

# New Mexico State University

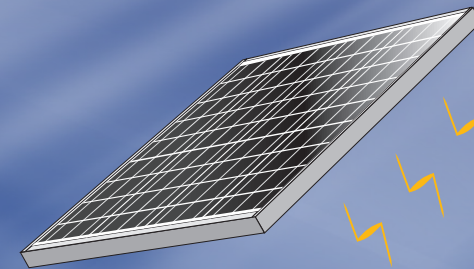
## Year of Sustainability

### Renewable Energy Technology

### Solar Powered Marquee



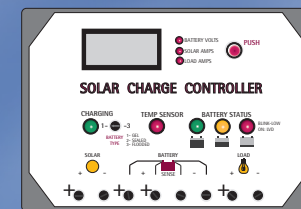
#### How it Works:



Solar Panel

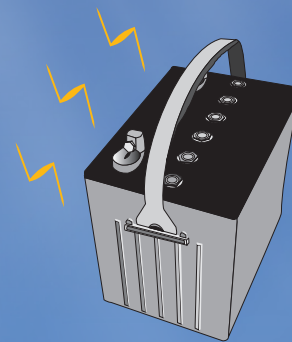
Solar Irradiance is Absorbed by the Solar Panel –

– The Solar Panel Generates an Electric Current & Charges the Battery –



Charge Controller

– A \*Charge Controller Regulates the Voltage & Current from the Solar Panel to the Battery –



Battery

– The Battery Provides Energy for the Display Light and Marquee

\* Most "12 volt" panels put out about 16 to 20 volts, so if there is no regulation the batteries will be damaged from overcharging. Most batteries need around 14 to 14.5 volts to get fully charged.

Constructed by the Department of Engineering Technology and Surveying Engineering.

