HOMER Energy Launches HOMER Pro - Next Generation Microgrid Optimization Software

HOMER Energy, creator of the HOMER software for optimization and decision analysis for hybrid renewable microgrids, has released its next generation product - HOMER Pro.

Boulder, Colorado, November 10, 2014 — HOMER Pro, a complete rebuild of the HOMER software for economic optimization of microgrids, was released this week by HOMER Energy LLC. The HOMER (Hybrid Optimization of Multiple Energy Resources) software is the global standard for early stage microgrid design and analysis. Originally developed at the US Department of Energy's National Renewable Energy Laboratory, HOMER was licensed to HOMER Energy LLC in 2009, setting the stage for the development of HOMER Pro.

Microgrids are independent electrical systems that can operate either in concert with the main electrical grid or separately from it – in "islanded" mode. The sizes can range from a single building or household to a region. Microgrids are considered a major part of the reworking and modernization of the electric grid to include high penetrations of renewable power and modern communications and controls. They are also a potential solution to energy poverty, since it is often more economical to build a localized electrical system based strongly on renewable energy sources than to extend the grid into these areas, particularly as grids may be extremely unreliable in some areas. But understanding what combination will work where is complex, and that's where HOMER comes in. It is a decision analysis tool for microgrids of all shapes and sizes.

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HOMER is different from other tools in the renewable energy analysis space in its focus on hybrid renewable microgrids, those that combine multiple energy and storage sources, such as wind with solar photovoltaics and batteries. It is a chronological simulation, optimization, and decision analysis tool that bridges the gap between financial spreadsheet and complex engineering tools. A popular application for HOMER is in remote locations that have depended solely on diesel (or other liquid fuel sources) for their electricity generation. Increases in diesel fuel prices in recent years have been crippling for many of these areas. HOMER allows the analysis and comparison of an almost infinite number of options for these locations, and determines which combination will reliably meet the electricity requirements for the lowest cost. HOMER is also used for grid-connected systems, where it is used to increase system resilience and security.

"We are excited about the release of this innovative product, which takes HOMER to a whole new level," said Dr. Peter Lilienthal, HOMER Energy CEO and original creator of HOMER. "HOMER Pro makes it much easier for us to work with our industry partners on getting their unique solutions and approaches into HOMER. That was much more difficult with earlier versions."

The need for a new edition of HOMER is driven by the burgeoning microgrid market, which, although still in its infancy, is growing rapidly. According to Navigant Research, the market is moving into full commercialization mode and is expected to surpass $40 billion in value by 2020.

HOMER Pro runs on Windows operating systems and can be downloaded from the HOMER Energy website.

About HOMER Energy

HOMER Energy LLC is the global leader in the design and analysis of remote microgrids. The HOMER (Hybrid Optimization of Multiple Energy Resources) software has over 110,000 users worldwide. HOMER Energy provides the HOMER software, training, analytical services, and community market access tools to professionals in the energy industry who desire to analyze and optimize distributed power systems and systems that incorporate high penetrations of renewable energy sources. Visit http://homerenergy.com for more information.