



# GEO THERMAL ENERGY ASSOCIATION

209 Pennsylvania Avenue SE, Washington, D.C. 20003  
Phone: (202) 454-5261 Fax: (202) 454-5265  
[www.geo-energy.org](http://www.geo-energy.org)

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## **National News**

### **Senate Finance Committee Leaders Unveil Tax Extenders Bill, S. 2886**

The Chairman and Ranking Republican on the Senate Finance Committee, Senator Baucus (D-MT) and Senator Grassley (R-IA), unveiled legislation that would address a series of priority tax issues this year. According to the Senators, their new legislation would “protect millions of taxpayers from being hit for the first time by the AMT, extend tax credits for renewable energy solutions, and offer tax relief for America’s workers...”

Specifically for energy related items, their press statement said:

Senate Finance Committee Chairman Max Baucus (D-MT) and Ranking Member Chuck Grassley (R-IA) unveiled legislation today to extend tax incentives for renewable energy solutions.

- \* Extends through December 31, 2009 the period during which certain facilities may be placed in service for purposes of the Section 45 credit. Extends Indian country coal provision for one year.
- \* Adds \$400 million to Clean Renewable Energy Bonds (CREBs) program. Provision is effective for bonds issued after December 31, 2008.
- \* Extends for one year the 30% credit for purchase of qualified photovoltaic property and solar water heating property used exclusively for purposes other than heating swimming pools and hot tubs. Extends for one year the 30% credit for the purchase of qualified fuel cell power plants.
- \* Extends the 30% investment tax credit for solar energy property and qualified fuel cell property, as well as the 10% investment tax credit for microturbines for one year (through 2009).
- \* Extends for one year the tax deduction for energy-efficient commercial buildings (through December 31, 2009).
- \* Extends the tax credit for production of energy-efficient appliances for two years (through December 31, 2009) and readjusts the baseline for the credit.
- \* Extends the tax credit to eligible contractors for the construction of new energy-efficient homes for one year, through December 31, 2009.
- \* Extends the tax credit for expenditures to improve the energy efficiency of an existing home for two years (through December 31, 2009).

To read the news release, go to <http://finance.senate.gov/press/Bpress/2008press/prb041708.pdf>.

The text of the “Alternative Minimum Tax and Extenders Tax Relief Act of 2008” and a summary of it are available at: <http://finance.senate.gov/sitepages/legislation.htm>.

## **GEA Celebrates Geothermal Successes in Honor of Earth Day**

Celebrate Geothermal Energy as “Mother Earth’s” Energy on Earth Day 2008 [Press Release—April 18, 2008]

Earth Day is a time to appreciate the natural world and explore ways we can reduce our impact on the Earth. A great way to celebrate Earth Day is by using an energy source that comes directly from “Mother Earth”—geothermal energy.

Geothermal energy helps reduce the impact of pollution on our air, water, and wildlife, and its use is growing. On Earth Day 2008, 6 million Americans will be using geothermal energy in their homes. About 3 million will receive electricity from geothermal power plants, and another three million will use geothermal heat pumps to heat and cool their homes. In the future, there could be millions more!

Earth Day founder Gaylord Nelson believed education was a key to protecting the environment. Let’s echo his conviction on Earth Day 2008 and discover the ways we can use geothermal energy. But where can you learn more about it?

The U.S. Geothermal Energy Association (GEA) recommends these Web sites for more information:

The Geothermal Education Office: <http://geothermal.marin.org>  
Great educational materials about all types of geothermal energy uses. Take a few minutes and view the wonderful geothermal slide show.

The Geothermal Energy Association: [www.geo-energy.org](http://www.geo-energy.org)  
Information about geothermal power, new technologies, and new projects in the United States . Download a free copy of “A Guide to Geothermal Energy and The Environment.”

The Geothermal Resources Council: <http://www.geothermal.org>  
Links to information about geothermal in the U.S. and worldwide, as well as the annual U.S. technical conference on geothermal energy. Students can sign up free for the GRC Annual Meeting!

The International Ground Source Heat Pump Association: <http://www.igshpa.okstate.edu>  
Local to national information about geothermal heat pumps, including a directory of businesses. You can search for heat pump designers, installers, and dealers in your area.

The Geothermal Heat Pump Consortium: <http://www.geoexchange.org>  
Geothermal heat pump industry information and events. Check out the fact sheets and brochures under their publications tab.

Geo-Center of the Oregon Institute of Technology: <http://geoheat.oit.edu>  
This U.S. DOE-funded information center on geothermal energy is a particularly unique site for information on geothermal direct uses such as greenhouses and building heating. Click on their interactive map to see geothermal projects in your state.

For those interested in learning more about geothermal energy today, we recommend starting with “A Guide to Geothermal Energy and The Environment.” This 87-page booklet covers a wide range of environmental topics as well as provides an introduction to geothermal energy as this resource is being used today. You can download a PDF copy free of charge at <http://www.geo-energy.org/publications/reports.asp>.

## **Company News**

### **Enel: Expanding Geothermal Capacity and Developing Technologies**

An article in *Reuters* highlights the international ventures of Italian power company Enel SpA, particularly to Latin America, as it is expanding its geothermal energy endeavors. Geothermal energy makes up less than 3% of Enel's capacity, but is working to attain 837 MW in 2012 from last year's 678 MW, the article said.

Enel is Europe's biggest producer of geothermal energy, according to the article. Latin America is a current focus because of its volcanoes and hot springs. "Latin America is a key area for us, because of course you have to go where the resources are," Roberto Deambrogio, Enel's head of international renewable energy development, told *Reuters*.

The article also pointed out that Enel is working with Massachusetts Institute of Technology and Milan's Polytechnic University to develop new binary cycle technologies. These systems use underground heat to warm liquid in a closed cycle and drive a turbine, the article said. New liquids to replace current mixtures of ammonium and water are called super criticals and could allow heat to drive turbines at lower temperatures.

"Basically, changing those liquids you can increase the efficiency significantly. That's one of the things we are doing," Deambrogio said.

For the complete article, visit <http://uk.reuters.com/article/oilRpt/idUKL1876417820080418>.

### **Ormat Technologies: Sells Stake in Geothermal Plants and Signs New PPA**

It was a big week for Ormat Technologies. They closed on a geothermal project with Morgan Stanley in Nevada including the sale of part-ownership interests and also signed a new 20-year power purchase agreement with Great River Energy. Excerpts from press releases follow:

Ormat Technologies Inc. said Friday it closed the sale of a partial stake in a geothermal power project to Morgan Stanley & Co. Inc. and Lehman Brothers Inc. in a deal worth about \$64 million.

The sale was the second round of a plan to cash in on production tax credits, and transfers the Galena 3 geothermal project to a company known as OPC LLC that will be operated by Ormat's Ormat Nevada division. The first stage of the deal was completed in June.

"Ormat remains interested in exploring other opportunities to utilize this financing model in our other projects under development and construction," Chief Executive Dita Bronicki said in a statement.

Ormat Technologies, Inc. announced that on April 17, 2008 its wholly-owned subsidiary, Ormat Nevada Inc., concluded the second closing under its previously announced transaction to sell part-ownership interests in certain geothermal power projects to affiliates of Morgan Stanley & Co. Incorporated and Lehman Brothers Inc., as institutional equity investors. Under this second closing, the Galena 3 geothermal project was transferred to OPC LLC, and Ormat Nevada received an amount of approximately \$64 million.

Ormat Technologies, Inc. announced that one of its wholly-owned subsidiaries has executed a new 20-year power purchase agreement (PPA) with Great River Energy (GRE), a Minnesota cooperative corporation of Elk River, Minnesota for electricity to be produced by a new ORMAT(R) Recovered Energy Generation (REG) facility. The new facility will have a net capacity of 5.3 MW and will convert the recovered waste heat from the exhaust of an existing gas turbine into electricity. The turbine is located at a compressor station along the Northern Border natural gas pipeline and Ormat has already secured the rights to the waste heat for the new facility.

For news releases from Ormat, visit <http://www.ormat.com/news.php?did=137>.

