



GEO THERMAL ENERGY ASSOCIATION

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

GEA Weekly Update August 12, 2008

| | |
|---|----|
| National News..... | 2 |
| BLM Geothermal Lease Sale in Nevada Breaks Records at \$28 Million..... | 2 |
| Programmatic EIS Hearings Completed, Comment Period Still Open | 3 |
| Company News | 3 |
| Calpine: Fusco Succeeds May as New CEO; Second Quarter Results Posted | 3 |
| Ormat Technologies: CEO Comments on Second Quarter Results | 4 |
| Raser Technologies: Former Secretary of Energy to Attend Groundbreaking Ceremony..... | 4 |
| Raser Technologies: Three New Leases Added in Utah | 5 |
| Raser Technologies: GeothermEx Confirms 10-MW Capacity in Beaver | 5 |
| ThermaSource: \$41.5 Million in New Resources will Finance Rigs, Services..... | 6 |
| Western GeoPower: \$25 Million Financing Will Fund Geysers Project..... | 6 |
| Renewable and Climate Change News | 7 |
| Simbol Mining to Tap Geothermal Resources for Lithium..... | 7 |
| DOE National Labs Improvements to Save \$13 Million in Annual Energy Costs | 7 |
| MIT Researchers On the Path to Solar Revolution | 7 |
| U.S. DOE Announces Energy-Efficient Commercial Building Efforts | 8 |
| EPA Criticized for Ignoring Global Warming..... | 8 |
| State News | 9 |
| California: Utilities Commission Underlines Necessity of Tax Credits..... | 9 |
| Florida: Chena Power Leads Geothermal Oil Field Project | 9 |
| Oregon: Oregon Tech to Build Geothermal Power Plant..... | 9 |
| Utah: Local News Reports on State's Geothermal Development | 9 |
| International News..... | 10 |
| Australia: TRUenergy Commits \$57m to Petrathem Geothermal | 10 |
| Costa Rica: Central American Bank to Fund Geothermal Energy..... | 10 |
| Dominica: Geothermal Resources to Contribute to Caribbean Renewables Projects..... | 10 |
| Dominica: Groups Voice Concern Over Geothermal Contract | 10 |
| Indonesia: Pricing Plan on Electricity Threatens Geothermal Development..... | 11 |
| Kenya: <i>Reuters</i> Article Spotlights Africa's Energy Needs..... | 11 |
| Nevis: Locals Show Interest in Geothermal Drill Site | 11 |
| Notices and Employment Opportunities | 12 |
| FINAL REMINDER: FOA, U.S. DOE, Enhanced Geothermal Systems Research, Development, and Demonstration (Applications Due August 12) | 12 |
| Truckhaven Geothermal Leasing Area ROD Available, BLM..... | 12 |
| Vice President of Business Development, Ormat Technologies..... | 13 |
| Sales Manager, Ormat Technologies | 14 |
| Engineer V, Geothermal Experience Preferred, Northern California Power Agency | 15 |
| Release of Forseo's "Investor's Guide to Geothermal Energy" (August)..... | 15 |
| Rio Tinto Alcan and the International Business Leaders Forum, Prize for Sustainability (Responses Due September 12) | 15 |
| Engineering Manager, Western GeoPower, Inc..... | 15 |
| Requests for Proposals (RFPs)..... | 16 |
| RFP for Renewable Energy, Arizona Public Service (August 13)..... | 16 |
| RFP for Renewable Energy, Tucson Electric Power Co. and UNS Electric (September 5)..... | 16 |
| RFP for Energy Frontier Research Centers, U.S. DOE (October 1) | 16 |

