



## Climate, Energy and Environment Policy Committee (CEEPC)

### MEETING SUMMARY: SEPTEMBER 27, 2017

**CEEPC MEMBERS IN ATTENDANCE:** (\*) Indicates participation by phone

- Hon. Penelope Gross, Fairfax County (Chair)
- Hon. Jay Fiset, Arlington County
- Hon. Konrad Herling, Greenbelt
- Hon. Mary Lehman, Prince George's County
- Hon. Del Pepper, City of Alexandria \*
- Hon. Pamela Sebesky, City of Manassas
- Melissa Adams, Washington Gas
- Dr. Kambiz Agazi, Fairfax County
- Dyan Backe, City of Gaithersburg \*
- Michael Barancewicz, Loudoun County Public Schools
- Ira Dorfman, Greater Washington Region Clean Cities Coalition (GWRCCC)
- Gretchen Goldman, Chair, Air and Climate Public Advisory Committee (ACPAC)
- Rachel Healy, WMATA
- Maureen Holman, DC Water
- Kate Johnson, District Department of Energy and Environment (DOEE)
- Tarese Lawrence, District Department of Energy and Environment (DOEE)
- John Lord, Loudoun County Public Schools (LCPS)
- Katherine Magruder, Maryland Clean Energy \*
- George Nichols, DC Sustainable Energy Utility (DCSEU)
- Dawn Hawkins-Nixon, Prince George's County \*
- Jon Settles, Capital Sustainability
- Tim Stevens, Virginia Sierra Club
- Theodore Trabue, DC Sustainable Energy Utility (DCSEU)
- Kathryn Zyla, Georgetown Climate Center

**ADDITIONAL ATTENDEES**

- Malaika Abernathy, DC DMPED
- Anu Bennett, Fairfax County Sierra Club
- Randall Clarke, DC DMPED
- Kate Daley, Fairfax County Sierra Club
- Vickie Davis, Urban Atlantic
- Seth Heald, City of Alexandria Sierra Club
- Debra Jacobson, Fairfax County Sierra Club
- Ivy Main, Fairfax County Sierra Club
- Bob Mango, Customer First Renewables
- Harriette Phelpse, UDC WRI
- Chris Somers, Arlington County

**COG STAFF IN ATTENDANCE:**

- Stuart Freudberg, Executive Office
- Steve Walz, COG Environmental Programs Director
- Amanda Campbell, COG Environmental Programs
- Maia Davis, COG Environmental Programs

- Jeff King, COG Environmental Programs
- Leah Boggs, COG Environmental Programs
- Timothy Masters, COG Environmental Programs

## **1. CALL TO ORDER, INTRODUCTIONS, APPROVE MINUTES, CHAIR'S REMARKS**

Chair Penelope Gross called meeting to order. Introductions by those in attendance and on the phone followed. Meeting summaries from May and July CEEPC meetings were approved.

## **2. COMMITTEE REPORTS**

### **A. Built Environment Energy Advisory Committee (BEEAC) (*Gina Mathias, Chair*)**

At the July meeting, BEEAC did a comparative review of the WELL building standard and the LEED standard. BEEAC also heard from COG regarding their site renovation and evaluation process. Many members expressed interest in the topic, so, in August, BEEAC took a tour of the American Society of Interior Designers' (ASID) office – the first WELL and LEED certified building in the United States.

In September, the BEEAC meeting focused on regional clean energy technology opportunities with an emphasis on pathways from technical assistance studies to implementation. Geothermal energy and District energy systems in Falls Church and DC were discussed. This meeting also kicked off the Regional Solar Market Series. This series will have more sessions (the next one is on October 19 – focusing on community solar). The 2<sup>nd</sup> and 3<sup>rd</sup> sessions will focus on large-scale commercial deployment and financing, as well as technical topics including interconnection, vehicle-to-grid (V2G), and solar storage.

Last, COG staff is developing the annual BEEAC survey, which is used to gauge the priorities of all member governments and committee members. This is scheduled to go out in mid-October.

