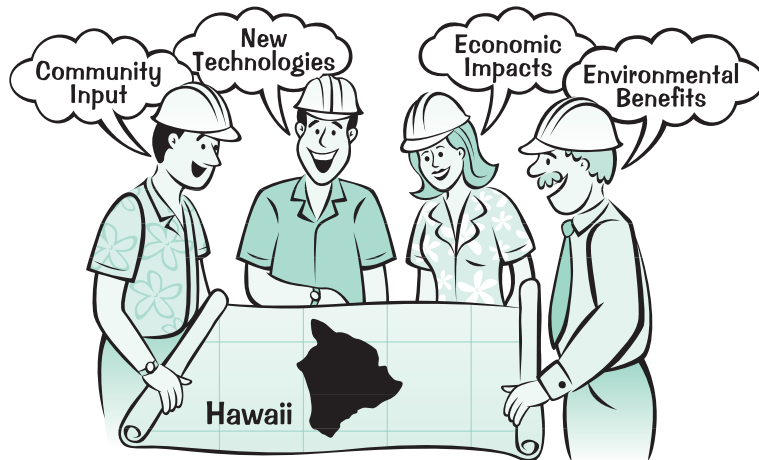


## Charting our island's energy future

**H**ow do we at HELCO ensure that your energy needs will be met reliably and affordably for the years to come? We do it through a careful, long-term, energy planning process called Integrated Resource Planning (IRP).

An important part of the process is community input. And to assist in this planning an advisory group, representing businesses, government agencies, energy regulators and producers, consumers, environmentalists, and other stakeholders, reviews and provides input on long-term forecasts, renewable and traditional energy technologies, energy-efficiency programs, and distributed generation. The advisory group meetings are open to the public.

For the current IRP planning cycle, possible long-term energy plans have been developed, such as maximizing renewable energy use, minimizing costs, and incorporating newer technologies.



HELCO uses computer models to measure the relative impacts of the candidate plans that are being evaluated by the advisory group.

The plans are evaluated on criteria such as possible impact on electric bills, environmental effects, cultural considerations, and flexibility. The candidate plans are also evaluated under scenarios of higher-than-expected electricity use and fuel prices.

Next steps will include holding public meetings to

discuss the plans with the general public, working with the advisory group to recommend a long-term energy plan, and filing a report with the Public Utilities Commission.

Community meetings will be held this summer to gather public comments on the proposed plans. The community meeting schedule, advisory group meeting notices and minutes, and other information on HELCO's IRP process can be found at [www.helcoirp.com](http://www.helcoirp.com).

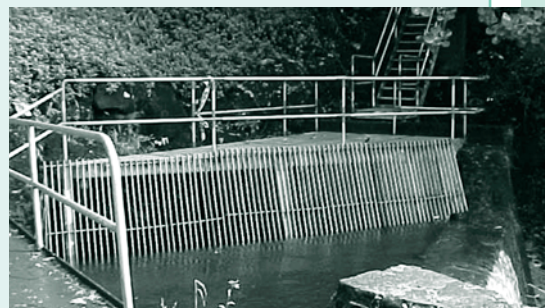
### Hydro plant output is increased

Recent improvements to HELCO's Puueo Hydroelectric Plant and penstock have increased the output of the plant from 2.2 megawatts (MW) to 3 MW.

A major improvement was the new generator that came online in July last year. However, other improvements to the facility also contributed to the increase in the plant's output.

The 7,231-foot long, 5-foot diameter penstock is a

*Continued on back page*



The redesigned, steel, trash rack installed at the mouth of penstock that feeds water to the Puueo Hydroelectric Plant has increased the plant's output.



Continued from front page

steel pipeline that carries water from the Wailuku River to the power plant. Naturally occurring vegetation and other debris carried along with the river were hindering the flow of water into the penstock and were affecting the output of the power generator.

To help the new generator to produce more energy, HELCO redesigned the trash rack at the mouth of the penstock. The rack's new design, which resists clogging more than the original structure built in the early 1900s, maximizes the flow of water through the penstock.