## **Skyberry Holdings Ltd. Invests in Polaris Geothermal Inc.**

Excerpts from press release follow:

Skyberry Holdings Ltd. Acquires Units of Polaris Geothermal Inc. for Investment Purposes [Press Release— April 18]

Skyberry Holdings Ltd. ("Skyberry"), announced today that it has acquired 19,500 Units of Polaris Geothermal Inc. (TSX: GEO) ("Polaris") at a price of CAD\$1,000 per Unit in connection with Polaris' brokered private placement, the closing of which was announced by Polaris on April 14, 2008. Each Unit consists of CAD \$1,000 principal amount of 9.5% secured senior debenture (each, a "Debenture") of Polaris, 667 warrants (the "Warrants") and 75 rights (the "Rights").

The Debentures will have a term of 18 months, will bear interest at the rate of 9.5% per annum calculated annually and payable quarterly in arrears and may be prepaid in whole or in part at any time by Polaris on at least 7 days notice without penalty or bonus. All Debentures will rank pari passu. The Debentures will be issued pursuant to a debenture indenture to be entered into between Polaris and a trust company as indenture trustee.

As a result of the acquisition, Skyberry now owns and controls 16,666,667 Common Shares representing approximately 22.18% of the total issued and outstanding Common Shares and 16,666,667 Common Share purchase warrants, each convertible into one Common Share, as previously disclosed by Skyberry via press release on July 30, 2007, 19,500 Debentures, 13,006,500 Warrants and 1,462,500 Rights.

Skyberry acquired the Units for investment purposes and may, from time to time, acquire additional securities of Polaris or dispose of such securities as it may deem appropriate.

Source: <http://www.newswire.ca/en/releases/archive/April2008/18/c7189.html>.

## **U.S. Geothermal: Trading on Stock Exchange as HTM**

U.S. Geothermal: Now Trading on the American Stock Exchange [Press Release— April 16, 2008]

U.S. Geothermal Inc. ("U.S. Geothermal"), a renewable energy development company focused on the production of electricity from geothermal energy, announced that its common shares have been listed on the American Stock Exchange ("AMEX") effective at market opening today under the trading symbol "HTM". The AMEX specialist for U.S. Geothermal will be J. Streicher & Co., LLC.

The common shares of U.S. Geothermal had previously traded on the OTC Bulletin Board under the symbol "UGTH". In addition to the AMEX listing, U.S. Geothermal continues to trade on the Toronto Stock Exchange under the symbol "GTH" and trading will cease on the OTC.

To read U.S. Geothermal's news releases, visit <http://www.usgeothermal.com/NewsReleases.aspx>.

## **Renewable News**

### **Sustainable Energy Efforts Becoming Worldwide “Green Rush”**

An editorial in the Los Angeles *Daily News* titled “Green rush” sums up modern green efforts in light of Earth Day 2008, particularly in California, calling sustainable energy efforts “the new California Gold Rush.”

“Currently, the state and the nation don't measure up well against the rest of the world when it comes to using green power,” says the article, mentioning efforts abroad:

- Denmark receives 20% of its electricity from wind turbines
- Iceland gets 90% of its electricity from geothermal
- Germany gets 12% of its electricity from a combo of solar and wind, projecting to 24% by 2020
- France gets 80% of its electricity from more than 50 nuclear plants
- Brazil provides 30% of its fuel for autos from sugar-cane ethanol

The article brings up several green initiatives going on in California and goes on to applaud efforts to improve lives worldwide through efficiency-conscious projects and products.

The products described in the article include:

- The \$3 LifeStraw: a plastic tube with seven filters; villagers in poor countries can drink from contaminated water.
- The \$25 BoGo (Buy One, Give One) Solar Light: If you buy one, the manufacturer donates one to a relief group of your choice.
- Solar cookers or solar family ovens: an oven with concentrated heat that eliminates the need for wood-burning fires, which damage the lungs and eyes and cause 1.5 million deaths worldwide.

The “green rush” doesn't stop in California.

For the complete article, visit [http://www.dailynews.com/editorial/ci\\_8988508?source=email](http://www.dailynews.com/editorial/ci_8988508?source=email).

### **Virginia Researchers Say Geothermal Uses Water Most Efficiently**

The Virginia Polytechnic Institute published a recent study that looked at the efficiency of water use in the current energy industry. The most water-efficient power generating sources were wind, geothermal, and hydroelectric plants.

The study, called “Analysis of Water Consumption for Producing and Generating Power,” is described on the Virginia Tech Web site as follows:

“Energy production and power generation systems require huge amounts of water. This study aims to compare water consumption efficiency of various energy production systems such as coal, natural gas, biodiesel and ethanol, and power generation systems such as hydroelectric, geothermal, nuclear, and solar. Preliminary analysis shows that, when expressed in British Thermal Unit (BTU), natural gas is the most water efficient and biodiesel is the least efficient energy production system. In terms of power generation, hydroelectric system is the most water efficient while nuclear power is the least water efficient.”

For more information, visit

[http://www.ecogeek.org/index.php?option=com\\_content&task=view&id=1559&Itemid=79](http://www.ecogeek.org/index.php?option=com_content&task=view&id=1559&Itemid=79) and <http://www.vwrrc.vt.edu/projects.html#Energy>.

## **Environmental Author Describes Energy Revolution**

A new book from Environmental Defense Fund President Fred Krupp called "Earth: The Sequel" is discussed in an article on greentechmedia.

GreenTech Media was able to interview Krupp about the ideas on energy revolution discussed in his book, which begins: "A revolution is on the horizon: a wholesale transformation of the world economy and the way people live. This revolution will depend on industrial technology -- capital-intensive, shovel-in-the-ground industries -- and will almost certainly create the great fortunes of the 21st Century. But this new industrial revolution holds a more important promise: securing the world against the dangers of global warming."

The question and answer session with Krupp addressed recent trends in the energy industry, and how the U.S. can keep on top of developments and policy to do our part in the world environmental campaign.

Regarding geothermal energy, Krupp said: "Geothermal potential also is amazing. In low-temperature geothermal, I've been working with United Technologies, which is generating electricity and hot water at half the temperature people thought, until now, we would be able to generate geothermal from."

"I came away from writing the book enormously hopeful because I see a future where we can solve the problem," Krupp told the publication. "It's important to share the hope because the [fear] can be debilitating. ... There are all these puzzle pieces out there. The book puts together a picture of an abundance of alternatives. There are a lot of possibilities once you change the fundamental drivers."

For the complete article, visit <http://www.greentechmedia.com/articles/predicting-an-energy-revolution-784.html>.

## **Climate Change News**

### **Climate Change Seen as Wartime Opponent**

A perspective article in the *Barre Montpelier Times Argus*, "Waging war on climate change," features the need to pursue political backing for an energy revolution.

"In the process of transforming our energy systems, we will become more energy independent and we will cut our greenhouse gas emissions," reads the article. "This, in turn, will strengthen our economy, put people to work, protect the environment, and provide for better health for our citizens."

"In World War II," it says, "We turned our auto plants into factories making tanks and military trucks and fighter planes in just a few months. We need to do the same now as we wage war on global warming."

It highlights a wide spectrum of energy-efficient areas where the United States government could lend more effort, speaking highly of geothermal energy:

"What about geothermal energy – the heat from deep inside the earth? It is free, renewable and can be used for utility-scale electricity generation. While geothermal is available at some depth everywhere, it is most accessible in western states where hydrothermal resources are at shallow depths. We have approximately 2,900 MW of installed capacity, which is just 5% of renewable electricity generation in the United States.

"Growth in geothermal has been stagnant for much of the last decade, but recent federal incentives have stimulated new investments in this renewable resource. The installed geothermal capacity is already expected to double in the near term with projects that are under development, but that is just the tip of the iceberg. A recent report for the U.S. Department of Energy by the Massachusetts Institute of Technology suggests that geothermal could provide 100,000 MW of new carbon-free electricity at less than 10 cents per

kilowatt-hour. And, an investment of \$1 billion, less than the price of one coal-fired power plant, could make this resource commercially viable within 15 years. The potential payoff is huge. It is estimated that electricity from geothermal sources could provide 10% of the U.S. baseload energy needs in 2050.”

*For the complete article, visit*

<http://www.timesargus.com/apps/pbcs.dll/article?AID=/20080420/FEATURES05/804200306/1014/FEATU RES05>.

