Yes, I know it is a few days early, but I am off to Tokyo for the 7th International Hydrogen and Fuel Cell Expo. This year we have the largest contingent of US companies in the conference’s history participating in the US Pavilion. Pdc Machines, ESL ElectroScience, NexTech Materials, Catacel, Avâlence, UTC Power, the Connecticut Center for Advanced Technology/ CT Hydrogen-Fuel Cell Coalition, Fuel Cells 2000 and the Fuel Cell and Hydrogen Energy Association will be in the Pavilion with NDCPower, Dexmet Materials and Preco, Inc. in adjoining booths. There will also be a few other US companies scattered throughout the exhibition hall, so if you are attending, please be sure to stop by E2-35!

As you may have heard, the US Secretary of Energy has once again proposed deep budget cuts to the Fuel Cell Technologies Program at DOE. Ruth Cox, executive director of the Fuel Cell and Hydrogen Energy Association did a great interview on E&E’s OnPoint - http://www.eenews.net/tv/2011/02/23 addressing the proposed cuts and state of the industry. Please take a second and send a message to Congress at http://capwiz.com/fuelcells/home/ to tell your representative to restore funding. You can also find media contacts for letters to the editor on that site as well. After you submit your letters, please share the link with friends, family and colleagues in the industry to do the same. Thank you!

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TRANSPORTATION APPLICATIONS

Hyundai Debuts New FCEV, Signs MoU with Nordic Countries.
Hyundai Motor introduced its third generation hydrogen fuel cell vehicle, the Tucson ix Fuel Cell Electric Vehicle (FCEV), for the first time at the Fuel Cell & Hydrogen Energy 2011 conference last week. The Tucson ix FCEV is equipped with its newest 100-kilowatt (kW) fuel cell system and two hydrogen storage cylinders (700bar), can travel more than 400 miles on a single fueling, a 76-percent improvement over its predecessor, and achieves gasoline equivalent fuel efficiency of more than 70 miles per gallon, a 15-percent improvement over the previous version. It can also start in temperatures as low as minus 25 degrees Celsius. Hyundai will test 50 new Tucson ix FCEVs throughout 2011 as part of the second phase of the Korean Government Validation Program. Hyundai plans to make a limited supply of the Tucson ix FCEV in 2012 and begin mass production in 2015. Hyundai-Kia Motors also signed a Memorandum of Understanding (MoU) with key hydrogen stakeholders from the Nordic countries, Sweden, Denmark, Norway and Iceland, to collaborate on market deployment of FCEVs. http://www.hyundaiusa.com/about-hyundai/news/Corporate_Tucson_ix_FCEV_Release-20110214.aspx

DLA Orders Eighteen Additional Nuvera Fuel Cells.
Nuvera Fuel Cells, Inc. has received a follow-on order from the Defense Logistics Agency (DLA) for eighteen PowerEdge RL25 fuel cell units to operate at the Susquehanna Defense Distribution Supply Depot (DDSP) in New Cumberland, Pennsylvania. DDSP already has 20 fuel cell forklifts powered by Nuvera fuel cells at its 1.5 million square foot distribution center, the largest in the U.S. with 800 pieces of material handling equipment operating 24 hours a day, 7 days a week. Hydrogen refueling equipment for the forklifts is supplied by Air Products and Chemicals, Inc. http://www.nuvera.com/news/press_release-56.php

Central Grocers Purchases Eleven More Plug Power Fuel Cells.
Central Grocers, Inc. has purchased an additional eleven Plug Power GenDrive™ fuel cell units for its electric lift truck fleet in Joliet, Illinois. This increases Central Grocers grand total of fuel cell-powered lift trucks to 231.


DLR Ready for Fuel Cell-Powered Nose Wheel Tests.
The German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt; DLR), is ready, after three years of development, for the first rolling tests of a fuel cell powered electric nose wheel on its DLR A320 ATRA (Advanced Testing and Research Aircraft). The fuel cell-powered nose wheel allows planes to approach their apron locations travelling in both forward and reverse directions, as well as taxi to their take-off positions without needing towing vehicles or using their main engines. It will reduce emissions produced by aircraft at airports by up to 27%, and noise levels during taxiing by up to 100% as well as reduce fuel use and operating time compared to conventional nose wheels.


ACAL Wins Carbon Trust Award.
ACAL Energy won £1 million (US$1.6 million) from the Carbon Trust’s Polymer Fuel Cell Challenge to help make its fuel cell system more affordable for the mass car market. ACAL is already working with a car manufacturer and hopes to help produce a commercial car engine by 2015.


