

## 1. Resilience Planning

Montgomery County's number one priority is to maintain the health and safety for all of its citizens, and a key piece of this is energy resilience and reliability. Between 2010 and 2012, the county was affected by multiple severe weather events that left many without power for extended periods of time. The Office of Energy and Sustainability within Montgomery County's Department of General Services (DGS) is increasingly focused on improving resilience for key sectors that can't afford to be without power through a variety of energy projects, including microgrids. The DGS also works with the Office of the County Attorney and several stakeholders to support high profile energy policy, resiliency and reliability initiatives. For example, several government facilities have been earmarked for resiliency improvements and efforts are underway to improve resiliency and harden these sites. Resiliency assessments are also underway for other government facilities that provide key services during emergencies. The County also advocated for the acceleration of key resiliency and reliability initiatives as part of the merger between Exelon Corporation and Pepco Holdings Inc. Pepco has committed to the accelerated improvement of annual reliability performance metrics, including possible financial penalties if targets are not achieved. Pepco has already achieved several targets and is on the way to achieving nation leading reliability.

The merger also triggered the initiation of a [Grid-of-the-Future proceeding](#) by the Maryland Public Service Commission (PSC). The County is an active participant in this effort, which is aimed at improving the adoption of clean energy technologies, increasing customer choice and ensuring reliable electric service. The proceeding is also exploring the viability of deployment of smart grid solutions, microgrids, CHP, renewables, advanced controls, demand response and energy storage. On March 1, 2018 Pepco also filed a [proposal for a pilot public-purpose microgrid project](#) to provide enhanced energy services to the microgrid customers as well as the wider community in Rockville. The DGS is also coordinating the disbursement of \$41 million of funds to create programs that benefit Pepco customers in the County.

## 2. Program or Project Implementation

The DGS is in the process of assessing the feasibility of all facilities in the county for microgrid projects aimed at enhancing individual facility and electric system resilience. The goal is to understand what facilities and related services are essential for the county to effectively operate in the event of a power outage. The DGS is currently implementing pilot microgrid projects with CHP at two facilities: the Public Safety Headquarters (PSHQ) and a Montgomery County Correctional Facility (MCCF). The PSHQ site will be equipped with CHP integrated into an existing generator bank, a 2 MW solar array mounted on a canopy, DC fast charging stations, absorption chillers and cybersecurity controls. The [MCCF microgrid](#) is expected to be completed by the end of 2018. The County is working with Pepco to identify additional candidate facilities for microgrids. It is also exploring avenues to expand incentives for CHP, specifically for smaller installations, while emphasizing the need for R&D and pilot efforts to increase the availability of micro-CHP units. Facility level engineering assessments and technical support would also be beneficial to expand CHP deployment in the region.

## 3. Lessons Learned

The County has learned a number of important lessons in its effort to deploy microgrids for resilience purposes. It has found that the design timeline for microgrid solutions can be extensive and challenging to align with the availability of utility and state incentives. It is also important to assist county attorneys and others in decision-making roles in becoming knowledgeable and well aware of the project details

### CHP for Resiliency Accelerator Partner Profile

and benefits. This includes working with the PSC and helping them understand how certain projects will benefit ratepayers.

The County is also interested in pursuing public purpose microgrid projects that can begin to serve local communities, businesses, and residential customers, and will continue to work with utilities and private developers to deploy these solutions. The microgrid planning efforts that the County has completed, and those that are currently underway, have helped prioritize critical infrastructure and identify the potential for relocating certain facilities or services in the future to improve resilience. The planning and deployment efforts have also assisted in ranking the County's building stock based on a variety of resilience and financial metrics.

#### 4. Additional Information

- ▶ [FY 2017 Montgomery County Green Government Report](#)
- ▶ [Montgomery County Department of General Services, Microgrids](#)
- ▶ [Maryland Public Service Commission, Transforming Maryland's Electric Grid Public Conference](#)
- ▶ [Montgomery County Microgrid Opportunity Presentation by Pepco](#)