
Sorry this is a little late. I was in Tokyo at the 8th International Hydrogen and Fuel Cell Expo. It was a great show, with organizers estimating attendance at 120,000 for the entire week (all shows – Fuel Cell, PV, Battery, Eco-House and Smart Grid). To see some pictures from the show and of the Suginami Hydrogen Station in Tokyo, check out (and like!) the Fuel Cell Insider Facebook page at https://www.facebook.com/FuelCellInsider.

Fuel Cells 2000 is gearing up to launch its website redesign and database upgrades and needs some help from fuel cell manufacturers. Please take a look at our State Fuel Cell and Hydrogen Database (http://www.fuelcells.org/dbs/) and/or the Worldwide Fuel Cell Installation Database (http://www.fuelcells.org/db/index.php) to make sure we have all of your companies’ installations and send us any missing information, images or updates as to whether they are active, decommissioned or still planned. Any updates please send to Jennifer Gangi at jennifer@fuelcells.org. The new website is going to be awesome and will drive increased traffic to the databases so we want to make sure we have the most up-to-date and complete information. Stay tuned for launch, hopefully by the end of the month!

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TRANSPORTATION APPLICATIONS

Fleet of GM Fuel Cell Vehicles Enlist in Military.
The U.S. Army, Pacific unveiled the world’s first military fleet of fuel cell vehicles (FCVs) - 16 General Motors’ FCVs for real-world evaluation at Fort Shafter in Hawaii. The vehicles are being paid for by the Army Tank Automotive Research Development Engineering Center (TARDEC), Office of Naval Research and Air Force Research Laboratories (ONR) and Air Force Research Laboratories (AFRL).

Hydrogenics to Deliver Five Fuel Cells for Various Vehicles.
Hydrogenics Corporation has received orders for the delivery of five HyPM™ HD Series Fuel Cell Power Modules from US Hybrid of Torrance, California, to be used in a dump truck, a step van and several buses. The vehicles are part of a government funded program managed by the High Technology Development Corporation's Hawaii Center for Advanced Transportation Technologies and will be deployed for a variety of end users in Hawaii.

Vehicle Projects Inc has entered a partnership with Anglo American Platinum Ltd on a project to build five fuel cell-powered underground mine locomotives. The locomotives will be demonstrated in Applets’ Dishaba underground platinum mine in Limpopo province, South Africa, around mid-year 2012. Vehicle Projects’ hybrid fuel cell power plant uses Ballard Power Systems’ FCvelocity-9SSL V4 stacks and K2 Energy lithium-ion batteries.

Intelligent Energy and Suzuki SMILE Together.
Intelligent Energy and Suzuki Motor Corporation have created a joint venture company called SMILE FC System Corporation, to develop and manufacture air-cooled fuel cell systems for a range of industry sectors. The joint venture also includes a non-exclusive license agreement that gives Suzuki access to
Intelligent Energy’s fuel cell technology for its next generation of fuel cell vehicles. Under the terms of the contract, both companies will take a 50 percent stake in the joint venture. SMILE FC System Corporation will be headquartered in Hamamatsu City, Shizuoka, with operations initially based in Yokohama.

Ballard Enters MOU With WEG Industries.
Ballard Power Systems has signed a non-binding Memorandum of Understanding (MOU) with WEG Industries of Brazil to collaborate on product and market development of clean energy fuel cell products. Under this agreement, the companies will work to identify and evaluate market opportunities for hydrogen fuel cell products and services in bus, rail and mining applications.

STATIONARY APPLICATIONS

For its Maiden, North Carolina data center, Apple plans to install 5 megawatts (MW) of fuel cells that, when online later in 2012, will be the largest non-utility fuel cell installation operating anywhere in the country. This installation will be located directly adjacent to the data center and will be powered by 100 percent biogas. In 2011, Apple installed a 500-kW biogas-powered fuel cell at its Cupertino, California corporate facilities.

