



## GEO THERMAL ENERGY ASSOCIATION

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## **National News**

### **Senate Takes Up Renewable Tax Credit Extension on Housing Bill, Votes Possible Tomorrow**

The U.S. Senate is considering HR 3221, the housing bill, and Senators Ensign (R-NV) and Cantwell (D-WA) along with a dozen others have proposed an amendment to extend renewable energy tax credits. Their amendment is based upon legislation the Senators have just introduced called the “Clean Energy Stimulus Act of 2008.” The Ensign-Cantwell amendment would extend the Section 45 Production Tax Credit for wind, geothermal, and other renewable technologies for one year, and would extend the Solar and Fuel Cell Investment Tax Credit for eight years.

Senators Alexander (R-TN) and Kyl (R-AZ) have proposed an amendment in the second degree that would extend the PTC for most renewable technologies for two years. To pay for this change, the Alexander-Kyl amendment would reduce the PTC credit for wind technologies by half, or in other words, would put it on the same footing as biomass and hydropower technologies under Section 45.

Votes on both the Ensign-Cantwell amendment and the second-degree Alexander-Kyl amendment are expected in the Senate on Tuesday, April 8.

Unlike previous proposals to extend these credits considered by the Senate, the Ensign-Cantwell bill has no “offset.” The choice of offset used to cover the cost of the extended credit has been cited as the major problem leading to one-vote defeats for a renewable tax credit extension previously this year. While this may make passage in the Senate easier, it is viewed as a problem in obtaining support from the House, which taken a tougher stance on budget deficits and has previously insisted on offsets for tax spending proposals.

### **States Support New BLM Nominations, Announce Upcoming Sales**

The Bureau of Land Management (BLM) has begun implementing the new process for geothermal lease applications through opening nominations and scheduling sales based on those nominations in upcoming sales.

The new process of nominations of lands for geothermal leasing was passed in 2005, and BLM has since processed nearly all the outstanding applications that followed the old law. The focus has now shifted completely to the new process and to getting nominations for competitive lease sales.

The BLM geothermal lease sales held last year for Idaho, Utah, Nevada, and California were not based upon the nominations process under the new law, but were largely sales of parcels held over from planned competitive sales under the old law.

In the past, criticism of the BLM has come from sources like investigative journalist Edwin Black, who, in his 1999 book *Internal Combustion: How Corporations and Governments Addicted the World to Oil and Derailed the Alternatives*, excoriated the agency for its long backlog of applications to develop geothermal sites. Some applications had been waiting response for over 30 years, he noted.

“It is remarkable to see BLM pushing through the old backlog and introducing a new image,” commented Karl Gawell, the Geothermal Energy Association’s Executive Director. “The new lease sales will be important in many areas of the West for geothermal energy to have the chance to develop,” Gawell added.

According to Kermit Witherbee, the National Geothermal Program Manager at BLM, there has been overwhelming support for the new program. Several states have already received several nominations from

production companies, particularly Nevada and Oregon, with 73 and 50 nominations, respectively. It is interesting to see the interest in nominations in Oregon, which is thought to have significant resource potential but has no geothermal production on-line. Utah has received some nominations, and Montana and California have had some interest as well.

Land nominations are submitted on the state level using Department of the Interior BLM Form 3203-1. A nominal fee of \$100, plus \$0.10 per acre, must be included with each nomination.

The new process for nominations and leasing for power generation is similar to how oil and gas leasing works, Witherbee said. It allows the nomination of lands on the basis of company interest and makes them available for competitive bidding. If lands that are offered receive no competitive bids, they become available on a noncompetitive basis.

However, while there has been progress on leasing for power purposes, there has not been any participation on the direct use side of the nominations process.

The new law allows for applications for leases on land to be used strictly for direct use under a somewhat different process. Direct use applications require a 90-day post in order to allow for competitive interest to be expressed, after which a company can then go through with the lease process outside of the competitive bidding/sale process.

Mining claims are also processed separately from electricity production and direct use leases. According to Witherbee, Nevada has had one request for a mining claim to be processed under the new law.

Tribes and local government can utilize separate leasing to obtain leases for their use which come with almost no payments required, and so far the Postal Service has expressed interest in this opportunity, according to Witherbee.

Oregon and Washington will be holding a competitive geothermal lease sale which is tentatively scheduled for June 12. Please see our announcement, "Oregon/Washington Geothermal Lease Sale, June 12," under "Upcoming Events."

California and Nevada are currently planning a sale for July 15.

In conjunction with the California/Nevada sale, BLM will hold a workshop on leases and how to convert to royalties so that they are revenue neutral.

The BLM Geothermal Lease Nomination Form, regulations, and other useful information are available at <http://www.unr.edu/geothermal/BLMlease.htm>.

For more information on the new leasing process, how to apply for a direct use leases, or how a tribe or local government can obtain a lease under the special terms of the new law, contact BLM at [woinfo@blm.gov](mailto:woinfo@blm.gov).

