



# 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)

## GEA Weekly Update June 5, 2009

National News.....	2
Senate Energy Committee Announces Vote on Energy Legislation and Nominations Next Week.....	2
Cathy Zoi Hearing Before the Senate Committee on Energy and Natural Resources.....	3
Secretary Chu Announces \$50 Million for Geothermal Heat Pumps.....	4
Company News.....	4
ElectraTherm: Company Announces Two Green Machine Applications.....	4
Nevada Geothermal Power: Third Quarter Financial Results Reported.....	5
Nevada Geothermal Power: Blue Mountain Plant Ahead of Schedule.....	5
U.S. Energy Corp.: Temperature Gradient Drilling Program Begins in Idaho.....	6
U.S. Geothermal: Neal Hot Springs Project Selected for DOE Loan Program.....	7
Dow Jones News Reports Magma Energy Preparing for IPO.....	7
Renewable and Climate Change News.....	8
Secretary Chu Announces \$256 Million Recovery Act Investment in Energy Efficiency.....	8
State News.....	9
Oregon: Geothermal Projects Heat Up Klamath Falls.....	9
International News.....	9
Chile: Mining Ministry Tenders 20 Geothermal Exploration Licenses.....	9
Germany: First Geothermal Power Station Opens.....	9
Indonesia: Jasa Sarana Wins Geothermal Exploration Rights in West Java.....	10
Mexico: Cerro Prieto Report to Be Adding 100 MW.....	10
Turkey: Nation's Largest and Newest Geothermal Plant Now On Line.....	10
UK: Geothermal Power Plant to be Built in Cornwall.....	11
Notices.....	11
DOE Announces New Geothermal Funding Opportunities.....	11
DOE Webcast Detailing Geothermal Funding Opportunities.....	12
California Proposes Changes to Oil, Gas, & Geothermal Resources Regulations (June 15).....	12
USDA Announces REAP Grant/Loan Guarantee Funding (July 31).....	12
Resource Development Opportunity, Contact, Nevada.....	13
Hannon Armstrong Announces Advisory Services for DOE Loan Guarantees.....	13
Resource Development Opportunity, Rosebud Sioux Tribe, Rosebud, SD.....	13
Employment Opportunities.....	14
Vice President of Engineering, Ram Power, Inc.....	14
Director of Development, California Operations, CalEnergy.....	14
Drilling Program Manager, Major Geothermal Power Company in CA.....	15
Senior Director, Business Development, Major Geothermal Company.....	15
Geothermal Project Supervisor, Central American Bank for Economic Integration, Costa Rica.....	16
Project Director, Municipal Clean Energy Project, Alliance to Save Energy.....	16
Research Associate II, SMU Geothermal Laboratory.....	17
Geothermal Engineering Analyst, National Renewable Energy Laboratory.....	17
Sales Manager, Ormat Technologies.....	18
Engineer V, Geothermal Experience Preferred, Northern California Power Agency.....	18
Requests for Proposals (RFPs).....	19
RFP for Smart Grid Demonstrations, DOE, American Recovery and Reinvestment Act.....	19
RFP for State Energy Program, DOE.....	19
RFP for Contribution of Cost Share for Transportation Related Recovery Act RFPs, CEC.....	19

RFP for Renewables Purchase in Southwest, U.S. Navy .....	19
RFP for Technology and National Research Priorities, American Recovery and Reinvestment Act.....	20
RFP for Rural Energy Audits and Renewable Energy Development, DOA, American Recovery and Reinvestment Act (June 9).....	20
RFP for Energy Innovations Small Grant Program, CEC (June 11).....	20
RFP for Energy Efficiency and Conservation Block Grants, DOE, American Recovery and Reinvestment Act (June 25).....	20
RFP for American Recovery Program, Department of Commerce (June 30).....	21
RFP for Green Jobs Training, DOL, American Recovery and Reinvestment Act (June 30).....	21
RFP for Environmental Implications of Emerging Technologies, NSF (September 15).....	21
RFP for Energy for Sustainability, National Science Foundation (September 15).....	21
RFP for Thermal Transport Processes, National Science Foundation (September 15).....	22
RFP for National Lab Partnerships for Energy Research, DOE (November 9).....	22
RFP for Renewable Energy Resources, Los Angeles (March 11, 2010).....	22
RFP for Smart Grid Investments, DOE, American Recovery and Reinvestment Act (March 31, 2010) .	22
Upcoming Events .....	23
Geothermal Lease Sale: California, Nevada, and Utah, July 14 (Reno, NV) .....	23
GEA: Direct Use/Small Power Finance Workshop, Oregon Institute of Technology (OIT), August 12-13 (Klamath Falls, OR).....	23
GEA: Geothermal Energy Expo/GRC Annual Meeting, October 4-7 (Reno, NV).....	23
Renewable Energy Indonesia 2009 Trade Show, October 14–17 (Jakarta, Indonesia).....	23
New Date! SMU Geothermal Conference, November 3–4 (Dallas, TX).....	23
XVII Annual Congress and Annual Assembly, Mexican Geothermal Association, November 13 (Mexico).....	24

## **National News**

### **Senate Energy Committee Announces Vote on Energy Legislation and Nominations Next Week**

The Senate Energy Committee issues the following announcement: "On Tuesday, June 9, the full committee will vote on three nominees -- Catherine Zoi, William Brinkman and Anne Castle -- and continue marking-up pending energy legislation. After disposing of the last remaining amendment to the Renewable Electricity Standard, members will consider: Federal Oil and Gas Development; Public Land Renewable Energy Deployment; Carbon Capture; Island Energy; Energy Markets; and Policy Studies & Reports. In addition, cleared amendments to previously considered titles may be expected. After that, the Committee will consider reporting the *American Clean Energy Leadership Act of 2009* as an original bill. There will be no webcast. *NOTE:* In the event that the Committee is unable to complete action on this agenda by 12:30 p.m., the Committee will recess for the caucus lunches and reconvene at 2:00 p.m. (*Dirksen 366 at 10:00 a.m.*)"

The Committee also indicated that text of the pending energy legislation was available from their web site: "The comprehensive and forward-looking American Clean Energy Leadership Act of 2009 is nearly complete. With next Tuesday's mark-up in mind, we draw attention to the closing chapters of this bipartisan bill, posted to our web this week. This draft legislation includes sections on oil and gas, carbon capture, renewable energy/public lands, island energy and energy markets. To review, click [here](#) and look for items dated June 3. Or, to see combined text of all completed parts of the bill (as of 6/3), click [here](#)."

## **Cathy Zoi Hearing Before the Senate Committee on Energy and Natural Resources**

The confirmation hearing of Cathy Zoi before members of the Senate Committee on Energy and Natural Resources for her appointment as the Assistant Secretary of Energy (Energy, Efficiency, Renewable Energy) took place on June 2, 2009. Excerpts of her prepared statement are detailed here.

After acknowledging members of the Committee Zoi declared her dedication to President Obama's vision of a secure, robust, and environmentally sound energy future for the United States of America. Zoi then detailed her credentials in the energy field, beginning with her experience in the oil and gas industry:

"I have been immersed in the energy field for over 25 years, working across energy resources on a range of issues in the private, public and non-profit sectors. As a young geologist I worked for an independent oil company, helping the exploration team identify new resource prospects. After studying natural gas markets and completing a graduate degree in engineering, I joined what was then the largest investor-owned utility in the country, Pacific Gas and Electric, and worked on a wide range of planning issues: cogenerating power from the vast enhanced oil recovery operations of California, pricing natural gas in newly deregulated markets, and demand forecasting that takes account of shifting technology and customer behavior."

Zoi also laid out her experience in developing energy focused public policy while in Washington and at the EPA:

"I later moved to Washington, where I worked as a consultant on electricity systems, helping utilities manage their generating resources and plan for future needs. This broad experience in the private sector helped to inform the next phase of my career, working in the federal government. After joining the U.S. EPA, I was proud to lead the team that created the Energy Star program. A small team of committed government officials worked closely with private sector partners to help unlock what I still believe is the single largest untapped and immediate energy opportunity in this country: improved efficiency. On the strength of this vast potential for energy efficiency, in 1991 our team demonstrated to the White House of President George H. W. Bush that signing the International Climate Convention at the Earth Summit in Rio made sense for the nation both economically and environmentally."

Zoi explained how after her experience at the EPA she moved to Australia where she engaged both the private and public sectors in developing, "renewable energy start-ups, green power programs, sustainable urban planning and most recently, smart metering." Zoi also went into some detail about her role as founding CEO of AI Gores Alliance for Climate Protection.

While acknowledging that the domestic energy system will rely on nuclear, coal, oil, and natural gas for some time, Zoi declared her commitment to rapidly increasing the nation's reliance on renewable energy. "If I am confirmed as Assistant Secretary for Energy Efficiency and Renewable Energy at the Department of Energy, it will be my goal to maximize our nation's use of these resources. The potential is enormous." Zoi said. Zoi also affirmed her commitment to using energy efficiency and renewables to "spur innovation, restore U.S. leadership in these industries, and create jobs."