Cox Installs Another 1 MW of Fuel Cells.
Cox Enterprises has installed five new 200-kW Bloom Energy fuel cells at its Cox Communications subsidiary in San Diego. The fuel cells, powered by renewable biogas, include two 200 kW units powering 100 percent of one facility and three 200 kW units powering 90 percent of another building. Cox already has 8 other fuel cells installed in California - four 100 kW fuel cell units at KTVU-TV in Oakland; two 400 kW fuel cell units at Cox Communications in San Diego; and two 400 kW fuel cell units at Cox Communications in Rancho Santa Margarita.
http://coxpath.kntv.com/index.php?s=43&item=584

CT Transit to Install UTC Unit for Headquarters.
CT Transit, which currently operates five buses in Connecticut powered by UTC Power fuel cells, has purchased a 400 kW PureCell® stationary fuel cell system for their headquarters in Hartford. The fuel cell will power the 330,000 square-foot facility and thermal energy from the fuel cell will be used to pre-heat two boilers that support the building's primary heating system.

FCE Enters MOU With Fraunhofer IKTS, Signs Long-term Service Agreement with SCE.
FuelCell Energy, Inc. has entered into a memorandum of understanding (MOU) to form a German-based joint venture with Fraunhofer IKTS (Institute for Ceramic Technologies and Systems) to market its Direct FuelCell® (DFC®) stationary power plants to the European market. FuelCell Energy has established a legal entity in Germany for the joint venture and will retain majority ownership. In other FCE news, the company has sign a multi-year service agreement with Southern California Edison (SCE) to operate and maintain the 1.4 megawatt DFC® power plant previously purchased and located at California State University — San Bernardino. FuelCell Energy will operate and maintain the power plant and SCE will sell the ultra-clean electricity produced by the fuel cell power plant to the University under a power purchase agreement and will also provide the high-grade heat generated by the fuel cell to the University.

ClearEdge5 Receives CSA Certification.
ClearEdge Power’s outdoor ClearEdge5 system has received CSA certification and listing to ANSI/CSA Americas FC-1.
PORTABLE/BACKUP POWER

Thirty Dantherm Power Fuel Cells Being Installed in India.
Thirty of Ballard Power Systems’ fuel cells manufactured by Dantherm Power, its backup power company, are being deployed in the Indian cellular wireless telecommunications network in India and installation will be completed this month. Good news for the industry - the Telecom Regulatory Authority of India (TRAI) issued a directive in January, 2012 requiring 50% of all rural telecom base station towers and 33% of all urban towers in the country to be powered by hybrid solutions within five years. Hybrid solutions involve a combination of renewable energy sources, and include hydrogen fuel cells.

ReliOn Introduces New Product.
ReliOn announced its new E-1100v fuel cell, a fully integrated system producing up to 1,100 Watts of power in an industry first vertical-mount chassis. The E-1100v fuel cell system offers footprint space savings and is available in both 24V or 48V DC in a variety of indoor and outdoor mounting options including rack, wall and cabinet. First customer commitments have been received in Europe for the internal communications network of a premier electrical utility and an emergency backup power application for a Fortune 100 industrial customer.
http://www.relion-inc.com/news.asp#41

MICRO FUEL CELLS

MILITARY APPLICATIONS

FUELS/REFORMERS/STORAGE

Belgium Station Officially Opened.
The WaterstofNet Hydrogen Fueling Station built by Hydrogenics officially opened at Colruyt's headquarters in Brussels. This station features Hydrogenics’ fifth generation HYSTAT 30 water electrolyzer, a compressor, a high pressure cascade storage and a 350 bar dispenser to supply up to 65kg of clean hydrogen fuel per day. The station will be used for refueling forklifts, buses and other vehicles.

ITM Signs Agreements with Boeing, Logan Energy.
ITM Power has signed an Equipment Development and Lease Agreement with Boeing Research & Technology Europe S.L.U. for the development, assembly and field trials of a 1Nm³ PEM electrolyzer. The containerized electrolysis equipment will form part of Boeing’s current off-grid refueling station for Unmanned Aerial Vehicles (UAS). ITM also signed a Cooperation Agreement with Logan Energy Limited to jointly tender for hydrogen energy storage and clean fuel projects in Scotland and Logan Energy will undertake all project management and after sales support for any plant installed under the agreement.