### **B. Air and Climate Public Advisory Committee (ACPAC) (*Gretchen Goldman, Chair*)**

In August, ACPAC was pleased to see the Environmental Justice Toolkit approved, which they had been working on for more than a year. They are now looking for ways to spread the word about it – ACPAC is requesting any advice in this regard.

The Climate and Energy Leadership Award winners will be recognized at the COG Board of Directors' meeting on October 11.

### **C. Member Updates**

- *Maureen Holmen, DC Water* – DC Water is involved with their own solar PPA and they look forward to having their RFP on the street and hopefully having some contracts signed by early next year for 10MW of solar installed at the Blue Plains plant. They look forward to contributing to the District's solar energy and Clean Energy DC goals.
- *Rachel Healy, WMATA* – WMATA recently finished an energy audit of their entire agency. They will be moving forward on some projects that were recommended from that audit. The operational cost savings will have an impact on the whole region. WMATA is also looking at solar energy, particularly at leveraging the opportunity that community solar offers to them as a low-rate payer. Lastly, WMATA is looking at regenerative braking and battery technologies.
- *Konrad Herling, Greenbelt* – Maryland is the first state in the country to receive funds for solar energy possibilities with respect to the charging stations. (*Penny Gross* – SolarWorld in Hillsborough, Oregon have had a solar vehicle charging station since 2011, which is worth learning about). Additionally, the governor of Maryland wishes to expand the Baltimore/Washington Parkway I-270, as well as the Capital Beltway. The City of Greenbelt

will be expressing their dissatisfaction regarding these expansions in a letter of concern. Finally, Konrad announced that he will not be running for reelection to the city council, as he will be pursuing a Masters in Urban Planning at the University of Maryland.

- *Kate Johnson, DOEE* – DOEE is in the process of updating Sustainable DC, the District’s comprehensive sustainability plan, and it will be called Sustainable DC 2.0. Over the summer, they took a survey of all those living, working, or visiting the District to see what they would want to be included in the new plan. They collected over 3,000 surveys. DOEE will be launching a more in-depth process soon involving working groups around specific areas of the plan that were identified by the surveys.
- *Edward Yim, DOEE* – Update on the status of Clean Energy DC, DOEE’s climate and energy plan. For the past 3-4 months, DOEE has tried to engage the public about the plan. They have also been holding in-depth consultation sessions with key stakeholders to find out any issues that they wish to be addressed in the plan before it is finalized. DOEE has also developed an interactive dashboard with a lot of information about the current status of the energy and greenhouse gas emissions profile in the District. The dashboard includes aspects of the Clean Energy DC plan, as well as some rudimentary projections and scenarios for the District. The dashboard is not yet finalized, but will be available to the public soon.
- *Ira Dorfman, GWRCCC* – GWRCCC, COG staff, Electrify America, and the New Automobile Dealers Association have been working collaboratively on the 2018 Washington Auto Show. There has not been a formal announcement, but Electrify America has agreed in principle to have an electric vehicle (EV) pavilion at the Auto Show in January. It will include an indoor test track, interactive charging area, and several workshops.
- *Ted Trabue, DCSEU* – This fiscal year, DCSEU has invested over \$20M in energy efficiency and renewable energy in the District. This culminated in significant greenhouse gas reductions and the installation of over 2MW of solar. DCSEU will be reporting this formally to their partners at the DOEE in about a month.
- *Kathy Magruder, Maryland Clean Energy* – “[Winning with PACE](#)” event is happening at MWCOG on November 13. The event is sponsored by the Mid-Atlantic PACE Alliance (Maryland, Virginia, DC are members). It will provide information about building and sustaining property, and clean energy lending programs throughout the region. There will be template ordinances and contracts. Invitees include contractors, capital providers, as well as elected officials and policy implementers who have been or want to be responsible for PACE projects in the region.
- *Jay Fisette, Arlington County* – The County Board will advertise in October and adopt in November the commercial PACE regulations. Arlington County has also been amending their purchasing regulations to allow for the public/private partnerships in non-transportation. They have five school buildings (this year) and three county buildings (2018) that will use solar arrays.
- *Chair Penny Gross, Fairfax County* – There will be a commercial PACE information session on November 29 at the Fairfax County Government Center.

