



## **GE's Integrated Biomass Gasification Solution to Power Phoenix Energy's North Fork Project**

- *GE to Supply Gasification System and Jenbacher Engines for Project*
- *Phoenix Energy Planning Multiple Bioenergy Generation Projects in California*
- *GE's Fuel-Flexible Distributed Power Solutions for Biomass Promote Regional Energy Security and California's New Bioenergy Tariff*

SAN FRANCISCO—September 9, 2015—GE's Distributed Power business (NYSE: GE), Western Energy Systems and San Francisco-based Phoenix Energy today announced they have signed an agreement for GE to provide equipment for an integrated biomass gasification solution to power a bioenergy plant in North Fork, the next in a series of bioenergy plants that Phoenix Energy is building in the state. GE's integrated biomass gasification solution includes an Ecomagination qualified, 1-megawatt engine and biomass gasification system. Phoenix Energy and GE have collaborated to design and implement this solution statewide.

For the North Fork project, Phoenix Energy will use the GE gasification solution to convert excess forest biomass to electricity, heat and biochar, supporting the state and federal efforts to reduce wildfire risk, eliminate wasteful pile and burn management practices and improve carbon sequestration. The renewable biomass is procured locally from U.S. Forest Service and CalFire managed lands. With GE's process, the carbon in the biomass is left mostly in solid form as biochar. This biochar is then put back into California agriculture to improve soil health and water retention and can also be used as carbon filter media. GE will provide an integrated biomass solution including the gasifier, gas conditioning system and engine.

"GE is the first company to offer us a single end-to-end solution on the complete biomass system, rather than piecing it all together from multiple vendors. This is game changing for the forested communities," said Phoenix Energy CEO Greg Stangl. "By working together, GE has given us the confidence that this is the right solution to use throughout California to produce sustainable local energy from local biomass, creating local jobs."

The North Fork project is the recipient of a \$4.9 million grant awarded by the California Energy Commission. Other Phoenix Energy projects nearing agreement will interconnect with various local utilities under California's new SB-1122 legislation, which seeks to support further deployment of bioenergy in the state.

"The Energy Commission invests in innovative cleaner energy concepts like Phoenix Energy's North Fork project because they create a pathway towards achieving California energy and greenhouse gas emission reduction goals," said Rizaldo Aldas, the Energy Commission's renewable energy R&D program lead. "Bioenergy is environmentally and economically sustainable, and the successful development of projects like this one move biomass forward as a key renewable energy resource for the state."

Phoenix Energy plans to commence operation of the North Fork plant in the fourth quarter of 2016. GE and Western Energy Systems also will provide technical support and service for Phoenix Energy's installed systems.

"This important agreement underscores our commitment to providing alternative energy solutions to help meet global energy goals for renewable power generation," said Scott Nolen, global technical solutions leader for GE's Distributed Power business. "Our gasification system and engines are designed to meet our customers' needs for both high efficiency and reliability while increasing fuel flexibility. The Jenbacher system is well suited for Phoenix Energy's process requirements."

In October 2014, GE, Western Energy Systems and Phoenix Energy [announced](#) that GE would provide its Jenbacher J612 gas engines for Phoenix Energy's Lake Tahoe site. The GE gas engines use syngas produced at Phoenix Energy's biomass gasification facilities to generate renewable electricity.

### **About Phoenix Energy**

Phoenix Energy is transforming the way the world makes and uses power. Phoenix Energy is a "private label" power company that builds, owns and operates small, on-site bioenergy plants in partnership with communities and businesses in the Ag, waste and forestry sectors. We enable our partners to become their own energy provider, producing electricity, heat and biochar at prices less than the traditional grid. We use local fuel to make local energy with and for local communities.

For more information, visit the company's website at [www.phoenixenergy.net](http://www.phoenixenergy.net).

### **About Western Energy Systems**

Western Energy Systems (WES) is GE's authorized distributor for Jenbacher gas engine systems throughout the western United States in California, Oregon, Alaska and Hawaii. Focused exclusively on gaseous fueled engine and power generation systems, WES provides comprehensive application, sales engineering, systems integration, parts and service capabilities. As part of the Penn DDA/Penn Power Systems organization, WES brings over 50 years of experience in engine power applications with renewable and fossil fuels. For more information, visit the company's website at <http://www.pennpowergroup.com/western-energy-systems>.

### **About GE**

GE (NYSE: GE) imagines things others don't, builds things others can't and delivers outcomes that make the world work better. GE brings together the physical and digital worlds in ways no other company can. In its labs and factories and on the ground with customers, GE is inventing the next industrial era to move, power, build and cure the world. [www.ge.com](http://www.ge.com)

### **About GE Power & Water**

GE Power & Water provides customers with a broad array of power generation, energy delivery and water process technologies to solve their challenges locally. Power & Water works in all areas of the energy industry including renewable resources such as wind and solar, biogas and alternative fuels; and coal, oil, natural gas and nuclear energy. The business also develops advanced technologies to

help solve the world's most complex challenges related to water availability and quality. Power & Water's six business units include Distributed Power, Nuclear Energy, Power Generation Products, Power Generation Services, Renewable Energy and Water & Process Technologies. Headquartered in Schenectady, N.Y., Power & Water is GE's largest industrial business.

Follow GE Power & Water on Twitter [@GE\\_PowerWater](#) and on [LinkedIn](#).

###

For more information, contact:

Susanne Reichelt  
GE Power & Water  
+43 644 80833 2382  
[susanne.reichelt@ge.com](mailto:susanne.reichelt@ge.com)