## **Scientist’s Letter Requests Halt on Coal Plants**

Climate scientist James Hansen received a national award for scientific achievement from the Desert Research Institute, according to the *Las Vegas Sun*.

Hansen recently sent a letter to Gov. Jim Gibbons calling on Gibbons to take meaningful action against climate change. He denounced the governor’s support of three coal-fired power plants proposed for Nevada, the article said.

Hansen said in his letter and that Nevada should eschew using coal in favor of developing its abundant solar, geothermal and wind resources.

“As governor, you can help inspire your state and the rest of the country to take the bold actions that are essential if we are to retain a hospitable climate and a prosperous future,” Hansen said in the letter. “If you should decide to come down firmly on the side of clean energy and energy efficiency, it could be a transformative moment for you, Nevada and the future of coming generations.”

The article said that Hansen hopes Gibbons’ scientific background as a geologist will open his mind beyond party lines and industry special interest groups. If the governor were to stop the plans for the coal plants, “he could go down in history as one of the greatest leaders of Nevada,” Hansen said.

*For the complete article, visit* <http://www.lasvegassun.com/news/2008/apr/16/scientist-wants-gibbons-nix-support-coal/>.

*To see the full copy of the letter, go to:*

[http://www.columbia.edu/~jeh1/mailings/20080414\\_GovernorGibbons.pdf](http://www.columbia.edu/~jeh1/mailings/20080414_GovernorGibbons.pdf).

## **State News**

### **New Mexico: College Reports on Renewable Energy Potential**

An article in the *Daily Times* described the renewable energy potential of counties in New Mexico and surrounding regions as rated by Colorado College.

The findings related to the Rocky Mountain States in general. The article pointed out that the region’s geothermal resources distinguish it from other parts of the nation.

The report gave grades on each county based on their potential within renewable energy capacities. San Juan County, which was highlighted in the article, was given an A-minus for its geothermal potential.

The article discussed other sectors of the renewable energy industry and also mentioned how increased energy efficiency can help the Navajo Nation.

*For the complete article, visit* [http://www.daily-times.com/news/ci\\_8996992?source=email](http://www.daily-times.com/news/ci_8996992?source=email).

## **Oregon: New Permits Promise Strong Geothermal Outlook**

Oregon, which has had a notable lack in geothermal projects, looks to have geothermal projects in the works, according to an article at oregonlive.com.

The state Department of Geology and Mineral Industries this year issued three new permits for drilling and a fourth will be issued soon, a state geologist, Bob Houston, told the publication. These are the first geothermal permits issued in Oregon in a decade or more.

Factors to this change include a recent rise in cost for other types of power, as well as improved technology for extracting geothermal power, the article said.

The article went on to describe the areas where geothermal potential is most prevalent, and what projects are proposed for development.

*For the complete article, visit*

<http://www.oregonlive.com/special/outlook/index.ssf?/base/news/1207774514150700.xml&coll=7>.

## **Utah: Geothermal Reservoirs Some of Best in Nation**

“Geologists, utilities and entrepreneurs already believe Utah possesses some of the best geothermal reservoirs in the nation, resources that could generate 850 MW, enough to meet the needs of 2.6 million people,” says an article from the *Salt Lake Tribune*.

The paper printed an article that explained geothermal energy, particularly its relevancy around the area, in conjunction with a two-day meeting for utilities, municipalities, students, homeowners, and anyone interesting in learning more about geothermal potential in Utah.

*For the complete article, visit* [http://www.sltrib.com/ci\\_8966838](http://www.sltrib.com/ci_8966838).

## **International News**

### **Fiji: Geothermal Sites Identified for Exploration**

Two companies will begin geothermal exploration work in Fiji, according to an article at Fijivillage.com.

Geothermal Electrical Company had been issued a license, and a second exploration license is expected to be issued to Australian Based Mitchell Morgan Investments, Netani Sukanaivalu, interim minister for Mineral Resources, told the press. He said that five sites in Vanua Levu have been identified.

*Visit* <http://74.86.208.250/?mod=story&id=20040886fc7e24666aed7bf028d2b0>.

### **Italy: Geothermal Market Gaining Investors**

An article on monstersandcritics.com talks about the geothermal energy market in Italy. Italy’s Tuscany region is its top geothermal area, the article said.

A seminar at Hanover Fair in Germany brought together corporate investors, with Italy’s geothermal industry a focal topic. The article explains how projects in Italy take off and how the industry is funded.

*For the complete article, visit*

[http://news.monstersandcritics.com/business/news/article\\_1400665.php/Seminar\\_at\\_Hanover\\_Fair\\_may\\_boost\\_Italian\\_geothermal\\_market](http://news.monstersandcritics.com/business/news/article_1400665.php/Seminar_at_Hanover_Fair_may_boost_Italian_geothermal_market).

## **Kenya: Geothermal Power to Aid Power Industry Growth**

Kenya, faced with demands for power, is focusing on geothermal power, according to an article at [businesswire.com](http://businesswire.com). The country has a known geothermal potential of 7,000 MW and has seen great interest from independent power producers, the article said.

“While Kenya’s robust economic growth is fuelling the demand for power, existing supplies are unable to meet demand, leading to acute power shortages and blackouts,” Frost & Sullivan Research Analyst Moses Duma said, according to the article. “Furthermore, approximately 62% of Kenya’s power plants use water as their major feedstock, leaving them prone to fluctuating water levels as a result of climate and weather variations.”

A virtual brochure, which provides manufacturers, end users and other industry participants with an overview of strategic analysis of the Kenyan electricity industry, can be obtained by sending an e-mail to Patrick Cairns, Corporate Communications, at [patrick.cairns@frost.com](mailto:patrick.cairns@frost.com). Include your full name, company name, title, telephone number, company e-mail address, company website, city, state and country.

*For the complete article, visit*

[http://www.businesswire.com/portal/site/google/?ndmViewId=news\\_view&newsId=20080416005468&newsLang=en](http://www.businesswire.com/portal/site/google/?ndmViewId=news_view&newsId=20080416005468&newsLang=en).

## **New Zealand: Mighty River Power Begins Work on Geothermal Station**

Mighty River Power has begun work on a new power station near Taupo, according to an article at the *Waikato Times*. The new 132-MW station, is located near an existing 34-MW station. It is part of Mighty River Power’s plan to generate 500 MW by 2012.

Mighty River Power chief executive Doug Heffernan told that press that “as the only renewable fuel not subject to climate variations, geothermal had a key part to play in ensuring security of supply,” said the article.

*For the complete article, visit* <http://www.stuff.co.nz/stuff/waikatotimes/4486397a6415.html>.

## **Philippines: Everest Expedition Team Supports Geothermal Energy**

The Philippine Mt. Everest Expedition team has expressed their support for plans to expand geothermal energy production to the island of Negros, according to [inquirer.net](http://inquirer.net).

The climbers said they originally opposed the Philippine National Oil Co. Energy Development Corp.’s (PNOC-EDC) plan to build a geothermal plant, but realized that the opportunity to use geothermal energy would do more to preserve the environment, said the article.

The team members include Noelle Wenceslao, Carina Dayondon, Pastour Emata, Dr. Ted Esguerra and Negrenses Art Valdez, the team leader, and Fred Jamili.

"We have seen the effects of global warming in Mt. Everest where the glaciers have receded, and where stones and pools of water can now be seen at the base camp that was formerly blanketed with snow," Valdez told the press.

Voltaire Velasco, who has a doctorate in environmental physics and acts as the expedition team's weather analyst, said, "we will see the worse [of global warming] before it gets any better."

"That is why we need to push for clean fuel and preserving the environment. We are lucky to have geothermal power in Negros," Valdez said.

For the complete article, visit

[http://newsinfo.inquirer.net/breakingnews/regions/view\\_article.php?article\\_id=131818](http://newsinfo.inquirer.net/breakingnews/regions/view_article.php?article_id=131818).

## **Philippines: DOE Secretary Endorses Geothermal Buffer Zone**

The Department of Energy is endorsing the use by the Philippine National Oil Co. Energy Development Corp. of a portion of the Mt. Kanlaon Natural Park buffer zone in Bago City for the generation of geothermal power, DOE Secretary Angelo Reyes said, according to an article in the *Visayan Daily Star*.

