

**Energy Advisory Committee**  
Washington Metropolitan Council of Governments  
777 North Capitol Street, NE, Washington, DC

**November 17, 2011 DRAFT Meeting Highlights**

**Attendance:**

***Olayinka Kolawole, DDOE\****

Kent Peterson, Washington Gas Energy Services

Jim Sterling, City of Greenbelt

Said Said, Prince William County

Sosina Tadesse, DDOE

Tom Cesky, USS

Donna Cooper, Pepco

Rob Stewart, Pepco

Robert Davis, TransBio Energy

Heather Jennings, Dominion

Patricia Lovelady, Energy Consultant for District of Columbia

Jeff Bond, Prince George's County

Bill Eger, City of Alexandria

Tom Savoie, MWCOG

Jeff King, MWCOG

Leah Boggs, MWCOG

Joan Rohlf, MWCOG

Jeannine Altavilla, MWCOG

Phone:

Luisa Robles, City of Greenbelt

Lisa Orr, Frederick County

Najib Salehi, Loudoun County

Eric Coffman, Montgomery County

Phil Butterfass, Loudoun County

***\*Committee Chair***

**Call to Order (Olayinka Kolawole)**

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

## **Approval of October 20, 2011 Meeting Summary (Olayinka Kolawole)**

- Summary from October meeting approved with no changes.

## **Reverse Auction for Natural Gas (Tom Savoie, COG and Patricia Lovelady, Consultant for District of Columbia)**

- The District led a reverse auction for natural gas at COG in 2007. The contract is set to expire in December of 2012 and the District has agreed to do the auction again.
  - Michael Yambrach of the District and Patricia Lovelady, their consultant, are working on plans for an auction in 2012.
  - COG's Chief Purchasing Officers Committee is ready and willing to help.
- DC is currently reorganizing and may not be able to put out the solicitation in January, but likely would organize it in the first few months of 2012.
  - Some are worried about delaying the auction with such good prices now.
  - Another jurisdiction could lead an auction now. That would not preclude the District from holding another auction at a later point.
- In 2007 pricing was secured at about 8 or 9 cents per therm. Markets are now running at about 6 or 7 cents per therm.
- In 2007 two vendors received contracts (due to different utilities across the region). Pepco Energy Services and Washington Gas each won part.
  - The contracts from the reverse auction were locked in for the base of the price. The rest of the price was locked in by each jurisdiction participating at the time of their choosing based on NYMEX trading.
- If the prices received at auction are not attractive there is no requirement to take them
- Ms. Lovelady's contract can be used by any COG jurisdiction. The fee will go into the gas price, just like the auctioneer, so there is not a separate purchase order required.
- Work for the lead county? There is not much work. The consultant will work with all participating jurisdictions to coordinate the RFP for the auction, ensuring all needs are included. The County's legal department must approve the RFP.
- Viewers watched the auction in the COG Board Room in 2007. It might be possible to have "viewer only" mode on the online auction to allow others to observe remotely.
- Prices today are lower than when they were locked in for this contract. The future price depends on many variables, so it is not possible to say whether or not the price will change a few months from now.
- The contract length is variable. Due to the price fluctuation of natural gas, it would likely be between one and three years, with two one-year extension options. The current contract is three years with two one-year extensions.

**Utility Updates: Smart Meter Roll Out** (Heather Jennings, Dominion Power and Rob Stewart, PEPCO Holdings, Inc.)

- Pepco
  - Began planning for smart grid in 2005. Received a \$173.5 million grant in 2009 for installations in Maryland, the District and New Jersey, as well as training. Received approval from the DC PSC for installation of the AMI in 2009 and in 2010 from the MD PSC. 74% of the meters are installed in DC and work will be completed by the end of the year. 6% of the meters are installed in Maryland and work will be completed in 2012.
  - AMIs are one of the first steps to achieving an optimized smart grid.
  - Analog substations are being transitioned to digital substations that can relay more information automatically.
  - A program for feeder automation has allowed faults caused by feeder lock-outs to restore power for most customers affected in less than one minute.
  - AMI allows over-the-air meter reads, remote disconnect and reconnect, outage detection and notification, and detailed web usage data. AMI will help improve information for net metering.
  - Pepco is working on EV integration. Staff are currently testing ten Chevy Volts.
  - In 2012 Pepco will launch interval billing and dynamic pricing, including a critical peak rebate.
  - Customer adoption and participation in these programs will be key for success.
- Dominion
  - Dominion currently has smart meter demonstration projects in Richmond, Charlottesville, and in Northern Virginia in Alexandria, Arlington, Falls Church, and Fairfax County. A second technology is being deployed in Richmond, Blue Ridge, and Williamsburg.
  - In addition to AMI benefits mentioned by Pepco, the meters will allow flexible billing dates and will reduce the company vehicle and fuel costs.
  - Studying voltage ranges for needs and accuracy. This could save power generation in central plants.
  - Running a voluntary pilot of a smart pricing plan for those with AMIs.
  - Have a pilot program with two pricing options for EVs.
  - Difference in rates with the EV pilot?
    - Standard rate is usually ten to eleven cents. Not sure of exact numbers, but the time-of-use rate is about eight cents for off-peak and about 45 cents for peak use.