#### D. Staff Updates

- *Steve Walz, COG* –
  - There is still time for fleets interested in joining Fleets for the Future (F4F). Contact Leah Boggs (MWCOG) for more information.
  - At October 11 COG Board meeting, the Climate and Energy Leadership Awards will be awarded.
  - MWCOG will take up the resolution to support the Mayors Climate and Energy Agenda and the We Are Still In efforts at the COG Board meeting.
  - COG has started to put up [performance dashboards](#) within the Department of Environmental Programs. These will be updated annually to show performance of region toward meeting its climate and energy goals.

- Finally, providing some support and direction for energy resiliency planning will be a focus of COG in the coming months.

### **3. EPA/NHTSA RECONSIDERATION OF THE GREENHOUSE GAS AND FUEL EFFICIENCY STANDARDS FOR LIGHT DUTY VEHICLES: COMMENT LETTER**

*Jeff King, COG Chief Energy and Climate Programs*

Jeff provided background noting that in 2010, there was an effort between the EPA, NHTSA, and auto makers to develop a national program to set both greenhouse gas emissions standards and fuel efficiency standards for fleets. In 2012, a Final Rule was set for the standards for the years 2022 to 2025. Part of the negotiation was a mid-term evaluation (MTE), which was set for 2016/17 to make sure these standards were realistic.

Since that time, EPA and others have tracked the success of the program, manufacturers have met the standards ahead of schedule, emissions have been reduced, and more efficient vehicles have been introduced to the fleet. In 2016, the EPA completed the technical analysis and on January 12, 2017, passed a Final Determination in accordance with the initial goals and targets.

In March, the EPA, issued a notice of intent to reconsider that determination for vehicles with the model year 2022-2025, as well as model year 2021. In August, they announced they would be taking comments until October 5. The MTE looked at technologies, whether they had met the previous standards, health and environmental benefits, cost to manufacturers, etc. CEEPC is being asked to consider a joint comment letter from MWAQC, TPB, and CEEPC, to be submitted to EPA and NHTSA as soon as possible if approved.

*Tim Masters, COG Environmental Planner*

Tim gave an overview of the comment letter, addressed to Administrator Pruitt and Secretary Chao. It states that MWAQC, TPB, and CEEPC oppose any rollback of the current standards and request that they are maintained as prescribed in the 2012 Final Rule. The region has implemented several control measures to improve its air quality and to comply with National Ambient Air Quality Standards (NAAQS). However, federal emissions control programs, such as this Final Rule, are heavily relied on for continued emissions reductions and for regions across the USA to meet their voluntary commitments. The 2016 Technical Assessment Report states that there are a wide range of alternative technologies with similar or lower costs that can be implemented by car manufacturers to meet these goals. There has also been better than expected progress in fuel economy and emission reductions, as well as greater consumer acceptance of these technologies.

The letter states that while considerable progress has been made in the Washington region, but the standards put in place by the Final Rule are critical for continued progress. Additionally, greenhouse gas emissions results in increased air quality degradation, making NAAQS a greater challenge to comply with. Federal leadership is necessary and vital for meeting the region's adopted and mandated environmental objectives.

The letter notes that the committees' support of the Final Determination is reiterated and they find that the standards are appropriate and necessary. In conclusion, MWAQC, TPB, and CEEPC urge the EPA to maintain their 2017 Final Determination of the standards set forth in 2012.

Jay Fisette moved to approve the comment letter, and Konrad Herling seconded this motion.

*Jay Fisette, Arlington County* – Agreed that the comment letter has immense importance, as changing the ruling or rolling back these standards makes it more difficult for member governments

in the region to meet their goals. In future comment letters, saving people money can be focused on more. The private sector has a lot of capacity to make changes if given certainty by consumers. As soon as there is a multi-year plan, tinkering with it undermines that certainty. A government that does not stand by past decisions provides greater uncertainty and risk to businesses than a challenging goal. Thinking of this side of the argument for future letters would be beneficial. Additionally, it would be good to have a press release regarding this letter.

