

SUBSCRIBE at <http://lb.bcentral.com/ex/manage/subscriberprefs?customerid=9927>

FUEL CELL CONNECTION -- September 2001 Issue

IN THIS ISSUE

- * Giner & NASA's JPL Demonstrate DMFC
- * Public Comments Sought on CA Draft Request for Bids for Stationary Fuel Cells
- * NineSigma Client Seeking Partners for Development of Fuel Cell Power Generation System
- * Hydrogen Program Announces Awards for Research
- * GM Introduces High-Density Fuel Cell Stack

CONTENTS

News on U.S. Government Fuel Cell Programs

1. Argonne National Lab Working with Ford on 2002 FutureTruck Competition
2. Giner & NASA's JPL Demonstrate DMFC
3. EPA to Launch CHP Partnership
4. HTAP Announces Date of Fall Meeting

RFP / Solicitation News

5. Air Force BAA Seeks Power Generation Technologies for Combat Operations
6. Power Generation is Topic of Interest for BMDO BAA
7. Pennsylvania DEP Accepting Applicants for 2nd Round of Alternative Fuels Incentive Grants
8. NineSigma Client Seeking Partners for Development of Fuel Cell Power Generation System
9. Public Comments Sought on CA Draft Request for Bids for Stationary Fuel Cells
10. TACOM Issues RFP for Future Combat System Program
11. Presidio Trust Revises Invitation for Bids for Fuel Cell Cogeneration Plants
12. DOE SBIR/STTR Solicitation to be Issued in October
13. DARPA BAA Topics Include Materials for Power Generation, Energy Storage

Contract Awards

14. NASA SBIR Phase I Award Recipients Selected
15. Hydrogen Program Announces Awards for Research
16. Hydrogenics Awarded Canadian Defense Contract for Portable Fuel Cell Project

Federal Legislation

17. EPA Proposes Rule Regulating Emissions from Non-Road Engines
18. CPUC Regulators Suspend Consumer Choice

Industry Headlines

19. GM Introduces High-Density Fuel Cell Stack
20. Ballard and Ford Sign \$34.5 Million Agreement for Fuel Cells
21. FuelCell Energy, MTU Friedrichshafen to Deliver Seven FC Power Plants in Europe
22. Honda Introduces Next Generation Fuel Cell Vehicle

Administration

About *Fuel Cell Connection*

Subscribe at <http://lb.bcentral.com/ex/manage/subscriberprefs?customerid=9927>

News on U.S. Government Fuel Cell Programs

~~~~~

-----

### 1. Argonne National Lab Working with Ford on 2002 FutureTruck Competition

The U.S. Department of Energy's Argonne National Laboratory facility will coordinate with Ford Motor Company on the 2002 FutureTruck competition. Ford will supply new Ford Explorer SUVs plus \$200,000 in seed money to each of 15 teams of engineering students from North American universities. Teams in the 2000 and 2001 competitions worked on Chevy Suburbans supplied by General Motors. Past FutureTruck and FutureCar competitions featured vehicles retrofitted with fuel cell engines.

[http://media.ford.com/article\\_display.cfm?article\\_id=9472](http://media.ford.com/article_display.cfm?article_id=9472)

<http://www.futuretruck.org>

-----

### 2. Giner & NASA's JPL Demonstrate DMFC

Giner Electrochemical Systems has demonstrated a liquid feed direct methanol fuel cell that is part of a complete system being developed by NASA's Jet Propulsion Laboratory. The successful demonstration of the 1.4 kW fuel cell paves the way for scale-up to the 3 kW range.

<http://www.ginerinc.com>

-----

### 3. EPA to Launch CHP Partnership

The Environmental Protection Agency will launch its CHP Partnership on October 15 at EPA headquarters in Washington, DC. The CHP (Combined Heat and Power) Partnership will provide technical assistance, public recognition and regulatory guidance to facilitate new CHP development in the United States. The National CHP Roadmap Workshop will be held in conjunction with the announcement.

<http://www.energetics.com/chproadmap.html>

-----

### 4. HTAP Announces Date of Fall Meeting

The Fall meeting of the Hydrogen Technical Advisory Panel (HTAP) will be held at Desert Research Institute in Reno, Nevada, on October 29-30, 2001. The meeting is free and open to the public. Information will be posted on the DOE Hydrogen Program web site.

<http://www.eren.doe.gov/hydrogen/htap.html>

