



Microgrid for QCD Warehouse Facility and Fleet of 30 Volvo VNR Electric Trucks

QCD and In-Charge Energy have collaborated with Scale Microgrids to develop an on-site microgrid that will provide clean electricity and resilience for QCD's warehouse facility and zero-emission Volvo VNR fleet in La Puente, California.

The microgrid combines on-site solar, battery storage, and backup generation to reduce energy costs, guarantee fleet availability, and maximize the use of renewable energy. This project will enable QCD to accelerate the electrification of its fleet, reduce the facility's carbon footprint, contribute to regional air quality goals, and meet the sustainability goals of a leading national coffee chain customer.

This first-of-its-kind microgrid will supply power to chargers for QCD's new fleet of 30 Volvo VNR Electric delivery trucks as well as the facility's refrigerated warehouse. The multiple layers of resilience provided by the system will enable QCD to eliminate the need for diesel-powered backup generation for its site while meeting sector-specific regulatory requirements, providing additional cost and sustainability benefits.

\$192,000+
ANNUAL COST SAVINGS

32%
REDUCTION OF CO2
EMISSIONS

\$0
UP FRONT CAPITAL

24+
HOURS OF RESILIENCE

Scale's modular design approach uses components that have been streamlined and pre-engineered to integrate seamlessly with the rest of the system and optimize performance. This accelerates the project construction and installation process, minimizes interruption to QCD fleet operations, and enables future system expansion without costly redesigns or retrofits. The microgrid will be installed in parallel with electric vehicle charging infrastructure, and its entire \$8.3 million cost will be funded through a 20 year contract between QCD and Scale. QCD's purchase of vehicles was supported by a grant from the Last-Mile Freight Program (LMFP).

**QCD'S
MICROGRID
CAPACITY**



1.3 MW
Carport and
Rooftop Solar



1,500 kW
Natural Gas
Backup



**770 kW/
3 MWh**
Battery Storage