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**FUEL CELL CONNECTION -- January 2002 Issue**  
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**Administration**

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News on U.S. Government Fuel Cell Programs
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*1. DOE Announces Freedom CAR Program to Replace PNGV*

DOE Secretary Spencer Abraham announced January 9 a new partnership program, the Freedom Cooperative Automotive Research (CAR) partnership -- with Ford, General Motors and DaimlerChrysler -- to fund research into hydrogen fuel cell vehicles. The DOE press release notes the program "will focus on the research needed to develop technologies such as fuel cells and hydrogen from domestic renewable sources." DOE did not yet specify any details such as funding levels or timelines. The Freedom CAR program will replace the Partnership for a New Generation of Vehicles, which was started in 1993.

[http://www.energy.gov/HQPress/releases02/janpr/pr02001\\_v.htm](http://www.energy.gov/HQPress/releases02/janpr/pr02001_v.htm)

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*2. Department of Defense in Joint Effort to Open Hydrogen Fuel Cell Facility on Oahu*

The U.S. Department of Defense (DOD), UTC Fuel Cells, Hawaiian Electric Company, and the Hawaii Natural Energy Institute (HNEI) have formed a joint project to open a hydrogen fuel cell research facility on Oahu. HNEI will evaluate the performance and reliability of fuel cells using test stands designed and manufactured by UTC Fuel Cells. The initial funding for the effort comes from a \$1.5 million DOD appropriation for research collaboration between HNEI and the Naval Research Laboratory under the Hawaii Energy and Environmental Technology Initiative.

<http://www.soest.hawaii.edu/HNEI/news.html>

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*3. Air Force Demonstrates Fuel Cell Potential*

Tests on PEM fuel cells conducted by Concurrent Technologies Corporation -- on behalf of the U.S. Air Force Air Expeditionary Force Battlelab (AEFB) Common Core Power Production (C2P2) Initiative -- successfully demonstrated the potential of fuel cells for use in powering AEFB applications.

[http://www.dodfuelcell.com/pr\\_010702b.html](http://www.dodfuelcell.com/pr_010702b.html)

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*4. Scientists Sought for Conference to Learn About DOD Technical Needs*

The DOD is hosting a conference in March 2002 to focus on "Scientists Helping America" and is inviting scientists and researchers to learn about technical areas where their help is needed. DOD is particularly interested in researchers who have never before worked with DOD. "Batteries and Fuel Cells" is one of the nine key technical areas of interest for DOD. The conference will be held March 11-14, 2002 at the Naval Research Laboratory in Washington, DC.

<http://safe.sysplan.com/scihelpamerica/>

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*5. CERL Report on DOD Demonstration of MCFC's Posted Online*

The U.S. Army Corps of Engineers Construction Engineering Research Laboratory has posted online a report on "Molten Carbonate Fuel Cells (MCFCs) for Department of Defense Applications." The report was published November 2000 but was posted on January 3, 2002.

[http://www.dodfuelcell.com/RIA\\_MCFC.pdf](http://www.dodfuelcell.com/RIA_MCFC.pdf)

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*6. Proceedings of DOE's Hydrogen Vision Meeting Posted Online*

The proceedings of DOE's Hydrogen Vision Meeting held in Washington, DC, November 15-16, 2001 are now available online as PDF documents.

<http://www.eren.doe.gov/hydrogen/features.html>  
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7. *Distributed Energy Resources Peer Review Proceedings Available Online*

The proceedings and presentations for DOE's First Annual DER Conference and Peer Review, "The Power to Choose: Creating an Expanded DER Industry" (November 2001), have been posted online.

[http://www.eren.doe.gov/der/conference\\_01.html](http://www.eren.doe.gov/der/conference_01.html)

8. *DOE Designates New Transportation Research Center near ORNL*

The National Transportation Research Center in West Knoxville, Tennessee, has been designated a national user facility by the Department of Energy. This designation enables scientists conducting research and development for the transportation industry and related fields to have special access to the facility. The center is a joint effort involving DOE, Oak Ridge National Laboratory, Development Corporation of Knox County, and the University of Tennessee.

[http://www.ornl.gov/Press\\_Releases/current/mr20011227-00.html](http://www.ornl.gov/Press_Releases/current/mr20011227-00.html)

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RFP/Solicitation News
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9. *Commerce Business Daily Replaced by FedBizOpps as Source for Funding Opportunities*

The website of Federal Business Opportunities has been designated by the Federal Acquisition Regulation as the single point of universal electronic public access on the Internet to government-wide Federal procurement opportunities that exceed \$25,000 (see link below). As a result, on January 4, 2002, the Department of Commerce ceased publication of the Commerce Business Daily (CBD). The online database of active notices through CBDNet has also been shut down.