~~~~~

RFP/Solicitation News

~~~~~

-----

### 5. Air Force BAA Seeks Power Generation Technologies for Combat Operations

The Air Expeditionary Forces Technologies Division has issued a Broad Agency Announcement. The Air Force requires advanced technologies that facilitate the conduct of combat operations and operations other than war. Technology areas include active and passive power generation, power conditioning and distribution systems, and new energy and utility systems technologies that increase mobility, reliability and efficiency on all deployable utilities required for AEF operations. Deadline for proposals is September 30, 2001.

<http://www.eps.gov/spg/USAF/AETC/TynAFBCS/Reference-Number-BAA-TYN-01-001/SynopsisR.html>

-----

### 6. Power Generation is Topic of Interest for BMDO BAA

The deadline is quickly approaching for submitting proposals for the Ballistic Missile Defense Organization's Innovative Science and Technology Research Program BAA of FY01 Research Opportunities of the Office of the Chief Scientist. Power Generation and Conditioning is a major topic of interest. Deadline for proposals is September 30, 2001.

<http://www.acq.osd.mil/bmdo/bmdolink/pdf/submission.pdf>

---

*7. Pennsylvania DEP Accepting Applicants for 2<sup>nd</sup> Round of Alternative Fuels Incentive Grants*

Applications will be accepted until October 1, 2001, for the next round of Alternative Fuels Incentive Grants from Pennsylvania's Department of Environmental Protection. Thirty-four applicants were selected from the first round to receive \$232,599 in grants for the purchase of alternative fuel vehicles. The DEP includes hydrogen, methanol, ethanol propane, natural gas and hythane in its definition of alternative fuels.

<http://www.dep.state.pa.us/dep/deputate/airwaste/aq/afv/afvafig1.htm>

---

*8. NineSigma Client Seeking Partners for Development of Fuel Cell Power Generation System*

NineSigma, representing a client with expertise in fuel processing technology, is seeking proposals from potential partners interested in the development and commercialization of distillate fueled fuel cells in the 250 kW to 2.5 MW power generation range. Proposals of interest are due October 9, 2001.

[http://www.ninesigma.com/ManagedExchange/rfp\\_00128\\_1.html](http://www.ninesigma.com/ManagedExchange/rfp_00128_1.html)

---

*9. Public Comments Sought on CA Draft Request for Bids for Stationary Fuel Cells*

California Power Authority is seeking public comments on a draft Request for Bids (RFB) for "Stationary Fuel Cells." The Authority hopes to entertain orders of as much as 20 MW of fuel cell capacity by the fall of 2002, 50 MW the year after, and 300 MW the next year. There is no deadline for receipt of comments to the draft, but the Authority wants to move quickly to get a final RFB up on its web site. Comments submitted to the Stationary Fuel Cell Collaborative will be forwarded to the Authority. Members of the Collaborative are also invited to comment separately.

<http://www.capowerauthority.ca.gov/Requestforbids/main.asp>

---

*10. TACOM Issues RFP for Future Combat System Program*

The U.S. Army Tank-automotive and Armaments Command Armament Research, Development and Engineering Center (TACOM-ARDEC) is seeking proposals for its Future Combat System Multi-Role Armament and Ammunition System. The program will mature and integrate key technology enablers such as advanced propulsion. Deadline for proposals is October 15, 2001.

<http://procnet.pica.army.mil/cbd/RFP/01R0221/01R0221.htm>

---

*11. Presidio Trust Revises Invitation for Bids for Fuel Cell Cogeneration Plants*

The Presidio Trust has changed its previous "Invitation for Bids" to a "Request for Proposals" for delivery and installation of up to four 1 MW solid oxide fuel cell cogeneration plants. Alternative technologies that still meet the Trust's performance specifications will be considered. The new RFP has a deadline of October 22, 2001, for proposals. The Invitation for Bids was announced in the July issue of the Fuel Cell Connection.

[http://www.presidiotrust.gov/trust/rfp2001\\_032.asp](http://www.presidiotrust.gov/trust/rfp2001_032.asp)

---

*12. DOE SBIR/STTR Solicitation to be Issued in October*

The Department of Energy will issue on October 15, 2001, its SBIR/STTR Programs annual solicitation. Technical areas of interest for both programs include Sensors and Controls for Advanced Power Systems, Hybrid Electric Vehicle Technology, Oil and Gas Technologies, Materials Research for Fossil Energy Applications, and Advanced Fossil Fuels Research. The

proposal deadline is January 15, 2002. Successful applicants may receive up to \$100,000 for Phase I projects.

<http://sbir.er.doe.gov/sbir>

-----  
*13. DARPA BAA Topics Include Materials for Power Generation, Energy Storage*

The Defense Advanced Research Projects Agency has issued a Broad Agency Announcement on Defense Sciences Research and Technology. One of the technical areas of the BAA covers "Materials and Concepts for power generation and energy storage at all scales." The deadline for proposals is August 29, 2002. From time to time, DARPA will publish addenda to the BAA highlighting particular areas of interest. Potential proposers are encouraged to check the web site periodically for updates.

<http://www.darpa.mil/baa/baa01-42.htm>