*Chair Penny Gross*, called the attendees to vote. All were in favor, with no one opposed and no abstentions. The motion was carried.

#### **4. ACHIEVING SCALE IN ENERGY INNOVATION: CHALLENGES AND OPPORTUNITIES IN METROPOLITAN WASHINGTON**

*Jeff King, COG*

The regional goal set in 2008 for 10,000 rooftop solar installations. For a time, the region was stuck at 600 installations, and this resulted in the decision to scale back the goal to 5,000 rooftops. Now, we have gone way past 5,000 rooftops and we're crossing the 20,000-rooftop mark. Upon hearing the folks in DC setting a goal of 100,000 rooftops, there may be a quarter of a million rooftop installations by 2025-2030. This group of panelists can help us get there.

##### *Panel #1 – Large Offsite Renewable Energy Projects*

*Blaine Collison, Edison Energy*

Corporate goal-setting in the market has had an enormous impact on the renewables market. General Motors, one of Edison Energy's clients, is an example of this. They have set a 100% renewable energy goal for their entire global operations by 2050. They do not know the exact plan on how to get there yet, but they have a rough idea. Having the goal guides where they go into the future.

The renewables market is very strong in the US right now. There are adjustments coming, details matter a lot, and there is a degree of complexity and risk to be managed. These are manageable, however, and Edison Energy continues to see big corporates and big institutional players going into the renewable market. Few are doing this for purely sustainability reasons. It is mostly an economic and a risk management transaction, plus sustainability.

Edison Energy is an independent advisor. The breadth of work being done, as well as the variety of work being done by many of the companies Edison Energy advises is astounding. General Motors is up to around a dozen transactions. Home Depot has done some interesting off-site transactions, moving to scale. They have 2,200 store rooftops. Howard University are working on their on-site solar portfolio. There is a huge range of possibilities, which means there is a solution to meet the needs of most stakeholders interested in renewables, especially when aggregation and some of the more innovative structures are considered.

Economics of renewables is getting better. Technology prices are declining, while efficiency and scale of deployment continue to increase. Prices are coming down, and in a time of historically low natural gas prices, we continue to see renewable projects put on the table.

How can smaller organizations achieve scale? Historically this has been a challenge and there are many different approaches to this question. There has been an evolution of both market conditions and transaction structures.

There are many large off-site energy projects in the pipeline. Factors that affect these projects include 1) renewable resource availability (e.g. wind and sun), and 2) state policy. The key is

choosing the right project.

We could spend a lot of time talking about how a financially-settled, wholesale renewable energy transaction works. Summary: there is no need to take physical delivery of renewable energy, which is a piece of very good news, as it increases flexibility and reduces complexity, while maintaining the GHG benefits, additionality benefits, and the financial value. We could also talk a lot about how a contract for differences works.

A great value of renewables is once you've built them, they work. There isn't volatility in the pricing, even with historically low gas prices. Energy markets are usually very volatile and companies do not like the risks inherent in the market. Forward-looking budget certainty is one of the great economic promises of renewables.

Getting to scale – there is an interesting shift on the utility side. Some utilities have been very progressive. Some of the larger IOU utilities have been slower to move, but it is happening. Effective pressure has been brought by large companies (e.g. Google, Amazon, Facebook) by making very public siting decisions for facilities and jobs based on renewable energy availability.

New products and aggregation – this is where things are getting very interesting. New products and new structures are coming to the market. Aggregation structures – aiming to organize a group of off-takers to make the same decision together across multiple organizations, on the same timeframe, around the same project. It can be done and there are examples, but it is not without its challenges. Edison Energy created a structure called power blocks. It's a PPA for new built facilities. It provides 10MW in 10-year tranches for individual off-takers. The off-takers are able to make their decision independently of each other.

