

Stay Ahead in CAISO's Distributed Energy Resource Gold Rush

Kiwi Core's VPP and distributed energy resource (DER) software platform upgrades the revenue generating capabilities of commodity suppliers, smart buildings, scheduling coordinators, distribution operators, municipalities, and community choice aggregators in CAISO.

Drive More Revenue from Distributed Energy Resources

The Kiwi Core software as a service platform combines real-time wholesale market price visualization with a simple, single interface with which you can:

- Offer, schedule, and dispatch power from DERs or reduce power from loads when prices are high, not just on DR signaled events
- Execute dispatches for single DERs or for a portfolio as a whole through your trading platform, delivering flexibility of demand at the right time and at the right price
- Create physical supply hedges with flexible assets whether you own them or not – dispatched by the Kiwi Core platform against your settlement position
- Prioritize the best DERs to leverage for each event, creating a merit-based dispatch order
- Bring more assets into frequency regulation markets discreetly

California has 4.7 gigawatts of flexible distributed energy capacity, about 10% of the state's peak grid demand. By 2025, the flexible distributed energy resource capacity is expected to grow to 13.5 GW, nearly 30 percent of projected peak demand.

-Wood Mackenzie, 2020

CAISO is experiencing major price volatility as it incorporates unprecedented levels of renewable power onto its system. Some days, CAISO experiences negative prices due to an abundance of solar. In contrast, CAISO says it will purchase import power at up to \$2,000/MWh when demand exceeds supply, as it did during the August 2020 rolling blackouts.

-California ISO – Department of Market Monitoring

Define Your Own Success with a Wealth of Functionality

Kiwi Core's enhanced features put you in the driver's seat:

- Data visualization and tracking of real-time and historic market prices mapped to loads
- Automatic price participation signals, defined by you
- DERs availability based on price levels
- Dynamic compensation across a portfolio
- Integration with a wide-ranging portfolio of DERs with the Kiwi Fruit device





Participate with Confidence

Get Kiwi Core and participate confidently in CAISO's dynamic wholesale power market now:

- Demand Response
- Flex Alerts Emergency Demand Response
- Resource Adequacy via Demand Response Auction Mechanism
- Peak Load Management

Let's talk about maximizing revenues from distributed energy flexible resources. Are you ready to participate in CAISO's DER-rich market? Kiwi Power is here to help.

Contact info@kiwipowered.com | For more information, visit kiwipowered.com

Kiwi Fruit

Our proprietary, low-cost, modular hardware sends your energy data to the Kiwi Core platform.

- Cost effective solution designed to reduce total cost of ownership
- Flexible will deploy only the functionality needed
- Easy to Install pre-configured modules minimize install time on site.

Features

- Highly integrated Internet-of-Things node developed around the revolutionary Electric Imp platform
- Dual-band WiFi
- Cloud and local Ethernet ports
- Secure, failsafe OTA application and OS updates
- Flexible interfacing options including GPIO, RS232, RS485, Modbus/TCP and relay terminals
- Clear front-panel status and diagnostic indicator
- Easy to install DIN-rail compatible form factor
- Pluggable terminal blocks for ease of wiring
- Expansion Segments connect via convenient DIN-rail bus
- Integrated with Kiwi's cloud-based time-series datastore, for highly scalable real-time data capture
- Managed, tamper-proof configuration
- Combined digital status and pulse-counting input

Standards Compatibility Security Performance • Ethernet (Local) • Wifi standards Parameter • RS485 RS232 • WPA, WPA2, WPS Value • Ethernet (Cloud) Local data storage capacity without Cloud data link encryption

- Door closure input
- Pulse inputs
- DIN bus Power & data
- 12-24v supply
- DIN-EN 60715 TH 35 mounting approval
- 802.11 a/b/g/n WiFi
- Modbus/TCP and Modbus/ **RTU** support

- cloud access
- Up to 1 year (configurationdependent, average)
- Centralized dispatch latency
- <1,000ms (communication-dependent)
- Local frequency dispatch latency
- <100ms

- TLS1.2-RSA-ECDHE (forward secrecy) Elliptic curve
- challenge-response
- Managed silicon-to-cloud security stack
- impSecure [™]

Let's talk about maximizing your revenues by leveraging flexibility from load and DERs Are you ready to participate in ERCOT's dynamic market? Kiwi Power is here to help.