Reyes wrote a letter to Negros Occidental Gov. Isidro Zayco saying in partnership with PNOG EDC, the DOE is committed to address the 230 MW power requirement of Negros. Of that, 190 MW is served by the Palinpinon Geothermal Project in Negros Oriental, said the article.

In his letter, Reyes said, “Our assessment of the proponent’s studies on the exploration and development of the Northern Negros Geothermal Production Field showed that the increasing temperature and pressure trend heads toward the buffer zone that is northwest of Mt. Kanlaon.”

Visit <http://www.visayandailystar.com/2008/April/16/topstory5.htm>.

## **Yemen: Icelandic Company to Begin Geothermal Exploration**

Yemen and Iceland have signed a geothermal electricity agreement, according to *Power Engineering International*. Iceland's Reykjavik Energy Invest company will explore geothermal potential at Lesi Mountain in the Dhamar region of Yemen, and if the resource proves viable, will begin drilling. The study is expected to be finished by August, the article said.

Visit [http://pepei.pennnet.com/display\\_article/326338/6/ARTCL/Display/none/1/Iceland-Yemen-geothermal-electricity-agreement-signed/](http://pepei.pennnet.com/display_article/326338/6/ARTCL/Display/none/1/Iceland-Yemen-geothermal-electricity-agreement-signed/).

## **Notices and Employment Opportunities**

### **Employment Opportunities—Contact Energy, New Zealand**

Contact Energy is a leading energy generator and retailer, and one of New Zealand’s largest publicly listed companies.

Our company is also New Zealand's leading provider of renewable geothermal energy, and is planning spend up to \$1 billion in new geothermal development over the next five years. This exciting program has created two new opportunities to join our team based at our geothermal sites in the Taupo region. These roles will see the successful candidates working on nationally significant renewable generation projects, to the benefit of the country, consumers and your own career.

#### **Project Manager: Geothermal**

Lead the construction of our newest steamfield developments as well as shaping future developments in this all important area. You can look forward to great diversity—undertaking feasibility analysis and development for consenting, drilling, steamfield works, and generation plant procurement. You’ll be developing technical specifications, negotiating works and service agreements, and supervising a team of engineers and specialists attached to the project. You’re an excellent communicator, negotiator and problem solver who is commercially savvy and can qualify any initiative with robust economic evaluation and financial modeling.

### **Drilling Engineer**

We are expanding our drilling team to support an extended drilling program over the next three years in the Central North Island. You will have a tertiary qualification in engineering; practical experience in well design, materials procurement, drilling operations, health and safety regulations, and contractor management is an advantage. We'll consider you if you have oil and gas qualifications and experience too. If you're an experienced Drilling Engineer then you'll thrive on the opportunities available at Contact.

### **General Geothermal Opportunities**

It goes without saying that with all of this development on the go we will require people experienced in the construction, operation and maintenance of geothermal plant. We will require people in the following areas:

- Site supervision
- Drilling engineers
- Reservoir engineers
- Mechanical/Electrical & Process engineers
- Project Managers
- Project Engineers

As an accredited employer with immigration New Zealand, Contact Energy is able to fully support all successful candidates with their Visa applications and offer generous relocation assistance. We will also recognize your expertise with an above average salary and benefits package.

*If you have geothermal experience and a desire for a lifestyle change then check us out at [www.contactenergy.co.nz](http://www.contactenergy.co.nz)*

*To apply for either of these roles please visit [www.contactenergy.co.nz/careers](http://www.contactenergy.co.nz/careers). For more information please e-mail [recruitmentcentre@contact-energy.co.nz](mailto:recruitmentcentre@contact-energy.co.nz) or for a confidential conversation please ring Richard Gilhooly on +64 4 4621311.*

### **Employment Opportunity—Terra-Gen Operating Company**

Terra-Gen Operating Company is a newly formed independent power producer operating clean and reliable energy projects located in several western states. Current renewable projects include wind, geothermal, and solar. Terra-Gen is currently seeking...

#### **Geothermal Resource Manager:**

Manage/develop the geothermal resource company wide. Maintain departmental budget. Direct/support geological/resource needs i.e., on-going geologic model, temperature model, reservoir and well performance evaluation. Evaluate geothermal reservoirs, provides recommendations for well field operations. Target drilling for production and injection wells. Provide technical support for well maintenance i.e., workovers, acid jobs, caustic jobs, surveys, etc. Desired qualification: Relevant BS from 4 yr college or university; or 10 yrs related exp and/or training; or equal education and experience. Geological and temperature modeling knowledge.

#### **Environmental Manager:**

Supervise the Environmental Compliance Dept personnel. Oversee departmental budget integrated into plant budgets. Document, review and track department activities, reports, compliance documents, audits, and investigations. Ensure company operations comply with environmental permit requirements and federal, state and county/district regulations. Maintain an effective relationship with regulatory agencies. Prepare and update company programs, policies, and procedures for safety and environmental compliance. Organize, develop, implement and administer the company's safety program. Desired qualifications: Bachelor's Degree from a 4-yr college or university; and 8+ yrs related experience and/or training; or equal education and experience. Environmental and safety regulation knowledge.

To apply for either position, send a resume to Terra-Gen Operating Company, Attn: Human Resources, P.O. Box 1690, Inyokern, CA 93527, fax to 760-764-1318, or email to [djackson@tgpnyc.com](mailto:djackson@tgpnyc.com). Terra-Gen Operating Company is an Equal Opportunity Employer.

## **Requests for Proposals (RFPs)**

### **Enhanced Geothermal System Funding Opportunity Announcements—U.S. Department of Energy (Due April 28)**

The U.S. Department of Energy's Geothermal Technologies Program is seeking input from the geothermal community (industry, academia, etc.) to assist in the development of these Enhanced Geothermal System Funding Opportunity Announcements.

Information on the U.S. Department of Energy's Geothermal Technologies Program Pre-Solicitation Meeting, which will discuss these announcements, is available in the **Upcoming Events** section of this newsletter.

#### **DRAFT Funding Opportunity Announcement FY08: Enhanced Geothermal Systems Research, Development, and Reservoir Stimulation:**

Topic Area 1: Enhanced Geothermal Systems Technologies – This topic area seeks projects that address key aspects of engineered reservoir creation, management, and utilization, by developing tools and techniques useful to temperatures up to 300°C and depths as great as 10,000 meters. Areas of interest include: zonal isolation; down-hole pumps; fracture characterization; image fluid flow; tracers and tracer interpretation; high-temperature logging tools and sensors; and stimulation prediction models. These technology improvements are discussed in greater detail in the report, “An Evaluation of Enhanced Geothermal Systems Technology,” posted on the DOE website: <http://www1.eere.energy.gov/geothermal/>.

Topic Area 2: Enhanced Geothermal Systems Reservoir Stimulation – This topic area seeks projects that demonstrate stimulation techniques that successfully establish inter-well connectivity at viable flow and heat extraction rates for commercial EGS production using techniques such as hydraulic stimulation.

*Comments in response to these topic areas can be provided to the DOE Golden Field Office as an attachment to an e-mail message to [go.geothermal@go.doe.gov](mailto:go.geothermal@go.doe.gov). Please provide comments by April 28th.*

#### **DRAFT Funding Opportunity Announcement FY08: Institutional Challenges**

Topic Area 1: Geothermal National Data Center – GTP is seeking to award one grant on a competitive basis to develop a data center that has reliable and accurate data on geothermal resources. The data center will support a wide range of development and utilization of geothermal resources. The Applicant will be responsible for collecting, maintaining, and disseminating information in the public domain. The Applicant will also be responsible for incorporating best practices from the information technology industry. The Applicant should also include a proposal for a classification system that will provide industry and investors a clearly defined framework to evaluate geothermal prospects and establish a common industry language for geothermal development.

Topic Area 2: Industry Communications – GTP is seeking opportunities to coordinate efforts and share information with domestic and international partners engaged in research and development of geothermal systems and related technology.