## **Organizations and Activists Pen Letter Requesting Tax Incentive Support from Senate**

A letter signed by 154 organizations and businesses, as well as 31 additional activists, is being sent to all 100 members of the U.S. Senate to request support for tax incentives for energy efficiency and renewable energy technologies, including ITC and PTC extensions.

The letter reads:

*Dear Senator:*

*We, the 154 undersigned business, environmental, consumer, energy-policy, faith-based, and other organizations and 31 individuals are writing to urge you to pass legislation to extend the Production Tax Credit (PTC), Investment Tax Credit (ITC), and other federal tax incentives for energy efficiency and renewable energy technologies and consumer purchases of energy efficient products. These critically important incentives have expired or will expire by the end of this year and must be extended immediately to avoid significant harm to the developing clean energy industries in the United States.*

*Specifically, we urge extensions for renewable energy electricity generation, energy efficiency in commercial buildings, purchase and use of efficient home heating and cooling equipment and appliances, and renewable energy and efficiency retrofits for residential and commercial buildings. In addition to those which broadly support wind, solar, and geothermal technologies, the package of tax incentives should also embrace open- and closed-loop biomass for thermal energy and pipeline quality natural gas, geothermal (i.e., ground-coupled) heat pumps, small wind, solar daylighting, and water power (including free-flow hydropower, tidal, wave and ocean thermal and currents).*

*Moreover, it is essential for the development of America's clean technology industries that extensions of the efficiency and renewable energy tax incentives remain effective for multiple (e.g., five to eight) years. Congress has historically extended the clean energy incentives in one or two-year increments - often waiting until the last minute, which creates a boom-and-bust cycle for the technologies covered by the incentives. This cycle undermines the efficient development of clean energy technologies into mature industries. Additionally, this is a pattern that the fossil fuel and nuclear power industries are not similarly subjected to and which therefore puts sustainable energy technologies at an unfair competitive disadvantage in the energy marketplace.*

*Sustainable energy technologies play a vital role in reducing global warming pollution, curbing energy imports, creating new high-quality American jobs and businesses, spurring economic growth, and saving consumers and companies money on their energy bills. Furthermore, some of these technologies have enjoyed annual growth rates of 30 percent or more in recent years while experiencing continuing significant declines in cost. As such, they are poised to begin making major contributions to the nation's energy needs in the very near future – provided federal support is continued.*

*However, as you probably know, legislation to extend these sustainable energy tax incentives (H.R. 5351) is currently stalled in the Senate and time is running out. It is critical for the sustained development of solar energy, wind, geothermal, energy efficiency, and other sustainable energy technologies that efficiency and renewable energy tax incentives be promptly extended. The delay in extending these provisions is already discouraging investment decisions today for clean energy projects that will be completed in 2009 or later. According to a recent study by Navigant Consulting, failure to promptly extend renewable energy tax incentives may be putting 116,000 solar and wind industry jobs and \$19 billion in clean energy investment at risk.*

*This is a critical time for both sustainable energy and the global climate. Extending efficiency and renewable energy tax incentives is critical to promoting the transition to a new, clean energy economy. Consequently, we urge you to do everything you can to ensure prompt passage this spring of legislation that adopts long-term extensions of the efficiency and renewable energy tax incentives.*

## **GEA Answers Geothermal Research Question**

The Geothermal Energy Association's Executive Director Karl Gawell responded to a geothermal query in Renewable Energy World's column, "Ask the Experts."

Russell from Laporte, Texas posed the question. "I've read that Congress has passed a new US \$100 million program for geothermal research," he said. "I have been working on some new ideas for the huge geopressured resource in the Gulf and would like to get support. Who do I contact about helping my geothermal project?"

In his response, Gawell explained current issues preventing developers from being able to take advantage of the full geothermal funding that should be available. "While Congress appropriated \$20 million for DOE geothermal research in FY 2008, the Department is planning to spend virtually all of these funds only on long-term research into enhanced geothermal systems (EGS), ignoring the other initiatives," he said. "For the FY 2009 budget, the Administration has requested US \$30 million for geothermal research. But again, all of it is directed toward EGS research."

"While you should contact DOE about your ideas, you should also let your Congressman and Senators know that you have ideas for projects that could benefit your state and the country," Gawell said. "You can also urge them to support efforts to secure full funding and implementation of the new geothermal research initiative."

*To contact DOE or your member of Congress, follow the links provided below.*

<http://www1.eere.energy.gov/geothermal/contacts.html>

<http://www.house.gov/>

<http://www.senate.gov/>

*For Gawell's full response, visit <http://www.renewableenergyworld.com/rea/news/ate/story?id=52008>.*

## **Energy Independence and Global Warming Committee to Send Subpoena to EPA**

The Select Committee on Energy Independence and Global Warming issued the following press release:

### **One Year After Supreme Court Decision, EPA Still Avoiding Action on Warming**

WASHINGTON (April 2, 2008) – One year ago today, the Supreme Court handed down its decision on the landmark global warming case Massachusetts v. EPA, saying the Bush administration's Environmental Protection Agency must address whether heat-trapping emissions from motor vehicles endanger public health or welfare. After a year of stalling and avoidance by EPA Administrator Stephen Johnson, Chairman Edward J. Markey (D-Mass.) and the Select Committee on Energy Independence and Global Warming will vote to issue a subpoena for EPA documents showing the Agency's progress in making the "endangerment" finding and proposing national emissions standards.

