Energy Advisory Committee

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

July 21, 2011 DRAFT EAC Meeting Highlights

Attendance:

Olayinka Kolawole, DDOE Jeffrey Bond, Prince George's County Bill Updike, DDOE Najib Salehi, Loudoun County Bill Eger, Alexandria Annette Osso, VSBN/USGBC Steve Walz, NVRC Debra Jacobson, George Washington University Law School Bill Topper, US Army William Bennett, Energesco Solution Walid Daniel, VA DMME Stuart Freudberg, MWCOG Joan Rohlfs, MWCOG Leah Boggs, MWCOG Jeff King, MWCOG Jeannine Altavilla, MWCOG Amanda Campbell, MWCOG Sarah Cosby, Dominion (via conference call) Lisa Orr, Frederick County (via conference call) Mark Spurr, FVB Energy (via conference call)

Call to Order (Olayinka Kolawole)

The meeting was called to order at 10:00am.

Approval of June 16, 2011 Meeting Summary (Olayinka Kolawole)

• The minutes from the June 16, 2011 meeting were approved with no changes.

FVB Energy Update on COG Community Energy Planning Project (Jeff King and FVB Energy)

- Opportunity Assessment
 - Fulfill thermal loads using spare energy
 - How to intersect with key infrastructure

- o Convene stakeholders- key challenge
- Not used to working together. How to cooperate better.
- RFP in Crystal City- high priority area. Technology, economics, financings questions.
- Need public sector champions
 - Model franchise agreement
 - City role deferring franchise fee repayment
 - Coordinate and streamline policies
 - Number of departments
 - Local government role- our operate finance?
 - Temporary tax relief if connected to system
 - Lead by example- connect government
 - Zoning strategies provide customer base and facilities
- Density is good
- Standards and recommendations design buildings compatible
- o Require developers demonstration: chicken/egg
- Building labels for energy efficiency
- 2nd task: cost/benefit/business case
 - o Economics are site specific
 - o Implementation challenges
 - o Structure for ownership
 - Will focus mainly on new systems
 - o Will address legacy systems- each unique
 - Steve Walz- McGuire Woods examining legal issues: authority, legal structure, govern/business models, before SCC rates
 - Will hold training sessions for staff and officials
 - Greenfield vs. greyfield- issues in greyfield
 - Characterizing economics difficult to generalize
 - o Bill Eger- business case heating and cooling? BOTH.
- Example: St. Paul system- 30 years ago was coal fired, 70% coal, 30% oil/gas
 - Mayor understood and provided flexibility in the future
 - Growth in the system represented an opportunity to change fuels
 - Last 6 years added 25MW electric CHP using urban waste wood pallets
 - Sell 25 to power, use some in house
 - o District hot water and cooling with the electric chillers.
 - Own staffing infrastructure to procure fuel
 - o Solar 1 MW solar thermal 3.4 million Btu/hr, getting closer to 1.5

- Low-temp hot water. Didn't need CSP. Needed grant funding. 1st solar feeding district energy in the US. Danes doing more of this, also others in Europe
- Najib- cost to upgrade system CHP? \$80 million. Payback- ROI economic proposition, financing complicated. DE St. Paul- private nonprofit- no equity Synergy- tax appetite; it did pencil from ROI standpoint
- Get decent power price from Exel Energy- Minnesota State Legislature deal to expand nuclear fuel storage
- Special economic driver
- o Better power purchase rate- >6 cents/kwh?

Benefits of Demand Response (DR) Programs (Leah Boggs and Walid Daniel)

- Presentation moved to end of meeting. Steve Walz began the presentation until Walid Daniel arrived.
- Virginia has a contract with Energy Connect
 - o The state received approximately \$3.5 million in 2010 from the DR program
- PJM has a minimum amount to bid in. need aggregators and business infrastructure, computer/monitoring
- PJM was already advanced before FERC Order 745
- Did receive LMP (locational marginal price) minus retail, now full LMP prove providing balance, with a net benefit test
- Debate about whether prices are appropriate
- We are in an area with a higher LMP
- PJM paid approximately \$107 million in 2009 for DR programs
- No cost to local government
- All can use contract. No cost. State \$3.5 million revisions last year. 100 accounts
- Flex connect program: shed load, get paid
- Capacity program vs. voluntary = this year vs. last year
- \$64K vs. \$40 k/MW June 1- Sept 30, next year \$7k/MW
 - Was based on 07/08 price when economy was booming, also natural gas prices decreased
- Minimum load in facility at least 100 kW required
- Energy Connect bought by Johnson Controls
- CR- flex connect- can shed throughout year

Utility Data Update (Jeannine Altavilla)

 COG collected energy use data from eight regional utilities. All provided usage and accounts; some also provided information on renewable energy purchases, advance

