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Fuel Cell Connection  
October 2000 Issue  
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Administration

About *Fuel Cell Connection*

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News on U.S. Government Fuel Cell Programs  
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1. Over \$100 Million Approved for DOE Fuel Cell Programs

More than \$100 million in fuel cell program funding is included in the FY2001 Interior Appropriations bill, which was signed into law by President Clinton on October 11, 2000. The House and Senate jointly agreed upon \$52.7 million within the DOE Fossil Energy R&D budget specifically for stationary fuel cell R&D, which funds work on solid oxide, molten carbonate and phosphoric acid fuel cells. This funding amount is \$10 million more than requested by DOE; it includes \$2 million for a demonstration of SOFC technology in Nuiqsut, Alaska, and \$8 million for the Solid-State Energy Conversion Alliance (SECA).

The House and Senate also approved \$41.5 million for DOE's Fuel Cells in Transportation program, which is the full amount requested by the agency for the program for FY2001. Also within the FY2001 Interior Appropriations, the "Fuel Cells for Buildings" program will receive \$5.5 million in FY2001 funding, a 55 percent increase over the FY2000 level. Unspecified levels of funding also exist within DOE programs that cover broader R&D concepts that include fuel cell-related R&D.

2. Transportation Appropriations Includes \$8.85 Million for Fuel Cells

Fuel cell projects will receive \$8.85 million from the FY2001 Transportation Appropriation, which was signed into law by the President on October 23, 2000. Georgetown University's fuel cell bus program will receive \$4.85 million, \$2.0 million is for University of Alabama's (Birmingham) fuel cell buses, \$1.0 million will go to West Virginia University for its fuel cell technology institute's propulsion and Intelligent Transportation System testing, and \$1.0 million is for AC Transit's zero-emission fuel cell bus deployment demonstration project in California. This is the fifth year that a provision in the Transportation Appropriations bill blocks the Department of Transportation from setting new Corporate Average Fuel Economy (CAFE) standards for cars and trucks. However, a study of the current CAFE standards – which is necessary to set new standards under a 1975 law – has been approved for FY2001.

3. Navy Testing Syntroleum for Fuel Cells

The U.S. Naval Surface Warfare Center Crane Division has purchased and received Syntroleum synthetic fuels for testing in fuel cell systems. The synthetic fuel was made to JP-5 specifications, and will be tested in a fuel cell manufactured by IdaTech Corporation, which is conducting the tests.

<http://www.syntroleum.com/news/2000pr/10092000.htm>

4. DARPA Workshop on Palm Power to Include Fuel Cells

Fuel cells and other small energy conversion devices are the topic of discussion at the upcoming "DARPA Palm Power Workshop" November 14 & 15, 2000, in Ft. Lauderdale, Florida. The Defense Sciences Office of the Defense Advanced Research Projects Agency is sponsoring this team-forming workshop on portable energy conversion technology with the purpose of exploring all facets of research necessary to create new technologies based on conversion of energy content fuels to electrical or mechanical energy on a small scale at or around the 20-Watt power range.

<http://www.sainc.com/conference/View/invitation.asp?MeetingID=133>

5. Newsletter on Fuel Cell Codes & Standards Efforts

The U.S. Department of Energy is now publishing a quarterly newsletter focused on efforts to foster the development and adoption of codes and standards for fuel cells. It is a free newsletter. To subscribe, send an email to am.borbely@pnl.gov.

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RFP/Solicitation News  
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6. Hydrogen Refueling Station Proposals Sought

California's South Coast Air Quality Management District is seeking proposals to develop and demonstrate distributed hydrogen refueling stations within the Los Angeles Air Basin. There is a total of \$700,000 available from the Clean Fuels Fund for the RFP. Deadline for proposals is February 21, 2001. A bidders conference will be held on November 16, 2000, at AQMD Headquarters in Diamond Bar, California.

<http://www.aqmd.gov/rfp>

7. Pre-Solicitation Notice on Fuel Cell, CIDI R&D

The U.S. Department of Energy will issue on November 15, 2000, an RFP for R&D and analysis projects for fuel cells, fuels for fuel cells and compression ignition, direct injection (CID) engines. DOE anticipates approximately 35 cooperative agreements related to fuel cell technologies, worth an estimated \$80 million. Performance periods for the projects will range from 24 to 36 months. The deadline for proposals is 2/15/01. Once issued, the RFP will be posted at <http://www.doeal.gov/cpd/readroom.htm>.