<http://www.fedbizopps.gov>

10. *California Issues Alternative Fuels Infrastructure Program Opportunity Notice*

The California Energy Commission is making available from \$200,000 to \$1 million through its Alternative Fuels Infrastructure Program to support non-petroleum alternative fuel infrastructure projects throughout California. The Budget Act of FY2000-2001 allocated \$6 million to be used to assist public agencies to establish an infrastructure for dispensing alternative motor vehicle fuels. Proposal deadline is February 15, 2002.

[http://www.energy.ca.gov/afvs/clean\\_fuel.html](http://www.energy.ca.gov/afvs/clean_fuel.html)

11. *Solicitation for SECA Core Technology Program Issued*

The Solid State Energy Conversion Alliance (SECA) has issued the solicitation for its Core Technology Program, which will focus on specific sub-topics under the following six topic areas: Fuel Processing, Manufacturing, Controls & Diagnostics, Power Electronics, Modeling & Simulation, and Materials. The Core Technology Program will focus on generating new scientific and engineering knowledge and on creating technology breakthroughs to address technical risks and barriers that limit achievement of the SECA performance and cost goals for solid-state fuel cell systems. Phase I awards will be limited to approximately \$150,000 (DOE Funding). Only Phase I recipients will have the opportunity to submit a renewal application to receive funds for Phase II research. The deadline for proposals is February 27, 2002.

<http://www.netl.doe.gov/business/solicit/main.html#40865>

12. *Solicitation Issued for Research on Fuel Cells by Minority Colleges and Institutions*

The National Energy Technology Laboratory has issued a solicitation for Support of Advanced Fossil Resource Utilization Research by Historically Black Colleges and Universities and Other Minority Institutions. Technical topics include "Fuel Cells" and "Advanced Coal Utilization", which

includes research on advanced fuel cell concepts utilizing coal as a fuel. Funding awards will be up to \$200,000 per project, depending on the length of the project period. Approximately \$900,000 total is available for the grant awards resulting from this solicitation. Deadline for proposals is March 12, 2002.

<http://www.netl.doe.gov/business/solicit/2002/41430//41430.pdf>

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*13. NYSERDA Funds Available for Distributed Generation and CHP Projects*

The New York State Energy Research and Development Authority (NYSERDA) will award up to \$10 million in multiple cost-shared contracts for a new program to support new product development of distributed generation (DG) systems, components, and related power systems technologies. NYSERDA anticipates an initial allocation of up to \$4 million for new product development and the balance of the allotted funds for demonstration of CHP. Distributed power generation technologies eligible include fuel cells, microturbines, and reciprocating engines. Proposals are due March 12, 2002.

<http://www.nyserda.org/669pon.html>

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*14. Solicitation to Advance Energy Technology in New York State*

The New York State Energy Research and Development Authority (NYSERDA) is seeking applications for its Technology Acceleration Program. The program is designed to stimulate early stage product development and encourage the commercialization efforts of New York State businesses and institutions whose products and/or processes result in the generation or conservation of energy, or environmental benefits. The maximum award under this notice is \$25,000 per project. Applications are due by March 14, 2002.

<http://www.nyserda.org/587pon.html>

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*15. Fuel Cells are a "Must Have" Component of Objective Force Warrior Program Solicitation*

The U.S. Army Natick Soldier Center at the Soldier Biological and Chemical Command "has a requirement for concept development, design, fabrication and delivery of prototypes for an Objective Force Warrior (OFW) multi-functional combat system of systems". Fuel cells are considered one of the "Must Have" components of the OFW program, specifically advanced hybrid fuel cells providing 72+ hours of power. A draft solicitation was released January 4, 2002. A revised proposal is expected to be released on or about January 28, 2002. The expected deadline for proposals is March 14, 2002. As of the writing of this newsletter, the solicitation was still listed in "Upcoming Acquisitions."

