



# Leverage an Abundance of Flexibility Monetization Programs in PJM



**Kiwi Core's distributed energy software platform upgrades the revenue generating capabilities of suppliers, curtailment service providers, aggregators and local distribution utilities in PJM.**

## 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

*PJM coordinates the movement of wholesale electricity across the largest region of any independent system operator in the U.S.:*

**Peak Summer Load 2019:** 151,558 MW

**Annual Energy Delivery 2019:** 823,000 GWh

**Total Population Served:** 65 million people

**States:** Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

# The future of PJM will be clean and distributed. The capacity of wind, solar, and storage projects slated for construction in PJM is ten times greater than for new gas projects



-Rocky Mountain Institute, 2020

## 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 PJM's dynamic market now:

- Economic Demand Response (EDR)
- Legacy Demand Response (DR)
- Peak Load Management
  - 5 Coincident Peaks Program
- Ancillary Services
  - Frequency Regulation
  - Synchronous Reserves
- Capacity Performance

Let's talk about maximizing your revenues from distributed energy. Are you ready to participate in PJM's dynamic market? Kiwi Power is here to help.

Contact [info@kiwipowered.com](mailto:info@kiwipowered.com) | For more information, visit [kiwipowered.com](http://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

- Ethernet (Local)
- RS485 RS232
- Ethernet (Cloud)
- 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

### Performance

- Parameter
- Value
- Local data storage capacity without cloud access
- Up to 1 year (configuration-dependent, average)
- Centralized dispatch latency
- <1,000ms (communication-dependent)
- Local frequency dispatch latency
- <100ms

### Security

- Wifi standards
- WPA, WPA2, WPS
- Cloud data link encryption
- 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.

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