On Tuesday June 9, 2009 the full Senate Committee on Energy and Natural Resources will vote on Catherine Zoi's nomination.

For Cathy Zoi's complete statement before the Senate Committee on Energy and Natural Resources see [http://energy.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing\\_ID=64ee896f-ce51-6db7-8991-8653e8138bcf&Witness\\_ID=9332089c-94bf-4d32-b2f7-e4cedf5178c9](http://energy.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=64ee896f-ce51-6db7-8991-8653e8138bcf&Witness_ID=9332089c-94bf-4d32-b2f7-e4cedf5178c9)

## **Secretary Chu Announces \$50 Million for Geothermal Heat Pumps**

Press Release—June 2, [Secretary Chu Announces Nearly \\$50 Million of Recovery Act Funding to Accelerate Deployment of Geothermal Heat Pumps](#)

Washington – During a visit to Fort Wayne, Indiana, where he toured a manufacturer of geothermal heating pumps (GHPs), U.S. Energy Secretary Steven Chu today announced nearly \$50 million from the American Reinvestment and Recovery Act to advance commercial deployment of the renewable heating and cooling systems, which use energy from below the Earth’s surface to move heat either into or away from the home or building. The expanded manufacturing and installation of GHPs could aid in the creation of new jobs while reducing the use of fossil fuels.

“The heat from the Earth represents a significant energy resource that can be tapped to reduce emissions contributing to climate change.” said Secretary Chu. “Expanded use of GHPs in the United States will create new jobs for engineers, manufacturers and technicians while at the same broadening our nation’s clean and renewable energy portfolio.”

Geothermal heat pumps, also called ground-source heat pumps, can be more efficient than the air-source heat pumps more commonly found in commercial and residential applications today. GHPs can substantially reduce building-related electricity demand while providing lower utility bills and lower maintenance costs to users.

DOE today is announcing opportunities for geothermal heat pump projects in three areas:

1. **Innovative Technology Demonstrations:** Cost-shared technology demonstration projects that retrofit/incorporate a minimum of 50 tons of heating and cooling capacity and can be deployed in various geological conditions and climate zones in either residential communities or commercial buildings. Selected projects will incorporate innovative business and financing strategies, and focus on technological improves to speed marketplace deployment.
2. **Life Cycle Cost Tools:** Projects that will assist in determining project feasibility by gathering and analyzing data related to system costs, performance, and installation techniques which will help decrease life-cycle cost applications for GHPs.
3. **National Certification and Accreditation:** A national certification and accreditation program for the GHP industry designed to increase consumer confidence in the technology, reduce the potential for improperly installed systems, and assure product quality and performance.

For information on this and other Funding Opportunities under the Recovery Act, visit:  
<http://www.energy.gov/recovery/funding.htm>.

## **Company News**

### **ElectraTherm: Company Announces Two Green Machine Applications**

Press Release—June 4, [ElectraTherm Green Machine Turns Geothermal Heat into Electricity; Proven Green Technology Taps Low Temp Geothermal Sources to Create Emissions-Free Power](#)

Carson City, Nev.--(Business Wire)--ElectraTherm, Inc., manufacturer of heat to power generators, today announced use of the ElectraTherm Green Machine in a significant geothermal application. ElectraTherm’s Texas partner, Gulf Coast Green Energy, will employ Green Machines to make clean electricity at two projects funded by the Research Partnership to Secure Energy for America. The first of those projects will make power from heat captured in geothermal brine, a common byproduct of drilling for oil. ElectraTherm

Green Machines can convert low temperature (200 degree F) geothermal heat into electricity for onsite consumption, or to sell power to the grid.

ElectraTherm launched the 50 kW ElectraTherm with an installation at Southern Methodist University's Geothermal Laboratory in June 2008. Since then, ElectraTherm has fielded interest from all over the world in the company's fuel-free, emissions-free systems. The ElectraTherm Green Machine can produce power from a wide array of heat sources including industrial waste heat, stationary engines, biomass, and solar thermal installations. Recently interest in geothermal applications has taken center stage.

"Generating electricity from geothermal sources is ideal because it harnesses local energy sources and provides a secure domestic energy supply with stable output," said Bill Olson, ElectraTherm Sr. VP of Business Development. "Given the modularity and scalability of ElectraTherm's technology, the company plans to introduce geothermal systems from the current 50 kW size up to 500 kW. ElectraTherm's smaller units can economically address smaller geothermal resources – including the tens of thousands of oil and gas wells in the U.S. and Canada alone. ElectraTherm's larger units can be installed in parallel to rapidly construct multi-megawatt plants for larger geothermal resources."

According to a study by the Massachusetts Institute of Technology, if we tapped 40 percent of the geothermal heat under the United States, it would meet demand 56,000 times over. MIT said an investment of \$800 million to \$1 billion could produce more than 100 gigawatts of electricity by 2050, equaling the combined output of all 104 nuclear power plants in the U.S.

The Geothermal Energy Association and the Geothermal Resource Council have recognized ElectraTherm's renewable energy systems with their top awards as an innovative, low-cost solution for geothermal applications. By invitation of the Canadian Geothermal Energy Association, Olson recently presented a session titled, "The Green Machine: Innovative Power Technology" at the CanGEA annual conference in Vancouver, BC.

For more information about the ElectraTherm Green Machine, visit <http://www.electratherm.com/products.html>.

*See*

[http://www.businesswire.com/portal/site/google/?ndmViewId=news\\_view&newsId=20090604005254&newsLang=en](http://www.businesswire.com/portal/site/google/?ndmViewId=news_view&newsId=20090604005254&newsLang=en).

## **Nevada Geothermal Power: Third Quarter Financial Results Reported**

Press Release—May 29, [Nevada Geothermal Power Inc. Reports Third Quarter Financial Results Ending March 31, 2009](#)

Vancouver, B.C. - Nevada Geothermal Power Inc. (NGP) (TSX-V: NGP, OTC-BB: NGLPF) today released the financial results for the period ending March 31, 2009.

To read NGP's third quarter financial statements and management discussion and analysis please click on this link: [Third quarter financials to March 31, 2009](#)

Or you can access directly on NGP's Web site: [www.nevadageothermal.com](http://www.nevadageothermal.com) or on the SEDAR website at [www.sedar.com](http://www.sedar.com)

## **Nevada Geothermal Power: Blue Mountain Plant Ahead of Schedule**

Press Release—June 1, [Nevada Geothermal Power Inc. Announces Early Completion Date October 2009 for Blue Mountain 'Faulkner 1' 49.5 MW Geothermal Power Plant](#)

Vancouver, B.C. - Nevada Geothermal Power Inc. (TSX-V: NGP, OTC-BB: NGLPF) today announced that the Blue Mountain 'Faulkner 1' 49.5 MW geothermal project under an Engineering Procurement

Construction contract with Ormat Nevada Inc., a subsidiary of Ormat Technologies Inc., (NYSE:ORA) is ahead of schedule. Ormat expects to be ready to start power plant commissioning during August 2009.

NGP will have the necessary elements (transmission line and well field) in place to start production testing in August and plans to be fully operational by early October 2009. NGP's Blue Mountain 'Faulkner 1' geothermal power plant will be producing electricity onto the grid and generating revenue up to three months ahead of schedule.

"We are extremely pleased with the pace and quality of the plant construction work being done by Ormat. Timely completion will allow NGP to benefit from early revenue generation and substantial interest cost savings. Most importantly, commercial operations will launch NGP into becoming a profitable geothermal energy company focused on growth," stated Brian Fairbank, President & CEO, Nevada Geothermal Power Inc.

## **U.S. Energy Corp.: Temperature Gradient Drilling Program Begins in Idaho**

Press Release—June 1, U.S. Energy Corp. Announces Initiation of Geothermal Temperature Gradient Drilling Program with Standard Steam Trust, LLC

Riverton, Wyo. -- U.S. Energy Corp. (NasdaqCM:USEG - News) ("USE" or the "Company"), a natural resources exploration and development company with interests in molybdenum, oil and gas, geothermal, and real estate assets, today announced that Standard Steam Trust LLC ("SST") has embarked on a 22-hole temperature gradient drilling (TGD) program at one of its geothermal prospects in an area of known geothermal potential in Idaho. The program consists of drilling twenty-two 500ft holes and is scheduled to run through midsummer 2009. The purpose of the TGD program is to define downhole temperature gradients across a broad spectrum of the lease hold. Data from the TGD program will be used to further identify resource potential and production test drilling targets. This process is a preliminary step in determining the commercial viability of the property.

Results from the first five temperature gradient drill holes have already been received and indicate an increase in water temperature of 5–7°F degrees per 100 ft. These increases indicate that commercial water temperatures may be found between 3,500 and 5,000 ft.

SST's total current leasehold position is approximately 73,500 acres. This prospect area consists of approximately 7,900 of those acres. SST has targeted this area in Idaho due to its historical production of hot water from local water wells, previous deep hot water drill hole tests, access to transmission capacity and a leasehold that is comprised mostly of fee and leased state land.