| | |
|---|----|
| RFP for Early Stage Clean Energy, New York State Energy Research and Development (October 1) ... | 17 |
| RFP for Renewable Energy Resources, Public Service Company of New Mexico (October 15)..... | 17 |
| RFP for Climate Change and Sustainability Conferences, EPA (December 9)..... | 17 |
| RFP for Energy Efficiency, Renewable Energy, and Transmission Technologies, DOE (December 31) 17 | 17 |
| Upcoming Events | 18 |
| Geothermal Technologies Workshop, Western Area Power Administration, August 11-12 (Everett, WA) | 18 |
| | 18 |
| High Sierra Energy Summit, August 11-15 (Mammoth Lakes, CA)..... | 19 |
| Groundbreaking Ceremony and Press Conference, Raser Technologies, August 18 (Hidalgo County, NM) | 19 |
| National Clean Energy Summit, August 19 (Las Vegas, NV)..... | 19 |
| Opportunities at the Intersection of the Oil and Gas Industry with Geothermal Energy in the U.S., Executive Management Roundtable, August 25 (Houston, TX)..... | 20 |
| International Geothermal Workshop, August 27–28 (Reykjavik, Iceland) | 21 |
| Renewable Energy Philippines 2008, August 28–30 (Manila, Philippines)..... | 21 |
| Geothermal Heating and Cooling Seminars, September 8–11 (Washington, D.C.)..... | 21 |
| Brita Climate Ride, September 20–24 (New York to D.C.) | 22 |
| GEA Geothermal Issues and Outlook Workshop, October 4 (Reno, NV)..... | 22 |
| GEA Trade Show/GRC Annual Meeting, October 5–8 (Reno, NV) | 22 |
| NZ Geothermal Workshop & NZGA Seminar 2008, November 11-13 (Taupo, New Zealand)..... | 23 |
| XVI Annual Congress of the Mexican Geothermal Association, November 14 (Morelia, Mexico)..... | 23 |
| Utah Geothermal Lease Sale, BLM, November 18 | 23 |
| 2nd African Rift Geothermal Conference, November 25–29 (Entebbe, Uganda)..... | 24 |
| Canadian Geothermal Energy Association Conference and AGM, April 16–17, 2009, (Vancouver, B.C.) | 24 |

National News

BLM Geothermal Lease Sale in Nevada Breaks Records at \$28 Million

The Bureau of Land Management held a geothermal lease sale in Nevada last week that netted \$28 million, according to the Nevada BLM Web site. Some sales went for the minimum bid, at \$2 per acre. The highest per-acre bid was at \$1000/acre by ENEL Geothermal LLC for a 2,707-acre parcel in Churchill County. The parcels were offered with 10-year leases, and all 35 parcels were leased.

According to the news release, \$14 million will go to the state, and the counties of Churchill, Elko, Esmeralda, Humboldt, Lander, Mineral, Nye and Pershing, where the leases are located, will receive more than \$7 million, which will be distributed by bid amount and acre.

The BLM released the following sale statistics, with complete results available at http://www.blm.gov/pgdata/etc/medialib/blm/nv/minerals/geothermal.Par.75484.File.dat/200808_Geo_Sale_Results.pdf:

1. Parcels offered: 35
2. Acres offered: 105,211.540
3. Parcels sold: 35
4. Acres sold: 105,211.540
5. Total bonus bid: \$27,992,464.00
6. Highest bid/parcel: \$3,204,000.00
7. Highest bid/acre: \$1,000.00
8. Total receipts: \$28,207,806.00

Additional BLM geothermal lease sales are expected in the coming months in Utah, Oregon, and California.

Programmatic EIS Hearings Completed, Comment Period Still Open

The Bureau of Land Management and U.S. Forest Service have completed their hearings on the Draft Programmatic Environmental Impact Statement for Geothermal Leasing in the Western United States. At the last hearing on July 30 in Sacramento, GEA submitted preliminary written comments on the Draft. "We applaud the agencies for completing the draft PGEIS, and encourage expeditious completion of this document and necessary subsequent actions to allow geothermal leasing and development," GEA said.

GEA went on to state that "...the proposed action (Alternative B) is the best alternative, and both the "no action" alternative (Alternative A) and the "limited leasing" alternative (Alternative C: Leasing Lands Near Transmission Lines) are not acceptable courses of action." GEA noted that the document should assume power production in all western states being considered, and criticized various restrictions being proposed in the proposed action by the agencies.

Beyond the substance of the EIS, GEA stressed the need for follow-through. "We are concerned that the PGEIS may not achieve its goal of expediting geothermal projects if the federal agencies do not make a clear commitment to follow through with appropriate land-use plan amendments for both FS and BLM lands."

While the BLM and U.S. Forest Service have completed public hearings, the comment period is still open and hundreds of additional comments from the public are expected by the September 19, 2008 deadline.

For more information, including the text of the Draft EIS, go to www.blm.gov/geothermal_eis.