Delphi SOFC APU Designated Emerging Technology by EPA.
Delphi Automotive’s solid oxide fuel cell (SOFC) auxiliary power unit (APU) has been designated an Emerging Technology by the U.S. Environmental Protection Agency (EPA), recognizing the technology as a potentially effective and efficient way to reduce harmful diesel emissions from heavy-duty commercial trucks. Delphi’s SOFC APU utilizes diesel fuel from the truck’s main tank to generate electricity to power equipment in the truck’s cab, including air conditioning, television, refrigerator and microwave. As a result of being added to the Emerging Technology list, the APU now is approved for use in Emerging Technology Program grants on highway class 8 tractors equipped with sleeper compartments and powered by heavy-duty diesel engines certified to 2007, 2008 or 2009 model year emission standards.


STATIONARY APPLICATIONS

FuelCell Energy Sells Units or CSU, San Bernardino, Redevelopment Project in London.
Southern California Edison Company (SCE) has ordered a 1.4 megawatt (MW) FuelCell Energy DFC1500 fuel cell power plant to install as a utility-owned fuel cell on the campus of California State University, San Bernardino. The electricity generated by the fuel cell will interconnect into the existing SCE distribution grid. FuelCell Energy, Inc. has also sold a 300 kilowatt DFC300 to be installed at the Quadrant 3 re-development project in central London, England. The Quadrant 3 project is a 250,000 square foot mixed use retail/office/residential redevelopment project being developed by The Crown Estate. The redevelopment project will maintain the historical character of the area while incorporating modern technology and sustainable environmental practices such as fuel cell power generation.


Cox Communications Installs Four UTC Power Fuel Cells at California Facilities.
Cox Communications has installed four UTC Power 400 kilowatt stationary fuel cells at Cox facilities in San Diego and Rancho Santa Margarita, California. UTC Power installed and will service the PureCell® System Model 400 units at a Cox Communications administrative building, a master telecommunications center and data center. All are powered by a blend of biogas and natural gas.

http://www.utcpower.com/fs/com/bin/fs_com_Page/0,11491,0367,00.html

UTC Fuel Cell at Stop & Shop Dedicated, PureCell System Reaches 100,000 Hours.
The UTC fuel cell at the Stop & Shop Supermarket in Torrington, Connecticut was officially dedicated after being commissioned in June of last year. The fuel cell has produced over 1.7 million kilowatt hours of electricity, accounting for 95% of the store’s total electric energy requirements. In other UTC news, its PureCell® Model 400 System fleet has reached a major milestone – 100,000 hours of field operation.

Tokyo Gas and Panasonic Develop New Ene-Farm Fuel Cell.
Tokyo Gas Co., Ltd. and Panasonic Corporation have jointly developed a new model of the "Ene-Farm" home fuel cell. The new product is manufactured by Panasonic, and will be sold by Tokyo Gas from April 1, 2011. Several improvements have increased efficiency while cost-saving efforts have allowed the companies to significantly lower the retail price to 2,761,500 yen (including tax; excluding installation fee, around US$34,000), a saving of as much as around 700,000 yen compared to the current models.

PORTABLE/BACKUP POWER

MICRO FUEL CELLS
myFC Introduces the Powertrekk Fuel Cell Charger.
myFC has introduced its Powertrekk fuel cell charger, which combines a portable battery pack with a fuel cell. The portable battery pack can be operated on its own as a ready source of power or storage buffer for the fuel cell. The fuel cell enables instant charging from a depleted battery state without ever needing a wall charge. Users simply insert a fuel pack and add water.

MILITARY APPLICATIONS

FUELS/REFORMERS/STORAGE

Hydrogen Industrial Park Opens in South Carolina.
Plug Power, GENCO ATC and Kimberly-Clark Corporation celebrated the opening of the nation’s first multi-use industrial park fueling station to supply hydrogen directly for industrial, commercial and government use in Graniteville, South Carolina. Kimberly-Clark’s 450,000 square foot distribution facility, which is located there, has 25 fuel cell-powered forklifts.

Horizon Fuel Cells Teams Up with Pilus Energy.
Pilus Energy and Horizon Fuel Cell Technologies, Pte. Ltd. have entered into a strategic relationship to combine Horizon’s fuel cells to Pilus Energy’s renewable hydrogen production platform, with the goal of providing a unique turnkey, end-to-end solution to generate clean power at a low cost.

UPS Joins ITM’s HOST.
UPS has signed an agreement to participate in the Hydrogen On Site Trials (HOST) of ITM Power’s transportable high pressure refueling unit (HFuel).

Hydrogenics to Supply Electrolyzers for Fueling Station in Norway, Receives Contracts for Nine Electrolyzers for Africa and Asia.
Hydrogenics Corporation will supply two HySTAT™60 electrolyzers for a hydrogen fueling station to be built in Oslo, Norway, as part of the HyNor Oslo Bus project and CHIC, the Clean Hydrogen in European
Cities Project. Hydrogenics Corporation has also received contracts for the delivery of nine electrolyzers to customers in Africa and Asia.