If the TGD program continues to produce results similar to the first five wells, a production test drilling program consisting of three large diameter wells will follow, with the goal of generating sufficient data to support an industry standard reserve report detailing megawatt production potential for the property.

"Increasingly aggressive state and federal targets for renewable energy generation are resulting in a growing governmental commitment to geothermal energy development ranging from the opening of new permitting offices, a streamlined leasing application process and a \$400 million allocation under the American Recovery and Reinvestment Act," stated Keith Larsen, CEO of U.S. Energy Corp. "Our temperature gradient drilling program in Idaho is a first substantial step in proving up a commercially viable geothermal resource. We plan to follow the Idaho program with another TGD program in Nevada in the third quarter. SST is aggressively advancing both its leasing and development activities and I am confident that this sector of our business will prove to enhance the value of our Company," he added.

In December 2008, U.S. Energy announced it had acquired a 25% interest in Standard Steam Trust LLC, a private geothermal exploration and development company based in Denver, Colorado. At that time, SST had approximately 60,000 acres of BLM, state and fee leases in six prospect areas in three states. Since then, SST has acquired an additional 13,500 acres of new leases with geothermal potential.

SST's overall goal is to have approximately 140,000 total net acres under lease by year end 2009.

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

## **U.S. Geothermal: Neal Hot Springs Project Selected for DOE Loan Program**

Press Release—May 26, [U.S. Geothermal's Neal Hot Springs Oregon Project Selected for Department of Energy Loan Program](#)

BOISE, Idaho – (NYSE Amex: HTM, TSX: GTH) U.S. Geothermal Inc. (“U.S. Geothermal”), a renewable energy company focused on the production and sale of electricity from geothermal energy, announced today that it has been selected by the U.S. Department of Energy (“DOE”) to enter into due diligence review on an \$85 million project loan for its Neal Hot Springs project in eastern Oregon. The DOE loan is expected to provide 80% of the \$106 million estimated total capital cost. Construction of a binary cycle power plant utilizing significantly improved technology is expected to begin in mid 2010. The new plant, designed to deliver 22 megawatts (“MW”) of power net to the grid, is scheduled to begin commercial operations in late 2011. The DOE loan is anticipated to be a combined construction and long-term loan and provide the project with a low cost annual interest rate.

On February 26, 2009 U.S. Geothermal submitted an application for the Neal Hot Springs project to the DOE's Energy Efficiency, Renewable Energy and Advanced Transmission and Distribution Solicitation loan guarantee program under Title XVII of the Energy Policy Act of 2005. The company was notified that its project application is complete, the power plant technology choice qualifies as new or improved under the program, and the project has been selected to proceed in the project loan process.

The renewable energy is expected to be sold under a long term power purchase agreement that is currently under advanced negotiations.

“Another critical milestone in the development of our project at Neal Hot Springs has been achieved and provides us with access to a source of low cost capital”, said Daniel Kunz, CEO and President of U.S. Geothermal. “As we enter into due diligence with the DOE on this important \$85 million loan we can now work to complete the balance of the project requirements necessary to construct an advanced and highly efficient geothermal power plant.”

U.S. Geothermal also announced today that it made a regular annual grant of compensation options pursuant to its Stock Option Plan to directors, employees and consultants to acquire 1,795,000 shares in capital of the company. The options are exercisable at a price of US\$0.92 per share for a term of 5 years expiring May 26, 2014. The options will vest pursuant to the schedule included in the company's Stock Option Plan.

See <http://www.usgeothermal.com/index.aspx>.

## **Dow Jones News Reports Magma Energy Preparing for IPO**

Dow Jones Newswire reported on June 2 that Magma Energy was preparing for an initial public offering (IPO). For the complete story go to: <http://online.wsj.com/article/BT-CO-20090602-712757.html>.

## **Renewable and Climate Change News**

### **Secretary Chu Announces \$256 Million Recovery Act Investment in Energy Efficiency**

Press Release—June 1, [Recovery Act Announcement: Secretary Chu Announces \\$256 Million Investment to Improve the Energy Efficiency of the American Economy](#)

U.S. Department of Energy Secretary Steven Chu today announced plans to provide \$256 million from the American Recovery and Reinvestment Act to support energy efficiency improvements in major industrial sectors across the American economy. The funding is targeted at reducing the energy consumption of America's manufacturing and information technology (IT) industries, while creating jobs and stimulating economic growth. These programs will help create manufacturing jobs quickly, along with jobs for technicians and experts who will be needed in the long-term to maintain and operate the new equipment.

"Supporting the development of the latest industrial technologies plays an important role in helping U.S. industry to lead the world in energy efficiency and productivity," said Secretary Chu. "Working together with American manufacturing and IT industries, we will be able to create new jobs, reduce industrial energy use and limit damaging greenhouse gas emissions."

Projects being funded under the Recovery Act will focus on three main areas:

1. **Combined Heat and Power, District Energy Systems, Waste Energy Recovery Systems, and Efficient Industrial Equipment (\$156 Million):** Combined Heat and Power, District Energy, and Waste Energy Recovery deployment and demonstration projects under the Recovery Act represent proven and effective near-term energy options to help the United States enhance energy efficiency, ensure environmental quality, promote economic growth, and foster a robust energy infrastructure. These technologies can be deployed in industrial and residential settings to improve efficiency, control costs, and limit greenhouse gas emissions—making U.S. industry more productive and more competitive. Combined Heat and Power and District Energy Systems can achieve efficiencies of 80% or better compared to roughly 45% for conventional heat and power production; waste recovery systems have the potential to save 17 gigawatts of energy nationwide annually.
2. **Improved Energy Efficiency for Information and Communication Technology (\$50 Million):** As information and communication technology (ICT) services continue to converge, these industries face increasingly similar challenges to control the power usage of their microprocessors or servers and supporting power and cooling systems. This project will select and fund applicants to conduct research, development, and demonstration projects to promote new technologies that improve energy efficiency in the ICT sector.
3. **Advanced Materials in Support of Advanced Clean Energy Technologies and Energy-Intensive Processes (\$50 Million):** DOE will support research, development, and demonstration projects for advanced industrial materials that can be used in fuel flexibility programs, combined heat and power technologies, energy intensive processes, and nanomaterials and nanomanufacturing. These projects will help the American industrial sector increase competitiveness, while rapidly introducing advanced technologies.

For more information on these opportunities and to view the Funding Opportunity Announcements visit the U.S. Department of Energy's Recovery and Reinvestment Web site, <http://www.energy.gov/recovery/>.

## **State News**

### **Oregon: Geothermal Projects Heat Up Klamath Falls**

An article on opb.org features the Klamath Falls, Oregon geothermal endeavors. One rapidly growing enterprise is that of geothermal-heated 80-degree ponds, perfect for raising fish even in freezing temperatures.

“What we do is impossible, without the geothermal water. It’s ridiculous. You couldn’t do what we do economically, and almost physically, because there’s 3 million gallons of water in ponds here. And you can’t keep that hot enough, if you were paying to heat it. It’s just not, basically, possible,” according to Ron Barnes, who raises fish and sells them to Petco.

John Lund, director of the Geo-Heat Center at the Oregon Institute of Technology, explained further uses of geothermal energy in Klamath Falls. “[Geothermal wells] heat most of the east side of the city, most of the schools. We have greenhouses that are heated in town, we melt snow, and we even have a brewery that makes their beer using geothermal energy,” he said.

Randy Travis, the water operations supervisor for the city of Klamath Falls, explains another geothermal project. Dirty water is pumped from the earth into a tank and then used to heat clean drinking water, according to the article.

Oregon could see as many as four geothermal power plants in the next 10 years, with a combined production capacity of 210 MW, the article said.

See <http://news.opb.org/article/5102-switch-cascades-make-oregon-geothermal-hotbed/>.

## **International News**

### **Chile: Mining Ministry Tenders 20 Geothermal Exploration Licenses**

Chile's Mining Ministry will receive bids for 20 geothermal exploration concessions, together 766,800 hectares, through July 31, according to the *Wall Street Journal*. Companies can collect tender packages from the ministry until June 30. The areas are mainly in Chile’s northern mining areas. With the new tender, the government seeks to improve energy security and reduce dependence on imported hydrocarbons.

“Given the interest that the development of geothermal energy has created in our country, if the companies which will obtain these concessions are in the right conditions, we could tender a much higher number of areas in the near future,” Mining Minister Santiago Gonzalez told press.

See [http://online.wsj.com/article\\_email/BT-CO-20090601-713746-klyVDAtMEM5TzAtMTIwMDEwWj.html](http://online.wsj.com/article_email/BT-CO-20090601-713746-klyVDAtMEM5TzAtMTIwMDEwWj.html) and [http://www.rechargenews.com/business\\_area/finance/article179901.ece?utm\\_source=Recharge+Daily+Newsletters&utm\\_campaign=f7e34bf65d-Recharge\\_Daily\\_Newsletter1\\_8\\_2009&utm\\_medium=email](http://www.rechargenews.com/business_area/finance/article179901.ece?utm_source=Recharge+Daily+Newsletters&utm_campaign=f7e34bf65d-Recharge_Daily_Newsletter1_8_2009&utm_medium=email).

