



Microgrid for QCD Facility and Fleet of Volvo Electric Trucks

In connection with the charging infrastructure project funded by the Last Mile Freight Program (LMFP), QCD and In-Charge Energy have collaborated with Scale Microgrid Solutions to develop an on-site microgrid energy system that will provide clean electricity and resilience for QCD's facility and zero-emission Volvo VNR fleet.

This microgrid combines on-site solar, battery storage, and backup generation to reduce energy costs, guarantee fleet fuel availability, and maximize the use of renewable energy. When compared to a traditional diesel backup generator, the microgrid reduces CO2 emissions by 99.9% during a power outage.

The clean energy microgrid will be the first of its kind, supporting both QCD's business operations as well as their newly electrified fleet of 30 Volvo VNR's and the associated charging infrastructure. The multifunctional system is a highly-replicable and scalable solution that provides a resilient backstop to business and fleet operations.

22%
REDUCTION IN ENERGY COSTS

\$0
UP FRONT CAPITAL

30
VOLVO VNR ELECTRIC TRUCKS

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 QCD microgrid will be installed in parallel with electric vehicle charging infrastructure and the microgrid's entire \$8.3 million cost will be funded separately from the LMFP through a 20 year contract between QCD and Scale.

**QCD'S
MICROGRID
CAPACITY**



1 MW Rooftop
240 kW
Carport



1,500 kW
Natural Gas
Backup



770 kW / 3 MWh
Battery Storage