A new platform was installed at the trash rack to facilitate clearing collected debris; and stairs were constructed leading to the platform. Additionally, repairs were made to the masonry foundations of the penstock's inlet structure and the spillway structure.

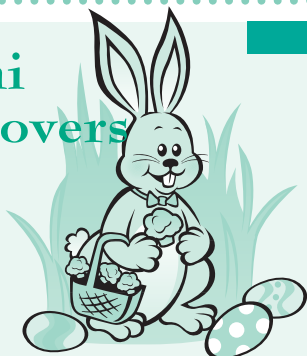
This is a good example of HELCO's commitment to the use of renewable energy to produce electricity and is a great example of a clean, environmentally responsible, power production system. The river water that passes through the hydro-electric generator is returned to the river in the same condition as it was drawn from the river.

## Celebrate Earth Day!

Come and celebrate the **18th Annual Earth Day Celebration** on **Friday, April 21**, from **9:00 a.m. to 4:00 p.m.**, at the Hawaii Community College (HCC) Upper Campus. While you are there, visit HELCO's *Solar Electric Trailer*, as well as 70 other educational exhibits on the environment and sustainability.

Nainoa Thompson is scheduled to speak at the University of Hawaii at Hilo Theater; and there will be free tours, popcorn, iced tea, cookies, and plants. The Earth Day Celebration is sponsored by HCC.

## Mini Popovers



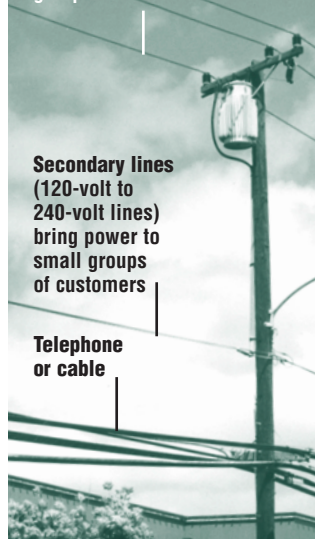
1 cup milk  
2 eggs  
1 cup flour  
1/4 teaspoon salt

## Whose line is it, anyway?

**Primary lines**  
(4,000-volt to 12,000-volt lines) bring power to large groups of customers

**Secondary lines**  
(120-volt to 240-volt lines) bring power to small groups of customers

**Telephone or cable**



Call HELCO's Trouble Line at **969-6666** in the following situations:

- ◆ When a line is down on the ground
- ◆ When a utility pole is leaning
- ◆ When branches are touching wires or equipment
- ◆ If you observe sparking, smoking, or charred branches near power lines
- ◆ When you see shoes, kites, balloons, or other items hanging from power lines

If you have ever looked at the lines on a utility pole, you may have noticed there are several sets of lines. Most of the utility poles on the Big Island are jointly owned and may carry electric, telephone, and cable T.V. lines. Sometimes state or county street lights are also placed on the poles.

As the accompanying photo illustrates, higher voltage electric lines usually are situated at the very top of the utility pole, with lower voltage lines directly underneath. Telephone and cable lines usually are located lower on the pole.

To help ensure reliable electric service and for your safety, trees growing into the electric lines should be trimmed. Only professionally trained individuals should try to identify facilities on a utility pole and only professionally trained individuals should trim tree branches that are growing close to electric lines.

For your safety please call us at **969-6666** before conducting any kind of work on trees or plants that are in direct contact with or close proximity to any overhead lines. Our staff will conduct an onsite inspection to identify the lines in question and to help determine what kind of maintenance may be necessary. Even if the lines in question are not electric lines, we can point you to the appropriate organization.

### RECIPE OF THE MONTH

Using 3 muffin pans with 1 3/4-inch cups, grease only 6 cups in each pan (every other cup). Place pans in oven and preheat oven to 425 degrees. Put all ingredients into blender. Cover and blend at high speed for 15 seconds. Pour batter into the greased cups of the preheated pans. Bake for 20 to 25 minutes or until golden brown. Recipe makes 18 miniature popovers.