Topic Area 3: Geothermal Curriculum Development and International Student Exchange – U.S. industry needs new geothermal professionals to meet the demands of the growing geothermal development market. GTP is seeking to award grant funding, on a competitive basis, to develop geothermal educational curriculum for an institute of higher education. The institute will serve as an educational resource to

students in relevant fields of study, and the data generated by the facility shall be available to students and the general public. The curriculum development would include sponsoring a student exchange with participating foreign universities. Students who utilized this curriculum would gain first hand knowledge through classroom education in the U.S. and a foreign country, field work, a National Lab or industry internship in geothermal research and development, policy, regulatory, and/or environmental issues.

*Comments in response to these topic areas can be provided to the DOE Golden Field Office as an attachment to an e-mail message to [go.geothermal@go.doe.gov](mailto:go.geothermal@go.doe.gov). Please provide comments by April 28th.*

## **RFP for Enhanced Geothermal Systems—U.S. Department of Energy**

The U.S. Department of Energy announces its intent to request proposals for Enhanced Geothermal Systems, to demonstrate reservoir stimulation techniques at existing geothermal fields; establish an EGS field validation site where DOE and its partners can perform high-risk experiments under actual field conditions; develop new sensors, down-hole tools, and mapping capabilities able to operate at greater depths and higher reservoir temperatures; and provide outreach to the geothermal community to convey the benefits and potential opportunities of EGS technologies.

Funding amount and number of awards anticipated was not posted at this time.

*For more info, contact James Damm at [james.damm@go.doe.gov](mailto:james.damm@go.doe.gov) or go to: <http://e-center.doe.gov/doesbiz.nsf/UNID/5E8F90C7ED4B98848525740400568EF1?OpenDocument>.*

## **SMUD to Release 2008 Renewable Energy RFO (Due April)**

On January 4, The Sacramento Municipal Utility District (SMUD) will release a Request for Offers (RFO) of renewable energy for power purchase agreements (PPA). Proposals will be due early April.

SMUD has a goal to meet 23% of its retail electricity sales with renewable energy by 2011 and beyond. The utility's need for renewable energy continues to increase due to its commitment to expand the amount of power from renewable sources in its power mix and a need to replace current contracts that expire in the coming years.

The 2008 solicitation is for PPA offers of California RPS eligible conventional renewables, which include resources such as wind, geothermal, small hydroelectric, landfill gas, biomass and biodiesel. A separate RFO for emerging renewable technologies is planned for mid-2008.

Interested parties can download the RFO documents from SMUD's Electronic Bid Solicitation System (EBSS) Web site at [www.bids.smud.org](http://www.bids.smud.org) when it becomes available. Registration to the EBSS site is required to access the documents.

SMUD recommends that those interested in this and future solicitations list their company name in the "Renewable Power" category as well as in one or more of the following Renewable Power subcategories: Generation Energy, Geothermal Power, Landfill Gas Power, Renewable Power-Other, Small Hydro Power, and Wind Power.

Registered individuals will also receive updated information regarding this RFO and will also receive notification of future solicitations for purchase of renewable energy resources.

For additional information, contact Cesar J. Beltran at (916) 732-6925 or [cbeltra@smud.org](mailto:cbeltra@smud.org).

## **RFO for Supply of Renewable Energy Resources—San Diego Gas & Electric (Due April 30)**

San Diego Gas & Electric (SDG&E) today announced it has issued a competitive solicitation seeking supply of renewable-energy resources to help the utility meet California's mandate to derive 20% of its energy from renewable sources starting in 2010. This latest solicitation, also known as a "request for offers" (RFO), will help to further increase SDG&E's supplies of clean, renewable power for the region's energy portfolio.

"For the last five years, SDG&E has aggressively pursued renewable energy from developers whose projects deliver clean energy to our customers in San Diego and South Orange Counties," said Matt Burkhardt, vice president electric and gas procurement for SDG&E. "For this year's solicitation, SDG&E seeks both long-term and short-term contracts that will build on our existing clean, 'green' energy resources and will aid us in our effort to secure 20% of our energy from renewables by 2010."

Through the bidding process, or RFO, SDG&E is seeking energy that comes from solar, wind, geothermal, biomass and any other clean, renewable resource that qualifies under the state's Renewable Portfolio Standard program. The plants that produce the power can be inside or outside the SDG&E service territory. Bids are due April 30, 2008.

The evaluation and selection of offers includes active participation by SDG&E's Procurement Review Group, comprised of California Public Utilities Commission (CPUC) staff, consumer advocates and other non-market participants, as well as an independent evaluator. These entities are involved at all stages of the process, including the preparation of the RFO, bid evaluation and determination of the final "short list" of bidders. Once the evaluation process is completed, all proposed contracts are subject to CPUC review and approval.

*More information about this latest RFO for renewable energy is available at <http://www.sdge.com/renewablerfo2008>.*

## **RFI for Energy Efficiency, Renewable Energy, and Transmission Projects—Office of Energy Efficiency and Renewable Energy (Due May 2)**

### Request For Information DE-PS36-08GO38004

The Office of Energy Efficiency and Renewable Energy (EERE) requests information for the Development of Solicitations for Energy Efficiency, Renewable Energy and Transmission Projects under Title XVII of the Energy Policy Act of 2005. This RFI is issued to encourage specific input from a broad-based cross-section of stakeholders, such as energy project developers, equipment vendors, engineers, investors, bankers, inventors and the like. This RFI is targeted to stakeholders directly involved in the promotion and development of energy efficiency, renewable energy and transmission technologies that employ new or significantly improved energy efficiency, renewable energy and transmission technologies addressing the production, consumption or transportation of energy that also achieve substantial environmental benefits. Through this RFI, the Department of Energy (DOE) is requesting input from these stakeholders in order to formulate and draft a solicitation for applications under a \$10,000,000,000 loan guarantee authority that meets the goals established by Congress under Title XVII of the Energy Policy Act of 2005.

### Request for Information Guidelines:

The purpose of this RFI is solely to obtain input from DOE stakeholders on the scope of a solicitation for loan guarantees to encourage commercial development in the United States of new or significantly improved renewable energy, energy efficiency and related transmission technologies that offer the potential to create more affordable and diversified energy sources and greater productivity and efficiency in energy

utilization. This RFI is not intended to solicit applications for loan guarantees from the public prior to issuing a solicitation.

DOE will not pay for information provided under this RFI, and respondents under this RFI will not receive any additional consideration in the current or forthcoming solicitations for loan guarantees.

The recommended response to this RFI should address the areas of interest set forth in this RFI, and it is suggested that responses be no longer than five (5) pages in length with 1-inch margins, single-spaced and a minimum 11 point font. Please send your response (one attachment only) via e-mail, with the title, "EERE RFI Response."

**RESPONSES WILL NOT BE CONSIDERED CONFIDENTIAL. DO NOT PROVIDE CONFIDENTIAL OR PROPRIETARY INFORMATION IN YOUR RESPONSE.**

Also please provide contact information for the submitting organization: address, phone number, email and type of business or institution (not included in the suggested five pages). In addition, please include your organization's technology focus (if any) in the e-mail and at the beginning of the RFI response.

*Responses should be submitted in Microsoft Word or PDF to [erefinance@hq.doe.gov](mailto:erefinance@hq.doe.gov) by 6:00 PM Mountain Time on May 2, 2008.*

#### Background to the RFI:

Pursuant to Title XVII of the Energy Policy Act of 2005 and the Consolidated Appropriations Act for FY 2008 and the accompanying Committee Report, DOE's Loan Guarantee Program Office (LGPO) has been allotted to undertake the authorization of \$10,000,000,000 in federal loan guarantees for renewable and energy efficient systems and manufacturing and distributed energy generation, transmission and distribution. On behalf of the LGPO, EERE is seeking information to support drafting and developing a solicitation for the Loan Guarantee Program to implement this authority.

This information is desired in order to assure that the loan guarantee solicitation will encourage commercial development in the United States of new or significantly improved technologies in energy projects that reduce, avoid or sequester greenhouse gases or air pollutants and offer the potential to create more affordable and diversified energy sources and greater productivity and efficiency in energy utilization. Furthermore, EERE is interested in supporting the development of large-scale projects that integrate multiple efficiency, renewable and transmission technologies to benefit regions or sectors of the United States.

#### Title XVII and the Loan Guarantee Program:

A principal purpose of the Title XVII and the Loan Guarantee Program is to encourage early commercial use in the United States of innovative and new or significantly improved technologies in energy projects.