"Paper is the traditional one year anniversary gift. On this anniversary of Massachusetts v. EPA, we're sending a piece of paper—a subpoena—to Stephen Johnson and the EPA," said Markey. "The modern one year anniversary gift is a clock, and we're trying to make sure this administration doesn't run out the clock on their term without taking action to protect the climate."

The vote, which is expected to succeed on a bipartisan basis, will precede a Select Committee hearing on aviation's role in the causes and solutions to global warming. A simple majority of the committee's 15 members is required to approve the subpoena, and the committee expects to serve the subpoena on the EPA shortly.

If the EPA does not turn over the requested documents following the subpoena within 10 days, the committee will then work with the House leadership to enforce the subpoena.

In conversations and in letters dating back to January, Chairman Markey and Johnson have discussed his agency turning over documents pertaining to EPA's required ruling on whether or not heat-trapping carbon dioxide pollution is a danger to human health or welfare; and draft regulations for controlling global warming emissions from vehicles. Johnson had personally committed to turning over the documents, but has since refused to do so, most recently when he testified before the Select Committee in a March 13, 2008 hearing. More information on the exchanges between Markey and Johnson is available on the Select Committee website [HERE](#).

Johnson will not be in Washington, DC today to witness the committee vote, as he is currently traveling in Australia.

“Stephen Johnson is going to the other side of the Earth to avoid giving the American people any information on his agency's global warming work,” said Markey. “But he can't avoid the people's right to know, he can't avoid the courts, and he can't avoid the fact that our planet is endangered by global warming.”

In April of 2007, the Supreme Court directed EPA to determine whether greenhouse gas emissions cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. If EPA makes this so-called "endangerment finding," the Supreme Court said, then it must regulate these emissions from motor vehicles. In its response to the Supreme Court decision, EPA spent about six months conducting intensive analysis and, according to EPA staff disclosures to Congress, Johnson signed off on his agency's positive endangerment finding as well as on a regulatory proposal to reduce these emissions from motor vehicles (to levels that correspond to a fleet average of 35 miles per gallon by 2018). These documents were forwarded to other White House and federal agencies for review in December.

See <http://globalwarming.house.gov/mediacenter/pressreleases?id=0197>.

### ***Discover Magazine Highlights Geothermal Solutions for U.S.***

*Discover* magazine published an April 3 story entitled “The Great Forgotten Clean-Energy Source: Geothermal,” that pointed out how little of America's geothermal potential is actually used. “If we could extract all the geothermal energy that exists underneath the United States to a depth of two miles, it would supply America's power demands (at the current rate of usage) for the next 30,000 years,” begins the article. “Getting at all that energy is not feasible—there are technological and economic impediments—but drawing on just 5 percent of the geothermal wealth would generate enough electricity to meet the needs of 260 million Americans.”

The article explores solutions to some common obstacles in geothermal development. Gerald Nix, recently retired geothermal technologies manager at the Department of Energy's National Renewable Energy Laboratory (NREL), was quoted as saying he believes that “improving exploration and drilling technologies could make geothermal power cheaper than coal.” The article explained the use of engineered geothermal systems (EGS), saying EGS “could contribute at least 100,000 MW to the U.S. geothermal power budget by 2050, according to the 2006 MIT report, “The Future of Geothermal Energy.” Professor Jefferson Tester was quoted as saying that large-scale demonstration projects are “desperately needed to advance EGS.”

The article emphasized the need for public policy to push geothermal energy. “With climate concerns, oil prices, and energy security now on everyone's mind, the tide seems to be turning again in favor of geothermal energy in this country,” said the article. It pointed out that the private sector is picking up more interest, with companies like Glitnir investing in U.S. projects, and construction companies making money with heat pumps.

The Geothermal Energy Association contributed to the article and was cited as a source: “In total, more than 3,400 MW of geothermal power is currently under development in the United States,” it said.

“With the right backing, the heat beneath us could help keep the planet from warming up,” said the article.

For the complete article, visit <http://discovermagazine.com/2008/apr/03-the-great-forgotten-clean-energy-source>.

## **Company News**

### **Ormat Enters Contract with Nevada Geothermal Power for Nevada Project**

[PRESS RELEASE] Ormat Technologies and Nevada Geothermal Power Execute EPC Contract for Blue Mountain Faulkner 1 Power Plant

VANCOUVER, B.C., April 2 2008, Nevada Geothermal Power Inc. (NGP) (TSX-V: NGP, OTC-BB: NGLPF) and Ormat Technologies Inc. (NYSE: ORA) announced today that NGP Blue Mountain I LLC (NGP I) has entered into an Engineering, Procurement and Construction Contract (EPC) for a 49.5 MW power plant, consisting of three Ormat Energy Converters (OEC's) at Blue Mountain's geothermal project in Nevada. The plant design incorporates Ormat's proprietary power generation technology with water-cooling for maximum efficiency.