### **Germany: First Geothermal Power Station Opens**

German Environment Minister Sigmar Gabriel inaugurated the first geothermal power station in Germany near Munich on June 2, according to dw-world.de. The plant uses the Kalina system and will have an output capacity of 3.36 MW. “This highly modern plant will provide a significant boost to the generation of geothermal power in Germany,” Gabriel told press.

The plant will cut carbon dioxide emission in the Munich municipality of Unterhaching by two-thirds. The government has pledged to create a geothermal network capable of generating 280 MW by 2020. Germany has been using geothermal energy for heating purposes since 2007, according to the article.

See <http://www.dw-world.de/dw/article/0,,4297903,00.html>.

### **Indonesia: Jasa Sarana Wins Geothermal Exploration Rights in West Java**

PT Jasa Sarana, owned by the West Java regional government, won geothermal exploration rights in West Java for 2010 in two mining concessions—Gunung Tampomas and Cosolok-Cisukarame, according to indonesia-oslo.no. "The two concessions are expected to sit on geothermal deposits with a capacity of 80 megawatts," Jasa Sarana president director Soko Sandi Buwono told press.

PT Wijaya Karya and PT Resources Jaya Teknik Management Indonesia partnered with Jasa Sarana to win the geothermal tender project for the Gunung Tampomas concession; PT Rekaysa Industri partnered with Jasa Sarana for the Cisolok-Cisukarame concession, the article said.

See <http://www.indonesia-oslo.no/economic-affairs/1207-jasa-sarana-targets-geothermal-exploration-in-2010.html>.

### **Mexico: Cerro Prieto Report to Be Adding 100 MW**

Industrial Info Resources reports that Compania Federal de Electricidad (CFE) plans to add 100 MW to its Cerro Prieto geothermal power station by 2012. For the full story go to: <http://www.industrialinfo.com/showAbstract.jsp?newsitemID=147362>

### **Turkey: Nation's Largest and Newest Geothermal Plant Now On Line**

Contributed by Henry Veizades

The Germencik Geothermal Project began commercial operation in May of 2009. The project has been a great success for the Developer, Guris Insaat ve Muhendislik A.S. (Guris) of Ankara Turkey. The project is the first private flash geothermal project in Turkey and Unit 1 is currently producing above the rated capacity of 47.4 MW.



The project began in the early 80's when General Directorate of Mineral Research and Exploration (MTA) drilled 9 wells that proved that the Germencik area was a viable commercial resource with temperatures above 200°C. During a hiatus of field activity, Guris acquired the development rights and the Turkish Government enacted the geothermal law that allowed private development of geothermal projects. Gurmat, a subsidiary of Guris, petitioned the USTDA to fund a grant for a feasibility study through Stone & Webster. The grant was

approved in 2005 and Stone & Webster, Geologica and Veizades & Associates completed the feasibility report that identified 40 MW minimum of potential power generation. The resource capacity was further confirmed by a series of short- and long-term well flow tests that included injection testing.

In early 2006, Power Engineers was awarded a design contract that included the power plant gathering and injection system and the reservoir modeling for the project. POWER teamed with Geologica for the reservoir component and Veizades & Associates for the gathering and injection system. This included drilling a total of 9 new wells and re-drilling 5 of the existing wells for a total of 14 production and injection wells. This drilling encountered a very prolific reservoir with high flow rates at high pressures. Maximum flows are above 800 ton/hr with well head pressure above 25 bar.

The project was managed for Guris by Mr. Ali Karaduman who was instrumental in making this project a success. Guris performed all the drilling and construction of the power plant and gathering and injection system and with the success of Unit 1, is actively pursuing Unit 2.

(Photo courtesy of Mr. Riza Kadirli.)

## **UK: Geothermal Power Plant to be Built in Cornwall**

A £15million power plant will be constructed near St Austell, Cornwall, by the Eden Project and geothermal experts EGS Energy, according to [dailymail.co.uk](http://dailymail.co.uk). The plant is expected to produce 3 MW of electricity, enough to power 5,000 homes, and waste heat will be piped to offices, homes, and the Eden Project's domed greenhouses, the article stated.

"I would hope to start drilling in a year and hopefully be generating electricity in 2012," Guy Macpherson-Grant, managing director of EGS Energy told press. The plant will aid Britain's target to produce a third of its electricity from renewable sources by 2020.

Tim Smit, Chief Executive of the Eden Project, said: "Powering the Eden Project site from a renewable source of energy is clearly a priority for us and we are very pleased to have the opportunity to bring our unique vision and environmental skills to the project alongside EGS Energy's experience and skills in engineering geothermal systems."

See <http://www.dailymail.co.uk/sciencetech/article-1190107/Geothermal-power-plant-run-5-000-British-homes-built-Cornwall.html> and <http://www.guardian.co.uk/environment/2009/jun/01/eden-project-geothermal-energy>.

## **Notices**

### **DOE Announces New Geothermal Funding Opportunities**

*From the Office of Geothermal Technologies, DOE:*

The Geothermal Technologies Program (GTP) at the United States Department of Energy (DOE) would once again like to bring your attention to THREE funding opportunities announcements (FOA) for awards in geothermal technologies. On May 27, 2009, President Obama announced \$350 million of American Reinvestment and Recovery Act funding in support of geothermal technologies. GTP would like to encourage you to review the opportunities and to register at [www.fedconnect.net](http://www.fedconnect.net) as soon as possible. By registering, you will receive automatic notifications of amendments and modifications to the open FOAs. These are wonderful opportunities to explore projects that reflect the broad portfolio of geothermal technologies with the potential to exponentially advance deployment. Information on all three announcements can be found at:

[https://www.fedconnect.net/Fedconnect/PublicPages/PublicSearch/Public\\_Opportunities.aspx](https://www.fedconnect.net/Fedconnect/PublicPages/PublicSearch/Public_Opportunities.aspx)

1. Recovery Act: Geothermal Technologies (attached) will close on July 22, 2009 at 11:59pm (EST). Application forms and instructions are available at:

[https://www.fedconnect.net/Fedconnect/PublicPages/PublicSearch/Public\\_OpportunitySummary.aspx](https://www.fedconnect.net/Fedconnect/PublicPages/PublicSearch/Public_OpportunitySummary.aspx)

2. Enhanced Geothermal Systems Component Research and Development/Analysis (attached) will close on July 17, 2009 at 11:59pm (EST). Application forms and instructions are available at <https://e-center.doe.gov/iips/faopor.nsf/UNID/762FF27668B2EE82852575C30070422D?OpenDocument>.
3. Enhanced Geothermal Systems Demonstration (attached) will close on July 30, 2009 at 11:59pm (EST). Application forms and instructions are available at <https://e-center.doe.gov/iips/faopor.nsf/UNID/DFEA0DAF24386352852575C30077E428?OpenDocument>

Please forward this message widely to interested parties. The Geothermal Technologies Program looks forward to receiving your applications and growing our partnerships.

### **DOE Webcast Detailing Geothermal Funding Opportunities**

The Department of Energy's Geothermal Technologies Program (GTP) has announced an upcoming webcast detailing funding opportunities under the American Recovery and Reinvestment Act, as recently announced by President Obama and Secretary Chu. This webcast will present the programmatic vision and goals of the GTP, the Funding Opportunity Announcement (FOA) application process, and technical facets of each FOA. Following the information session there will be an opportunity for questions and answers. The general public and geothermal communities are highly encouraged to submit pre-questions to [GO.GEOTHERMAL@GO.DOE.GOV](mailto:GO.GEOTHERMAL@GO.DOE.GOV). The GTP hopes to use this Webcast as a platform to communicate their goals to heat up the future of geothermal technologies.

For an exact date and time of the webcast please monitor the GTP's website at [www.eere.energy.gov/geothermal](http://www.eere.energy.gov/geothermal). The GEA will also send out future notices once a date for the webcast is determined.

### **California Proposes Changes to Oil, Gas, & Geothermal Resources Regulations (June 15)**

The Division of Oil, Gas, and Geothermal Resources has filed a Notice of Proposed Rulemaking with the State of California Office of Administrative Law. The Notice of Proposed Rulemaking proposes to amend Subchapter 4 (State-Wide Geothermal Regulations) of Division 2, Chapter 4 of Title 14 (Natural Resources) of the California Code of Regulations. Beginning on May 1, there will be a 45-day official comment period on this proposed action. This comment period will end at 5:00 p.m. on June 15. Any interested person, or his or her authorized representative, may submit written comments relevant to the proposed regulatory action to the Division. Please visit <http://www.consrv.ca.gov/dog/geothermal/Pages/Index.aspx> to review these proposed changes.

If you have any comments on these regulation changes or would like to propose additional changes to regulations, please submit these comments in writing to Elizabeth Johnson, [ljohnson@consrv.ca.gov](mailto:ljohnson@consrv.ca.gov) or Michael Woods, [mwoods@consrv.ca.gov](mailto:mwoods@consrv.ca.gov) by June 15, 2009. These comments may be submitted via conventional mail or e-mail.

