New fuel cell system generates power on campus

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David McHale and the Bloom Energy Server at UC Santa Barbara

UC Santa Barbara is now host to a unique new energy system that is providing electricity as part of the university's commitment to energy efficiency and sustainability. The new 200-kilowatt Bloom Energy Server is directly connected to Southern California Edison's electric distribution system.

"UC Santa Barbara is a leader in advanced energy efficiency research," said David McHale, associate director of Utility and Energy Services in Facilities Management. "Developing next-generation materials and technologies that will power our future is a point of pride for UCSB, and the partnership with Southern California Edison and Bloom Energy to install a 200-kilowatt fuel cell on campus provides an opportunity to

evaluate an emerging power generation technology."

The Bloom Energy Server produces clean, reliable and affordable electricity on-site. The system utilizes a unique fuel cell technology, which converts fuel into electricity via an electro-chemical process, without any combustion or harmful, smog-forming particulates.

The new server generates power 24 hours a day, seven days a week. It is expected to produce more than 1.75 million kilowatt hours annually, enough to power about 160 average U.S. homes. The system is extremely efficient, cutting carbon emissions by almost 30 percent, nearly eliminating nitrogen oxide and sulfur dioxide pollution, and producing electricity using 99.99 percent less water than an average power plant.

"Effective energy management has always been a high priority for UCSB," said McHale. "It is critically important to manage the campus's energy consumption while attaining and maintaining the quality of programs and research for which the university is known. We are proud our students will carry on the conservation measures they have learned here out into the world."

Provided by University of California - Santa Barbara