The total EPC contract value is US\$76 million, of which a US\$20 million was previously released under a Limited Notice to Proceed (LNTP) in order to secure the guaranteed substantial completion date of December 31, 2009. The full release under the EPC contract is subject to finalizing the financing for the project and is expected to occur by April 30, 2008. The EPC provides for an additional partial release if necessary.

The EPC consists of three Ormat Energy Converter units which are guaranteed to produce 16.5 MW (gross) each, totaling at least 49.5 MW (gross). The output of the power plant at Blue Mountain will meet the Phase 1 power delivery requirements of the existing 20-year Power Purchase Agreement between NGP and Nevada Power Company with a reserve of excess power. NGP is currently in discussions with Nevada Power Company for a Phase II power contract covering the reserve power.

"The EPC contract with Ormat increases the power output of each OEC unit to 16.5 MW from the originally planned 12.5 MW. The increased OEC capacity results in a lower cost per MW installed at Blue Mountain. Ormat's proven power plant technology combined with Blue Mountain's favourable reservoir chemistry will extract more megawatt-hours of energy per unit volume of geothermal fluid compared to other available technologies, maximizing the overall megawatt potential for the Blue Mountain geothermal field," stated Brian Fairbank, President and CEO of Nevada Geothermal Power Inc.

"We are pleased for the opportunity to work with NGP's development team and are delighted to contribute from our experience and knowledge in this field. Our technology is perfectly suited for the Blue Mountain resource and we are looking forward to delivering on schedule a great performing power plant," said Dita Bronicki, CEO of Ormat Technologies Inc.

See <http://www.ormat.com/>.

### **Polaris Geothermal Announces Year Results and Project Update**

[Press Release] Polaris Geothermal Reports 2007 Year End Results and Provides a Project Update

TORONTO, ONTARIO--(Marketwire - April 2, 2008) - Polaris Geothermal Inc. ("Polaris" or the "Company"), (TSX:GEO) a renewable energy geothermal power producer, announces that on March 31, 2008 it filed on SEDAR its annual financial results for the year ended December 31, 2007 together with the Company's MD&A and Annual Information Form. A project update together with certain selected financial and operational information for the years ended December 31, 2007 and December 31, 2006 is set out

below. This information should be read in conjunction with Polaris' annual consolidated financial statements and related MD&A., which are available for review on the Company's website at [www.polarisgeothermal.com](http://www.polarisgeothermal.com) or on the SEDAR website at [www.sedar.com](http://www.sedar.com). Polaris reports its results in U.S. dollars. The Company is currently developing a 72 MW project on its San Jacinto-Tizate ("SJT") concession in Nicaragua. The SJT project (the "Project") is being developed in two phases. Phase I involves the development of 34 MW in two stages through the installation and construction of a power generating facility using proven production wells already existing on the concession. The first 10 MW of Phase I (Stage 1) are in production at a rate of approximately 8 MW and this is expected to increase to 34 MW by the fourth quarter of 2009. The second phase will see the Company expand its production to 72 MW. This phase is expected to be completed in the first quarter of 2010.

Visit <http://www.polarisgeothermal.com/eng/main.html>.

## **Renewable and Climate Change News**

### **New Report Acknowledges Geothermal Fluids as Lithium Source**

Geologist R. Keith Evans has completed a report titled "Lithium Abundance—World Lithium Reserve" which asserts that world lithium reserves are abundant, despite concerns.

The report acknowledges that geothermal resources hold substantial mineral potential and includes geothermal fluids as a resource base for lithium.

Evans' Abstract reads:

"In 1976 a National Research Council Panel estimated that Western World lithium reserves and resources totaled 10.6 million tonnes as elemental lithium.

Subsequent discoveries, particularly in brines in the southern Andes and the plateaus of western China and Tibet have increased the tonnages significantly. Geothermal brines and lithium bearing clays add to the total.

This current estimate totals 28.4 million tonnes Li equivalent to more than 150.0 million tonnes of lithium carbonate of which nearly 14.0 million tonnes lithium (about 74.0 million tonnes of carbonate) are at active or proposed operations.

This can be compared with current demand for lithium chemicals which approximates to 84,000 tonnes as lithium carbonate equivalents (16,000 tonnes Li).

Concerns regarding lithium availability for hybrid or electric vehicle batteries or other foreseeable applications are unfounded."

[http://www.pr-usa.net/index.php?option=com\\_content&task=view&id=93931&Itemid=9](http://www.pr-usa.net/index.php?option=com_content&task=view&id=93931&Itemid=9)

For Evans' world report, visit <http://lithiumabundance.blogspot.com/>.

### **Department of Energy Awards ENERGY STAR® Partners**

The U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) honored 76 businesses, groups, and government entities "for their outstanding commitment to the ENERGY STAR® program," according to their news release.

