



PORT OF LONG BEACH MICROGRID BUILDS COMMUNITY RESILIENCE

In 2018, the Port of Long Beach, California, announced it would begin development on a solar-plus-storage microgrid energy project with Schneider Electric. The port holds the title of second-busiest container port in the country, with approximately \$200 billion in goods passing through annually. The \$5.2 million dollar contract is in line with California's larger commitment to improved resilience and emissions reductions across its energy footprint. The microgrid also secured a \$5 million grant from the California Energy Commission's Electric Program Investment Charge, with \$2.12 million in matched funds from the Port.

BY THE NUMBERS

- **300 kW** solar array
- **\$5M** CEC grant
- **575,000** jobs

COMMUNITY IMPACT

A partnership with the University of California, Irvine's Advanced Power and Energy Program offers career pathway opportunities for students through hands-on data analysis initiatives on microgrid and energy storage. Targeted for completion in late 2021, the project also offers paid on-site training for apprentices in coordination with the International Brotherhood of Electrical Workers.

The microgrid system consists of a 300-kW PV solar array, integrated distributed energy resources (DERs), advanced system management controls, and demand response capabilities. By leveraging smart load management, cybersecurity software, and an integrated suite of advanced energy resources like mobile and stationary battery energy storage, the microgrid project is able to ensure reliable, uninterrupted power for critical activities. During emergencies, the microgrid also lessens the need for diesel back-up generators and can lower costs for ratepayers.

Prior to development of the microgrid, the port already supported an estimated 575,000 jobs in Southern California. The project has also undertaken curriculum development with the California Community Colleges to build skilled competency around advanced technology installations.

SUPPORT MORE PROJECTS LIKE THESE

Incentivizing the use of technologies that improve electric grid resilience and flexibility, funding new power system modeling to better integrate DERs in power markets, creating an investment tax credit (ITC) for energy storage, and encouraging workforce development partnerships with local unions and colleges can bring more projects like this to California.