



CPower

The Bridge To Energy's Future

# PHOENIX ET — LEVERAGING LINK API TO INCREASE CUSTOMER ENERGY SAVINGS



## PHOENIX ENERGY TECHNOLOGIES

**Case Study:** How Phoenix Energy Technologies leverages CPower's exclusive building automation tool to increase energy savings in demand response

Phoenix Energy Technologies is a leader in smart buildings and connected machines. They control, manage, and monitor assets such as HVAC, lighting, refrigeration, industrial, and consumer-facing machines. Phoenix enables its customers – retailers, universities, theater and grocery chains, and more – to accomplish their savings goals by providing best-in-class software that monitors and controls assets with minimal additional hardware.

Phoenix has built a stellar reputation on its ability to provide customers with significant energy savings. Could CPower help them provide even more with one particular customer?

CPower and Phoenix have a national big-box retailer as a customer in common. CPower has enrolled more than 1.7 MW at more than 350 of the customer's sites in Demand Response (DR) programs nationwide. These same sites employ Phoenix's Enterprise Data Xchange (EDX) Smart Building Platform to automatically optimize building performance, reduce energy consumption, and improve customer comfort.

What it couldn't do, however, was perform one crucial task: Automate demand response. Each of those 350+ sites participating in programs – such as Capacity Bidding Program in CAISO, ERS 30 in ERCOT, and even the utility program Act 129 in Pennsylvania – performed their curtailment activities manually. This left the door open for missed opportunities, missed savings and revenue, and in California, which sees multiple events each summer, a fair amount of frustration.

With CPower providing DR services and Phoenix providing energy management services, the obvious solution was CPower's Link API, our proprietary application programming interface. Link seamlessly integrates our automated metering and dispatch processes with any and all building management systems, including Phoenix's EDX.

Link creates an integrated automatic DR platform that provides customers with the ability to enact predetermined load management measures at close to a moment's notice, to precisely the degree they need. Another important plus: Link API is one of the few automated demand response tools that meets California's Open Automated Demand Response (OpenADR) open source requirements. With 135 California customer sites, this was a critical consideration.

To ensure secure, reliable performance of the new ADR system, Phoenix engineers completed a thorough two-stage certification process:

- Link Adapter Stage 1 Testing – Testing to verify that the Link adapter on Phoenix's control platform is securely communicating with CPower's servers and properly interpreting DR messages
- CPower Link Final Certification – Full end-to-end testing, sending signals from Dispatch to the sites' building controls through the Link adapter, initiating a load drop test, and ultimately reinstating normal operations

Only after successfully passing both stages did CPower certify Phoenix's control platform's Link adapter ready to support this retailer's automated DR participation needs.



With Link deployed, Phoenix can now ensure that each and every called event is handled quickly and completely, with no delay or chance

of human error. This guarantees savings from curtailed energy usage and can provide additional customer savings by reducing or eliminating resources that were designated for manual curtailment. And because the process is now completely automated, customers have an opportunity to realize greater savings (and earnings) through participation in DR programs with dramatically shortened lead times.

To date, **CPower Link**'s automated DR has performed flawlessly in this summer's real-world, real-time events. While all the data aren't in yet, PhoenixET expects its customers to see notable improvements in building energy savings, as well as revenue generated from utility programs through their collaboration with CPower. In a limited release, over a three-month period, selected stores estimate a positive return on investment from utility incentives amounting to more than 140% of the PhoenixET solution costs.

### PHOENIX/CPower CUSTOMER DEMAND RESPONSE ENROLLMENT BY ENERGY MARKET

ISO	PROGRAM	# OF SITES	KW
CAISO	Capacity Bidding Program	135	675
ERCOT	CPS San Antonio Summer	9	45
ERCOT	Emergency Response Service 30	91	455
MISO	Duke Energy Indiana-CallOption	10	50
RJM	Emergency Capacity DR - Seasonal	79	395
RJM	PA Act 129 Load Curtailment Program	20	100
SPP	Energy Demand Response	8	40

\*CAISO - California Independent Service Operator; ERCOT - Electric Reliability Council of Texas; MISO - Midcontinent Independent System Operator; RJM - RJM Interconnection (mid-Atlantic); SPP - Southwest Power Pool

### ABOUT PHOENIX ENERGY TECHNOLOGIES

As an IoT innovator in smart buildings and connected machines, PhoenixET controls, manages, and monitors assets such as HVAC, lighting, refrigeration, industrial and consumer facing machines to do smart things such alert, measure and command to automatically correct or predict the need for service. Phoenix enables retailers, universities, grocery stores, theaters and many other industries to accomplish their savings goals by providing best-in-class software that monitors and controls assets with minimal additional hardware.

### CPower, Demand-Side Energy Management Solutions.

CPower is a demand-side energy management company. We create optimized energy solutions that help organizations reduce energy costs, generate revenue, increase grid reliability, and help achieve sustainability goals.

For more information, contact us at **1.844.276.9371**

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