



## MAJOR STORMS TRIGGER INCREASED INTEREST IN MICROGRIDS

In general, microgrids have been increasing in popularity and actual installation over the last year or two, largely because of the ease in adding “solar plus storage” (large-scale batteries) to the microgrid profile. However, the two recent massive hurricanes (Texas and Florida), and, to some extent, the massive hurricane in Puerto Rico, have jump-started interest in microgrids even more.

According to a new report from Navigant Research, “Market Data: Energy Storage for Microgrids,” interest in energy storage-enabled microgrids (ESMGs) is growing alongside an increase in solar PV and even wind deployments. Although not required for microgrids to operate, energy storage systems have emerged as an increasingly valuable component of distributed energy networks, because of their ability to effectively integrate renewable generation.

Navigant estimates that, throughout the next ten years, a cumulative 14,850 MW of new ESGM capacity is expected to be installed.

“There are several key drivers resulting in the growth of energy storage-enabled microgrids globally, including the desire to improve the resilience of power supply, both for individual customers and the entire grid, the need to expand reliable electricity service to new areas, rising electricity prices, and innovations in business models and financing,” said Alex Eller a research analyst with Navigant.

“Innovations in business models and financing will likely play a key role in the expansion of the ESGM market during the coming years.”

And, again, adding to the growth of interest in microgrids and actual installations is the growing realization among communities and businesses that, following catastrophic storms, such as Hurricane Harvey (Texas) and Hurricane Irma (Florida), both of which were Category 5 storms, it can take more than a couple of days for power to be restored, and microgrids can provide a dependable power source buffer during such restoration efforts.

A recent article published by Greentech Media noted that, “Such systems could help hospitals, shelters and retail outlets become more resilient against surging waters and torrential winds, compared to backup diesel generators or relying on the power grid to remain operational.”

And, the article noted, “The dropping cost of batteries has helped make (battery-connected solar microgrids) a lower-cost option than the often expensive, reoccurring costs of diesel fuel.”

In early October, Tesla CEO Elon Musk suggested that his company could rebuild Puerto Rico’s power grid with solar and batteries. Tesla had already sent hundreds of its batteries to the region, but Musk was referring to a project of a much larger scale.



### About the Author

Phil Carroll, Vice President of the Energy Group for Finley Engineering, has been involved in the electric utility industry for the past 31 years. Managing multi-million dollar projects around the country, Carroll has been responsible for the design of distribution and transmission lines, material specifications, contract administration, final acceptance, and close-outs. He is also a registered Professional Engineer in several states. **For more information, you can contact Phil at [p.carroll@FinleyUSA.com](mailto:p.carroll@FinleyUSA.com).**