<https://www3.natick.army.mil/ssbusops.htm>

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*16. Fuel Cell, Hydrogen Topics Included in State Energy Program Special Projects Solicitation*

Several fuel cell-related categories are included in the FY2002 State Energy Program Special Projects solicitation. Special Projects options for the Mid-Atlantic Region include "Uninterrupted Power Source" (testing and evaluation of fuel cells of approximately 1-5 kilowatts to provide power as an uninterruptible source and/or peak shaving plant); "Power Park" (demonstrate the use of hydrogen as an energy carrier for remote areas); "Compressors, Storage and Dispensers" (test the ability of a hydrogen generation system to fill buses and/or light and heavy duty vehicle storage tanks); and "Distributed Energy Resources Technologies (including fuel cell projects to support long term testing and/or engineering/system design and support). Approximately \$18.5 million is available to states to implement projects under this solicitation. Deadline for proposals is March 15, 2002.

[http://www.eren.doe.gov/buildings/state\\_energy/corner\\_cafe/special\\_projects.html](http://www.eren.doe.gov/buildings/state_energy/corner_cafe/special_projects.html)

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*17. CERL BAA Seeks Proposals for Demonstration of Residential PEM Fuel Cells*

The Construction Engineering Research Laboratory of the Engineer Research and Development Center will issue a Broad Agency Announcement (BAA) for demonstration of domestically-produced residential PEM fuel cells in military facilities. For funding in FY2002, proposals must be submitted not later than March 29, 2002. Please check the final solicitation to confirm proposal submission deadline. As of the writing of this newsletter, the BAA was not yet listed on the contracting web site. The solicitation release is expected by February 12, 2002.  
<http://www.mvk.usace.army.mil/contract/other.asp>

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Contract Awards
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*18. NREL Awarded Subcontract for Fuel Cell Project*

The Colorado School of Mines selected National Renewable Energy Laboratory to be the subcontractor on a \$1.1 million contract to develop new electrocatalysts for proton exchange membrane fuel cells.

<http://www.nrel.gov/hot-stuff/press/xcel.html>

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*19. CEC Proposes Award to A.D. Little for Hydrogen Fueling Infrastructure Study*

The California Energy Commission has announced a proposed \$500,000 award to Arthur D. Little for a Hydrogen Fueling Infrastructure Study.

<http://www.energy.ca.gov/contracts/>

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*20. Teledyne Energy Systems Receives DOE Fuel Cell Contract Modification*

Teledyne Energy Systems executed a contract modification to deliver a prototype PEM fuel cell power system to the DOE under the continuation of work begun by Energy Partners. The prototype system will be rated at 7 kW and fueled by natural gas.

<http://www.teledyne.com/news/doemod.asp>

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*21. PIER Program Final Project Reports Posted Online*

Final project reports from the Public Interest Energy Research (PIER) program are now available on the California Energy Commission web site. Reports include several fuel cell-related projects under the Environmentally-Preferred Advanced Generation topic.

[http://www.energy.ca.gov/pier/epag/epag\\_finalreports.html](http://www.energy.ca.gov/pier/epag/epag_finalreports.html)

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Legislation / Regulations
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*22. NHTSA Seeks Comments on Proposed Model Year 2004 CAFÉ Standard*

NHTSA issued a notice of proposed rulemaking for Model Year (MY) 2004 light truck Corporate Average Fuel Economy (CAFÉ) standards, proposing a standard of 20.7 mpg, no change from the current standard. NHTSA says due to Congressional prohibitions to studying possible changes to the standard (lifted in December 2001), it has "not had sufficient time to study whether a level other than the one that has been in place since 1996 should be proposed." By law, NHTSA must issue a final rule establishing a model Year 2004 light truck CAFÉ standard by April 1, 2002. The notice will have a 30-day period during which the agency will accept comments, including those with data and analysis suggesting a level higher or lower than 20.7 mpg.

<http://www.nhtsa.dot.gov/nhtsa/announce/press/pressdisplay.cfm?year=2002&filename=pr03-02.html>

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Industry Headlines
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**23. GM Unveils Fuel Cell-Powered AUTOmomy Vehicle**

General Motors unveiled its AUTOmomy concept vehicle, which would feature a hydrogen-fed fuel cell, at the 2002 Detroit Auto Show. The concept vehicle has a unique "skateboard chassis", which includes the propulsion and other critical systems.

[http://www.gm.com/cgi-bin/pr\\_display.pl?2695](http://www.gm.com/cgi-bin/pr_display.pl?2695)

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**24. EBARA BALLARD Unveils 2<sup>nd</sup> Generation Prototype of Residential Fuel Cell**

EBARA BALLARD unveiled the second generation of its engineering prototype 1-kW PEM fuel cell stationary power generator for the Japanese residential market. The volume of the new prototype has been reduced by 40 percent from the first-generation.

<http://www.ballard.com/viewpressrelease.asp?sPrID=257>

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

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