The organizations were recognized for achieving "major energy savings and/or are helping consumers save money while also increasing energy efficiency and reducing carbon emissions," said the release.

ENERGY STAR®, formed in 1992, is a joint DOE-EPA program working to reduce air pollution through increased energy efficiency.

These eight ENERGY STAR® Award winners were recognized in the following categories:

- Whirlpool Corporation: Sustained Excellence Award – Appliance Manufacturer
- GE Consumer & Industrial: Sustained Excellence Award – Appliances & Lighting Manufacturer
- Gorell Enterprises, Inc.: Sustained Excellence Award – Windows, Doors and Skylights
- Osram Sylvania: Sustained Excellence Award - Lighting Manufacturer
- Pella Corporation: Partner of the Year - Window Manufacturer
- ProVia Door, Inc.: Partner of the Year - Door Manufacturer
- Bosch Home Appliances: Excellence in ENERGY STAR® Promotion – Appliance
- Best Buy: Excellence in Appliance Retailing

See <http://www.energy.gov/news/6135.htm>.

For information about ENERGY STAR®, visit [EnergyStar.gov](http://EnergyStar.gov) or call 1-888-STAR-YES.

### **Nationals Baseball Team Uses New Green Park**

Washington Mayor Adrian M. Fenty has announced that the Washington Nationals ballpark received LEED Silver certification from the U.S. Green Building Council. This makes it the first major stadium in the U.S. to achieve LEED Certification, according to the Environment News Service.

LEED (Leadership in Energy and Environmental Design) is a widely recognized standard for green buildings, with LEED Silver being the third-highest rating available.

The energy-saving features in the new ballpark include high-efficiency field lighting, which uses 21% less energy than typical field lighting, as well as a 6,300-square-foot green roof above one of the concession areas, the article said.

For more information, visit [www.ens-newswire.com/ens/mar2008/2008-03-29-091.asp](http://www.ens-newswire.com/ens/mar2008/2008-03-29-091.asp)

### **Article Cites Geothermal as Foreign Oil Dependence Solution**

An article in *The Trumpet* exploring problems and solutions to foreign oil dependence focused on geothermal energy.

“Problems linked to foreign oil dependence are real and frightening,” begins the article. “With oil prices north of \$100 per barrel, more constrictive environmental regulation, and incidents of pollution-related illness piling up, research into all kinds of alternative energy is on the rise.”

The article gives the example of Iceland as a “real-world example” where enough focus has been given to geothermal energy to make it a real solution.

“Most of the geothermal development for the last 10 years has been in Iceland,” the article quotes Asgeir Margeirsson, head of geothermal company Geysir Green Energy. “There has been a lot of development here whereas there has been some sort of stagnation in the other countries, and not too much development [in] the U.S., New Zealand or Italy.”

The U.S. can use Iceland as a model and apply it to its own resource capabilities, the article said.

See <http://www.thetrumpet.com/index.php?q=4991.3264.0.0>.

## **State News**

### **Nevada: U.S. Geothermal to Acquire Geothermal Power Plant and Acreage**

[Press Release] U.S. Geothermal to Acquire Producing Geothermal Power Plant and Over 28,000 Acres of Energy Rights in Nevada

U.S. Geothermal Inc. (OTC Bulletin Board: UGTH, TSX: GTH) ("U.S. Geothermal"), a renewable energy company focused on the production of electricity from geothermal energy, announced that it entered into an agreement with Michael B. Stewart individually and Empire Geothermal Power LLC ("Empire") (together "Seller"), to acquire a 3.6-MW operating geothermal power plant and approximately 28,358 acres (44.3 square miles) of geothermal energy leases and certain ground water rights all located north of Reno Nevada. The power plant is comprised of four binary cycle units, a wet cooling tower and nine geothermal wells developed in a proven geothermal reservoir.

"This acquisition will provide us with our second operating power plant and another proven geothermal reservoir. Based on our experience at Raft River, we believe that a new plant would utilize the existing well production more efficiently and could produce up to 10 megawatts," said Daniel Kunz, President and CEO of U.S. Geothermal Inc. "These 44.3 square miles of geothermal leases are located along thermal geologic structures and are close to the California electricity market," Kunz added.

The asset purchase transaction (the "Transaction") will be completed in two closings. The first closing occurs today along with the transfer of approximately 18,000 acres of undeveloped U.S. Bureau of Land Management ("BLM") geothermal leases and certain ground water rights. The second closing will transfer the existing geothermal power plant and the balance of the geothermal leases which are the ones associated with the power plant and include private and BLM leases. The total Transaction purchase price is US\$16.62 million. A US\$11.3 million payment was made today and an additional payment of US\$5.32 million is payable at the second closing. U.S. Geothermal may require additional financing to complete the second closing. If U.S. Geothermal is without sufficient funds to complete the second closing within 30 days then the payment will be subject to interest rate adjustments. If the second closing does not occur before January 1, 2009 that portion of the Transaction will, subject to prior negotiations, terminate. At the second closing, an existing third party project loan that currently is secured by the power plant and its associated geothermal leases will be paid in full. The balance of the Seller's funds from the second closing payment, together with additional non-Transaction related Seller assets, will be held in escrow as collateral for indemnification of U.S. Geothermal against an existing claim and any future claims by third parties against the Transaction assets.