~~~~~  
Contract Awards
~~~~~

-----  
*14. NASA SBIR Phase I Award Recipients Selected*

NASA has announced the selections for its 2001 SBIR Program Phase I awards. Giner Electrochemical Systems received an award for its project on "Direct Electrochemical Methanol Production for Mars" and Materials & Electrochemical Research Corp. received an award for its project on "Low Pressure Adsorbent for Recovery & Storage of Vented Hydrogen."

<http://sbir.gsfc.nasa.gov/SBIR/sbir2001/phase1/awards/index.html>

-----  
*15. Hydrogen Program Announces Awards for Research*

Nine projects were selected for awards under four DOE Hydrogen Program supplemental announcements to the 2001 EERE Broad Based Solicitation. Companies and research centers selected include Fuelcell Propulsion Institute, Air Products and Chemicals, Arthur D. Little, and California Institute of Technology.

[http://www.eren.doe.gov/hydrogen/solicitation\\_results.html](http://www.eren.doe.gov/hydrogen/solicitation_results.html)

-----  
*16. Hydrogenics Awarded Canadian Defense Contract for Portable Fuel Cell Project*

Hydrogenics Corporation was awarded a contract by the Department of National Defence Canada for the next stage of development of its chemical hydride-fueled portable fuel cell power program.

[http://www.corporate-ir.net/ireye/ir\\_site.zhtml?ticker=hyg.to&script=4111&layout=7&item\\_id=208521](http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=hyg.to&script=4111&layout=7&item_id=208521)

~~~~~  
Legislation
~~~~~

-----  
*17. EPA Proposes Rule Regulating Emissions from Non-Road Engines*

EPA has proposed to regulate emissions from Non-Road Large Spark Ignition Engines and Recreational Engines. Vehicles that would be covered by this proposal include Recreational Diesel Marine Engines, Off-Road Motorcycles and All-Terrain Vehicles, and Snowmobiles. Public hearings will be held in Washington, DC, on October 24, and in Denver, Colorado, on October 30, 2001. Written comments on the proposal are being solicited.

<http://www.epa.gov/otaq/nonroad.htm>

-----  
*18. CPUC Regulators Suspend Consumer Choice*

California's Public Utilities Commission voted to take away the right of consumers to choose their electricity provider. The vote will affect about 200,000 customers, who had switched utilities, and more than 170 school districts that had pooled together to seek a new electricity provider.

<http://www.energyinfosource.com/aoi/news-details.cfm?id=13289&FLink=&tf=5>

