northern Virginia jurisdictions are in some stage of GHG assessment at this time.
 Arlington is gearing up for an inventory, Alexandria's is scheduled for Q1 or Q2 of this year, and Fairfax City is in the process of conducting one. All have indicated a desire for more consistency in the approach. This would encourage a more integrated understanding of GHG emission trends and help tie into broader COG/CEEPC climate work.
- Different methodologies have been used in the past, and it's of interest to look into whether a single methodology will work for everyone.

Any COG member jurisdictions are invited to get in touch if they are interested in joining the
effort. Steve Walz can be reached at swalz@novaregion.org, 703-642-4628.

Discussion -

- John Morrill, Arlington, provided an update. They are currently in negotiations with a consultant (SAIC) on methodology and approach. They are inclined to use ICLEI protocol, but because the community protocol is different in how it treats transportation (VMT per roadway versus the car's "home"), they are doing both so they can to compare. There has been an inquiry about whether the COG rider could be added to the contract with the consultant.
- SAIC is also working with PG and Montgomery counties
- COG can talk to procurement folks as well.
- COG has considered holding a GHG inventory workshop may work with ICLEI.

Update on Climate Action Plan and Surveys, Maia Davis, COG DEP

- COG staff received a number of comments on the proposed 2013-2106 climate action plan.
 Comments included increasing certain percentage goals and requesting flexibility for smaller jurisdictions.
- The goal pertaining to building energy tracking has been modified to separate tracking, benchmarking, and disclosure into discrete goals.
- For every action in the plan, we'll supply links, resources, and/or examples. Would like to include as many local examples as we can, so please provide info in comments section of survey.
- I will be presenting changes to CEEPC; then there will be a vote to adopt in March, after survey results have been collected.
- Local Government surveys are due by February 15th

Roundtable

- Said Said, Prince William County It would be helpful to put phone numbers and email contacts for presenters on the agenda.
- Lisa Orr, Frederick County We are moving ahead with Solarize Frederick County volume purchasing program, and have selected 2 communities for special outreach. Moving through RFP process.
- John Nelson, Wall Street Without Walls We have been working with COG on energy finance.
 American Fuel Alternative (AFA) is an alt fuel company to help increase CNG distribution in fleets and taxis.
- Linda, AFA We are converting vehicles to run on biofuels, also providing CNG and high speed electric chargers. We're exploring becoming emergency-prepared stations- micro-turbines and other technology to supply busses, taxis, and emergency response vehicles. How can we work with the County to become part of the emergency preparedness process.
- Leah Boggs, COG I have been working on alternative fuel vehicles and EV infrastructure. An initiative was started last year to look at EVs, led by local governments. Phase II is looking at business case development. On February 1 we will hold a pre-event to the Washington Auto Show titled the Business Case for EVs. In other news, EAC and IGBG will be merging this year. IGBG has been around for 6-7 years, focusing on green building. Now that that technology/policy has been explored, there are more aligned interests between the groups.
- Dr. Sam Hancock I work on television programs which are broadcast every Sunday. I'm looking for best practices within the COG region cities, counties, private businesses. Have had 700

- guests, 600 organizations in 4 years, about to go to 3 hours a week. Much more bandwidth to get information out there. <u>Www.emerald-planet.org</u> for more info.
- John Morrill We are finalizing the Arlington community energy plan. It includes three pillars GHG reduction, energy resiliency, and economic development. I want to echo the importance of relationship building. Emergency response and Management teams working with utilities and private sector will be very useful when we address emergencies as well as economic development and sustainability. We don't have an EAP yet, just ESF operating procedures, but in the context of the energy plan, these pillars are becoming more connected.
- Jeff King, COG COG was approached by Optony to solicit applications from local governments for a solar challenge round 2. We are looking for letters of support from COG jurisdictions by Jan 25th. We are getting closer to wrapping up Round 1 of the Solar Collaborative Procurement and issuing an RFP. Starting to focus on round 2, to align the roject. Need to get involved with Dominion to see if we can move VA identified projects into the solar pilot. At CEEPC this month we'll have a panel on "Utility 2.0" to discuss grid modernization.

Adjournment and Next Meeting Date

The next meeting will be held on February 21.