

PILOT PROJECTS GOVERNANCE BOARD

Meeting No. 11 May 20, 2021

Ms. Brinda Westbrook-Sedgwick Commission Secretary Public Service Commission of the District of Columbia 1325 G Street, N.W., Suite 800 Washington, D.C. 20005

Re: The Investigation into Modernizing the Energy Delivery System for Increased Sustainability, GD-2020-02-M

Dear Ms. Westbrook-Sedgwick,

Attached please find the Pilot Projects Governance Board's May meeting minutes. Should you have any questions regarding this filing, please contact me directly.

Best Regards,

/s/ Anjali G. Patel

Anjali G. Patel Pilot Projects Governance Board Secretary



Pilot Project Governance Board

Meeting No. 11

May 20, 2021

3:11 pm

Meeting Minutes (DRAFT)

Commission Facilitator called the Meeting to Order at 3:11 pm.

List of Attendees:

Board Member Organizations in Attendance (Quorum present)

- Solar United Neighbors of DC *Absent*
- DC Chapter of the Sierra Club *Present*
- DC Consumer Utility Board ("DC CUB") *Present*
- Office of the People's Counsel for the District of Columbia ("OPC") *Present*
- Maryland-DC-Delaware-Virginia Solar Energy Industries Association ("MDV-SEIA") *Present*
- District Department of Energy and Environment (DOEE) *Present*
- Greater Washington Urban League ("GWUL") Absent
- Apartment and Office Building Association of Metropolitan Washington ("AOBA") Present
- Commission Staff *Present*

II. General Business

Purpose of the meeting was to have presentations from individuals/agencies who have specific information regarding potential pilot projects, a question and answer session with authors and to discuss the RFP scopes of work.

III. Meeting

• Update on VDER Study

*Contract has been executed with Synapse Energy Economics

• Q&A with Recurve Analytics (Matt Burton, Andrew Terenzio)

- *Discussed potential operation as a virtual power plant;
- *Program includes resource planning, where assets should be located. Right technologies paired with right customers, raises equity concerns;
- *Open aggregator model to allow any technology to be brought into the model;

- *Participant compensation based on information from the meter; based on a year previous data; correlate with building temperature/other factors to calculate baseline;
- *use full AMI meter data, could use billing data, but prefer AMI
- *customer benefits- work with aggregators to ensure participation
- *Highest use cases don't always produce highest savings; need to match use case to participant use
- *all of the data stays on the Recurve Analytics platform; platform usually accessed by aggregators not the specific customer
- *have worked with GreenButton programs in other jurisdictions
- *developed comparison group methodology; use a participant group of nonparticipants https://grid.recurve.com/
- *source of funding- funded by procurement dollars from utilities for chopping peaks versus EE which is funded through regulatory or other mechanisms
- *flow of incentives would depend on the aggregator
- *certain programs would have higher incentives for LMI customers
- *Price signaling cost stack can test pricing, can include avoided GHG
- *NWA can match meters with feeders, substations

• Discussion with DC Green Bank (Matthew Hickman and Jay Lurie)

- *Working with several projects already
 - Solar for All projects- provide commercial/near commercial rates of financing at construction stage; also offering permanent financing on construction stage
 - o Drawdown financing that can be repaid in a balloon in preconstruction or construction phase
 - o Solar, for PPA project go out longer 15-20 years
 - o SREC only- closer to 10 years and will have different debt service coverage threshold in early versus later years
- *If there is a revenue stream attached, the later phases easier to facilitate funding; as such front end funding even more important
- *can usually provide financing even where there is something to attach collateral; also willing to take risk on projects that not "normally" financed; though, may need to integrate risk mitigation strategies
- *Types of projects potentially funded include multicustomer scale, virtual power plants using building interaction (software and demand side management), aggregation of heat pumps, aggregating solar using communications functionality using adv inverters and peak demand shifting
- *operate commercial but ultimately an instrumentality of the District; can send a letter of interest that is nonbinding but gives comfort that funding resource could be available
- *Can share language, contact information, and some basic facts to include in RFP
- *can tailor minimum payments
- *for software based programs where there is not a physical equipment to attach a lien to, collateralization could be based on project agreements, revenue stream, etc.
- *if construction very risky could ask for a guarantee
- *can discuss backstop on funding if the project is not performing or developing as expected

- * Main purpose to identify gaps in the market given project financiers go out just a few years
- *Re: time to process loans: 45-60 days to close
- *have contacts with private funders who are interested in engaging in the District but who are not as familiar themselves with our area or its needs

• Presentation from SEPA Storage Working Group (Robert Tucker)

- *In determining pilot project for storage essential to define goals and what trying to test; and structure pilot based on where on system storage is integrated and benefits want to receive.
- *Provided background on various storage pilot and virtual power plant programs, including Maryland storage pilot project, virtual power plans in NY, CA, Hawaii, Arizona, and Utah, utility virtual power plant pilot by Portland General Electric, Green Mountain Power Storage Programs, and SMUD Energy StorageShares program
- *Business use case re PJM revenues has been challenging; expect this to change as FERC 2222 gets implemented. Additionally, Green Mountain has started using batteries enrolled in their programs for regulation frequency in the ISO-NE market;
- *Technology characteristics of storage technology, operating profile, interconnection location, and resource ownership and control will all impact the monetization of the value streams
- *Need to balance complexity of the pilot with focusing on specific goals to be tested
- *Virtual Power Plant- often have an equity component built into them
- *challenges of balancing utility use with customer's interest in reducing demand. All of the programs have terms and conditions for priority dispatch rights. Dispatchability may be impacted whether there is passive or active control of the storage unit.
- *storage still difficult to make cost effective based on bill savings; though there is an additional resiliency benefit—economic impacted by customer load shape
- *provided discussion on observations from the developer, utility, and regulator perspectives

• Scope of Work deadline and scheduling of future meetings

- *Next meeting scheduled for June 17, 2021
- *Scopes of work to be submitted after next meeting

• Subcommittee Updates

- *Transactive Neighborhood Microgrid draft scope underway:
 - o Third-party, multi-customer microgrid using renewable energy with transactive layer
 - Use transactive platform to demonstrate the following:
 - 1) Expanded hosting capacity
 - 2) GHG reduction
 - 3) Bill savings
 - 4) Sustain critical loads during grid disturbance
- *Virtual Power Plant draft scope underway:
 - o Demonstrate Grid Interactivity and Interoperability of Buildings and DER

O Demonstrate the ability of grid-interactive buildings and DER to serve as grid resources and assets; aggregate flexible demand to avoid peak hours; demonstrate frequency response, volt/VAR control, et. al.

*Heat Pump – draft scope underway:

- o Pilot installation of high-efficiency heat pumps (i.e. air source, ground source) at scale
- o Reduced GHG emissions, improved indoor air quality
- * Solar Communications/Aggregation finalizing draft scope:
 - o Aggregating DER (including solar) to communicate information to the distribution utility without relying on proprietary cellular telemetry cabinets

VI. Adjournment

Commission Chair adjourned the meeting at 5:10 pm