EVPowerPod EV-Resilient Generator Demonstration in Sacramento and Redding, CA

The Sacramento Clean Cities Coalition, working with partners at A-Z Bus and BREATHE Sacramento, hosted a "live" demonstration of the trailer-mounted 100kW, propane-powered "EVPowerPod" generator on September 1, 2021 at the A-Z corporation yard in Sacramento, CA..

Campora Propane set up a bobtail propane delivery truck at the event to show the ease of refueling the unit wherever it is operating, allowing for continuous charging operation for days, weeks or months. BREATHE Sacramento brought a Chevy Bolt EV from their Zipcar "Our Community Car Share" fleet, and A-Z used this portable charging unit to charge a 19,001 lb. Class 5 GVWR Type A school bus, going from 55% to 85% state of charge in about 15 minutes.



EVPowerPod at A-Z in Sacramento



EVPowerPod at Shasta AQMD in Redding

Two days later the EV PowerPod unit was shown to enthusiastic staff at the Shasta Air Quality Management in Redding, CA. There, air district staff recognized the dual-purpose value of the trailer-mounted, self-contained generator with its ability to provide remote, mobile EV charging while also serving as a resilient, rapidly-deployable, low-emission power generation unit for use in Public Safety Power Shutoff (PSPS) events or emergency electric grid failure events.

The EVPowerPod is a trailer-mounted generator running on propane and powering Electric Vehicle Chargers on the trailer. In California, the EVPowerPods will use low-carbon Renewable Propane. The units are relatively quiet, emit no diesel toxics, and have very low criteria emissions and greenhouse gas emissions, making them ideal for providing temporary power in nearly any location.

Because they are trailer mounted, the units can be taken virtually anywhere to provide continuous charging for cars, trucks, buses and off-road equipment, and can simultaneously power a building during a power failure, an Emergency Command Trailer, or a remote worksite. The unit's propane tank is connected by cellular or satellite telemetry to the propane supplier so fuel is automatically dispatched as needed and the unit is refueled on-site, allowing for short- or long-term continuous operation. Units can also be skid-mounted for sites where longer-term charging may be required but grid-power is unavailable.

Attendees discussed a number of opportunities for putting this type of system into service. Some of these included:

- Bringing Transportation Hubs on line while waiting for EVSE
- Demonstrating EVs at fleets that don't have EVSE installed
- Testing mid-route charging locations for longer daily routes
- Testing potential Car Share and Rideshare sites
- Charging EVs during utility power failures and emergencies
- Powering EVs and facilities at emergency operation sites

Dwain Beydler, CEO with EVPowerPods (dbeydler@evpowerpods.com) is touring the West Coast with the unit before taking it to Chicago for an equipment show. At the Sacramento event, Dwain introduced Mark Leitman with Blue Star Gas (mleitman@bluestargas.com) as a distributor for EVPowerPods power units. On-site at the event, assisting with buses and logistics were Isaac Medina, Customer Service Representative for Electric Vehicles (lMedina@a-zbus.com) and Kim DiNapoli, Territory Sales Manager, New School Bus (kDinapoli@a-zbus.com). Naasona (Junior) Taumua from Campora (campora.com) brought the propane truck and provided a short demonstration on how the EVPowerPod is refueled in the field.

For more information about the EVPowerPod, contact Dwain Beydler (dbeydler@evpowerpods.com) or visit the EVPowerPod website at www.evpowerpods.com. For potential applications in the Sacramento Region, please contact Tim Taylor, Executive Director of the Sacramento Clean Cities Coalition (taylor@cleancitiessacramento.org) or Greg Gilbert, Sacramento Clean Cities Coalition Board Member and Principal at Autumn Wind Associates (ggilbert@autumnwind.us).