~~~~~  
Industry Headlines
~~~~~

-----  
*19. GM Introduces High-Density Fuel Cell Stack*

General Motors has introduced a high-density fuel cell stack that generates 1.75 kW per liter, the highest power density announced by any fuel cell manufacturer. The new stack has a continuous power output of 102 kW, a peak power output of 129 kW, and a weight of 180 pounds (82 kg).

[http://www.gm.com/cgi-bin/pr\\_display.pl?2512](http://www.gm.com/cgi-bin/pr_display.pl?2512)

-----  
*20. Ballard and Ford Sign \$34.5 Million Agreement for Fuel Cells*

Ballard Power Systems and Ford Motor Company have signed a three-year, \$34.5 million agreement for fuel cells and related support. This is the largest order for Ballard fuel cells to date. John Wallace, executive director of Ford's TH!NK brand, says the company intends to launch its first commercial fuel cell vehicle in 2004.

<http://www.ballard.com/viewpressrelease.asp?sPrID=236>

-----  
*21. FuelCell Energy, MTU Friedrichshafen to Deliver Seven FC Power Plants in Europe*

FuelCell Energy's partner MTU Friedrichshafen announced that it will deliver seven new fuel cell power plants in Europe starting later this year. The 250 kW power plants are based on the Direct FuelCell technology of FuelCell Energy.

[http://www.fce.com/site/investor/press/releases/2001/09\\_18\\_01.html](http://www.fce.com/site/investor/press/releases/2001/09_18_01.html)

-----  
*22. Honda Introduces Next Generation Fuel Cell Vehicle*

Honda Motor Company introduced a new hydrogen-fueled fuel cell vehicle, FCX-V4, which increased the cruising range from 108 miles in the previous model, to 180 miles. Honda intends to introduce a production fuel cell vehicle in 2003.

[http://world.honda.com/news/2001/c010904\\_1.html](http://world.honda.com/news/2001/c010904_1.html)

~~~~~  
Administration
~~~~~

Press releases and story ideas may be forwarded to Bernadette Geyer, editor, for consideration at [bernie@usfcc.com](mailto:bernie@usfcc.com).

Subscribe at <http://lb.bcentral.com/ex/manage/subscriberprefs?customerid=9927>

~~~~~  
About Fuel Cell Connection
~~~~~

## **The Sponsors**

*U.S. Fuel Cell Council* -- The U.S. Fuel Cell Council is the business association for anyone seeking to foster the commercialization of fuel cells in the United States. Our membership includes producers of all types of fuel cells, as well as major suppliers and customers. The Council is member driven, with five active Working Groups focusing on: Codes & Standards; Transportation; Power Generation; Portable Power; and Education & Outreach. The Council provides its members with an opportunity to develop policies and directions for the fuel cell industry, and also gives every member the chance to benefit from one-on-one interaction with colleagues and opinion leaders important to the industry. Members also have access to exclusive data, studies, reports and analyses prepared by the Council, and access to the "Members Only" section of its web site.

[\(http://www.usfcc.com/\)](http://www.usfcc.com/)

*National Fuel Cell Research Center* -- The mission of the NFCRC is to promote and support the genesis of a fuel cell industry by providing technological leadership within a vigorous program of research, development and demonstration. By serving as a locus for academic talent of the highest caliber and a non-profit site for the objective evaluation and improvement of industrial products, NFCRC's goal is to become a focal point for advancing fuel cell technology. By supporting industrial research and development, creating partnerships with State and Federal agencies, including the U.S. Department of Energy (DOE) and California Energy Commission (CEC), and overcoming key technical obstacles to fuel cell utilization, the NFCRC can become an invaluable technological incubator for the fuel cell industry.

[\(http://www.nfcrc.uci.edu/\)](http://www.nfcrc.uci.edu/)

*National Energy Technology Laboratory* -- The National Energy Technology Laboratory is federally owned and operated. Its mission is "*We Solve National Energy and Environmental Problems.*" NETL performs, procures, and partners in technical research, development, and demonstration to advance technology into the commercial marketplace, thereby benefiting the environment, contributing to U.S. employment, and advancing the position of U.S. industries in the global market.

<http://www.netl.doe.gov>