Written comments on the Draft PEIS may be submitted by any of three methods:

- e-mail – geothermal_EIS@blm.gov
- fax – 1-866-625-0707
- U.S. Mail – Geothermal Programmatic EIS, c/o EMPSi, 182 Howard Street, Suite 110, San Francisco, California 94105

Company News

Calpine: Fusco Succeeds May as New CEO; Second Quarter Results Posted

Jack A. Fusco, former CEO of Texas Genco will succeed Robert P. May as CEO of Calpine Corporation, according to mercurynews.com. Fusco will also have the title of president and serve on its board of directors.

"With its streamlined balance sheet, portfolio of clean, fuel-efficient assets and dedicated workforce, I firmly believe Calpine is well positioned for future success," Fusco said in a news release.

May led Calpine out of bankruptcy earlier this year. He had previously announced his intent to retire once Calpine had named a successor.

Calpine, which operates 80 natural gas and geothermal power plants, also posted its second quarter results. The company reported net earnings of \$197 million, or 41 cents a share, for the quarter, according to the article, compared to the net loss of \$500 million, or \$1.04 a share, since last year's second quarter report.

Zamir Rauf, Calpine's interim Chief Financial Officer, stated, "I am encouraged by our ability to demonstrate continued progress during the second quarter, as we remain focused on excellence in our core operations. For the second quarter in a row, we have delivered considerable improvements in Commodity Margin and Adjusted EBITDA over the prior year period. I am confident that the Calpine team will continue to deliver clean and reliable energy to our customers over the course of 2008, while at the same time delivering value to our shareholders."

For the six months ending June 30, Calpine reported operating revenues of nearly \$4.8 billion, as compared to \$3.7 billion in the same period of the prior year.

See http://www.mercurynews.com/businessheadlines/ci_10167495?source=email and <http://phx.corporate-ir.net/phoenix.zhtml?c=103361&p=irol-newsArticle&ID=1185899&highlight=>.

Ormat Technologies: CEO Comments on Second Quarter Results

Press Release Highlights— August 5, [Ormat Technologies, Inc. Reports Second Quarter 2008 Results: Q2 Net Income Increased 42.3% to \\$12.2 million; Products Backlog Increased \\$144 million to \\$186 million](#)

Ormat Technologies, Inc. (NYSE: ORA) today announced financial results for the second quarter of 2008.

Electricity revenues for the second quarter increased by 11.6% to \$61.8 million and product revenues decreased by 35.7% to \$18.4 million. Total revenues for the second quarter were \$80.2 million compared to \$84.1 million for the second quarter of 2007, a decrease of 4.6%.

Commenting on the quarter's results, Dita Bronicki, Chief Executive Officer of Ormat, stated: "We remain on track with projects scheduled to come online over the next two years with expected contribution of 101 MW by year's end and 73 MW in 2009.

"Generating capacity for both the quarter and six-months increased even as scheduled maintenance reduced production at several projects. We also built a solid product backlog that added \$176 million of new orders since the beginning of the year, out of which \$66 million are still subject to a Notice to Proceed. These orders were geographically diverse with projects from New Zealand, Turkey and the United States."

"The results confirm confidence in our growth goals. We secured additional leases and raised approximately \$246 million in capital by completing two stock placements and the second leg of our tax monetization transaction. The funding received from these activities provides us with ample capital as we continue to advance our growth strategy," Ms. Bronicki continued.

Commenting on the outlook for 2008, Ms. Bronicki said, "Following our second quarter earnings results, we expect our 2008 Electricity Segment revenues to be approximately \$250 million. We also expect additional revenues of approximately \$9 million from our share of electricity revenues generated by Mammoth that is accounted for under the equity method. With regard to our Products Segment, we maintain our guidance for 2008 revenues and expect them to be between \$70 million and \$80 million".

For the six month-period ended June 30, 2008, total revenues were \$149.6 million, an increase of 2.6% from \$145.8 million in the same period last year. Net income for the period was \$22.2 million, or \$0.52 per share, compared to \$2.7 million, or \$0.07 per share, in the first half of 2007.

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

Raser Technologies: Former Secretary of Energy to Attend Groundbreaking Ceremony

Press Release—August 12, [Raser to Hold Groundbreaking Ceremony and Press Conference for First Commercial Geothermal Power Project in New Mexico](#)

Raser Technologies, Inc. (NYSE Arca: RZ) announced today that they will hold a groundbreaking ceremony to mark the beginning of the construction phase of the first commercial geothermal power plant to be built in New Mexico. Governor Bill Richardson, former U.S. Secretary of Energy, has accepted Raser's invitation along with other state and county government officials to participate in the groundbreaking ceremony and press conference. These officials will be available to discuss New Mexico's

efforts to reduce emissions from power production facilities at the press conference and groundbreaking ceremony. The groundbreaking ceremony is scheduled for August 18, 2008, at the power plant project site in Hidalgo County at 11:00 a.m. local time.