### **USDA Announces REAP Grant/Loan Guarantee Funding (July 31)**

Today USDA announced the long-awaited availability of funding for the 2009 program year for the Rural Energy for America Program (REAP). The Department is now accepting REAP applications for grants and loan guarantees for renewable energy and energy efficiency systems, and also is including funding for feasibility studies. The deadline for applying for REAP funding is July 31. This year \$60 million is available for projects. USDA has made some changes to the application process for REAP, incorporating

statutory changes from the 2008 Farm Bill. A summary of these changes and the full notice may be found here: <http://farmenergy.org/news/usda-announces-reap-funding-for-2009>.

### **Resource Development Opportunity, Contact, Nevada**

Seeking someone to do a feasibility study and/or development of property to generate commercial electricity. The property is 30 acres of commercial property on highway 93, approximately 15 miles from the Idaho/Nevada border in Contact, Nevada. The property is in a hot water zone.

In the mid 1970's Phelps Dodge had many drilling sites for copper approximately three quarters of a mile from the property. Phelps Dodge was drilling and hit hot water that was too hot for them to continue drilling.

The property is also three quarters of a mile from high power transmission lines running north and south.

Please contact Ted Reddy, at 25653 S. Brentwood Dr. Sun Lakes, AZ 85248, by phone 480-707-2574, or by email, [reddyteddy@hotmail.com](mailto:reddyteddy@hotmail.com).

### **Hannon Armstrong Announces Advisory Services for DOE Loan Guarantees**

The American Recovery and Reinvestment Act expanded DOE Loan Guarantees and U.S. Treasury Tax Grants, providing renewable energy project developers a path for project funding, according to the Hannon Armstrong Web site. The company has launched an advisory service offering for industry members seeking to apply.

Vice President of Analytics and Structuring Nate Rose told press, "The outcomes vary rather substantially from existing project finance models, and vary between solar, wind, geothermal and biomass projects."

"Given our team's experience with DOE and OPIC loan guarantees, and our appreciation of how challenging this process is, we decided it makes sense to expand our Federal finance offer to include not just the application and its negotiation, but also the monetization of the capital required with this new structure," said Jeffrey Eckel, President and CEO.

See [http://www.hannonarmstrong.com/index.php?option=com\\_content&task=view&id=28](http://www.hannonarmstrong.com/index.php?option=com_content&task=view&id=28).

### **Resource Development Opportunity, Rosebud Sioux Tribe, Rosebud, SD**

The Native American Tribe near Mission SD has a deposit of geothermal energy under their large Rosebud Reservation in South Dakota. See U.S. News & World Report, November 7, 2007, DOE map of U.S. Geothermal Hotspots, p. 52, reference to deposit p. 50.

Leigh Bryant-Zarse, the architect, engineer, and consultant in Wisconsin who is submitting this solicitation, attended a meeting of the Tribe Council on September 16, 2008. The Tribe presented him with a resolution to approach developers with free exploration rights on their reservation, and agreed to split 1/10 of 1% of the energy profits for a period of 2 years, if found. These parties are looking for help to develop the resource. The reservation exists under a sole ownership, making it easy to deal with.

Contact: Leigh Bryant-Zarse, Architect-Engineer-Consultant, 1812 Mountain Ave., Wauwatosa, WI 53213-2336, phone and fax: 414-259-1812  
Rosebud Sioux Tribe: Chief Rodney Bordeaux, PO Box 430, Rosebud, SD 57570, phone 605-747-2381

## **Employment Opportunities**

### **Vice President of Engineering, Ram Power, Inc.**

Ram Power, Inc., a recently formed renewable geothermal and solar thermal project development company, with offices in Nevada and California has an immediate opening for a Vice President of Engineering. The candidate will be responsible for managing all aspects of Engineering and Procurement as it pertains to the company's current and future Solar and Geothermal Projects. This position reports to the President and CEO and works closely with other functional leaders in the company, including those in finance, business development, and marketing.

#### Responsibilities:

- Assist in developing strategic planning for and direction and control of project development activities.
- Provide technical direction and guidance, as well as hands-on project management for all solar and geothermal project development.
- Ensure the optimal application of technology and engineering resources to meet project development requirements.
- Direct the definition and procurement of geothermal and solar thermal power plants, and provide oversight of power plant and surface facility construction.
- Hire and direct a team of engineers from different disciplines to acquire necessary resources and plan to meet scheduled commitments.
- Ensure implementation of formal processes to support project development, including interconnection and transmission agreements.

#### Requirements:

- Strong operational and project management skills to manage logistics and time, as well as people and materials for multiple projects.
- Solid understanding of engineering technical issues/needs, financial, sales, and marketing as related to project design and development.
- Successful candidate must have at least 10 years engineering experience in the energy/renewables industry with primary experience in power plant technologies. Prior work experience in the area of steam power plants and Organic Rankine Cycle is an advantage. Prior work experience in solar and geothermal is preferred.
- Strong Engineering experience in Design, Analysis and Development of Renewable Energy Projects, as well as Proposal Drafting.
- Excel software knowledge to create estimates and manage projects to improve project profitability. Fluency in AutoCAD is essential.
- Knowledge of PPA's (Power Purchase Agreements), related building codes and NEC, as well as permitting process and ability to manage specification, procurement and delivery of equipment and material.
- Minimum of Bachelors Degree in Electrical or Mechanical/Chemical or Civil Engineering and 10 years demonstrated project management experience. PE (Professional Engineer) certification is an advantage.

#### Contact Information:

Email resumes to: [info@ram-power.com](mailto:info@ram-power.com)

Fax resumes to: (775) 828-0904

### **Director of Development, California Operations, CalEnergy**

CalEnergy Operation Corporation is an international leader in the development and production of energy from diversified fuel sources including geothermal, natural gas and hydroelectric. CalEnergy is currently looking for a Director of Development for California-based operations.

This individual will direct, coordinate and exercise functional authority over all activities associated with the development of the new geothermal power plants and other platform development opportunities:

- Administers the project construction contract, manages the use of consultants, and has fiscal responsibility for all costs to build the new plants.
- Directs and oversees the integration of the new plants into the current Imperial Valley operations consistent with the organization's policies and objectives. Qualified candidates will have a bachelor's degree in engineering, business administration, or related field or equivalent work experience.
- Eight years experience in managing power plant development and installation projects or power plant operations including three years supervisory responsibilities.
- Excellent oral and written communication skills, including presentation skills.
- Effective interpersonal skills and leadership abilities.

To apply for this position and view a complete job description please visit [www.calenergy.com](http://www.calenergy.com).

## **Drilling Program Manager, Major Geothermal Power Company in CA**

A Geothermal Energy Company in Northern California is seeking a Drilling Program Manager to oversee all drilling operations of an 800+ acre expansion project. Please send updated resume and salary requirements. Experience as follows:

1. Experience managing successful geothermal drilling programs.
2. Leadership experience and management of drilling and support personnel.
3. Experience managing compliance with safety and environmental regulations.
4. A successful track record of improving business performance and meeting and managing against operating goals and budgets.
5. Exposure to drilling technology, service providers, contracts and risks.
6. Relationships with relevant parties within the geothermal drilling industry including, but not limited to: rig providers, contractors, vendors, consultants and qualified company men.
7. Thorough understanding of the contracting and procurement processes required for cost effective drilling program management.

Contact:

Mike Erney

Project Director – Alternative Energy

The Carmon Group

(216) 328-9060 EXT 102

[michaelerney@carmongroup.com](mailto:michaelerney@carmongroup.com)

[www.linkedin.com/in/michaelerney](http://www.linkedin.com/in/michaelerney)

## **Senior Director, Business Development, Major Geothermal Company**

The Senior Director, Business Development is responsible for overseeing the Business Development function in North America for geothermal market. This role could quickly grow into a VP role and will oversee a sales team currently consisting of 8 sales reps and will grow it by 50%.

Essential Functions:

- Direct and execute the business development strategy to achieve company goals and objectives.
- Identify and develop key strategic partnerships, both internally and externally.
- Responsible for negotiating PPAs and contract changes.
- Evaluate and analyze market expansion opportunities
- Build and lead a business development team that will assist the company towards completion of company goals
- Build relationships with internal departments so that all areas of the company are ready to execute when necessary.

Education, Experience, and Skills Required:

- Bachelor degree in engineering and MBA

- 10–15 years experience in Sales, Marketing, Business Development or Operations roles (preferably a mix of sales and operations in energy industry)
- Willingness to travel up to 60% nationally and internationally
- Ability to negotiate contracts with potential business affiliates
- Experience in the renewable energy field a strong plus
- Proven track record maintaining confidentiality and dealing with company proprietary information

Contact:

Paige Carratturo

Executive Recruiter

Richard Wayne & Roberts

877-236-0899 (direct)

206-855-9746 (fax)

[paige@rwr.com](mailto:paige@rwr.com)

<http://www.linkedin.com/in/paigecarratturo>

### **Geothermal Project Supervisor, Central American Bank for Economic Integration, Costa Rica**

The Central American Bank for Economic Integration (Banco Centroamericano de Integración Económica, BCIE) is looking for an expert in geothermal energy to supervise a project in Costa Rica. It is called Las Pailas and it is financed through BCIE.