8. DOD SBIR Seeks Fuel Cell Projects

Fuel cells are among the topics included in the U.S. Department of Defense's Small Business Innovation Research (SBIR) solicitation, which was issued on October 2, 2000. Topics in which fuel cells are mentioned include: "Electrochemical Systems for Micro Electro Mechanical Systems Applications on Microsatellites," "Pulsed Power Technology for Aerospace Applications," "Long-Term Non-Interrupted Power Device," and "Compressed Natural Gas Reformer to Supply Hydrogen to Fuel Cell." Deadline for proposals is January 10, 2001. http://www.acq.osd.mil/sadbu/sbir/sol011/dod_sbir011.htm

9. Navy Seeks Proposals for Undersea Fuel Cell Vehicles

As part of its Centerwide Broad Agency Announcement, the U.S. Naval Undersea Warfare Center (NUWC) is seeking proposals for propellants and combustion products, including fuel cells, for high-speed-underwater vehicles and low rate rechargeable energy systems for long endurance missions in unmanned underwater vehicles. The BAA is open until June 14, 2001. <http://www.npt.nuwc.navy.mil/contract/contract/announce/baa/2000-01/>

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Contract Awards  
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10. ATP/NIST Awards SOFC Development Contract

ITN Energy Systems, Inc., in partnership with UniSource Energy Corporation, has received an initial \$2 million contract from the National Institute of Standards and Technology (NIST) Advanced Technology Program Office, for "Integrated Planar SOFC Stack Development." The three-year program has a total estimated funding of \$4 million. http://www.nist.gov/public_affairs/atp2000/00004269.htm

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Industry Headlines  
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11. DaimlerChrysler Unveils 2nd Fuel Cell Jeep Commander

DaimlerChrysler unveiled the Jeep Commander 2 fuel cell concept vehicle, running on hydrogen reformed on-board from methanol. The vehicle is actually a fuel cell/battery hybrid concept, with a nickel-metal-hydride battery to provide supplemental energy during acceleration, and for cold starts. The battery also captures energy from regenerative braking. The hybrid powertrain gives the Commander 2 near-zero tailpipe emissions, while achieving double the fuel efficiency of a conventional SUV.

<http://us.media.daimlerchrysler.com/data/wwwpr/wwwpr98.nsf/6dae9617fe2315fc85256903004ac5d3/85256698006d394c8525695a00560b0c?OpenDocument>

12. Enron Invests in Two Fuel Cell Companies

Enron North America has made investments in both FuelCell Energy and Dais-Analytic. Enron invested \$5 million in the common stock of FuelCell Energy, with terms that are contingent upon the sales of 55 MW of power generation utilizing FuelCell Energy products. Enron made an equity investment in Dais-Analytic and will support the fuel cell developer's market development, distribution and other field services. Financial details of the arrangement were not released.

<http://www.fuelcellenergy.com/prs/enron.html>

http://www.daisanalytic.com/press_release.html

13. Texaco/EDC Joint Venture Gets Boost from Merger

Just weeks after announcing a joint venture with Energy Conversion Devices to form Texaco Ovonic Fuel Cell Company, Texaco Energy Systems' parent company announced a merger with Chevron, which expressed its own strong support of the joint venture. Work under the joint venture is estimated to exceed \$40 million.

http://www.ovonic.com/news/Sept21_2000.html

http://www.ovonic.com/news/Oct16_2000.html

14. GM, Toyota Join California Fuel Cell Partnership

General Motors and Toyota have accepted invitations to join the California Fuel Cell Partnership. The companies' participation is expected to be formalized in

the next few weeks. On November 1, 2000, CFCP will be hosting a Grand Opening Ceremony at its new West Sacramento headquarters facility.

http://www.fuelcellpartnership.org/releases/2000-10-1_media_update.htm

http://www.fuelcellpartnership.org/releases/2000-10-16_gm_toyota.htm

15. H Power to Supply Fuel Cells for Military Field Equipment

H Power signed a Memorandum of Understanding with Ball Aerospace & Technologies Corp., to provide PEM fuel cell stacks for use in Ball Aerospace's portable hydrogen fuel cell systems. The systems are sold to the U.S. military for field equipment.

<http://www.hpower.com/NEWS%20ballaero.html>

16. Californians Clueless About Fuel Cells, Says Survey

A survey commissioned by the California Fuel Cell Partnership found that less than one in four Californians knew what a fuel cell was, but after hearing how one works, nearly eight in ten had a favorable attitude towards the technology. Seventy-seven percent of those surveyed supported government funding for fuel cell development and for government backed financial incentives when the fuel cells hit the market.

http://www.fuelcellpartnership.org/releases/2000-10-1_media_update.htm

17. Merrill Lynch New Energy Technology Fund Oversubscribed

Merrill Lynch Investment Managers (MLIM) successfully raised \$290 million for its new energy technology fund, which will invest in companies developing new technologies for fuel and automotive generation, storage and switching (including Ballard). The chairman of Merrill Lynch New Technology said the company had an original target of only about \$70 million. The fund begins trading on October 30, 2000.

<http://news.ft.com/ft/gx.cgi/ftc?pagename=View&c=Article&cid=FT3M0DS4KEC&live=true&tagid=YYY9BSINKTM&useoverridetemplate=IXLZHNNP94C>

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Press releases and story ideas may be forwarded to Bernadette Geyer, editor, for consideration at <mailto:bernie@fuelcells.org>.

Subscribe or unsubscribe to this newsletter at <http://fuelcellnews.listbot.com>.

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About *Fuel Cell Connection*  
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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.

[\(http://www.netl.doe.gov\)](http://www.netl.doe.gov)