- metering, and pricing options. Three of these utilities provided natural gas information and six provided electric use information.
- Trends in natural gas use for 2005, 2009, and 2010 are shown. Overall there is not much change, but there is large growth in Loudoun County in all sectors except group metered apartments and large growth in Fairfax City residential use.
- Trends in natural gas accounts for 2009 and 2010 are shown; no notable change
- Does this represent the direct purchase of natural gas or gas delivery
 - o GMU buys natural gas but the utility carries it
- Trends in electric use for 2005, 2009, and 2010 are shown in the chart. There was a large drop in industrial use in Frederick County since 2005 and large growth in Loudoun County in all sectors. NOVEC territory saw large government growth. Overall use was relatively steady by state in Maryland and the District, and saw growth in Virginia.
 - Lisa Orr- Frederick County's closed aluminum facility likely responsible for drop
 - Virginia required a clean-up of accounts- many government accounts were previously mislabeled as private
- Trends in electric accounts for 2009 and 2010 are shown; overall accounts were steady
- Ms. Cosby asked for the contact at Dominion.
- The region met goal of 1,000 solar roofs, with just under 10MW of solar and wind at the end of 2010. There was large growth in Fairfax, Loudoun and Montgomery Counties, the District and the Potomac Edison Region from 2009 to 2010.
- Residential Electric and Natural Gas Use per capita has dropped less than 2% since 2005 while the region saw a 6% increase in population.
- Green power sales number of accounts increased. Pepco data not available for 2010.
 - o Ms. Cosby will see if there is information on kWh of these sales.
- Smart Grid- change to "utility advanced metering"
 - Large growth in northern Virginia from 2009 to 2010
- Pricing options
 - Change title of graph to be more clear
 - NOVEC has offerings that are not noted
 - Sarah- voluntary Time of Use (TOU) rates in Dominion are older programs with static participation
 - Recently pilots for dynamic pricing rates- July 1- 1,000 residential, 1,000 commercial
 - o EV TOU pilot approved last week
 - rate for whole house or rate for EV, 750 participants in each category, effective October
- This data will be available on the SharePoint website.

COG WE CAN Program Update (Joan Rohlfs)

- The ad hoc outreach work group met on July 14 to discuss the future of the WE CAN program. The group decided to move forward with creating a sustainability selfcertification checklist program that addresses energy as well as other sustainability categories. The next meeting is planned for August 17.
- Steve Walz- drive to other programs, ie MD home performance with Energy Star

Responsible Purchasing Network (RPN) Membership (Amanda Campbell)

- The Responsible Purchasing Network has presented COG with an opportunity to receive membership for all of its local government members at a reduced rate.
- COG would pay the dues for all members for this two year deal and then would evaluate the usefulness of the membership.
- Bill Eger- Has this been presented to purchasing officers? Is green procurement on the annual survey?
 - o Look at DC- have they developed a policy?
 - Where are they gaining value from RPN? Same information from EPA?
 - What is that value they've gained?
 - o Procurement officers go to DEP for information on certain regional contracts
 - This is a question on the annual survey
- Would come out of COG dues already collected
- Loudoun will look into this

Update on New Generation Biofuels Presentation

- Cordell Martin presented in June
 - o NGB is offering a cost-neutral option- looking for a pilot in the DC region
 - o Interest from DC, Loudoun and Frederick; held focus meetings
 - Frederick didn't have enough use to participate
 - Loudoun participates in DR program. Can't run generators when it's in effect, but could continue use if this fuel was use
 - New Generation is in negotiations with another company that may change the price neutral policy

Roundtable Exchange

- Solar PV Workshop- October 6 COG will hold a solar workshop with NARC through their Solar America Communities Outreach grant. See draft agenda in the materials, there may also be a vendor forum.
- Solar Challenge Grant- states decided that it was better for them to go forward individually due to how DOE set regions

- Dale Medearis at NVRC is leading the effort in Virginia; Olayinka Kolawole is leading the project in DC
- o Reference the COG initiative to help applications
- o If they make it to phase 2 of this grant, DDOE will facilitate regional collaboration
- Jeff attended the EV Conference in Raleigh, NC
- COG submitted the EV Infrastructure planning grant application in June
- Home Performance with Energy Star in Northern Virginia will now have an official sponsor. NVRC is working with them to grow the program. It will be transitioning to this new sponsor until October 1.
- Ms. Osso is working with the formation of the Virginia Energy Efficiency Council. If it evolves as planned it will be a lobbying platform.
- Loudoun County:
 - 5 electric vehicle stations and 21 solar LED lights will be completed in 2 weeks using EECBG funds
 - o The Moorefield station community energy study is underway
 - o CoGen is conducting a study for government facilities in the County
 - o An outreach program, funded by EECBG, is under development
- Alexandria: The Council approved the Climate Action Plan on May 14.

Next Meeting Date and Adjournment

• The next meeting will be September 15th at 10am. There will be a conference call on September 1st at 10am to set the agenda.