



BUILT ENVIRONMENT AND ENERGY ADVISORY COMMITTEE (BEEAC)

Final Webinar Meeting Summary: November 16, 2023

BEEAC Local and State Government Members in Attendance:

- Dawn Ashbacher, Frederick County (BEEAC Chair)
- Mati Bazurto, City of Bowie, MD
- Brian Booher, Montgomery County
- Amanda Campbell, City of Rockville
- Chloe Delhomme, City of Manassas
- Bill Eger, Arlington County
- Dory Estrada, City of Takoma Park
- Beth Groth, Charles County
- Andy Young, City of Falls Church
- Anna Bower, WMATA
- Bettina Bergoo, Virginia Energy
- Casey Studhalter, DOEE
- Chris Taylor, PEPCO
- Courtney Chinn, Arlington County
- Dawn Hawkins-Nixon, Prince George's County
- Debra Maes, Fairfax County Public Schools
- Dory Estrada, Takoma Park
- Elliot Harkavy, CAN
- Emily Nachbar, Arlington County
- Hadja Doumbouya, Virginia Energy
- Jeremy Good, Montgomery County
- Joe Gorney, Fairfax County
- John Sheridan, Office of Jolene Ivey
- Kate Roetzer, WMATA
- Kate Tanabe, DOEE

- Kathie Hoekstra, City of Alexandria
- Lewis Morgante, Montgomery County
- Luisa Robles, City of Greenbelt
- Marc Aveni, Loudoun County
- Matthew Meyers, Fairfax County
- Sharath Reredy, City of Alexandria
- Shawn O'Neill, Fairfax County
- Sosina Tedesse, DOEE
- Stand Edwards, Montgomery County
- Will Ellis, PEPCO
- Will McNamara, CISA

Additional Attendees:

- Timothy Burdis, PJM
- Lori Murphy Lee, PJM
- Kevin Carbonnier, New Buildings Institute
- Deb Harris, ICF
- Susan Elliott, ICF

COG Staff:

- Leah Boggs, COG DEP
- Alissa Boggs, COG DEP
- Kelsey Boatwright, COG DEP
- Robert Christopher, COG DEP
- Jeff King, COG DEP
- Tim Masters, COG DEP



1. CALL TO ORDER AND INTRODUCTIONS

Dawn Ashbacher, Frederick County Climate and Energy Manager

Chair Ashbacher introduced herself and the agenda for the day. New Chair and Vice Chair introduced to committee.

2. APPROVAL OF THE SEPTEMBER 20, 2023 MEETING SUMMARY

Dawn Ashbacher, BEEAC Chair

Meeting summary for September 21, 2023 approved.

3. JURISDICTION ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT (EECBG) UPDATES AND ROUNDTABLE PEER EXCHANGE

BEEAC Committee Members

Updates provided by localities on EECBG status:

Loudoun County: Using funds to begin implementation of their board approved energy strategy. Also using funds to develop an energy equity plan, as well as using funds to undertake energy audits for municipal buildings to improve efficiency.

Arlington County: Currently developing a list of priorities based on the available funding.

City of Manassas: Utilizing funds to purchase electric vehicles for the city fleet.

City of Bowie: Using funds for energy audits and for consultant support in developing an energy plan for the city.

City of Rockville: Rockville is exploring working with Montgomery County on the LMI energy efficiency program. It is probable that they will do something else that is simpler to the County's program.

Prince George's County: Pursuing community solar incentives as well as benchmarking and energy audits.

Frederick County: Funds are being used for environmental justice outreach as well as low to moderate income energy efficient appliance rebates.

4. EPA CLIMATE POLLUTION REDUCTION GRANT (CPRG) UPDATE

Jeff King, Director, COG Climate, Energy and Air Programs
Susan Elliot, ICF

Update provided on the status of CPRG process:

The discussion focuses on a multi-year initiative involving a comprehensive climate action plan, with an immediate goal of developing a priority climate action plan by March 1, 2024. This initiative aligns with an Environmental Protection Agency (EPA) funding opportunity announced on September 20th, providing implementation funding for regional and jurisdictional projects within the plan. The total

funding is significant, with \$4.3 billion for states and additional funds for tribal entities. The plan's completion and proposal submission by April 1, 2024, are critical for accessing these funds.

For implementation grants, projects must implement greenhouse gas reduction policies or enhance carbon removal, benefiting low-income and disadvantaged communities. These grants can fund new or existing projects, requiring applicants to justify the need for EPA funding over other sources. The EPA has structured the funding into five tiers, with varying grant sizes and numbers, and is open to direct applications and coalitions.

Evaluation criteria for grants include greenhouse gas reduction impacts, with emphasis on reductions before 2030, cost-effectiveness, and overall project scope. Entities can submit only a limited number of applications, encouraging diverse geographic coverage and avoiding duplicate funding for the same measure in the same location.

The PCAP (Priority Climate Action Plan) measures should align with project proposals, focusing on reducing emissions between 2025 and 2030, and demonstrating funding gaps. The plan must integrate already identified greenhouse gas reduction strategies, prioritize cost-effective measures, and ensure the authority for implementation.