Cella Energy Wills 2011 Shell Springboard Award.
Cella Energy won the 2011 Shell Springboard Award for its hydrogen storage technology. The honor includes a £40,000 (US$65,000) prize.
http://www.shellspringboard.org/news/96

University of Waterloo Wins Hydrogen Student Design Contest.
The University of Waterloo was declared the Grand Prize winner of the 2011 Hydrogen Student Design Contest, marking the fifth award for the University of Waterloo in the six-year history of the Contest. Contest newcomers, Imperial College London and University of California Riverside were awarded honorable mentions. For the 2011 Contest, students were challenged to plan and design a residential hydrogen fueling system including a technical design, economic analysis, and business, marketing, and public education plans for their systems.
http://www.hydrogencontest.org/

UPS Systems Signs Distributor Agreement with Air Liquide.
UPS Systems has signed an innovative new distributor agreement with Air Liquide Hydrogen Energy to become the first UK company to offer its three brand new hydrogen fuel cell systems: the Energy Container, the Mobixane and the Commpac 500.

MATERIALS/COMPONENTS/TESTING

PNNL Develops Durable Catalytic Material.
Researchers at the Pacific Northwest National Laboratory (PNNL) have developed a new combination of nanoparticles and graphene that results in a more durable catalytic material for fuel cells that provides stability, good electrical conductivity and other desired properties.

ITM Membranes Demonstrate High Power Densities.
ITM Power has successfully demonstrated exceptionally high power densities from its proprietary hydrocarbon membrane materials for fuel cells. The research is supported by funding from the Carbon Trust.

REPORTS/MARKET STUDIES

Hydrogen Fuels.
Hydrogen Fuels - Global Market Size, Technology Road-Map, Regulations, Competitive Landscape and Pricing Analysis to 2020, a report from GlobalData, gives an overview of the global hydrogen fuel cells market and the key factors impacting the market.

REQUESTS FOR PROPOSALS

Check out the Fuel Cell RFPs blog for more opportunities.

MISCELLANEOUS
SAFCell Delivers Stack to NPS.
SAFCell, Inc. delivered a 1.4 kW solid acid fuel cell (SAFC) stack to Nordic Power Systems (NPS), exceeding the target performance and marking a major technical milestone in its 18-month development contract with NPS. The SAFC stack will be integrated into NPS’ proprietary cool flame diesel reformer system for both mobile and stationary auxiliary power applications.

Nuvera Headquarters Receives ISO Certification.
Nuvera Fuel Cells, Inc. has achieved ISO 9001:2008 certification at its Billerica, Massachusetts headquarters. This certification indicates that Nuvera’s Quality Management System (QMS) meets ISO’s criteria, specifically the ability to consistently provide product that meets customer and applicable regulatory requirements and aims to enhance customer satisfaction.

CONFERENCES

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

FC Expo.
The 7th International Hydrogen and Fuel Cell Expo (FC Expo) will be held March 2-4, 2011, at Tokyo Big Sight in Tokyo, Japan. For more information, please go to http://www.fcexpo.jp/en/.

HANNOVER MESSE.
The 17th Group Exhibit Hydrogen + Fuel Cells at HANNOVER MESSE 2011 will take place April 4-8, 2011, in Hannover, Germany. For details, please visit http://www.h2fc-fair.com/.

Ohio Fuel Cell Symposium.
The Ohio Fuel Cell Symposium: Economic Opportunities through the Fuel Cell Supply Chain will be held April 18-19, 2011, at the University Center, Kent State University at Stark in North Canton, Ohio. For information, go to http://www.fuelcellcorridor.com.

Stationary Fuel Cell Power Project Finance and Investment Summit
The Stationary Fuel Cell Power Project Finance and Investment Summit is scheduled for May 3-5, 2011, at the Hilton Del Mar in San Diego, California. For more information, please go to http://www.infocastinc.com/index.php/conference/fuelcellpower11.

ACT Expo.
The ACT Expo "The Alternative Clean Transportation Expo," will take place at the Long Beach Convention Center in Long Beach, California, on May 4-6, 2011. For more information, please visit http://www.actexpo.com/.


Hydrogen Energy Implementation Conference.
The 7th Annual Hydrogen Energy Implementation Conference will be held at NASA-Kennedy Space Center, Florida on August 23-25, 2011. For details, go to http://www.mountainstateshydrogen.com/.

Ecobuild.
The 7th annual Ecobuild America Show will take place in the Washington, DC Convention Center, December 6-8, 2011. For more information, please go to http://www.aececobuild.com/.

Piero Lunghi Conference and Exhibition.

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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.*