The Program objectives are to issue loan guarantees to eligible projects that:

- Avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases;
- Provide a reasonable assurance of repayment; and
- Employ new or significantly improved technologies as compared to technologies in service in the United States at the time the guarantee is issued.

Other elements of an eligible project for loan guarantee are:

- The project must be deemed to have a "reasonable prospect" of repayment before a loan guarantee is issued;
- A guarantee shall not exceed 80% of the total project cost;
- DOE will have a superior lien on all project assets, pledged as collateral;
- LGPO must charge and collect fees sufficient to cover applicable administrative expenses; and
- The borrower will pay a "credit subsidy" fee to cover the risk of the obligation.

*For further information on Title XVII and the Loan Guarantee Program and implementing regulations, go to <http://www.lgprogram.energy.gov/>.*

#### Areas of Interest for DOE:

EERE seeks comments on the following areas of interest. Respondents need only comment on those areas that are of importance to them.

1. Describe the technology or project concept for which you would like to seek a loan guarantee from DOE. Project concepts can include, but are not limited to, freestanding energy efficiency, supply-side energy production, transportation projects, transportation and consumer systems, and equipment manufacturing facilities. Also of particular interest are integrated project proposals that incorporate

multiple technologies that utilize transmission and electronic control systems on a utility or distributed generation scale.

2. Explain how your technology or project concept complies with the requirements established by the LGPO, the final regulations published in October, 2007 and Title XVII of the Energy Policy Act of 2005. Without revealing proprietary information, describe how the technology or project is innovative.\*

3. Describe the principal obstacles your company, technology or project face in obtaining commercial financing, attracting equity capital or developing the underlying project or technology to a commercial level. Describe what is needed to mitigate such obstacles and how the loan guarantee may or may not be an important mitigating force. Note that DOE's Loan Guarantee Program is designed to support commercially viable projects that have been successfully demonstrated at both the pilot and demonstration scale, but have not yet been widely deployed in the U.S.

4. How would you rate your company's interest in responding to this solicitation: (a) very high, probable that we will apply; (b) interested, but would need more information or technology development before we applied, or (c) not interested, not likely that we will apply.

5. Suggest what criteria DOE should consider to evaluate and score energy efficiency, renewable energy and transmission related applications. Relevant criteria can include timing, scope, cost effectiveness, eligible technologies and other criteria that will enable DOE to attain the goals established in Title XVII. \*Note that to qualify for a loan guarantee the technology must have been successfully demonstrated both at the pilot and demonstration scale and be ready for commercialization. In addition, the final regulations limit support to technologies that are installed in no more than three commercial projects in the United States and that have been in operation in each such commercial project for no more than a period of five years.

6. Any other suggestions, recommendations or observations relevant to DOE in developing the energy efficiency, renewable energy and transmission portion of the solicitation.

#### Questions:

*Any questions concerning this RFI must be submitted through the "Submit Question" feature under DE-PS36-08GO38004 on DOE's Industry Interactive Procurement System (IIPS) at <https://e-center.doe.gov>.*

### **RFP for Renewable Power Projects—Southern California Edison (Due May)**

Southern California Edison is looking for both short-term and long-term contracts for projects that produce solar, wind, biomass, and geothermal energy, according to a release. All proposals are welcome, but the company is especially interested in the Tehachapi area of Kern County.

Proposals are due in May 2008. SCE hopes to submit completed contracts to the California Public Utilities Commission by December.

Contact [vanessa.mcgrady@sce.com](mailto:vanessa.mcgrady@sce.com). Visit the Southern California Edison Web site at <http://www.sce.com/>.

### **RFP for Energy Innovations Grants—California (Due May 2)**

The California Energy Commission requests proposals for the Energy Innovations Small Grant (EISG) Program. EISG supports research that establishes the feasibility of new, innovative energy concepts.

Projects must address a CA energy problem and provide a potential benefit to CA electric and natural gas ratepayers, and target one of the following areas: Industrial/agriculture/water end-use efficiency; building end-use efficiency; environmentally preferred advanced generation; renewable generation; energy-related environmental research; and energy systems integration. Individual hardware projects NTE \$95K, modeling projects NTE \$50K.

*Pre-proposal abstracts are optional and are due 5/2/08, final proposals due 6/10/08. For more info, contact*

*eisg@projects.sdsu.edu or go to: <http://www.energy.ca.gov/contracts/smallgrant/index.html>.*

## **Renewables Purchase—Michigan (Due May 2)**

DTE Energy seeks up to 150,000 MWh of Michigan-based eligible renewable energy resources or Renewable Energy Certificates (RECs) for the Green Currents program.

*Responses due 5/2/08. For more info, contact Paul Marshall at [marshallp@dteenergy.com](mailto:marshallp@dteenergy.com) or go to: <http://dteenergy.com/supplyChain/rfp.html>. (Green Power Network 4/16/08)*

## **Energy Analysis and Technical Assistance—U.S. Department of Energy (Due May 5)**

The U.S. Department of Energy's National Renewable Energy Laboratory seeks proposal for energy related analysis and technical assistance in support of NREL's ongoing energy efficiency and renewable energy programs. The overall objective of this solicitation is to establish task ordering agreements with multiple organizations to provide analysis and technical assistance as needed by NREL. Area of interest include: Technology, systems and applications analysis; market analysis; policy and benefits analysis; and program analysis and evaluation. Responses due 5/5/08.

*For more info, contact Laura Hughes at [laura\\_hughes@nrel.gov](mailto:laura_hughes@nrel.gov) or go to: [http://www.nrel.gov/business\\_opportunities/solicitations\\_rfps.html](http://www.nrel.gov/business_opportunities/solicitations_rfps.html). Refer to Sol# RCX-8-88280. (FBO 4/16/08)*

## **Seeking Renewable Energy Certificates for EPA and DHS (Due May 5)**

The Defense Energy Support Center seeks 280,936,000 kWh of Renewable Energy Certificates (REC), for ultimate transfer to the U.S. Environmental Protection Agency and the U.S. Department of Homeland Security.

*Responses due 5/5/08. For more info, contact Cynthia Ralph at [cynthia.ralph@dla.mil](mailto:cynthia.ralph@dla.mil) or go to: [https://www.fbo.gov/?s=opportunity&mode=form&id=3a427ec6474f696fd4f92f0408ffa62a&tab=core&\\_cvview=0](https://www.fbo.gov/?s=opportunity&mode=form&id=3a427ec6474f696fd4f92f0408ffa62a&tab=core&_cvview=0). (FBO 4/20/08)*

## **RFI for Enhanced Geothermal Systems Technologies Validation Site(s) —U.S. Department of Energy (Due May 30)**

Information on the U.S. Department of Energy's Geothermal Technologies Program Pre-Solicitation Meeting, which will discuss this announcement, is available in the **Upcoming Events** section of this newsletter.

[Request for Information DE-PS36-08GO38003: Enhanced Geothermal Systems Technologies Validation Site\(s\)](#)

The Department of Energy is seeking information from the geothermal community to assist in the development of a possible Funding Opportunity Announcement, acquisition, or other procurement option in regard to establishing Enhanced Geothermal Systems Technologies Validation Site(s). This will facilitate high risk technology development, validation, and deployment by participating organizations that would not otherwise take place at a commercial geothermal field. The information gathered from this RFI will be used by DOE for internal planning and decision making purposes, and will not be released to the general public.

The RFI will be listed at <http://e-center.doe.gov/iips/faopor.nsf/Solicitation%20By%20Program%20Office?OpenView&Start=1&Count=30&Expand=3#3> for comment. Comments in response to this RFI must be provided to the DOE Golden Field Office as an attachment to an e-mail message to [RFI-08GO38003@go.doe.gov](mailto:RFI-08GO38003@go.doe.gov). Comments must be provided no later than 8 p.m. EDT, on May 30, 2008.

### **Renewables Purchase—Virginia, W. Virginia and Tennessee (Due May 30)**

American Electric Power Service Corporation seeks up to 100 MW of long-term supply from new renewable energy resources on behalf of Appalachian Power Company.