In connection with this Transaction, U.S. Geothermal has also negotiated to reduce an existing third party royalty from 12.5% to 1.75% of the gross power plant revenue associated with the existing production wells under a primary geothermal lease. The royalty rate reduction applies to the existing 3.6-MW power plant and any future development on the private lease. In exchange, U.S. Geothermal has agreed to issue 290,000 shares of its common stock to the lessor, subject to TSX approval.

The Transaction assets are comprised of two locations: the San Emidio assets and the Granite Creek assets. The San Emidio assets are located in the San Emidio Desert, Washoe County, Nevada and include the geothermal power plant project, approximately 22,944 acres (35.9 square miles) of geothermal leases, and ground water rights used for cooling water. The Granite Creek assets are comprised of approximately 5,414 acres (8.5 square miles) of BLM geothermal leases located about 6 miles north of Gerlach, Nevada along a geologic structure known to host geothermal features including the Great Boiling Spring and the Fly Ranch Geyser.

The 3.6-MW geothermal power plant has been producing power since 1987 with current production delivering approximately 4,000 gallons per minute of 290 F geothermal fluids to the plant. The project sells

electricity to Sierra Pacific Power Corp. ("Sierra") under an existing power purchase agreement that extends through 2017. A March 2008 resource assessment of the San Emidio geothermal leases by independent experts Susan Petty and Dennis Trexler of Black Mountain Technology shows a total resource of 44 MW with a 90% probability factor. Based on the known 21-year historical production data from the existing reservoir, it is expected that by drilling a number of new production and injection wells the resource area can be expanded. The geothermal resource is shallow relative to other properties currently held by U.S. Geothermal.

U.S. Geothermal has prepared a preliminary 27-MW development plan for the San Emidio geothermal resource area. The US\$75 to US\$85 million plan calls for the construction of twin binary cycle plants, similar in efficiency to the 13-MW plant recently constructed at Raft River Unit I. It is anticipated that the current well field could provide approximately 75% of the geothermal fluid requirement for one replacement plant and an expanded production and injection well field could be drilled to provide the balance of the geothermal fluid for the second plant to make a total 27-MW development. Drilling is scheduled to begin in 2008, with commercial operations of the twin plants expected in late 2010 or early 2011 depending on the availability of financing, permitting timetables and transmission issues. An estimated US\$10 million transmission upgrade may be required to allow the full electrical output of the project to be delivered to customers. Project transmission studies will be commissioned with Sierra. The buyer of the project's planned power output has not yet been determined but discussions have been initiated with interested parties and management believes there is significant opportunity to market this power. See the U.S. Geothermal press release at <http://www.usgeothermal.com>.

## **Utah: Raser Announces New Geothermal Project**

[Press Release] Raser Initiates an Additional Geothermal Power Project in Utah

PROVO, Utah--([BUSINESS WIRE](#))--Raser Technologies, Inc. (NYSE Arca:RZ) announced today that it has initiated the development of an additional geothermal project in Utah. This brings Raser's total projects under development to eight, representing 80–85 MW of geothermal power projects initiated since April, 2007. Raser announced in April, 2007 that it would initiate the development of approximately 100 MW per year over the following three years and then ramp up to 150 MW per year for each year thereafter. The additional project announced today includes a second 10 MW plant accessing the same geothermal resource that had been previously announced for Utah's Escalante Desert. The Company's projects under development now include three projects in Nevada, three in Utah, one in New Mexico and one in Oregon.

The first project in Southwestern Utah recently completed and announced the drilling results of its first well for geothermal production. The well's preliminary readings indicated the existence of geothermal resources with promising water temperatures well in excess of 260°F (127°C), subject to further testing and evaluation, which exceeds the minimum required temperature for use in binary-cycle power plants produced by UTC. The preliminary geothermal resource analysis indicates adequate geothermal resources to initiate the development of a second 10-MW power plant in the same general vicinity.

“We continue to move forward in building a pipeline of geothermal projects,” stated Brent M. Cook, Raser's CEO. “The results from the first Escalante Desert project in Utah were encouraging. Based upon preliminary results of the wells on the first project as well as data from other wells in the area, we are moving forward on a second 10 MW power project at this time. This may also give us some economies of scales for the well field development and accelerate the rapid deployment for both projects.”

The Raser Technologies press release is available at <http://www.rasertech.com/>.

## **International News**

### **France: Paris Airport Going Green with Geothermal**

Paris's Orly Airport has announced plans to rework their heating system using geothermal energy, according to an article in *Yahoo! News*.

The article quoted Pierre Graff, chairman and managing director of Aeroports de Paris (ADP). "We have the unprecedented luck of having hot water below our feet that can heat a large part of Orly without CO<sub>2</sub> [carbon dioxide] emissions. We are the first airport in Europe to do this," he said.

