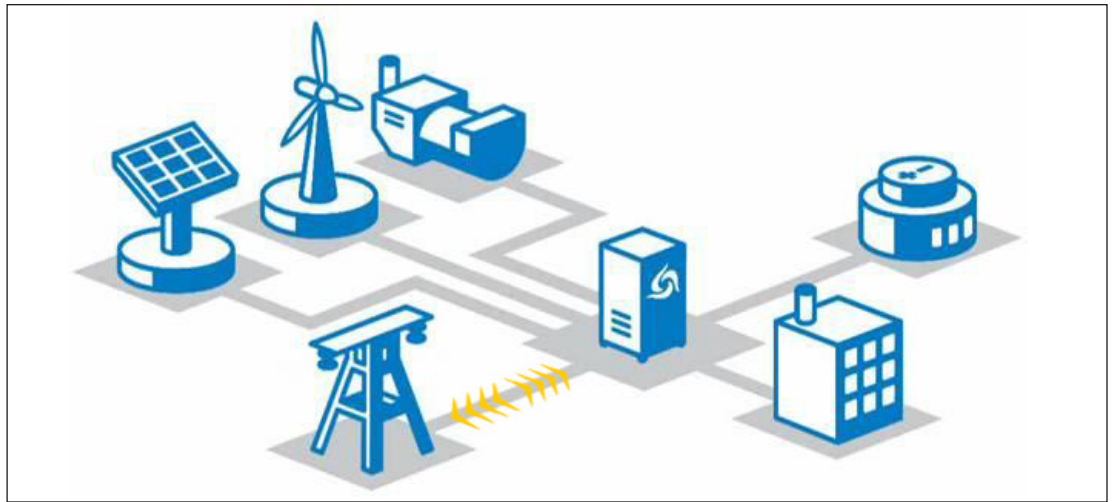


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▲ The ZESS POWR™ PECC (Power & Energy Control Center) in a Grid Interactive platform is a grid-tied ZBB proprietary hybrid power conversion system. The unit supports integration of any combination of generating sources, including having the grid as two-way input. When supplied with ZBB ZESS energy storage units (ZESS 50, ZESS 500) or other bulk energy storage devices, the platform creates an expandable power plant system that independently optimizes supply of each generating source. This provides a grid-synching intelligent energy management architecture that can direct power flows to or from the grid based on demand response, load management and shift supply by time of day for peaking needs. It can even be used as an emergency power system independently of the grid during outages.

Grid Interactive Take Control of Your Power

The utility companies don't have to be in charge of the cost and quality of your energy supply. You can take control of your power needs and have energy - even green energy - on your own terms:

- » You can manage the output of your resources and dictate the quality of your own energy supply
- » You can be free from total dependence on the grid
- » You can have reliable, constant power, even if wind or solar are your main energy source
- » You can sell your excess generated supply and even stored energy back to the grid when its optimal for you to do so, not just for the utility company

What you need is a platform configuration that supports your electrical demands while optimizing all of the interconnected resources available to

you beyond your singular connection to the grid.

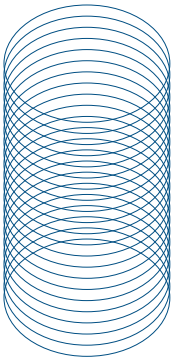
The Answer is ZBB

ZBB is an energy integration solutions company. We provide platforms for:

- » Continuous energy supply
- » The integration of multiple types of energy generation
- » Storage devices for both inexpensive and premium application needs
- » Grid-interactive inverters or inverter sets that normally function in conjunction with the grid but can, as needed, form their own highly reliable micro-grid

ZBB's ZESS POWR™ PECC is an integrated, factory-built and tested system that operates 24-hours a day,





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365 days of the year, regardless of available power. Renewables, energy storage and conventional fuel generation sets are all optimized to form a dependable 'always on' power supply.

Be in control

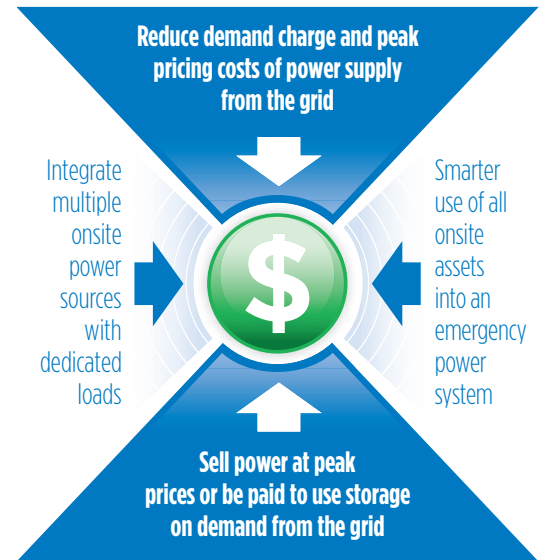
Based on performance, cost or availability of resources, you can manage your power needs with:

- » Direct grid connection with bi-directional power flows
- » Independent control over active/reactive power dispatch to improve power quality
- » Integrated renewable, advanced and conventional generation sources
- » Hybrid configurations of energy storage (flow batteries and other devices) in parallel operation
- » Smart-Grid 'demand response/dispatch' assets as an additional revenue source where available
- » Renewable generation ramp control/voltage smoothing/frequency regulation
- » Power quality management with included power electronics in place of other external devices

Optimize your resources

Power quality and reliability is critical, but with ZBB ZESS POWR™ you don't have to be subject to the grid's continually increasing costs and intermittent supply, nor be constrained to meet the rising demands of your facilities

ZBB ZESS POWR™ PECC is scalable, modular, flexible and configurable. It will support you with an energy storage system that allows many diverse energy sources to run at their discrete optimized levels, thus maximizing total power availability. ZBB's interactive energy format features:



▲ An integrated, intelligent energy platform that manages onsite supply and demand in a bi-directional flow to and from the grid, capturing the convergence of multiple value streams with the use of energy storage as the 'shock absorber' between changes in outputs, demands and cost of supply. It will also create a 'reserve supply' for use at peak times and emergency outages as directed.

- » Open and simplistic design
- » Total installed solution cost
- » Ability to manage complex electrical site requirements
- » Accommodates multiple AC and DC load and generation types
- » Easy installation, configuration and training
- » Fewer parts (SKUs), more efficient inventories
- » Low maintenance requirements, higher availability and improved efficiency
- » Superior electrical energy performance and reliability
- » Low, ongoing costs

Life is uncertain. You need a solution that balances out those uncertainties.

With ZBB ZESS POWR™, this is energy on your terms!

Empowered Renewables. Lower Costs. Continuous Reliability