5. GRID SERIES PART TWO: ENERGY TRANSITION, BUILDING INTEGRATION, AND THE FUTURE OF THE ELECTRIC GRID

Timothy Burdis, PJM

Kevin Carbonnier, New Buildings Institute

Tim Burnett, who oversees state policy solutions at PJM, focusing on integrating state energy policies with PJM processes, presented on behalf of PJM. He introduced his colleague, Lori Murphy Lee, who handles regulatory affairs in DC, Virginia, and other PJM states. His presentation had three parts: an overview of PJM, industry changes and PJM's responses, and proactive steps for future changes. He emphasized PJM's role as a regional transmission organization, managing electricity grid reliability and wholesale markets across several states. PJM's strategy, set in 2021, aims to facilitate state and federal decarbonization policies and support the energy transition. Burnett discussed the varying state energy policies within PJM's jurisdiction, highlighting the diverse goals and challenges. PJM expects significant retirements of fossil fuel-based generation, replaced increasingly by renewable resources. However, challenges include low commercial operation rates for new resources and slow resource build-up due to supply chain and financial issues. He also noted the difference in planning for intermittent renewable resources compared to thermal resources like coal and natural gas.

PJM's demand-side management includes programs like demand response and considers factors like behind-the-meter solar facilities and electric vehicle (EV) adoption in its forecasts. They are adapting to FERC order 2222, allowing distributed energy resources to participate in PJM markets. Finally, Burnett highlighted PJM's long-term transmission planning efforts, considering various policies and programs impacting demand and supply. He encouraged audience feedback to enhance PJM's planning and concluded by emphasizing the importance of robust information gathering for effective long-term planning.

Q and A:

Question 1: How does PJM forecast behind-the-meter solar?

Answer: PJM uses data from PJM Environmental Information Services, the renewable energy credit producer for many Mid-Atlantic states, to gauge behind-the-meter solar registered in state programs. They also consider state policies, grid parity, lowering costs of solar panels, and rebates. This helps predict adoption and distinguish between local distribution grid and wholesale solar.

Question 2: How does PJM handle data center load growth?

Answer: PJM's load analysis subcommittee includes data center load forecasts. They work closely with utilities and data center owners (about 30) to understand their location plans and future growth. This collaboration helps PJM anticipate where data center load growth will occur on the system.

Question 3: Is PJM considering the impact of hydrogen hubs like those in Pennsylvania and Ohio?

Answer: PJM is monitoring hydrogen developments but finds it premature for planning purposes. They are considering if hydrogen processing will drive demand similar to data centers. Hydrogen's potential as a megawatt producer will be factored through PJM's queuing process.

Question 4: How will resources aggregated under FERC Order 2222 bid in PJM markets?

Answer: Aggregated resources can bid in PJM markets if they reduce demand or inject energy. However, they must not overlap with wholesale or retail offerings or receive net energy metering payments while bidding in PJM's energy market. PJM aims to allow a middleman or aggregator to manage bids from individuals with distributed energy resources.

Question 5: How do time-of-use rates impact PJM's planning?

Answer: Time-of-use rates are seen as beneficial for signaling optimal actions on the distribution system versus the wholesale system's requirements. These rates help align usage with system demands and availability.

Question 6: How is PJM planning for the intermittency of solar power?

Answer: PJM plans by ensuring the resource portfolio can meet demand even during low solar output periods. They accredit solar power conservatively to avoid overcommitting intermittent resources. There is a possibility of paying standby units (like thermal generators) to be available when needed, which might impact energy rates.

Kevin Carbonnier, a senior technical associate at the New Buildings Institute (NBI), presented on the building aspect of energy management and grid integration. NBI is a nonprofit organization based in Portland, Oregon, focusing on creating a built environment that equitably delivers community benefits and climate solutions. Kevin emphasized NBI's role in advancing best practices, codes, and policies for a climate-friendly built environment.

His presentation focused on building-grid integration, where he discussed how buildings can manage their energy demand to support the grid. This includes using more energy when abundant solar power is available or participating in demand response programs for load reduction or shifting. Kevin introduced NBI's Grid Optimal Buildings Initiative, launched in 2018 with the US Green Building Council, to develop metrics quantifying the relationship between buildings and the grid. This initiative has produced several resources, including a white paper, design guidance, a LEED credit for grid-friendly buildings, utility program guidance, and codes and standards developments.

He also showcased a tool developed by NBI to evaluate buildings in terms of their grid-friendliness, such as their ability to manage energy demand actively. This tool can help design and operate facilities to optimize time-of-use rates and provide value to the building owner and the utility. Kevin used an example of a typical commercial office building to explain load shifting, an essential strategy for making buildings more grid-friendly. This involves using smart technologies like thermostats and batteries to reduce energy demand during peak times and increase it during off-peak times. Such strategies and the integration of solar and storage solutions can lower peak demand and reduce the overall carbon footprint.

The presentation demonstrated the NBI tool for evaluating buildings' grid-friendliness, inviting questions, and further discussion. Kevin provided his contact information for anyone needing more detailed information or assistance.

6. 2023 MEETING SCHEDULES AND ADJOURNMENT

BEEAC Chair

- 2024 BEEAC Meeting Schedule (virtual meeting only*).

February 15, 2024*

April 18, 2024*

June 20, 2024 (Potential hybrid meeting.)

September 19, 2024*

November 21, 2024*

All meeting materials including speaker presentations can be found on the MWCOG website by clicking the link below –

<https://www.mwcog.org/events/2023/11/16/built-environment-and-energy-advisory-committee/>

For more information, visit: www.mwcog.org/accommodations or call (202) 962-3300 or (202) 962-3213 (TDD)