

FuelCell Energy to develop biogas-fueled project in California

By Chris Hanson | October 21, 2013

Connecticut-based FuelCell Energy Inc. announced two updates to the development and commercialization of solid oxide fuel cell (SOFC) technology, which included a \$6.4 million cooperative agreement with the U.S. DOE and a SOFC power plant preparing for operation at a California dairy farm.

FuelCell Energy said the SOFC dairy farm power plant demonstration is slated for operation in early 2014. The facility is located within the Sacramento Municipal Utility District and will use biogas derived from anaerobic digestion to generate electricity and heat for the dairy operation.

“We believe our technology is well-suited for the market with industry-leading electrical efficiency of approximately 60 percent plus useable heat for combined heat and power applications, resulting in total estimated thermal efficiency between 80 and 85 percent. The technology is also fuel flexible, with the ability to utilize coal syngas, clean natural gas, on-site renewable biogas or directed biogas,” said Tony Leo, vice president of application engineering and advanced technology development at FuelCell Energy. “We have increased the size and power density of the individual fuel cells, which is critical to high volume manufacturing of an economically competitive product as we enhance the technology and prepare for commercialization.”

The research on sub-megawatt applications reinforced the value of combined heat and power configurations that use the same fuel to generate both electricity and heat, added Leo.

The DOE award is spread over an 18 month term and aims towards developing a sub-megawatt power plant to generate both heat and power for FuelCell Energy’s facility in Danbury, Conn.