Contact:

Ana Karina Rubi de Reyes, Oficial de Consultorias, BCIE-Tegucigalpa, Honduras

Tel. +504-240-2243, Ext. 5214

Fax. +504-240-2228

Visit the BCIE Web site, [www.bcie.org](http://www.bcie.org) - [www.cabei.org](http://www.cabei.org)

### **Project Director, Municipal Clean Energy Project, Alliance to Save Energy**

The Alliance to Save Energy is seeking a Project Director to start-up and to lead the Municipal Clean Energy Project (MCEP). The MCEP is a new multi-year, national initiative to encourage investment in, and deployment of, energy efficiency and clean energy programs and policies by publicly owned power utilities in the U.S.

The Project Director will have oversight and responsibility for the entire MCEP program, will report to the Vice President of Programs for the Alliance as well as to the MCEP Steering Committee, and will liaise with key project partners.

The successful candidate must have at least five years of program management experience and three years of experience in one of the following areas: publicly owned utilities, municipalities and/or energy efficiency. The candidate must also demonstrate organizational, writing and communications expertise and have the ability to work with senior level executives to both design and lead multi-faceted programs and initiatives. S/he must have a demonstrated ability to build and lead partnerships and/or coalitions. The candidate will work in a fast-paced environment with highly motivated staff in a rapidly growing, energy efficiency-focused organization. The position requires a modest amount of travel, mostly within the U.S. Candidates must have at minimum a Bachelors degree, Masters preferred.

Initial funding has been secured from a major foundation for the development of this initiative and the donor has expressed their interest in the future expansion of the program. Additional proposals have already been submitted to other funding sources. The current funding cycle is through 2011.

The position responsibilities include, but are not limited to, the following:

- Manage MCEP logistics, including budgeting, communications reporting, maintenance of the project web site, and supervision of project personnel and contractors;
- Liaise with the MCEP Steering Committee and project partners;
- Compile, field test and produce “best practice” tool kits for use by MCEP participants;
- Coordinate with project partners in the delivery of MCEP workshops and the tracking of workshop outcomes;
- Manage special events, including a project launch and Municipal Clean Energy Summits;
- Integrate the activities of the MCEP with other leading clean energy policy initiatives.

Salary is competitive based upon experience. The Alliance to Save Energy offers a generous benefits package and a comfortable work environment in downtown Washington DC convenient to Metro. Consideration of candidates will begin immediately and continue until the position is filled. The Alliance is an equal opportunity employer.

Applicants should send a cover letter, resume, salary history and references no later than December 1, 2008 by mail to Dianne Streat, Director of Administration, Alliance to Save Energy, 1850 M Street, N.W, Suite 600, Washington, DC 20036, or via email to [dstreat@ase.org](mailto:dstreat@ase.org). No calls please.

### **Research Associate II, SMU Geothermal Laboratory**

Position: The SMU Geothermal Laboratory, Dallas, Texas, has an opening for a Research Associate II for an appointment of 2 years. The research is supported in part by a grant from GOOGLE.org to SMU. The activities associated with the position relate to the temperature field of the U.S. lithosphere. The outcome is the ability to make sound resource related renewable energy decisions. This research will build on the extensive thermal data sets used to produce the 2004 Geothermal Map of North America by collecting new data and modeling the regional thermal structure.

Qualifications: A PhD in geosciences is strongly preferred or an MS in geophysics and 3 years of work experience. Candidates must demonstrate strong analytical/critical thinking skills to identify issues and information requirements, apply appropriate research and analytical procedures, and review data with a strong focus on attention to detail and accuracy.

Apply online at <http://smu.edu/hr/recruit/> search for “geothermal”  
Contact: Dr. David Blackwell, [blackwel@smu.edu](mailto:blackwel@smu.edu), 214-768-2745

### **Geothermal Engineering Analyst, National Renewable Energy Laboratory**

Geothermal Engineering Analyst—Requisition #114BR or 115BR—Washington, D.C.

Job/Research Summary: This position performs technology, market and economic analysis, with an emphasis on geothermal energy technology, systems, and infrastructure. Work carried out will support R&D and decision-maker support activities within the Geothermal program through the use of analysis methodologies such as economic feasibility, market transformation, risk, portfolio balance, and cost-versus-benefit. Design novel approaches for systems and infrastructure analysis. Deliver quality products that synthesize the inputs of team members, researchers, market players, and other analysts. Innovate new methods, tools, and approaches that enable greater understanding of geothermal systems.

Job Duties: Combines broad, in-depth knowledge of chemical and/or mechanical engineering with an emphasis on process, heat transfer, and fluids engineering with strong economic analysis capabilities. Performs engineering/economic analyses of geothermal systems and electric transmission in cooperation with research community to gather and understand field data. Documents work in detailed technical memos and internal milestone reports; publishes and presents key results in peer-reviewed journals and at regional, national, and international scientific meetings and conferences. Supports the development of annual operating plans and assists with strategic planning efforts. Works with Department of Energy on technology goals and opportunities.

Minimum Qualifications: Bachelor's Degree in science and/or engineering, or equivalent/relevant education/experience. 3 years of relevant R&D experience.

Preferred Qualifications: Multidisciplinary research exposure to both chemical and mechanical engineering systems, especially those related to the development of cost-effective geothermal systems for utility-scale applications. Familiarity with value chain analysis, risk analysis, and dynamic modeling. Experience in the development and evaluation of applied technology aimed at entering the marketplace. Previous industry experience in renewable energy and geothermal technologies, with experience in related analysis. Established base of contacts with individuals and institutions relevant to energy analysis. Experience working with the federal government. Some experience with computer modeling of energy markets.

Pre-employment drug testing required.

Please visit our website for more information and to apply online: [www.nrel.gov/employment/](http://www.nrel.gov/employment/)  
NREL is an equal opportunity employer committed to diversity and a drug-free workplace.

### **Sales Manager, Ormat Technologies**

Ormat Technologies has an immediate opening for a full time Sales Manager located in our Reno, NV. The ideal candidate will 10+ years in related Sales experience in the energy/renewables industry.

Position Title: Manager of Sales, Geothermal Development; Department: Business Development; Location: Corporate Office Reno, NV; Reports to: Director, Geothermal Development; Position Summary: The Manager of Sales, Geothermal Business Development, will be responsible for the sales and marketing of renewable energy products. The selected candidate will help lead the commercialization and sales efforts for Ormat's latest geothermal supply of geothermal plant equipment, electrical power generation projects, as well as the supply of engineering and construction services for 3rd Party power projects.

Essential Functions: Develop detailed sales and marketing strategies to grow sales within the power generation industry; Conduct market segmentation research, identify lead databases and determine sales channels to establish customer opportunities and spearhead direct sales efforts; Manage customer relationship from initial feasibility trials through to field deployment.

Other Responsibilities: Work flexibly within a dynamic, multidisciplinary team.

Education, Experience and Skills Required: Minimum of 10 years experience in a similar position; Bachelor's degree in Marketing or related field or equivalent experience and/or technical qualifications relevant to the geothermal applications, as well as Engineering and Construction; Experience in marketing or application engineering; Experience working directly with customers in a sales organization with strong communication and interpersonal skills.

Physical Requirements: Must be able to travel regularly

To apply for the position please send a resume to [Chris@redfishtech.com](mailto:Chris@redfishtech.com).

### **Engineer V, Geothermal Experience Preferred, Northern California Power Agency**

Performs engineering tasks relating to plant reliability/ performance efficiency, primary technical resource for CMMS, supervises implementation of system/equipment repairs/upgrades, PM for plant efficiency upgrade/retrofit projects, construction mgr for public works projects, supervises plant chemical lab & environ, health/safety staff. First 4–6 months, position assigned to NCPA HQ office/Roseville, then GEO Plant, Middletown, CA thereafter. During initial period in Roseville, temp housing provided if required.

Requires BA in electrical/mechanical engineering; MA preferred; and min 10 yrs exp plant/production engineering, preferably within geothermal industry; 2 yrs experience plant reliability/ maintenance

engineering & 2 yrs mgmt. exp preferred. Requires knowledge/experience in industry codes/standards; CMMS, Root Cause Failure Analysis, Reliability Centered Condition Based/Mntc, CBM equip; steam turbine plant monitoring & power plant electrical sys; writing, analyzing/interpreting scientific/tech info.; making presentations and some travel in CA. Starting salary: \$96 to \$121K plus exc employer benefits inc CalPERS retirement/medical.

