

## CSUSB Energy Profile: A Look AT Resiliency 6-month Update

The Office of Sustainability continues to work with its campus partners to explore and implement measures that will increase energy resiliency. The focus of these efforts has largely been with the establishment of a microgrid system. The microgrid system, once implemented will allow the University to maintain its most critical functions during disruptions of electrical service provided by Southern California Edison (SCE). These disruptions range from general maintenance to SCE's infrastructure, public safety power shutoffs (PSPS), natural disasters and other unforeseen events.

### Report Follow-Up

#### 1. Solar IV PPA:

Facilities Planning and Management (FPM) is in the process of finalizing the power purchase agreement (PPA) with EDF Renewables. The project will add an additional 3.1MW of clean, renewable energy to the campus through photovoltaic arrays in Parking Lot N and the CGI building rooftop. This project is a component of the future campus microgrid system.

#### 2. Battery Storage:

FPM is exploring options to implement 7.2MWh battery storage. Options for campus battery storage include a Chancellor's Office established a master enabling agreement (MEA) for a PPA and purchase of batteries through the CPUC's Self-Generation Incentive Program (SGIP). Battery storage implementation is planned after the installation and operation of the 3.1MW solar project. This project is a component of the future campus microgrid system.

#### 3. Microgrid:

Creation of the microgrid will be a phased approach. The Chancellor's Office is working with FPM to develop specs and provide funding for bridging documents / design development based on the P2S generated feasibility study. Per the P2S feasibility study, approximately \$1.2M is required to fund the microgrid infrastructure (controllers, transfer switches, communications, etc.).

#### 4. Multi-Trade TOCA Pilot:

CSUSB in partnership with CSU Channel Islands and the Chancellor's Office is establishing a pilot program for a multi-trade, energy efficiency TOCA contract. The Chancellor's Office will establish a minimum spec that CSUSB and CSU Channel Islands will use to help create a regional TOCA. The focus of the projects under this multi-trade TOCA will be on energy efficiency that will aid in microgrid implementation. CSUSB is proposing upgrading building controls to digital controls, upgrade building metering and possible retro-commissioning.

#### 5. Skyspark Energy Information System:

The Office of Sustainability continues to work on the implementation of its energy information system (EIS). Once completed, this will enable the office to have enhanced utility monitoring capabilities and data collection.