CONSUMER Lines

MECO FEBRUARY 2002

Hawaii to host fuel cell facility

In a joint project with UTC Fuel Cells, the U.S. Department of Defense and Hawaiian Electric Company, the Hawaii Natural Energy Institute (HNEI) of the University of Hawaii's School of Ocean & Earth Science & Technology announced plans to open a hydrogen fuel cell research facility at MECO's parent company, Hawaiian Electric, on Oahu.

Celebrating the announcement of the Hawaii Fuel Cell Test Facility are Gary Jensen, regional director of the Office of Naval Research; UTC Fuel Cells executives Wade Roberts and Doug Wheeler; HNEI interim director Rick Rocheleau; State Representative Hermina Morita; Senator Daniel Inouye; State Senator Ron Menor; HECO President & CEO T. Michael May and UTC Fuel Cells Vice President Mark Morelli.

The Hawaii Fuel Cell Test Facility will utilize 4,000 square feet of warehouse space at HECO's Ward Avenue location. HNEI researchers will evaluate the performance and reliability of fuel cells using test stands designed and manufactured by UTC Fuel Cells, a leader in fuel cell production and development. According to UTC Fuel Cells Vice President, Mark Morelli, these test stands will give the University of Hawaii test capability not found in any other university.

State DBEDT deputy director Sharon Narimatsu and Maurice Kaya, Program Administrator for DBEDT's Energy, Resources & Technology Division, view the displays on fuel cell applications.

Hydrogen fuel cells, viewed by many as one of the most promising energy technologies for the future, produce electricity electrochemically by combining hydrogen and oxygen without combustion. A fuel cell operates like a battery but does not run down or need recharging. It produces electricity quietly, with low emissions.

In most current fuel cell applications, hydrogen is extracted from natural gas, which isn't available in Hawaii. Hydrogen can also be extracted from synthetic natural gas derived from other fossil fuels. However, development is increasingly focusing on technology to extract hydrogen from renewable resources, including biomass and from water using electrolysis powered by renewable energy sources such as wind.

"New energy sources must be a part of Hawaii's energy future," says HECO President & CEO T. Michael May, "and HECO is pleased to help move Hawaii in that direction with facilities and support staff to help get the testing facility up and running."

Initial funding for the project comes from a $1.5 million U.S. Department of Defense appropriation for research collaboration between HNEI and the Naval Research Laboratory under the Hawaii Energy and Environmental Technology (HEET) initiative.

After building permits are received, the fuel test facility is expected to be operational by late summer.

Also in this issue:

POWER TIPS

How do oil prices affect my electric bill?

"I've read that crude oil prices are dropping a lot lately. How come I don't see as big a decrease in the fuel charges on my electric bill?"

A customer recently called with this question and it's a good one. Power plants don't run on crude oil. In Maui County, our power plants use both diesel and medium sulfur fuel oil, products that have been refined from crude oil. Since this fuel comes from crude oil, prices of all will usually move in the same general direction, but not necessarily by the same magnitude. That's because crude, diesel and medium sulfur fuel oil are different products, with prices subject to different market forces.

The fuel cost included in your electric bill is based on selling prices in large mainland markets as tracked by a number of independent price reporting services. MECO makes no profit on what we charge for fuel. But mainly because we carry an inventory of fuel, there can be a one to two month lag before it is used and increases or decreases in the price we paid for that fuel show up in your electric bill. During 2001, the fuel component of a 600 kilowatthour residential electric bill on Maui decreased by about 24% as a result of falling fuel prices.

An important safety reminder

When in doubt... check it out

Occasionally a customer will ask, "When someone knocks on my door and says they are a MECO employee, are there precautions I can take to verify this?" The answer is yes. Remember:

- All field representatives and meter readers wear company shirts with the MECO logo and carry a company ID badge.
- Consider asking for the number of the employee's supervisor to call for confirmation of their assignment. If an individual refuses to show you their ID or to provide a phone number, don't let them in and notify the police department.

Ready, set, go...

Coming up:
The 2002 Electron Marathon electric car race!

When: *Saturday, March 23, 2002*
Where: *Ford Island*
Time: *9:00 a.m.*

This year 33 high schools from around the state, including Maui, Hana, and St. Anthony High Schools and Seabury Hall, will pit their student-built go-carts in an exciting race of performance, endurance and speed. MECO and our affiliated companies HECO and HELCO, the State Department of Education and the Department of the Navy sponsor the Hawaiian Electric Electron Marathon to encourage students to learn about electric vehicle technology and develop research, writing and public speaking skills.

Because of increased security measures on military bases, a new procedure for accessing the Ford Island Electron Marathon racetrack site is currently being finalized. Stay tuned for media announcements of details, or call **871-2323** for more information.

RECIPE OF THE MONTH

Tofu Mocha Pie

2 cups semi-sweet chocolate chips
1/3 cup coffee liqueur
1 teaspoon vanilla
1 container (10.5 oz) silken firm tofu, drained
1 tablespoon honey
1 (8-inch) ready-made chocolate graham cracker pie crust
1 container (8 oz) frozen whipped topping, thawed

Melt chocolate chips in a double boiler or microwave oven. Add coffee liqueur and vanilla; mix well. In a blender, puree tofu until smooth. Add chocolate mixture and honey; blend well. Pour tofu mixture into pie crust and chill until filling is set, about 2 hours. Top with whipped topping before serving. Makes 8 servings.