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**Project Summary**

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**Battery Energy Storage System (BESS)**

A large Li-ion battery energy storage system (500Whrs storage capacity)

**Power Protection & Control / Monitoring & Measurement System**

Comprising of:

- One “Power Monitoring Device & Power Quality Recorder” on substation incoming feeder (@12.5kV)
- One Multifunction Protection Relay on feeder to OASIS (@480V)
- One “Power Monitoring Device & Power Quality Recorder” on Energy OASIS feeder.
- One IEC61850 compliant “Power Quality Meter”
- All required sensors
- One relay-controllable breaker

**Solar Photovoltaic Arrays**

- 814 solar modules, providing a total of 250 kW solar generation capacity.

**Microgrid Loads When Islanded**

- Two “level-3” DC Quick EV Chargers
- Two “level-2” EV (charging posts)
- Other campus/ microgrid loads (i.e. lighting, etc.)

**User Interface (Kiosk)**

Provides required interaction with EV drivers, enabling queuing, charge scheduling, and potentially EMS network access for drivers.

**Mobile Browser**

A Mobile-browser-based web application to enable EV drivers to interface with OASIS system.

**Microgrid Energy Management System**

Capable of controlling loads, generation and planning for energy dispatch.

**Power Conversion System (PCS)**

PCS system comprising of:

- Four 70 kW bidirectional DC/DC converters
- One 250 kW DC/DC photovoltaic converter
- A bidirectional, four-quadrant, 3-Phase, 280 kW DC/AC grid-tied and islandable Inverter
- Electrical balance-of-system including DC and AC disconnect switches, protection modules, isolating transformer, etc.