Home microgrid projects



Home microgrid projects

We learned that early this year. The idea that on-site power provides value year-around was driven home by Gil Bindewald, Principal Deputy Assistant Secretary at the U.S. Department of Energy's Office of Electricity, when he spoke last April at the Microgrid Knowledge Conference in Baltimore.

"A lot of times when I see microgrid investments it is (only) when an event occurs. Please don't wait. There is a value proposition in day-to-day normal conditions," Bindewald during the MGK conference keynote in Baltimore last April.

"You shouldn't wait to have an event and then react because that is a disservice to the value you could draw. So, I promote thinking proactively to fully consider the value microgrids could offer."

Hear, hear! At Microgrid Knowledge, we write plenty of stories about the power resilience that on-site power delivers during cataclysmic events. And we also cover those which are built for every day, not just the rainy day...and all over the world, not just the U.S.

Here is a rundown of eight microgrid projects operational and in focus this year. We're not saying these are the only or most important microgrid efforts, but we are saying they cover most situations and intrigued many of our readers. They also prove significant for the industries or sectors they serve.

Way back in January, the retailer giant announced it has contracted Trinity Structures to design, build and activate the off-grid, rooftop solar capacity to charge electric trucks at its distribution center in Mira Loma, California.

Costco, which has 850 warehouses nationwide, had released a climate action plan committing to converting depot yard trucks from diesel to alternative fuel models by 2035. The Mira Loma site recently added a 350-stall truck parking lot.

The Trinity solar electric structures could produce about 100 MWh in carbon-free energy annually, according to the companies. These, coupled with storage batteries, could be enough to provide 11,750 hours of EV charging and off-set 3 million metric tons of carbon dioxide annually.

The solar electrification structure, as Trinity calls it, is not connected to the grid and provides direct, on-site power, similar to a microgrid. Many fleet electrification advocates contend that microgrids will be necessary to help utilities deal with an industry-wide shift toward EVs in the near future.

Australia's first renewable hydrogen microgrid was commissioned earlier this year. The Western Australian (WA) government and Horizon Power released a July report outlining their learnings to date,



Home microgrid projects

including details on the integration of hydrogen and microgrid technologies, costs, regulatory requirements and community sentiment around hydrogen.

Located in Denham, WA, about 500 miles north of Perth, the Denham Renewable Hydrogen Microgrid integrates hydrogen components into an existing off-grid hybrid microgrid that had relied on diesel, wind, a 704-kW solar farm and a battery energy storage system.

The system now includes a 348-kW hydrogen electrolyzer and a 100-kW fuel cell. The system will pass city drinking water through a reverse osmosis system prior to its use by the electrolyzer. The system's daily consumption of water will be no more than that of four typical households, according to Horizon Power.

Contact us for free full report

Web: https://www.hollanddutchtours.nl/contact-us/ Email: energystorage2000@gmail.com WhatsApp: 8613816583346

