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World's First Energy Station Featuring Hydrogen and Electricity Co-Production Opens in Las Vegas

Public-Private Partnership Demonstrates Hydrogen Infrastructure Development Success

The U.S. Department of Energy (DOE) today announced the opening of the world's first hydrogen energy stations featuring the co-production of hydrogen fuel for vehicles and clean electric power using fuel cells.

The project, a public-private partnership between the Energy Department, the City of Las Vegas, Air Products and Chemicals Inc., and Plug Power, will be a learning demonstration of hydrogen as a safe and clean energy alternative. The co-production of hydrogen fuel and electricity offers an attractive future business case for the sale of merchant hydrogen or for generating a steady electric-generation revenue stream while hydrogen vehicle sales ramp up.

President Bush's National Energy Policy provides for exploring promising alternative energy technologies such as hydrogen. David K. Garman, Assistant Secretary for Energy Efficiency and Renewable Energy, who attended the opening ceremony, said, "This project supports FreedomCAR by providing the means for learning about hydrogen infrastructure technologies necessary for clean energy-efficient vehicles."

The fueling station is located at the City of Las Vegas vehicle maintenance and operation service center. It is capable of dispensing hydrogen, hydrogen-enriched national gas, and compressed natural gas, and consists of an on-site hydrogen generator, compressor, liquid and gaseous hydrogen storage tanks, dispensing systems and a stationary fuel cell. The costs for the $10.8 million project were split evenly between DOE and the Air Products team. The Air Products team was responsible for the design, construction, and operation of the hydrogen facility. Plug Power was responsible for manufacturing and installing the proton electrolyte membrane fuel cell. DOE is also sharing the cost with the City of Las Vegas and NRG Technologies Inc. to convert and operate hydrogen-based vehicles for use at the new hydrogen station.

Future work under this project will evaluate hydrogen operating safety, the reliability of fuel cell power and its overall economic feasibility, and verify the integration of power generation and vehicle refueling designs. This project is one of the Department of Energy's strategies to develop hydrogen and fuel cell technologies which will reduce dependence on imported oil. For more information see http://www.eren.doe.gov/hydrogen.