

ComEd.

An Exelon Company



Battery Storage: ComEd Perspective

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Energy Storage Uses – ComEd Perspective

- ComEd is investigating the use of energy storage technologies for a number of distribution and substation applications.
- The applications have been chosen carefully in consideration of key planning and operations functions of importance to ComEd and customers.
- ComEd sees the advancement of energy storage technologies as an opportunity to increase reliability, resiliency of the service we provide customers while also enhancing power quality.

Current Energy Storage Projects in ComEd

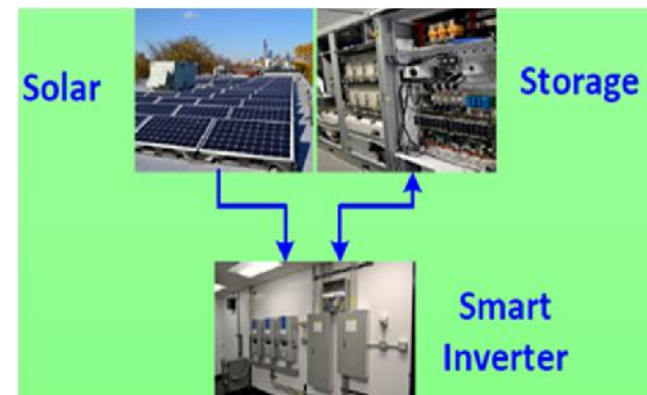
Community Energy Storage to Improve Pocket Reliability

- This project will test the use of small-scale (25 kW) battery storage technology to reduce the impact of power outages in residential areas where customers experience an above normal number of interruptions, particularly in extreme weather events.



Renewables Integration (DOE SunShot Initiative Grant)

- This project will use battery storage technology in combination with solar PV to manage intermittency and to make solar PV a more dispatchable and reliable grid resource for microgrid operations.



Potential Use Cases (1/3)

Distribution Upgrade Deferral

- Evaluating the use of large-scale (+MW) battery storage technology to capture the economic value associated with deferring or avoiding distribution upgrades by discharging a battery system during peak load hours.



Voltage Support

- Evaluating the use of small scale (+kW) battery storage technology to provide voltage support in areas with customers operating large seasonal (agricultural) loads that adversely impact the power quality of nearby customers.



Potential Use Cases (2/3)

Traffic Signal Back-Up

- Evaluating the use of battery storage technology distributed throughout the city of Chicago for the purpose of maintaining traffic light function at crucial intersections through outage events.



Storage on Wheels

- Evaluating the use of battery storage technology retrofitted to utility trucks or added to a trailer to provide power to customers during potential outages and transformer swaps.



Potential Use Cases (3/3)



Substation Auxiliary Power Resiliency

- Evaluating the use of battery storage technology to provide a resilient backup system for substation auxiliary power systems at a critical facility.



High Pressure Fluid Filled (HPFF) Cable Pump Resiliency

- Evaluating the use of battery storage technology to provide a resilient backup system for forced cooling and oil pressurization pumps supporting the HPFF system.