- Dominion will install the additional meter for EV only time-of-use, but cost for any necessary upgrades on the house may be shared depending on the upgrades required.
- Security
  - Both utilities are following standards and keeping up to date on the issues. Pepco is pushing vendors to standards more similar to cyber security than what utilities generally require. 3<sup>rd</sup> party testing is reviewing the system.
  - Customer privacy is also a concern
- Is smart grid being deployed globally?
  - More developed countries are working on smart grids.
  - Pepco is partnering with IBM which gives them access to information from global partners on EV, renewables and AMI. Europe operates on different voltages, so all of the information is not a direct comparison, but is still useful.
- Is a second meter for the EV a code violation?
  - Not sure. Will have to research and get back to you.

**Critical Infrastructure Planning: Back-up Power for Hospitals Project** (Heidi Bonnaffon, COG)

- Using \$1.7million UASI 2009 funds for a project to help continue hospital critical functions for up to 96 hours during interruptions of utility water or power, reduce the risk of evacuations, and speed up response and recovery.
- Assessments were conducted in Maryland and the District. Virginia had funds to do assessments themselves. Partners on the project are COG, the DC Hospital Association, the Suburban Maryland Hospital Association and HDR Engineering, Inc.
- The Phase I analysis was completed in September 2011. Phase II is designing and implementing projects, which should be completed by April 2012.
- Analyses found major vulnerabilities in power and water supply. Needs were often not reconsidered during expansions. Estimated costs for all hospital power needs totaled \$9,117,000 and water needs totaled \$1,769,000. To make the funds go further, the design and implementation phase will focus only on water needs.
- Main recommendations: keep a bottled water reserve, establish emergency water connections, create a portable bladder tank system, and contract with potable water suppliers for emergencies. Regional coordination will help with the bottled water and tanker truck supplies. The group will seek additional funds for power improvements.
- A separate COG project is working with the US Army 249<sup>th</sup> Prime Power BN to assess backup power needs of other critical infrastructure in the NCR. Steve Bieber could present information on that project to this committee.

### **MaxR 100 Performance Test Results Update** (Najib Salehi, Loudoun County and Bob Davis, Trans Bio Energy)

- MaxR 100 is added to HVAC systems to increase unit efficiency and extend unit life. It can see return on investment in as little as one cooling season. It works for heating and cooling but gives more results in cooling. It works in new and old units, improving efficiency and maintaining unit efficiency.
- Loudoun uses MaxR 100 at the Lovettsville Community Center. It is a coating, not an additive. Loudoun saw 19% energy savings in the test period. In 2010 savings were 24% and in 2011 they were 15%.
- MaxR 100 can be added to chillers, freezers and refrigeration, also. The average price is \$100 per ton, but it depends on the equipment.

### **Community Energy Solutions Report and Workshop** (Jeff King, COG)

- Last year COG formed a taskforce with energy managers and industry experts to study applications of combined heat and power (CHP) and district energy (DE) in the region.
- Mark Spurr of FVB Energy was hired for two tasks: conduct a gap analysis examining the existing laws and regulations and potential improvements; conduct a business case analysis for typical systems
- The reports are being finalized based on comments received. Mark presented findings to CEEPC in July and yesterday he provided a virtual tour and review of the business case in a workshop
- There is interest in DE in Loudoun County as well as Crystal City in the region. Crystal City could be a great candidate because there is one property owner that owns a large amount of the land. They have hired Burns and McDowell to do a study of the area
- The most likely short term outlook would be a small-scale system with two or three buildings connected
- Existing systems in the region are on military bases and campuses. It could be possible to go beyond these borders and extend the systems into the surrounding community. The Convention Center was designed for this, but we're not sure if anyone is using it.
- The final report and slides from yesterday's workshop will be made available. It is likely that COG will have to distill the report further into a few key points.

### **Roundtable Exchange**

- Jeff recently went to China to present at a US/China New Energy Cities Summit. China has aggressive goals, and Jeff, as well as Emil King from DDOE and a couple other US representatives, attended the conference to speak to what their organizations are doing. Interest in the US in new high voltage transmission was mentioned.

- Most of the onsite feasibility assessments for the regional cooperative solar purchase have been completed. Now firm commitments are needed. Hopefully this could be a robust network; if all commit to installing it would be greater than 20 MW.
- Prince William County- a new small solar installation started producing electricity on November 1 on one County building.
- Frederick County- Progress on the solar thermal project through an EECBG grant and moving forward with the Green Homes Challenge.
- Loudoun County- the cogeneration study is being finalized and updates will be provided.
- Montgomery County- wrapping up the Commercial and Multi-Family Study. A final version should be available in February.

#### **Next Meeting Date and Adjournment**

- Meeting adjourned 12:00pm.
- Next planning conference call is December 1<sup>st</sup> at 10am.
- Next meeting is December 15<sup>th</sup> at 10am.