Element One, Inc. of Boulder, Colorado, finished as a runner-up in the Department's "America's Next Top Energy Innovator" competition for its unique hydrogen leak detection technology that can indicate the presence of hydrogen down to concentrations as low as 0.04%, or 1/100 of the lower flammability limit.
http://energy.gov/articles/secretary-chu-announces-winning-startup-companies-americas-next-top-energy-innovator

MATERIALS/COMPONENTS/TESTING
NTM Sensors Supplied ITM Power with Sensors.
NTM Sensors has supplied ITM Power with NTM SenseH2® hydrogen sensors for its hydrogen generation systems.
http://www.ntmsensors.com/site/

REPORTS/MARKET STUDIES

Ten Trends.
Pike Research has released, “The Fuel Cell and Hydrogen Industries: Ten Trends to Watch in 2012 and Beyond.”

REQUESTS FOR PROPOSALS

Check out the Fuel Cell RFPs blog for more opportunities.

$6 Million for FCEV Data Collection Projects.
DOE announced up to $6 million available this year to collect and analyze valuable performance and durability data for light-duty fuel cell electric vehicles (FCEVs). The projects selected for funding will collect data from next-generation FCEVs as they are operated in real-world conditions to identify ways to lower costs and improve fuel cell durability and overall vehicle performance. The 50% cost-shared projects will supply information on fuel cell system operation and other real-world vehicle data to the Hydrogen Secure Data Center at the Department's National Renewable Energy Laboratory (NREL) for analysis and comparison.
https://eere-exchange.energy.gov/#8cb62689-d772-4fad-b990-1889cdda0b96

Miniaturized Rechargeable Power Systems.
NineSigma, on behalf of Siemens Corporation, has issued RFP# 68106, "Miniaturized Rechargeable Power Supply Systems.”

MISCELLANEOUS

Intelligent Energy Raises $35 Million.
Intelligent Energy has completed its latest round of funding, raising in excess of $35 million (£22 million) from existing and new institutional shareholders. This funding will be geared towards the commercialization of the company's products within the consumer electronics and stationary power markets.

Arcola Energy and Horizon Form Exclusive Partnership.
Arcola Energy and Horizon Fuel Cell Technologies have formed an exclusive partnership to provide deployment, customization and integration support to a wide range of companies launching Horizon fuel cell powered products in the UK. Arcola Energy has also commenced work on the first UK-based deployment of next generation Horizon Fuel Cell stacks powered by Johnson Matthey’s HiSPEC® membrane electrode assemblies (MEAs).
http://arcolaenergy.com/PR/Arcola_Horizon_Integration_Platform_FINAL.pdf

Patents for Sale!
Phil-Lu Incorporated has two patents for sale – one for an on-demand sodium borohydride hydrogen generator and the other for a low-cost fuel cell. You can see the patents by searching http://patft.uspto.gov/netahtml/PTO/srchnum.htm. The fuel cell patent is No. 6,998,188 and the hydrogen generator patent is No. 7,691,527. If interested, contact Phil-Lu Incorporated at Philluinc@aol.com.
CONFERENCES

For a complete list of conferences, please go to http://www.fuelcells.org/news/conf.html.

Hannover Fair!!

ACT Expo.
The 2012 ACT "Alternative Clean Transportation" Expo will take place May 15-17, 2012, at the Long Beach Convention Center in Long Beach, California. For conference details, please go to http://www.actexpo.com/.

All-Energy.
All-Energy will be held May 23-24, 2012, at the Aberdeen Exhibition and Conference Center in Aberdeen, Scotland. The show is organizing a U.S. Pavilion so if any U.S. companies are interested in exhibiting, contact Wayne Kakos at wkakos@reedexpo.com. For more information, please visit http://www.all-energy.co.uk/HOME.html.

WHEC 2012.

Hybrid Small Fuel Cells 2012.

Total Energy USA.
Total Energy USA will be held November 27-29, 2012, at the George R. Brown Convention Center in Houston, Texas. For more information, please go to http://totalenergyusa.com/.

China Fuel Cell and Hydrogen International Conference.
The China Fuel Cell and Hydrogen International Conference will be held September 20-21, 2012, in Nanjing, China. For conference details, please contact Mr. Jacken Zheng at atkepp@gmail.com.

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_Fuel cells generate electricity without combustion by harnessing the energy released when hydrogen and oxygen are chemically combined. Fuel Cells 2000 is an independent, nonprofit activity dedicated to the commercialization of fuel cell technologies._