GEOTHERMAL PIPELINE

Progress and Development Update Geothermal Progress Monitor

MEETINGS

International Geothermal Days - Oregon 1999, October 10-16, 1999, Klamath Falls, OR

The Oregon 1999 program is being organized by the International Summer School on Direct Application of Geothermal Energy of Macedonia and staff of the Geo-Heat Center. Expert presenters from the U.S. and Europe will be joined by speakers from Latin America and Pacific Rim countries. Three main topic areas will be covered: Small Scale Power Projects, Geothermal Heat Pumps and Direct Utilization of Geothermal Energy. Two evening workshops will focus on application software for Geothermal Heat Pumps and HEATMAP (a district heating program).

The conference will also feature field trips to provide participants with a complete overview of geothermal development opportunities. The first excursion will take participants to nearby Medicine Lake (Glass Mountain) in northern California to view sites of 49.9 MWe power plants proposed by Calpine Corp. and CalEnergy Co. Inc (Oct. 10). The second excursion will provide participants with an indepth tour of geothermal direct-use sites in and around the Klamath Falls area, including OIT's heating system, and the Klamath Falls City district heating/snow melt system, greenhouses and an aquaculture project (Oct. 13). An optional field trip on the last day of the conference will include stops of a number of district heating, binary and hybrid geothermal power generation projects in Oregon and California on the way to the Geothermal Resources Council (GRC) Annual Meeting in Reno, Nevada (Oct. 16).

For more information, including program, costs and accommodations, contact the Geo-Heat Center or the program can be viewed on the GHC web site at: <www.oit.edu/other/geoheat/iss/issindex.htm>.

Geothermal Resources Council Annual Meeting, Oct. 17 through 20, 1999, Reno, NV

The Geothermal Resources Council (GRC) Annual Meeting will be held at the Reno Hilton Hotel. The meeting will feature a thematic opening session, special and technical sessions on a broad range of geothermal resource and development topics, workshops, field trips and the Geothermal Energy Association Trade Show.

Two special GRC workshops are scheduled prior to the meeting: (1) Applications of High-Temperature Electronics in Geothermal Drilling (Oct. 14-15), and (2) Advances in Geochemical Methods for Geothermal Applications (Oct. 15-16).

Four field trips of northern Nevada geothermal manifestations and development sites will be held either before or after the meeting: (1) Dixie Valley and Stillwater power plants (Oct. 16), (2) Steamboat and Brady's Hot Springs power plants (Oct. 17), (3) Wabuska, Empire and

Soda Lake binary power plants (Oct. 21), and (4) Colado and Humboldt House geothermal resources with epithermal gold deposits.

For more information contact the Geothermal Resources Council, Davis, CA (phone: 530-758-2360) or email: <grc@geothermal.org>, or view the program on their web site: <www.geothermal.org>.

Geothermal Heat Pump Projects in Iowa and California

The "nation's largest" lake-coupled, geothermal heating-cooling system recently began operating at what will be the Great River Medical Center, a new hospital facility under construction in West Burlington, IA. In February, two 150-hp pumps began drawing water through plastic piping at the bottom of a 15-acres, artificially made lake next to the hospital site. The pumps move more than 5,000 gpm of water through a 100-mile-long piping system, which carries it through more than 800 heat pumps that help regulate temperatures in office, patient, and treatment rooms in the hospital, two new medical buildings, and two existing facilities. All total, the geothermal system will provide heating and cooling for approximately 707,000 sq. ft. of building space. (The Air Conditioning, Heating and Refrigeration News, May 24, 1999).

Feather River College in Quincy, CA recently installed a ground loop heat pump system for the college's three office buildings, the library, the gymnasium and three classroom buildings, a total of 53,000 sq. ft. of enclosed space. The system has enabled the college to trimits heating and cooling energy by 421,000 kilowatt hours, which amounts to an annual savings of about \$50,000. The entire project cost \$512,000, with a grant for \$35,000 from the Geothermal Heat Pump Consortium and funding from the California Community Colleges. (source: California Energy Commission, Aug. 11, 1999).

Yellowstone Deal to Keep Geyser Faithful

President Clinton announced a \$13 million deal on August 21st, to buy 9,300 acres of land to better protect Yellowstone National Park and make sure the "Old Faithful remains faithful for year to come." The White House said the U.S. Forest Service will acquire title to, or conservation easements on, 9,300 acres of the Royal Teton Ranch north of Yellowstone, and will acquire geothermal rights to the entire 12,000-acre Montana ranch. The purpose will provide a critical winter range for Yellowstone bison, which in some years face starvation because of inadequate food supplies in the park, and preserve important migration corridors for elk, antelope, bighorn sheep, grizzly bears and other wildlife. It will also remove a threat to the underground springs that feed Yellowstone geysers. The land will be owned and managed by the Gallatin National Forest. The deal to buy the land was

made with help from the nonprofit Rocky Mountain Elk Foundation, based in Missoula, Montana. (by Steve Holland, Reuters).

Washington, D.C. - Coalition Critiques Baron Restructuring Rill

On September I^t, sixteen member groups of the Sustainable Energy Coalition sent a detailed critique of the draft electric utility restructuring legislation, the Electricity Competition and Reliability Act, to its primary author Rep. Joe Baron (R-TX), chairman of the House Commerce

Committee's Subcommittee on Energy and power. The group warned that "unless restructuring is carefully crafted, negative impacts on environmental quality and human health are likely to be one of the unintended consequences" noting that "the draft is missing a number of critical provisions that we believe are essential for inclusion in a final bill." The group further called for a redraft of the bill to include the following topics: (1) Public Benefits Trust, (2) Renewables Portfolio Standard, and (3) Emissions. For details, contact Eric Wesselman: 202-332-0900.