The project will cost 11 million euros (US \$17.27 million) and will include the Orly-Ouest terminal, part of Orly-South, the airport's Hilton Hotel, and two business districts.

Two nearby towns, Orly and l'Hay-les-Roses, already use geothermal, the article said.

Visit [http://news.yahoo.com/s/afp/20080403/sc\\_afp/environmentfranceenergygeothermalclimate](http://news.yahoo.com/s/afp/20080403/sc_afp/environmentfranceenergygeothermalclimate).

## **India: Power Utility and Research Institute Sign Geothermal Cooperation Agreement**

[Press Release] NTPC and NGRI for Geothermal Energy Development

India's largest power utility NTPC Limited and National Geophysical Research Institute (NGRI), Hyderabad signed an MOU in New Delhi, for cooperating and sharing their knowledge to identify potential sites for setting up Geothermal based power projects in India as an alternate source of energy.

The MOU was signed by Shri R.K.Sikri, General Manager, NTPC and Shri Harinarayana, Dy. Director, NGRI in the presence of Dr V.P. Dimri, Director, NGRI and Shri T. Sankaralingam, CMD, NTPC. Senior officials of both the organization were present on the occasion.

NTPC and NGRI have agreed to associate for formulating a long term strategy to set up the first Geothermal based power projects in India. NGRI is the premier Geo- physical Research Institute, engaged in carrying out multidisciplinary R&D programs in Earth sciences and having experience in identifying potential geothermal sites in the country.

NTPC is the largest power generation company with an installed capacity of 29144 MW through 26 power stations. With nearly 20% of India's installed capacity it contributes around 29% of country's power generation. NTPC is poised to become a 75000 MW plus company by the year 2017.

See the press release from the government of India at <http://pib.nic.in/release/release.asp?relid=37042>.

## **Kenya: Power Companies to Rely More on Geothermal**

Kenya's power companies are looking to geothermal energy as a way to provide much-needed electricity for the country, according to an article published at [allafrica.com](http://allafrica.com).

The article quotes Kenya Power and Lighting Company, which reported at its Annual General Meeting, "The peak demand is projected to grow to 1,153MW by June against an effective generation capacity of 1,185 MW, leaving a reserve capacity margin of 3%."

The article looks at projects underway by KenGen, the public power generator, and also looks at help from neighboring countries and through diversifying power sources, but says that geothermal is the focus.

"All the projects slated for completion in 2007 are now being fast tracked. We are mobilizing all resources into thermal sources of power," Energy Regulatory Commission director general John Mwirichia told the press.

For more information, visit <http://allafrica.com/stories/200803311942.html>.

## **Yemen: Agreement to be Signed with Iceland for Geothermal Production**

[Press Release] Yemen, Iceland to Sign Agreement on Geothermal Power Production

SANA'A, April 06 (Saba)---An Icelandic delegation led by industry, Energy and Tourism Minister Ossur Skarphedinsson arrived on Sunday in Yemen to sign an intention agreement in principle for geothermal power production.

According to the agreement, a geothermal power-generating plant with a capacity of 100 MW per day will be established at the Lesi mountain in Dhamar province.

On the two-day visit, Ossur will discuss with Yemeni officials the ways in which technology is transferred and how to benefit from the earth's internal heat to produce power.

To view the news release, visit <http://www.sabanews.net/en/news151122.htm>.

## **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@tgpny.com](mailto:djackson@tgpny.com). Terra-Gen Operating Company is an Equal Opportunity Employer.*

## **Employment Opportunities—Mighty River Power**

Mighty River Power's diverse generation portfolio helps New Zealand ensure its ability to meet future energy needs. Mighty River Power is an integrated energy generation and retail business with a diverse and expanding portfolio of generation assets throughout the North Island of New Zealand. That portfolio includes rapidly growing geothermal interests including those at Mokai, Rotokawa, Kawerau, and throughout the Taupo Volcanic Region. Mighty River Power's geothermal team performs to world class standards and is focused on implementing cutting-edge technology to the development of these renewable and greenhouse friendly energy resources. Rapid growth in our geothermal business has increased their need for engineers to join the geothermal team. They're looking for motivated engineers with good written

and verbal English skill. They offer a stimulating environment for those who want to apply their geothermal expertise, whilst enjoying New Zealand's extensive lifestyle opportunities.

**Reservoir Engineer:**

As a reservoir engineer you will:

- Design and supervise well tests, and collect and interpret results
- Propose and oversee field monitoring projects
- Characterize resource behavior using sophisticated computer modeling software.
- Provide valuable technical support to high-dollar energy resource projects.

An engineering, hydrology or applied maths degree are relevant qualifications. An interest in real-world applications in a mixed office and outdoor environment is essential, as well as interests in geology, civil engineering, hydrology and computer modeling. Specialized knowledge and skills in geothermal field management, resource monitoring and well testing will be developed over time. This position reports to the Geoscience Manager and is located in Hamilton.

