

EBay to power new data center with fuel cells

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Bloom's Energy Server

(Phys.org) -- Proving that it's serious about becoming greener, EBay has announced that a new data center being built in Utah will run entirely on fuel cells, a move that other giants in the technology sector have been hesitant to take. Currently, those companies using fuel cells to power their data centers use them as a supplemental source of power, clearly worried about relying on a still new and in some ways unproven technology.

The new data center is to be built in South Jordan, Utah as an addition to an already existing data center. The existing center will continue to draw [power](#) from the grid, while the new one will be powered exclusively by fuel cells, but will be hooked to the grid as a backup measure. [EBay](#) also has another data center in South Jordan that processes PayPal

transactions, though there are no plans currently in place to make any modifications to its power source structure.

As [fuel cell](#) technology has matured, it's undergone a name change; it used to be called hydrogen fuel cell technology, but because other sources of fuel can now be used as well, the name has become more generic. Still, the fuel cells for the South Jordan center will be of the hydrogen variety, though EBay has said that it will pay a premium for the creation of an equal amount of biogas in other places to offset the hydrogen used to power its plant. In addition to helping to save the environment, the center is expected to save on electricity costs as the price of hydrogen has dropped dramatically over the past several years.

With fuel cells, the gas is not burned to produce heat to boil water to turn turbines to create electricity, as occurs with other processes. Instead, a chemical reaction occurs at high temperatures and the electricity produced is used to continuously recharge large batteries, which in turn are used to power the plant; this means carbon dioxide and water and very little else is released into the environment, making the process much cleaner than with fossil fuel burning plants. And because the electricity is made onsite, none is lost in transit and the need for bulky and expensive backup generators is eliminated.

To generate the huge amount of power required by the data center, [Bloom Energy](#), maker of the cells will string together enough of them to generate the six million watts the company believes it will need. Each fuel cell is capable of producing about 1.75 million kilowatt hours a year. Construction of the new plant is expected to commence almost immediately with completion likely by the middle of next year.

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