Responses due 5/30/08. For more info, contact Peggy Simmons at [pisimmons@aep.com](mailto:pisimmons@aep.com) or go to: <http://www.appalachianpower.com/go/rfp/>. (Green Power Network 4/11/08)

### **RFP Climate Change and Sustainability Conferences (Due June 5 and December 9)**

The U.S. Environmental Protection Agency has issued a Broad Agency Announcement for Conferences, Workshops, and/or Meetings. EPA seeks applicants for the planning, arranging, administering and/or conducting of conferences and workshops in areas including, but not limited to: Economics and sustainability; air and global climate change; and technology. \$500K expected to be available, up to 15 awards anticipated. Proposals due 1/7/08, 6/5/08 and 12/9/08.

For more information, contact Bernice Smith at [smith.bernicel@epa.gov](mailto:smith.bernicel@epa.gov) or go to [http://es.epa.gov/ncer/rfa/2008/2008\\_baa.html](http://es.epa.gov/ncer/rfa/2008/2008_baa.html). Refer to Sol# EPA-C2008-BAA. (Grants.gov 12/6/07)

### **RFP for Energy Frontier Research Centers—U.S. Department of Energy (Due October 1)**

The U.S. Department of Energy requests proposals for Energy Frontier Research Centers (EFRCs) to accelerate the rate of scientific breakthroughs needed to create advanced energy technologies for the 21st century. The EFRCs will pursue the fundamental understanding necessary to meet the global need for abundant, clean, and economical energy. Through this initiative, DOE seeks to bring together the skills and talents of multiple investigators to enable fundamental research of a scope and complexity that would not be possible with the standard individual investigator or small group research project. \$500 million expected to be available, up to 50 awards anticipated.

Responses due 10/1/08. For more info, contact Emiela Bradford at [emiela.bradford@ch.doe.gov](mailto:emiela.bradford@ch.doe.gov) or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/933104E42D0185E58525742100694C78?OpenDocument>. Refer to Sol# DE-PS02-08ER15944. (Grants.gov 4/4/08)

## **Upcoming Events**

### **Geothermal Working Group Meeting, April 22–23, Cedar City, UT**

The next Geothermal Working Group Meeting will be at Southern Utah University. The theme will be "Geothermal Activities and Potential in Southwestern Utah: Ground Source Heat-Pumps to Electrical Generation.

Day one will offer presentations from private geothermal developers, utilities, and other industry members.

Day two will consist of an all day field trip to Blundell Geothermal Power Plant and Milgro Nursery in Newcastle, Utah.

Further event details will be announced soon.

*If you have any questions or comments, please contact Jason Berry at [jasonberry@utah.gov](mailto:jasonberry@utah.gov) or 801-538-5413.*

### **Office of Energy Efficiency and Renewable Energy Industry Day, April 23, Washington, D.C.**

Note: Leslie Blodgett, GEA's Director of Outreach and Senior Editor, plans to attend this event. Contact her at 202-454-5261 or [leslie@geo-energy.org](mailto:leslie@geo-energy.org) with comments or issues you would like her to raise.

EERE will host an industry day on April 23, 2008 at DOE's Forrestal Building Auditorium, 1000 Independence Ave., S.W., Washington, D.C. Two separate sessions are scheduled. The first presentation and overview will be provided from 9:00 am to 11 am. A second repeat presentation and overview will be provided from 1:30 pm to 3:30 pm. The schedule for the break-out sessions will be posted on the EERE website at [www.eere.energy.gov](http://www.eere.energy.gov).

Space is limited for these meetings. Only those respondents who have received an acknowledgement from our office will be permitted to attend the meetings. These meetings will be videotaped and posted on the website (referenced above) for the benefit of those that cannot attend.

In order to assure attendance, interested parties must send an email containing the following information to [eerefinance@hq.doe.gov](mailto:eerefinance@hq.doe.gov) with the title, "Finance Meeting RSVP:"

- Name
- Title
- Company
- Address
- Email
- Phone Number
- Confirmation of Attendee U.S. Citizenship

### **4th International Geothermal Conference, April 24, Freiburg, Germany**

The International Geothermal Conference is one of the leading event for geothermal developers, finance providers and policymakers in Germany. The conference provides profound information about geothermal projects and creates ideal conditions to network with international business partners. The event will bring high level representatives such as Karl Gawell, director of the Geothermal Energy Association (GEA), who will report on the state of U.S. geothermal activities. Michael Kraml, consultant at the Federal Institute of Geosciences and Natural Resources (BGR) will offer high-quality information about current developments in South America and East Africa. A speech on the political frameworks, especially the Erneuerbare-Energie-Gesetz (Renewable Energy Sources Act) and its essential effect on market developments in Germany will be given by Cornelia Viertl, consultant at the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

Following the lectures four workshops will take place and provide opportunity to exchange information about technical demands, project financing instruments and the legal framework situation. After keynote speeches and the presentation of a case study, representatives of banks, public authorities, drilling and insurance companies will offer sufficient time to share experiences and information during the following panel discussions. Speeches and workshops will be translated simultaneously into English and German in parts.

As last year, the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) oversees the International Geothermal Conference 2008. We are also happy to present one of the leading magazines for renewable energy, Sun & Wind, and vdi-nachrichten as the new media partners of the conference. Cooperation partners are amongst others the German Energy Agency dean as well as the International Geothermal Association (IGA). The conference invites investors, insurances, insurance companies, project developers, technology experts, consultants, energy providers, local authorities, political stakeholders and associations. The application fee is 300 Euro plus VAT.

For further information please visit: [www.geothermiekonferenz.de](http://www.geothermiekonferenz.de).

## **U.S. Department of Energy's Geothermal Technologies Program Pre-Solicitation Meeting**

Please view details about two Enhanced Geothermal System (EGS) Funding Opportunity Announcements (FOAs) and a Request for Information (RFI), as summarized in the **Requests for Proposals (RFPs)** section of this newsletter.

The U.S. Department of Energy's (DOE) Geothermal Technologies Program (GTP) is seeking input from the geothermal community (industry, academia, etc.) to assist in the development of two Enhanced Geothermal System (EGS) Funding Opportunity Announcements (FOAs) and a Request for Information (RFI), as summarized below.

You are invited to participate in a pre-solicitation meeting scheduled for April 25th in Houston, Texas at the Houston Museum of Natural Science, lower level conference room, beginning at 9:00AM. We will be reviewing our plans for two funding opportunities and a RFI. We value your input on the construct of a reconstituted geothermal effort focusing on Enhanced Geothermal Systems prior to final decisions made by the Department. If you are unable to participate at this event in person, you are encouraged to provide input through email, as described below.

*The Department thanks you for your assistance and input. Please RSVP by April 23rd if you plan to attend and/or email any questions to [go.geothermal@go.doe.gov](mailto:go.geothermal@go.doe.gov).*

## **Geothermal Energy Working Group Meeting, May 13, Santa Fe, NM**

Date: Tuesday, May 13, 2008

Location: Porter Hall, Wendell Chino Building, 1220 South Saint Francis, Santa Fe, NM

Time: 8:00am–4:30pm

### **Meeting Overview:**

This meeting will provide a forum on the exchange of information concerning the development of geothermal energy projects in New Mexico. Topics include but are not limited to: Ground Source Heat Pump Technology, Direct Use, District Heating Applications and Electricity Production.

### **Specific Goals of the Meeting Include:**

- Updates on Strategic Planning action items for the working group
- Status of geothermal projects in NM
- Identify and discuss challenges concerning geothermal development in NM
- Sustainability of GSHP systems
- Discussion of drilling techniques and costs

### **Tentative Schedule:**

8:00am—Sign in, Welcome

8:30am—Noon—Presentations

Noon–1:30pm—Lunch on your own  
1:30–2:30pm—Presentations  
2:30–4:00pm—Round Table Topics  
4:00–4:30pm—Action Items, Adjourn

*For information, contact Steve Lucero at 505.476.3324 or [stephen.lucero@state.nm.us](mailto:stephen.lucero@state.nm.us).*

## **Oregon/Washington Geothermal Lease Sale, June 12**

### **BLM Seeks Nominations for Geothermal Lease Sale**

Portland, OR – The Bureau of Land Management (BLM) Oregon/Washington State Office has announced that it will be accepting nominations of lands, in Oregon and Washington, for a competitive geothermal lease sale. The geothermal lease sale is tentatively scheduled for June 12, 2008.

