TransPower Company
Saving Energy and Our Environment

Case Study

MPTS Technology

Flowing Wells Unified School District - FWUSD

Client

Flowing Wells Unified School District is a unified school district that is headquartered at 1556 West Prince Road, Tucson Arizona. It has more than 10 locations that include early learning center, elementary schools, one junior High school and two high schools.



The facilities director, a progressive person, looking for new technologies for efficiency came across MPTS Technology in 2018. He did his due diligence by actually visiting the labs at Ecotech Institute and end-user customers with MPTS installations in Colorado. He spent time discussing with the end-users, talking to them about their reasons for purchasing the MPTS. He also confirmed MPTS benefits that the customers were realizing after installing the MPTS devices.

In 2020, the facilities director got funding for the first MPTS device and installed it at the high school where they had the largest chiller load and a large solar system rated over 200 KW. The MPTS was commissioned in Sept 28, 2020; since the date of commissioning the MPTS is performing well and is exceeding expectations. MPTS is working well with changing loads. The measured energy demand reduction is an average 30 Kilowatts compared to the benchmark. The Utility bills are also recording lower billed peak Kilowatts. With Covid, the school is operating with maximum intake of outside air. Instead of seeing an significant increase in energy consumption, the MPTS is keeping the consumption very low or near zero. The maintenance and repairs in the building has notably reduced after the installation despite the HVAC equipment running overtime due to COVID's outside air requirements and increased air circulation.



The High School where the MPTS is installed has 1800 students approximately. It occupies 548,000 Sft land area. The average electrical load of the high school is 500 Kilowatts. This load includes HVAC Chillers, AHUs, Motors, Lighting, Office equipment, Electronics and Computers. In 2018, the High School added a Solar System. This location was chosen to install the MPTS because of the synergies that that come into play when MPTS Technology and Solar System when installed on the same electrical network.

The performance of the MPTS has proved to be very successful. **The results are attached.**

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Measured Performance Results:
First Four Months – Green Color values with MPTS. Red Color without MPTS.
Top graph is Power Factor or Electrical Efficiency. Bottom graph showing Peak Kilowatts.



MPTS is reducing the Carbon Footprint significantly with every installation.

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Power Quality Improvement Solution:
MPTS - 21st Century power quality improvement Technology



MPTS, maximum power transfer solutions, are next generation power quality products that **decrease the Electrical Demand,**

Total Electrical Power requirement or Generation (KVA) and

the Carbon Foot Print without replacing/retrofitting inefficient electrical and mechanical equipment by cleaning and recycling wasted electrical power in the electrical network – a renewable energy solution inside the building!