*Kevin Rackstraw, Customer First Renewables*

Customer First Renewables is also an independent renewable energy advisor. Aggregation structures and what is possible in the Washington Metropolitan region are two focus areas. They look at opportunities in VA, a regulated state, differently than in MD and DC which are deregulated.

Aggregation structures are possible in the region. The large-scale PPAs are available with these structures. An example is George Washington University, American University, and George Washington University Hospital who combined to purchase the output of a large solar project in North Carolina. This solar project feeds into the regional grid.

There is a need to differentiate between wholesale markets (wholesale deals) and retail markets (state-regulated). MD and DC may have more freedom because there are retail options that aren't available in VA – but all parts of the region have the same wholesale options.

Distinguish between retail markets (with strict regulation on the degree of control of utility) and wholesale markets (federally regulated). Typically, a customer plugs into the grid, gets its retail electricity from the distribution grid from a utility. Behind that, is a wholesale market; in our region PJM, a pool of power plants that power the grid (an interstate, free, open market that anybody can participate in with the right licenses). The utility's and grid manager's role is to balance the amount of electricity going in with the amount taken out, thereby keeping the grid stable.

How does a wholesale transaction work? There is a renewable energy project feeding into the grid. If the customer signs a PPA with that renewable energy project, they can get the RECs. The customer (or the developer, depending on how deal is structured) receives the wholesale energy revenue from that project – these offset the PPA price.

*Bill Thomas, LevelTen Energy*

At its core, LevelTen is a utility-scale renewable energy project aggregator and syndicator of smaller configurable volumes of the offtake from those renewable energy projects. A virtual PPA is a financial transaction that can be used as a tool to mitigate some of the risk associated with wholesale or retail energy procurements.

Why aggregation? LevelTen saw a problem with the way the virtual PPA was being marketed to customers. Top one percent of the Fortune500 is accounting for 90% of the volume of these projects. LevelTen's aim is to facilitate transactions for the other 99%. For many renewable energy projects, one large-volume buyer enters into a virtual PPA. This is flawed, as it means the vast majority of potential/interested customers do not have sufficient volume to access a virtual PPA. The developers have not adjusted their business models to account for this new and emerging market (the corporate and institutional space). Developers tend to have a 400MW project in a distant location, where corporate/institutional customers are looking for 5-7MW.

Another major issue is that organizations usually do not have energy expertise. Combined with the risks associated with these types of transactions it makes it a challenging environment for most businesses or institutions. It's very important to understand the product and understand the risks.

Another limitation is the sales cycle – the process of getting involved in one of these PPAs can take 2-3 years.

LevelTen is trying to offer multiple connections to a broader market, getting the cost benefits of utility-scale PPAs and pass it along to smaller-volume buyers. It can be thought of as a renewable energy mutual fund – many different projects that buyers “invest” in. The larger projects (>100MW) tend to have a greater discount (up to 32%) compared to smaller projects. LevelTen takes an aggregation of renewable projects, run them through some value and risk algorithms to make a subset of those projects. Diversity in renewable projects (both technological and geographic settlement) is good – lowers risks for consumers.

Q – The panel said that the climate right now for the installation of solar is very favorable. There has been discussion about tariffs that might potentially impact that climate. Does the panel have any comment on this?

A – *Kevin Rackstraw, Customer First Renewables* – A decision by the US International Trade Commission (ITC) last week determined that two US companies that had filed a trade complaint were harmed by Chinese imports of photovoltaic panels. A discussion about what type of tariff would be imposed, if any, will now begin. That could have an impact on the solar market, as the Chinese are the dominant supplier of panels in the market.

Q – Arlington County is preparing to put an RFP out. Arlington is not even doing this between the county and the school in Arlington. The schools are doing it separately. What continues to be the obstacle for getting local governments to get into these types of aggregation structures?

A – *Blaine Collison, Edison Energy* – The human problem. The technology works. The economics are moving in the right direction. It's the human problem, as there is a lot of resistance to change.

Q – Is this that the local governments can't agree on the terms and conditions of an RFP?