**Senior Mechanical Engineer:**

As a senior mechanical engineer you will:

- provide vital strategic support to both operations and new generation development
- provide engineering and economic evaluation for enhancement opportunities of existing assets and new developments
- oversee and provide leadership for a multi-disciplined team of engineers.
- ensure that the company's strategic goals are achieved through assurance of plant performance in consideration of life cycle costs

The ideal person for this role will hold a relevant engineering qualification and have more than 10 yr experience in geothermal projects. This position reports to the Geothermal Engineering Manager and is located in Hamilton.

**Plant Chemical Engineer:**

As plant chemical engineer you will:

- be responsible for determining appropriate treatment processes throughout the different geothermal power generation cycles
- oversee various specialist service providers
- review industry trends to ensure best practice principles are being applied
- specify and review the design of new installations
- supervise investigations

The ideal person for this role will hold a relevant engineering qualification and have more than 5 yr experience in geothermal power plant operation. This position reports to the Operations Manager and is located in Taupo.

**Maintenance Manager:**

As maintenance manager, responsible for a portfolio of power generation plant currently totaling 150MW and expanding to 500MW in the near future, you will:

- proactively improve and implement systems to enhance plant availability
- oversee and provide leadership for a multi-disciplined team of engineers.
- remain aware and trained on all technical advancements in the area of responsibility
- manage plant level capital projects in conjunction with the engineering team

This role will require a relevant engineering qualification and have more than 10 yr experience in geothermal power plant operation, including demonstrated line management skills. This position reports to the Operations Manager and is located in Taupo.

**Drilling Engineer:**

As a drilling engineer you will:

- Write drilling programs and monitor drilling progress
- Assist the onsite drilling supervisor with implementation of high profile drilling operations
- Review operations for process improvements

•Provide technical support to field managers and reservoir groups for well maintenance. An engineering degree with computer skills and good written and spoken English communications skills are required. Specialized knowledge and skills in geothermal drilling are important and additional experienced can be developed over time where needed. This position reports to the Drilling Manager—Geothermal and is located in Hamilton.

*If you would like more information about Mighty River Power please see the company Web site at [www.mightyriver.co.nz](http://www.mightyriver.co.nz). If you would like more information about any of these vacancies or wish to apply then email [careers@mightyriver.co.nz](mailto:careers@mightyriver.co.nz), or phone +64 9 5803612, or post your application to Human Resources, Private Bag 92008, Auckland Mail Centre.*

## **Employment Opportunity—Nevada Geothermal Power Inc.**

Nevada Geothermal Power Inc. is seeking an experienced Geothermal Resource Exploration and Development Manager. Nevada Geothermal Power's 30 MW geothermal power development at Blue Mountain near Winnemucca is financed to production (\$120 million). This dynamic company seeks to significantly expand the resource base at Blue Mountain and is actively developing other geothermal power projects to meet the increasing demand for clean energy. The Company is well financed and expects significant growth through the next decade.

### **Geothermal Resource Exploration and Development Manager:**

This is a senior management position that requires a MS in Geological Sciences, Geological Engineering or Hydrology with 10+ yr experience with geothermal field development. The successful candidate will plan and implement exploration and geothermal reservoir evaluation programs using a multi-disciplined approach involving geology, geochemistry, geophysics, and drilling up to and including large scale development wells, helping to achieve the Company's objective for growth. The position is based in Reno and/or Winnemucca and will involve supervision of resource technical staff and consultants. Excellent communication and interpersonal skills are required as is a familiarity with budgets and cost controls.

The Company offers excellent health benefits, competitive remuneration, opportunities for career advancement in an exciting field.

*To apply, fax resumes to 604-688-5926 or email resumes to [careers@nevadageothermal.com](mailto:careers@nevadageothermal.com).*

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

### **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/doebiz.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>.*

## **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 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)

## **Upcoming Events**

### **Geothermal Working Group Meeting, April 8, Denver, CO**

The Colorado Governor's Energy Office is sponsoring a Geothermal Working Group Meeting in Denver on April 8th. The agenda includes sessions on geothermal electricity development in Colorado and ground source heat pump applications.

Persons interested in this event are invited to contact John Gitchell at [John@SustainableConferences.com](mailto:John@SustainableConferences.com).

### **MIT Energy Conference, April 11–12, Cambridge, MA**

Registration is now open for the MIT Energy Conference, which brings together leaders in technology, policy, entrepreneurship, and finance to discuss multidisciplinary solutions to our global energy challenges. Based on the 2008 theme of "Solutions that Scale," panel sessions will cover: Nuclear Power, End-Use Efficiency, Carbon Capture and Sequestration, Geothermal Energy, Transmission Infrastructure, Vehicles, and the all-conference session Renewables at Scale. Many of these panels will be moderated by MIT faculty who are leading researchers in these fields.

For more information and to register, visit <http://mitenergyconference.com/>.

### **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.*

#### **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 US 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 simultaneous 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).*

#### **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, Texas**

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).*

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

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.

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### ***GEA Update***

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

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