Application at [www.ncpa.com](http://www.ncpa.com)

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

### **RFP for Smart Grid Demonstrations, DOE, American Recovery and Reinvestment Act**

The U.S. Department of Energy announces its intent to request proposals for Smart Grid Demonstrations. Through this RFP, DOE seeks regionally unique demonstrations to verify smart grid technology viability, quantify smart grid costs and benefits, and validate new smart grid business models, at a scale that can be readily adapted and replicated around the country. Areas of interest include: Smart Grid Demonstrations, Synchrophasors, and Energy Storage. \$615 million expected to be available, up to 36 awards anticipated. Closing date to be announced with release of RFP. For more info, contact Keith Carrington at [keith.carrington@netl.doe.gov](mailto:keith.carrington@netl.doe.gov) or go to:

<http://www07.grants.gov/search/search.do;jsessionid=9x3VJydGP2TfWHPRK9mfnpLqsWpm1TQmDJTzS6XLDp1QJKpb2SM!-1267850137?oppId=46836&flag2006=false&mode=VIEW>. Refer to Sol# DE-FOA-0000036. (Grants.gov 4/16/09)

### **RFP for State Energy Program, DOE**

The U.S. Department of Energy requests proposals for the State Energy Program (SEP). This program provides formula grants to State and Territorial energy offices to design and carry out renewable energy and energy efficiency priorities. \$25 million expected to be available, up to 56 awards anticipated. Due dates based on state/territorial program years. For more info, contact Lisa Kuzniar at [lkuzni@netl.doe.gov](mailto:lkuzni@netl.doe.gov) or go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46791>. Refer to Sol# DE-FOA-0000073. (Grants.gov 4/14/09)

### **RFP for Contribution of Cost Share for Transportation Related Recovery Act RFPs, CEC**

The California Energy Commission requests proposals for the American Recovery and Reinvestment Act Cost Share: Alternative and Renewable Fuel and Vehicle Technology Program. Through this RFP, the CEC will contribute cost share to applicants who are submitting proposals to the Federal government in response to a transportation-related Recovery Act funding opportunity announcements. All projects must be based in California. Eligible Recovery Act solicitations include, but are not limited to: Transportation Electrification (Round 1), DOE, DE-FOA-0000028; Energy Efficiency and Renewable Energy Research – Electric Drive Battery and Component Manufacturing Initiative, DOE, DE-FOA-0000026; Clean Cities (Rounds 1 and 2), DOE, DE-PS26-09NT01236-04; and Transit Investments for Greenhouse Gas and Energy Reduction, DOT, FTA-09005-TIGGER-TRI. \$176 million expected to be available, due dates vary by solicitation. For more info, contact Sarah Williams at [skawilli@energy.state.ca.us](mailto:skawilli@energy.state.ca.us) or go to: <http://www.energy.ca.gov/contracts/transportation.html#PON-08-010>. Refer to PON-08-010.

### **RFP for Renewables Purchase in Southwest, U.S. Navy**

The U.S. Department of the Navy announces its intent to request proposals for the purchase of competitively priced renewable electrical power through power purchase agreements at Naval and Marine

Corps installations in the Naval Facilities Engineering Command Southwest AOR. The Navy seeks systems that are constructed, owned, operated, maintained and repaired by the successful offeror(s) on Government property located within the installation boundaries. Up to 5 awards anticipated. The RFP will be issued “within the next month.” For more info, contact Russell Dominy at [Russell.dominy@navy.mil](mailto:Russell.dominy@navy.mil) or go to:

[https://www.fbo.gov/?s=opportunity&mode=form&id=2d9716078bff363ae320d7e111d4b2d0&tab=core&\\_cview=1](https://www.fbo.gov/?s=opportunity&mode=form&id=2d9716078bff363ae320d7e111d4b2d0&tab=core&_cview=1). Refer to Sol# N6258309R0085. (FBO 4/17/09)

### **RFP for Technology and National Research Priorities, American Recovery and Reinvestment Act**

The National Institute of Standards and Technology requests proposals for the Technology Innovation Recovery Act Measurement Science and Engineering Research Grants Program: Providing the Technology Infrastructure to Address National Priorities. Priority research areas include, but are not limited to: Energy, environment and climate change; manufacturing; and physical infrastructure. \$35 million expected to be available, up to 60 awards anticipated. Responses accepted on a continuous basis. For more info, contact Christopher Hunton at [christopher.hunton@nist.gov](mailto:christopher.hunton@nist.gov) or go to:

<http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46063>. Refer to Sol# 2009-NIST-ARRA-MSE-RESEARCH-01. (Grants.gov 3/16/09)

### **RFP for Rural Energy Audits and Renewable Energy Development, DOA, American Recovery and Reinvestment Act (June 9)**

The U.S. Department of Agriculture requests proposals for the Rural Business Enterprise Grant Program. USDA seeks proposals from eligible entities to provide energy audits and renewable energy development assistance for agricultural producers and rural small businesses. Individual awards NTE \$100K. Responses due 6/9/09. For more info, go to: <http://www.rurdev.usda.gov/rbs/>. Refer to Sol# RDBCP-09-RBEG-ARRA. (Grants.gov 3/27/09)

### **RFP for Energy Innovations Small Grant Program, CEC (June 11)**

The California Energy Commission requests proposals for the Energy Innovations Small Grant Program – Electricity Program. EISG funds the early development of innovative energy RD&D projects. Projects must target one of the following: Industrial/Agriculture/Water End-Use Efficiency; Building End-Use Efficiency; Environmentally Preferred Advanced Generation; Renewable Generation; Energy-Related Environmental Research; and Energy Systems Integration. Proposed projects must be clearly relevant to California’s electric market. Individual hardware awards NTE \$95K, individual modeling awards NTE \$50K. Responses due 6/11/09. For more info, go to: [http://www.energy.ca.gov/contracts/smallgrant/09-01\\_electricity/index.html](http://www.energy.ca.gov/contracts/smallgrant/09-01_electricity/index.html). Refer to Sol# 09-01.

### **RFP for Energy Efficiency and Conservation Block Grants, DOE, American Recovery and Reinvestment Act (June 25)**

The U.S. Department of Energy request proposals for Energy Efficiency and Conservation Block Grants (EECBG). This program will provide financial assistance to eligible states, cities, counties and Indian Tribes to create and implement strategies to reduce energy use and fossil fuel emissions, and improve efficiency in the building, transportation, and other appropriate sectors. Areas of interest include, are not limited to: Development of efficiency and conservation strategies and programs for buildings and transportation, technical consultant services; building energy audits; energy efficiency retrofits; building codes programs; reduction and capture of methane and greenhouse gases; traffic signals and street lighting; and renewable energy technologies on government buildings. \$3.1 billion expected to be available. Applications from States due 5/26/09. Applications from Local Governments and Tribes due 6/25/09. For more info, contact Lisa Kuzniar at [lkuzni@netl.doe.gov](mailto:lkuzni@netl.doe.gov) or go to:

<http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46340>. Refer to Sol# DE-FOA-0000013. (Grants.gov 3/26/09)

### **RFP for American Recovery Program, Department of Commerce (June 30)**

The U.S. Department of Commerce, Economic Development Administration (EDA) requests proposals for the EDA American Recovery Program, for projects that advance economic growth by assisting communities and regions experiencing chronic high unemployment and low per capita income to create an environment that fosters innovation, promotes entrepreneurship, and attracts increased private capital investment. Priority consideration will be given to regions that have experienced sudden and severe economic dislocation and job loss due to corporate restructuring. Applicants may apply for the following programs: 1) Public Works and Economic Development Facilities Program, and 2) Economic Adjustment Assistance Program. Responses due 6/30/10. For more info, including Region-specific contacts, go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=45786>. Refer to Sol# DA03102009RECOVERYACT. (Grants.gov 3/5/09)

### **RFP for Green Jobs Training, DOL, American Recovery and Reinvestment Act (June 30)**

The U.S. Department of Labor announces its intent to request proposals for Recovery Act Competitive Grant Opportunities. DOL anticipates \$500 million will be targeted at research, labor exchange, and job training projects that prepare workers for careers in energy efficiency and renewable energy as defined in the Green Jobs Act: Energy efficient building, construction, and retrofitting; renewable electric power; energy efficient and advanced drive train vehicles; biofuels; deconstruction and materials use; energy efficiency assessment for residential, commercial, or industrial sector, and manufacturing of sustainable products using sustainable processes. \$250 million will be targeted at other high growth and emerging industry sectors. DOL intends to post the RFPs no later than 6/30/09. For more info, go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46337>. (Grants.gov 3/26/09)

### **RFP for Environmental Implications of Emerging Technologies, NSF (September 15)**

The National Science Foundation requests proposals for Environmental Implications of Emerging Technologies, for research to develop and test the environmental effects of new technologies. Areas of interest include, but are not limited to: The development and refinement of sensors and sensor network technologies; innovative production processes, waste reduction, recycling, and industrial ecology technologies; and evaluation of the effect of increased usage of renewable resources on water supply and land use. Individuals awards generally NTE \$80K each. Responses due 9/15/09. For more info, contact Paul Bishop at [pbishop@nsf.gov](mailto:pbishop@nsf.gov) or go to: [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=501030](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030). Refer to Sol# PD-09-1179. (Grants.gov 3/23/09)