A – *Bill Thomas, LevelTen Energy* – No, the economics have become more favorable as time has gone by.

A – *Blaine Collison, Edison Energy* – Politics has also played a role. Getting a lot of different local governments together can create a challenging environment for these types of deals when

considering the politics between governments in a region.

Q – Have there been any municipalities, counties or cities anywhere in the US that have entered into one of these off-site aggregation arrangements?

A – *Blaine Collison, Edison Energy* – The Northern California project that Edison Energy leveraged has expanded very successfully. There has been significant municipal collaboration accessing larger on-site portfolios. The off-site, utility-scale piece has had slower uptake for municipalities,

*Jeff King, COG* – The attempt to pre-package a set of deals that have been well-vetted and then selling slices of that package to customers is still a challenge. COG is interested to see if there is a way to offer aggregate purchasing, that COG can facilitate and streamline the process so that member jurisdictions can participate in these types of aggregation structures.

### Panel #2 – Co-Gen, District Energy, and Microgrids at Large Redevelopment Sites

*Leah Boggs, COG*

The next panel is focused on the Walter Reed Redevelopment. They panel will discuss the nuances of the site as a formerly government-owned site, the technological innovations at the site, as well as the potential of replication around the region.

*Randall Clark, Walter Reed Local Redevelopment Authority*

The Parks at Walter Reed is 110 acres of land in northwest DC, surrounded by established communities on all sides and Rock Creek Park to the west. The property went to three users; the federal government (32 acres for a Foreign Mission Center), a pediatric public health research facility (12 acres), and the District (66 acres). In 2005, the army announced the potential closure of Walter Reed. A process started at the local level and consisted of many community meetings discussing the possibilities of what could be done with the property.

The larger redevelopment goals that came out of the community meetings included integration of the site with the community, providing a mix of uses, creating jobs and revenue, and activating the site immediately. Some of the sustainability opportunities recognized for the site included cisterns, green roofs, and photovoltaics. Larger planning goals included sustainability goals put forward by the District in the RFP. The development teams were challenged with some energy goals, for instance making the site a net zero energy site by 2030. Other goals addressed water use; capturing, treating, and reusing storm water and greywater. Transportation goals encourage non-automobile traffic and provide opportunities for low-carbon methods of transportation. There were also waste and materials goals. All of these goals and the reuse plan went into the RFP.

On the District's 66 acres, there will be 3.1M square feet of development, including 2,100 units of housing (432 units will be set-aside as affordable housing), 200,000-250,000 square feet of retail, and there are two charter schools that have already opened.

*Vickie Davis, Urban Atlantic*

Urban Atlantic is one of three firms (including Hines and Triden) that are the master developers of the site. The city set ambitious goals for the site, including an on-site energy goal to be 25% better than code and green ratio goals – the highest requirement for properties in DC with a 0.4GAR. These goals will be met through a combination of energy efficient design, photovoltaics, green roofs, and other methods. The site is also unique because it came with a parking maximum on it. Alternative transportation will also be developed in the form of bikeshare stations.



An interesting additional asset of the site is a boiler plant. It was originally used to power the property by steam and was incredibly inefficient. This was shut down immediately. There are steam tunnels throughout the site. This provided a platform to take on an energy partner; Washington Gas Light (WGL) for microgrid, cogeneration potential, and rooftop solar.

*John Dukes, Washington Gas Energy Services*

WGL invests \$100M-\$150M annually into distributed generation assets, central plants, secure energy generation systems, solar, fuel cells, etc. The application was to create a behind-the-meter, secure energy system that provides electricity and also heating and cooling to anybody wanting to connect to the existing systems or pay for new infrastructure to connect other buildings. The idea is to operate with or without the grid providing electricity, heating and cooling. This is what WGL is calling “resilient energy supply mode”. This is achieved by marrying diverse types of generation with energy storage, and then intelligently connecting that to critical load or load that needs to stay up and operating.

