



OnDemand™ Energy Appliance



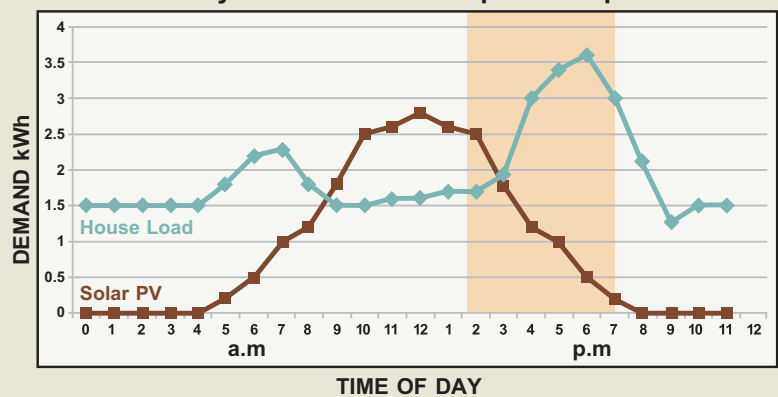
Smart Grid Solution for Integrating Renewables into the Grid

The Silent Power OnDemand™ Energy Appliance is the ideal solution for Electric Utilities and their customers to integrate renewable into the distribution grid. OnDemand™ solves a number of issues that arise as renewable energy production becomes more prevalent.

Aligns Distributed Renewable Production Peaks with the Utility Demand Peaks

Peak solar renewable energy production from photovoltaic panels occurs during peak sunlight hours (typically 9 am to 3 pm). Conversely, the Utilities daily peak residential demand for electricity typically occurs between the hours of 2 pm and 7 pm. As a result many of the grid tie only solar systems in use today are selling energy back in the grid, when the grid doesn't need it. The Silent Power OnDemand™ Energy Appliance stores any excess renewable energy locally, and intelligently uses this stored energy during the Utilities peak demand period, in effect aligning the solar peak with the Utilities peak demand.

**Typical Residential Household using 40 kWh per day
Utility "On Peak" from 2 p.m. to 7 p.m.**

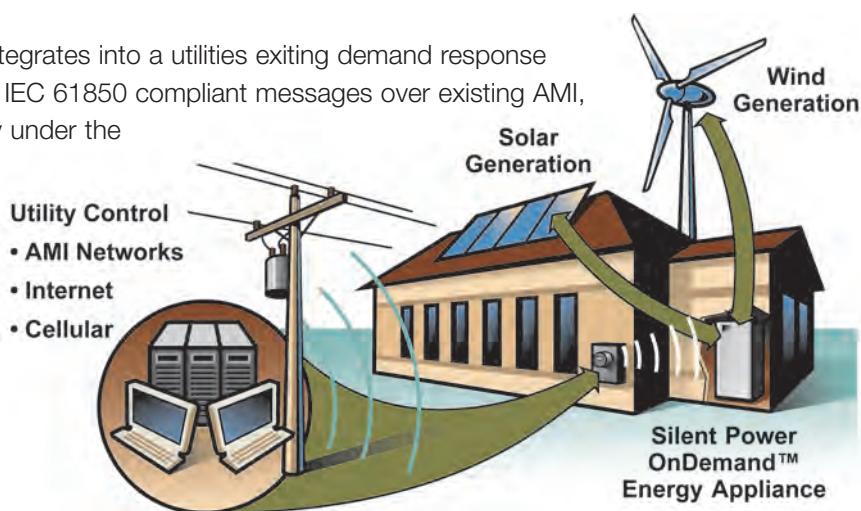


Solar production typically peaks outside the Utilities peak demand

Silent Power OnDemand™ Energy Appliance

Dispatchable Generation Source for Demand Response

Silent Power's OnDemand™ Energy Appliance easily integrates into a utilities existing demand response system. OnDemand™ communicates standards based IEC 61850 compliant messages over existing AMI, cellular, or Internet networks to put dispatchable energy under the utilities control. During critical demand response periods utilities are able to immediately add system capacity by turning on multiple OnDemand™ Energy Appliances in aggregate for those key hours when extra capacity is needed. Key energy metrics such as renewable energy production, consumption, stored energy are all available to the utility.



Residential or Small Commercial Applications

Silent Power's OnDemand™ Energy Appliance is about the size of a small refrigerator. OnDemand™ is available in 5kW or 10kW electrical output with 10kWhr (20kWhr optional) of energy storage. Energy storage is provided by high capacity, sealed maintenance-free, fully recyclable batteries.

Consumer Benefits

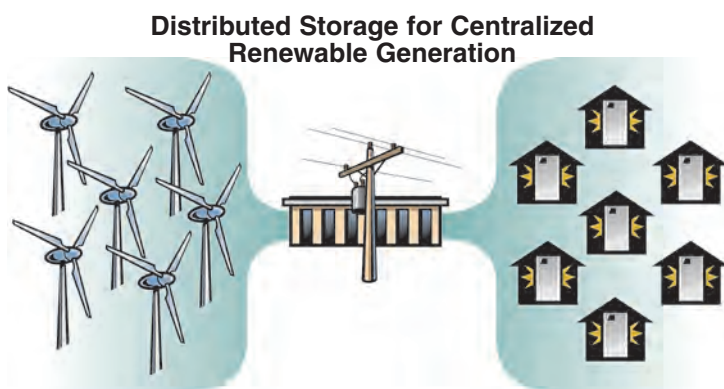
Backup Power — OnDemand™ automatically provides clean, instant, reliable backup power to protect homes and businesses from blackouts and brownouts for critical loads such as computers, refrigerators, security systems, heating systems, and well pumps.

Energy Intelligence – Consumers are provided with detailed energy information including renewable energy production, energy consumption, and net-metered energy.

Renewable Rebates – The OnDemand™ system is eligible for federal tax credits of up to 30% when used with a solar installation. State incentives may apply as well.

Excess Centralized Renewable Production Storage

As centralized renewable production becomes more significant for Utilities (i.e. wind farms, solar farms, etc), there will be times when there is excess centralized production. Utilities will be able to use the OnDemand™ Home Energy Appliance as a distributed energy storage device to store this excess energy for when it is needed the most.



Improved Electrical Grid Reliability

As the grid becomes more storage dependent, the OnDemand™ Home Energy Appliance improves network reliability by creating a microgrid architecture through its distributed energy production by providing energy storage at the edge of the grid. This distributed multipoint production/storage design eliminates a single point of failure or vulnerability and is more secure in terms of our nation's energy security.



To learn more about Silent Power call: **888.818.1001** or visit our website: **www.silentpwr.com**