### **RFP for Energy for Sustainability, National Science Foundation (September 15)**

The National Science Foundation requests proposals for the Energy for Sustainability Program. This program supports research and education in energy production, conversion, and storage, and is focused on energy sources that are environmentally friendly and renewable, including solar, wind and biomass. Average individual awards \$100K. Responses due 9/15/09. For more info, contact Trung Nguyen at [tnguyen@nsf.gov](mailto:tnguyen@nsf.gov) or go to: [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=501026](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026). Refer to Sol# PD-09-7644. (Grants.gov 3/6/09)

## **RFP for Thermal Transport Processes, National Science Foundation (September 15)**

The National Science Foundation requests proposals for the Thermal Transport Processes Program, for engineering research aimed at gaining a basic understanding of the microscopic and macroscopic levels of thermal transport phenomena (heat and mass transfer) underlying energy conversion and conservation, the synthesis and processing of materials, cooling and heating of infrastructure and equipment, and more. An active understanding of thermal transport in energy conversion and conservation processes is vital to reduce the nation's dependence on petroleum. Awards NTE \$100K. Responses due 9/15/09. For more info, contact Theodore Bergman at [tbergman@nsf.gov](mailto:tbergman@nsf.gov) or go to: [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=13367](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13367). Refer to Sol# PD-09-1406. (Grants.gov 3/9/09)

## **RFP for National Lab Partnerships for Energy Research, DOE (November 9)**

The U.S. Department of Energy requests proposals for Experimental Program to Stimulate Competitive Research (EPSCoR); Building EPSCoR-State/National Laboratory Partnerships. This RFP will support collaborative partnerships between National Laboratories and academic or industrial researchers to conduct nationally competitive, energy-related research. \$1.7 million expected to be available, maximum awards generally \$600K. Pre-applications are required and are due 6/5/09, final proposals due 11/9/09. For more info, contact Marilyn Oyler at [marilyn.oyler@science.doe.gov](mailto:marilyn.oyler@science.doe.gov) or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/33EE94649665FEA8852575A1006CCB0A?OpenDocument>. Refer to Sol# DE-PS02-09ER09-11. (Grants.gov 4/23/09)

## **RFP for Renewable Energy Resources, Los Angeles (March 11, 2010)**

The Los Angeles Department of Water and Power (LADWP) has issued a rolling request for proposals (RFP) designed to seek renewable energy proposals on a continuous basis throughout the year. The rolling RFP calls for proposals for approximately 1,000 GWh per year of renewable energy resources such as solar, wind and geothermal power. This amount represents nearly 4% of LADWP's power sales.

LADWP is looking to acquire renewable energy resources through either immediate ownership of power generation facilities or through long-term power purchase agreements. Under the terms of the new RFP, green power providers can submit their proposal anytime throughout the year. LADWP will open and consider the proposals on a monthly basis, and could then begin evaluation and negotiation of a particular project right away.

LADWP says it will give preference to proposals that offer immediate facility ownership or to long-term PPAs that have an ownership option. Additionally, LADWP is targeting solar projects located in the high deserts of California, close to LADWP's existing transmission system. The application deadline is March 11, 2010.

## **RFP for Smart Grid Investments, DOE, American Recovery and Reinvestment Act (March 31, 2010)**

The U.S. Department of Energy announces its intent to request proposals for the Smart Grid Investment Grant Program. Through this program, DOE seeks to stimulate the rapid deployment and integration of advanced digital technology that is needed to modernize the nation's electric delivery network for enhanced operational intelligence and connectivity. The program will support projects that promote deployment, including development of component technologies. Individual award range anticipated to be \$500K to \$5 million. The RFP will open on or about 6/17/09. Three due dates anticipated: 7/29/09, 12/2/09, and 3/31/10. For more info, contact Donna Williams at [Smart-Grid.NOIComments@hq.doe.gov](mailto:Smart-Grid.NOIComments@hq.doe.gov) or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/39C0D96768F2083F8525759A0068F216?OpenDocument>

<http://www07.grants.gov/search/search.do;jsessionid=9x3VJydGP2TfWHPRK9mfnpLqsWpm1TQmDJTzS6XLDp1QJKpb2SM!-1267850137?oppId=46833&flag2006=false&mode=VIEW>. Refer to Sol# DE-FOA-0000058. (Grants.gov 4/16/09)

## **Upcoming Events**

### **Geothermal Lease Sale: California, Nevada, and Utah, July 14 (Reno, NV)**

The U.S. Bureau of Land Management has announced new geothermal lease sales in California, Nevada, and Utah in July 2009. The “competitive oral sale of Federal lands for geothermal leasing” will take place on July 14, at the BLM Nevada State Office in Reno.

In Nevada, 112 parcels with a total of 337,000 acres are offered. See BLM Nevada:

[http://www.blm.gov/nv/st/en/prog/minerals/leasable\\_minerals/geothermal0/ggeothermal\\_leasing.html](http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/geothermal0/ggeothermal_leasing.html).

In California, 19 parcels with a total of 11,390 acres are offered. Check for updates:

<http://www.blm.gov/ca/st/en/prog/energy/geothermal.html>.

In Utah, one parcel of 228 acres is for sale. See BLM Utah:

[http://www.blm.gov/ut/st/en/prog/energy/geothermal0/july\\_2009\\_geothermal.html](http://www.blm.gov/ut/st/en/prog/energy/geothermal0/july_2009_geothermal.html).

### **GEA: Direct Use/Small Power Finance Workshop, Oregon Institute of Technology (OIT), August 12-13 (Klamath Falls, OR)**

GEA in cooperation with OIT will host a geothermal direct-use and small power workshop in Klamath Falls, Oregon in the summer of 2009. The format would be an all day workshop with a site tour the following day. Included in the workshop agenda will be the how-to's of financing a small power/direct use project, direct use technology, presentations of small projects and direct use projects today and information about drilling and exploration for such projects. For more information contact Kathy Kent at [kathy@geo-energy.org](mailto:kathy@geo-energy.org).

### **GEA: Geothermal Energy Expo/GRC Annual Meeting, October 4-7 (Reno, NV)**

The 2009 Geothermal Energy Expo and GRC Annual Meeting will be held October 4-7 at the Peppermill in Reno, Nevada. For more information about the Geothermal Energy Expo, visit: <http://www.geo-energy.org>.

### **Renewable Energy Indonesia 2009 Trade Show, October 14–17 (Jakarta, Indonesia)**

Indonesia has 45% of the world's geothermal energy resources. Renewable Energy Indonesia 2009 is the 5th international exhibition for all renewable energy technologies. It will be held at the International Exhibition Centre at Kemayoran, October 14–17, 2009.

For more information: [www.pamerindo.com](http://www.pamerindo.com).

### **New Date! SMU Geothermal Conference, November 3–4 (Dallas, TX)**

SMU Geothermal Laboratory has announced new dates for this year's conference, Geothermal Energy Utilization Associated with Oil and Gas Development. From SMU: We postponed the June 18–19 conference to November to give more time for working with companies responding to the many requests for proposals, and to give new projects time for installation so they can report the progress. We apologize for any inconvenience by changing the dates. Looking forward to seeing you in November!

Topics Presented: Power Generation Technology Advancements, Geothermal Resource Exploration and Assessment, Reservoir Engineering, Fracturing, Geopressure Development, Tight Gas Sands Development, Enhanced Geothermal Systems – International, Green Power for Utilities, Renewable Energy Credits and Tax Incentives, Economics and Business Plan, Transmission Needs, Regulation Laws and Leasing, Financing, Demonstration Sites

Submit abstracts for consideration to: [blackwel@smu.edu](mailto:blackwel@smu.edu) or call 214-768-2745 to discuss an idea.  
Deadline for submission is September 1, 2009.

More conference details online - <http://smu.edu/geothermal>.

## **XVII Annual Congress and Annual Assembly, Mexican Geothermal Association, November 13 (Mexico)**

The Mexican Geothermal Association (AGM: Asociación Geotérmica Mexicana) will hold its XVII Annual Congress and Annual Assembly by November 13, 2009, at the CFE (Comisión Federal de Electricidad) offices in Morelia, Mich., Mexico.

Preliminary program:

9:00 – 10:00 hours: Registration  
10:00 – 13:00 hours: Technical presentations  
13:00 – 14:00 hours: Lunch  
14:00 – 17:00 hours: Technical presentations  
17:00 – 18:30 hours: Ordinary Assembly

Fees: AGM's members: 750 Mexican pesos (~55 USD). Non-members: 1,100 Mexican pesos (~85 USD). Students and retired: 50%. Fee includes lunch, transactions and coffee breaks.

Deadlines:

Submission of abstracts: July 24  
Acceptation notification: August 7  
Submission of extended papers: September 4  
Pre-registration: November 3

Complete call for papers (in Spanish) at: <http://www.geotermia.org.mx> (See: Congreso 2009)

More information: Luis C.A. Gutiérrez-Negrín (AGM's secretary): [l.g.negrin@gmail.com](mailto:l.g.negrin@gmail.com).



### ***GEA Weekly Update***

A newsletter for the geothermal industry 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)