



GridSense Develops Battery-free Monitoring for Underground Infrastructure and Transformer Applications

Sacramento, CA - December 13, 2011 - GridSense, a subsidiary of Acorn Energy (Nasdaq: ACFN), which develops and markets advanced monitoring solutions for the electric power industry, has developed a maintenance-free and battery-less monitoring system for a U.S. Department of Energy-sponsored project. This self-powered system will allow utilities to cost-effectively monitor dead-front transformers, underground feeders and any other areas of the power grid where an AC (alternating current) power supply is not available. Tested and currently deployed at a major utility in California, GridSense expects the solution to be readily available in 2012.

There are over 30 million transformers installed in the U.S. and it is estimated that over one million are in underground enclosures that are difficult to maintain and monitor. The GridSense solution parasitically draws power from insulated cables and enables continuous monitoring of various asset parameters. Unlike battery-powered monitors that have a finite life span and provide the single function of only detecting faults, the GridSense system is designed to last the life of the asset it is monitoring and can actually prevent faults by capturing real-time performance data. Like all GridSense offerings, the new battery-less solution is easy to retrofit and provides more reliable protection for electric grid assets.

"This new product offering overcomes a major hurdle for the industry," says GridSense CEO Lindon Shiao. "The ability to cost-effectively monitor dead front transformers, switches and underground cable extends GridSense's reach into parts of the network previously cost prohibitive or technologically challenging to monitor. By monitoring these critical points at the distribution level, utilities now have the visibility and intelligence to proactively control power flows in order to optimize asset utilization, prevent failure and ultimately improve reliability."

"The opportunity to start an affordable upgrade of our nation's vast underground electrical infrastructure to a self-healing network makes this a high-profile project," said John Moore, CEO of Acorn Energy. "Until now, this was impossible due to traditional applications which relied upon expensive and unreliable battery-powered technology."

About GridSense Inc.

GridSense is a smart grid technology company dedicated to providing innovative, practical and cost effective monitoring solutions to the electric power industry. Utilizing in-depth industry knowledge and understanding of utility requirements, we provide technology and services that help the industry address the limitations of old and aging infrastructure. We apply experience and technical know-how with new insight and ideas to create intelligent, reliable and leading edge technologies that add value to our customers and shape the future of the modern electrical power system.

About Acorn Energy Inc.

Acorn Energy, Inc. is a holding company focused on technology driven solutions for energy infrastructure asset management. Our three businesses in which we have controlling interests improve the world's energy infrastructure by making it more secure by providing security solutions for underwater energy infrastructure (DSIT), more reliable by providing condition monitoring instruments for critical assets on the electric grid (GridSense) and more productive and efficient by increasing oil and gas production while lowering costs through use of ultra-high sensitive seismic tools for more precise pinpointing of oil and gas reservoirs (US Seismic). For more information visit www.acornenergy.com.

Safe Harbor Statement

This press release includes forward-looking statements, which are subject to risks and uncertainties. These risks and uncertainties include demand and competition in the market for devices and equipment similar to those manufactured by GridSense and possible uncertainty about GridSense's orders from customers resulting from grants by the US Department of Energy. For disclosure of additional risks and uncertainties which may affect GridSense's business and prospects and Acorn Energy, Inc.'s business generally, see the information under "Risk Factors" in Acorn Energy's most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K as filed with the Securities and Exchange Commission.

Gridsense Contact:

Leonce Gaiter
Director of Marketing
(916) 372-4945
l.gaiter@gridsense.com

Investor Contact:

Paul Henning
Cameron Associates
(212) 245-8800
Paul@cameronassoc.com