In order to be considered for the June 2008 geothermal lease sale, the BLM must receive nominations by 4:30 pm., Monday, March 3, 2008. Nominations received after March 3, 2008, will be processed for future sales.

The BLM is the agency responsible for managing geothermal leases on all Federal lands. Not all Federal lands are open to geothermal leasing. Public lands are available for leasing only after they have been evaluated through BLM's multiple-use planning process (National Environmental Policy Act and Federal Land Policy and Management Act). Stipulations may be placed on leases to protect other resources through mitigation or restrictions on surface use. Nominations are not automatically placed on a sale when received, and the BLM cannot guarantee that the nominated lands will always be included on a particular sale notice. Each nomination must be submitted with a nonrefundable filing fee of \$100 per nomination plus \$0.10 per acre of lands nominated. If a land parcel consists of fractional acreage, please round the land acres up to the nearest whole acre. Nominations will need to be submitted to:

Bureau of Land Management – Oregon/Washington State Office Attn: Ms. Donna Kauffman  
P.O. Box 2965 Portland, OR 97208.

*Additional information regarding geothermal issues can be found on the internet at:  
<http://www.blm.gov/or/energy/geothermal/index.php>.*

## **SMU Geothermal Conference, June 17–18, Dallas, TX**

Southern Methodist University will put on a Geothermal Conference June 17–18. This international conference specializes in the enhancement of existing oil & gas wells for electrical production. According to SMU, “Geothermal energy can be extracted from the well fluids using newly designed compact turbines with binary fluids. These systems are now sized to fit single wells or multiple wells with an approximate fluid temperature differential of 120°F+ between produced and cooling temperatures. Thus, in the Gulf Coast, temperatures of 225°F or higher are eligible. This electrical production (geothermal energy) is renewable and considered a baseload source and is capable of producing 24 hours a day. This capability gives new life to low yield producers with high water volume and a reason to keep them pumping. Undesirable high water flow geopressure wells become an immediate revenue path if converted to electrical production. With a system installed in Chena Hot Springs, Alaska and another installation going into the Wyoming Rocky Mountain Oil Field Testing Center, the ability to use low temperature fluids is no longer just a concept, rather it’s a reality. New technology, data, and economics will be presented to assist you in developing your company’s renewable energy portfolio using existing wells.

Topics Presented To Include:

- Power Generation Technology Advancements
- Geothermal Resource Exploration and Assessment
- Reservoir Engineering

- Fracturing
- Geopressure Development
- Tight Gas Sands Development
- Well Longevity—Corrosion and Scaling Management
- Enhanced Geothermal Systems – International
- Green Power for Utilities (RECs)
- Economics and Business Plan
- Transmission needs
- Regulations and Leasing
- Financing
- Demonstration Sites

*For more information and to read the Call for Papers, visit [http://smu.edu/geothermal/Oil&Gas/2008/Geothermal\\_Energy\\_Utilization.htm](http://smu.edu/geothermal/Oil&Gas/2008/Geothermal_Energy_Utilization.htm).*

### **2008 California Geothermal Summit, June 25, 2008, Davis, CA**

The California Geothermal Energy Collaborative will be holding the 2008 California Geothermal Summit at the UC Davis Alumni and Visitors Center in Davis, California on Wednesday, June 25, 2008 from 9 a.m. to 4 p.m.

Sessions will cover the Energy Commission’s new integrated approach to renewables with the formation of the California Renewables Energy Collaboratives, an update on the CGEC Development Plan with a major focus on the next two years, status report on the California RETI transmission task force as it relates to geothermal development, California State Policies and Incentives to Promote Geothermal Energy, a Bureau of Land Management (BLM) presentation on the Draft of the Western Geothermal Programmatic Environmental Impact Statement (PEIS), and other topics under development.

More information on registration, accommodations and a draft agenda will be provided by the end of April on the CGEC web site and distributed by email.

Immediately following the Summit, from 5:30 to 8:30 p.m., and at the same location, BLM is planning to hold its California-wide Public Meeting for the Draft of the Western Geothermal PEIS. BLM indicated that the California Geothermal Energy Collaborative draws together the broadest interests from across the state, which will provide an excellent opportunity for soliciting comments and maximizing exposure of the Draft.

### **GEA “Geothermal 101” Workshop, July 23, New York City**

GEA is planning a workshop in New York City on July 23<sup>rd</sup> to introduce the City’s finance and media communities to the geothermal industry. For those interested in supporting or sponsoring the day-long event, please contact Kathy Kent at 202-454-5263, or by email at [kathy@geo-energy.org](mailto:kathy@geo-energy.org).

### **GEA Trade Show/GRC Annual Meeting, October 5–8, Reno, NV**

The GEA Trade Show and GRC Annual Meeting will take place October 5-8 Peppermill in Reno, Nevada. Annually, Geothermal Energy Association hosts a wide range of companies working in the U.S. and abroad within the geothermal power industry at its Trade Show. Last year in Reno/Sparks, Nevada, 71 booths were visited by over 1000 visitors. With dramatic growth underway in geothermal power projects in the U.S. and internationally, we expect the 2008 trade show in Reno to be our largest event yet!

*For more information about the GEA Trade Show, visit [http://www.geo-energy.org/2008\\_ts/index.htm](http://www.geo-energy.org/2008_ts/index.htm). For information about the GRC Annual Meeting, go to <http://www.geothermal.org>.*

## 2nd African Rift Geothermal Conference, November 25–29, Entebbe, Uganda

The second International Geothermal Conference on the African Rift will be held in Entebbe, Uganda. The conference is designed as a forum for the exchange of information on the African Rift Geothermal Resources and for discussion of the current state of scientific knowledge and understanding of all aspects of exploration and development of geothermal resources, including exploration, field and conversion technology, design and construction, environmental considerations, financial, marketing, and operational aspects.

### Scientific Program

The Scientific Program of the conference consists of Plenary Lectures, Poster presentations, Workshop and Field Trips. The structure and the list of sessions below are preliminary.

A number of Keynote addresses will be given by eminent scientists, on subjects relevant to the main themes of the conference (as indicated in this circular). Lectures will be open to all participants and will take place in a large conference hall.

### Sessions

The following will be the themes for oral and poster sessions:

- Session 1: Exploration: Geology, Geophysics, Geochemistry, and Hydrology
- Session 2: Drilling and well design: Shallow and deep, Production and Injection
- Session 3: Field development, Production Technology, Power generation & Operation.
- Session 4: Reservoir Engineering: Well Testing, Injection, and Modeling
- Session 5: Case Histories
- Session 6: Economics and Financing
- Session 7: Environmental, Social, Legal and Institutional Aspects
- Session 8: Direct Use: Agri- and aquaculture, Mineral extraction, Manufacturing, Air conditioning etc.

### Contributions

The organizers of ARGeoC2 welcome submission of titles/extended abstracts for oral and poster presentations from all geoscientists, engineers and others involved in geothermal resources exploration and development. Authors may submit papers for publication only, or for presentation and publication in “The Conference Proceedings”. Papers may be selected for presentation in a technical session, or poster session. Selection of papers for presentation will be based on subject material suitability, professional standards of writing, and quality of the illustrations. Time allotted for oral presentations will be 15 minutes each, with an additional 5 minutes for discussion. Oral presentations will be illustrated with LCD Projector in PowerPoint.

*For more information and to register, contact Department of Geological Survey and Mines, Plot 21–29, Johnstone Road, P.O Box 9, Entebbe, Uganda. Phone: +256 712 812231, +256 712 835843, +256 773 129941. Fax: +256 414 320364. E-mail: [argeoC2@minerals.go.ug](mailto:argeoC2@minerals.go.ug) or [bahati@minerals.go.ug](mailto:bahati@minerals.go.ug).*



### **GEA Update**

A newsletter for GEA Members written by Leslie Blodgett and Karl Gawell.

For more information contact GEA at: 209 Pennsylvania Avenue SE, Washington, D.C. 20003. Phone: 202-454-5261; Fax: 202-454-5265; E-mail: [research@geo-energy.org](mailto:research@geo-energy.org)