WGL is starting focus heavily on advanced vanadium flow batteries. These are very reliable, able to charge and discharge indefinitely for 20 years without any recognizable depreciation in storage capacity. EtaGen, a new linear generator to replace reciprocal engines, generates electricity extremely effectively. They are in their series C funding, and they generate electricity at about a 54% efficiency without needing to thermally balance them. It can run on propane, natural gas, and they’re working on liquid fuels as well. Fuel switching will increase the capability of extending power generation into a grid outage event (such as those experienced in recent hurricane events). WGL is approaching the infrastructure at Walter Reed, it’s through a staged development of energy centers, and each energy center itself has a staged investment.

WGL has an obligation to serve the customers at Walter Reed, but is not a regulated, tariffed utility. The company is a retail provider of energy. WGL has agreed to cap its sales price of energy to be in line with what a customer might be able to get as a standard offer from regulated utilities. WGL’s approach has also been to reduce the potential market risks. When using large transmission and distribution grids to have energy transported from one state to the next, prices can be an issue along with the potential for energy infrastructure and generation going down over time. The transmission and distribution lines, the tariffed infrastructure, continues to be a larger percentage of the kWh rates that people pay, even in retail markets. WGL owns the assets, it develops, operates and maintains, and supplies them with energy from its own systems, which can be very cost effective. WGL believes microgrids of the future would benefit from developing energy systems behind the meter that do not need to leverage the larger grid.

*Penny Gross, Fairfax County* – please document everything you do on this development because there are probably going to be lessons learned that will be applicable with other large sites.

Q – From a developer perspective, with any project like this there is a lot of risk with just the timeline to buildout. Can you give your perspective about being the owner of an energy asset or partnering with someone else and letting them own that?

A – *Vickie Davis, Urban Atlantic* – Urban Atlantic has struggled with this since before they applied. They took a macro look at the project and asked what was possible, the opportunities and the assets. They made a list of all the things they could do. Then they went into the process of procuring an energy partner. The way Urban Atlantic chose to mitigate their risk was to maintain the market value of its assets and the company’s competitive advantage by making sure that both commercial and residential users never pay more than market price. This is fundamental because if the user needs to pay above market price then the real estate value is lower. Having this benefit over a longer period created more certainty for customers. The most important thing to do is choose the right partners. The other thing is that Urban Atlantic documents everything that they do. There is a [website](#). They do a lot of community meetings and this is a heavily community-driven development.

A – *Randall Clark, Walter Reed Local Redevelopment Authority* – Also, there was recognition from the District’s perspective that lofty goals were being set. For example, entitlement risk for the project was mitigated by completing the federal process to acquire the property, but land use planning was also concurrently done. This culminated in the creation of new zoning for the site. By the time it was transferred to the development team, it was fully zoned. This took that risk out of the project. DC has a Historic Preservation Review Board that one must go to if new construction or exterior work in a historic district is being considered. That is the only kind of additional entitlement activity that the developers must do for individual projects other than the administrative building permit process.

Q – Is there any information WGL can share about the duration of the ability to serve critical load using the vanadium flow battery and perhaps solar?

A - *John Dukes, Washington Gas Energy Services* – The maximum amount of solar WGL due to the vertical development at the site is somewhere less than a megawatt. This is because the owners do not want to take up any of the land space, as most of it is being dedicated to green space. With regard to the phased strategy, as WGL invest about \$5M to begin the generation of Energy Center 1, they are building in advance of the demand. As there is a long duration under the contract, WGL is able to make those investments now. The idea is that once demand hits a certain level, WGL begins making additional investments including the fuel cells and batteries. That may not be for another 3-4 years.

## **5. ADJOURN**

*Penny Gross, Fairfax County* – Agenda items for the future will follow up of these topics because as these are refined and become more understandable, CEEPC can begin thinking about how to implement them in the region.

*Steve Walz, COG* – This will be taken up in future agenda discussions, especially looking at how a locality or a group of localities can take a substantial portion of their total consumption and do these types of synthetic PPAs, or how developers can replicate successes of the Walter Reed redevelopment on other sites across the region.

Chair Penelope Gross adjourned the meeting.