

AEMC – 5 minute settlement 04/05/2016



DELIVERING SYSTEMS AT SCALE



SOLAR 2,000+ MW Solar Deployed \$9 Billion+ Project Value



STORAGE
300 MWh Storage Deployed
Systems online in 15+ countries



INTEGRATED ENERGY SOLUTION









POWERPACK

Lithium-ion batteries Liquid thermal control Isolated DC-DC converter

INVERTER

Bi-directional Transformer-less Modular Off-grid and grid-tied capable 99% peak efficiency

INTEGRATED SOFTWARE

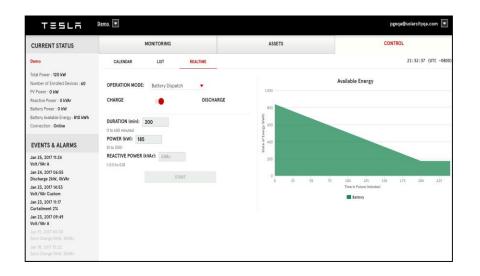
Optimization software
Battery management system
Site master controller

REMOTE MONITORING

Real-time monitoring & control Real and reactive power services Optimized dispatch and market participation



DYNAMIC SOFTWARE PLATFORM



MONITORING AND CONTROL

- Real-time production and consumption data
- Individual asset and aggregated portfolio data
- Discover, locate, and resolve issues to maximize system uptime and performance

OPTIMIZATION AND FORECASTING

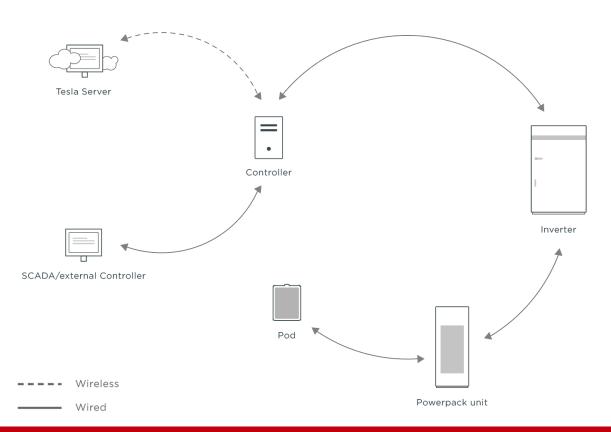
- Real-time energy analysis and forecasting
- Intelligently allocates power/energy commands across individual sites to maximize efficiency and longevity
- Optimizes aggregated portfolios for on-site savings, T&D services, and market participation

MARKET PARTICIPATION

- Response time <1 second full power
- Grid integration through SCADA software locally or remotely
- Accurate current power feedback through to dispatch



POWERPACK GRID INTERFACE



Optimization Software

Powerpack Controller

Tesla Inverter

Powerpack Unit



Customer

Southern California Edison

Location

Ontario, CA

Project Size

20 MW / 80 MWh

Applications

Peaker plant replacement

Commissioned

2016. Three months from deployment to operation



ONE OF THE WORLD'S LARGEST STORAGE PROJECTS







20MW / 80MWH 48 INVERTERS 396 POWERPACKS





Customer

Kauai Island Utility Cooperative (KIUC)

Location

Kauai Island, HI

Project Size

13MW Solar PV 13MW / 52MWh storage

Applications

Solar energy firming and shifting

Commissioned

2017