Raser previously announced signing a power purchase agreement to sell the power to be produced by the plant to the Salt River Project (SRP), the nation's third largest public utility serving the greater Phoenix, Arizona area. Raser currently plans to begin delivering power pursuant to this agreement in the first quarter of 2009, subject to obtaining the necessary construction financing and timely construction of the plant.

"We continue to make steady progress in the development and commercialization of our geothermal assets, as evidenced by the groundbreaking of this important project in New Mexico," stated Brent M. Cook, Raser's Chief Executive Officer. "We anticipate that the completion of this renewable energy plant over the next several months will mark another important milestone in our development. The geothermal power plants we are developing are designed to provide baseload renewable energy with virtually no harmful emissions. We have already begun to take delivery of several power generation units for this New Mexico plant and we expect that the remainder will be ready once site preparations are completed."

Raser Technologies: Three New Leases Added in Utah

Press Release— August 11, [Raser Technologies Adds 20,000 Acres to Its Thermo Resource Portfolio](#)

Raser Technologies, Inc. announced today that it has signed three new lease agreements covering more than 20,000 acres of geothermal, surface and other rights near its existing Thermo resource in Beaver County, Utah.

The signing of these three leases increases Raser's total holdings in the Thermo area to over 50,000 acres. Raser recently released the results of a report prepared by the prominent geothermal consulting firm, GeothermEx Inc., which concluded that the Thermo resource could potentially sustain over 200 MW of clean renewable baseload energy. These additional holdings in that area provide added resources for Raser's potential future development.

The specific terms of leases were not disclosed but under the lease agreements, Raser has rights to the geothermal resources and certain surface rights for the construction of geothermal wells, piping, power plants and transmission lines.

"These leases are very important to our future development plans," stated Richard Clayton, Raser's Executive Vice President and General Counsel. "Adding to our holdings in what we believe is one of the richest geothermal finds in the U.S. in the last 25 years enhances our ability to maximize the potential of that resource. The independent third-party verification of the potential that exists in that valley confirms the value of our vast geothermal portfolio."

For news releases from Raser, visit <http://www.rasertech.com/news/scripts/full-news.php?1218029160>.

Raser Technologies: GeothermEx Confirms 10-MW Capacity in Beaver

Press Release Highlights— August 6, [Raser Receives Third Party Analysis on Well Field: Confirmation of at Least 10 MW Project Capacity and up to 238 MW Gross Overall Resource Potential](#)

Raser Technologies, Inc. (NYSE Arca: RZ) today announced that GeothermEx Inc., an independent third party geothermal consultant, has completed and delivered its analysis of the well field for Raser's Thermo geothermal power project near Beaver, Utah. GeothermEx is the largest, most comprehensive geothermal consulting and services firm in the Western Hemisphere. GeothermEx reported that well #24-34 indicated 3.6 MW net at the well depth level Raser plans to produce, with temperatures in excess of 280°F. GeothermEx's analysis of the resource concludes that ample resources are available in the immediate vicinity of the announced Thermo project to support a 10-MW net plant using the closed loop binary

systems planned for this plant. The report also concludes that the larger area of Raser's Thermo resource field is most likely to sustain 238 MW gross with a 90% probability of sustaining 138 MW of geothermal energy or enough power to supply over 100,000 homes. Raser recently announced the leasing of an additional 6,000 acres of geothermal rights on lands in the same area bringing its total interests in the area to nearly 30,000 acres.

"The resource analysis report concluded that the resource is much larger than anticipated and we expect that as the wells continue to heat up, it will actually provide temperatures in excess of the 280°F experienced during testing," stated Brent M. Cook, CEO of Raser Technologies. "We believe the issuance of the report puts us in a position to finalize and close in a timely manner on the funding for the Thermo project pursuant to the financing commitment previously announced. We are excited about the progress to date on our first wave of projects and have a number of projects being prepared for additional waves. We expect to start setting the generating units for operational purposes at the Thermo site in the August to September time frame so that the plant will be operational later this year. We expect to be active in this resource field well into the future as we plan the development of additional projects in the same area."

For news releases from Raser, visit <http://www.rasertech.com/news/scripts/full-news.php?1218029160>.

ThermaSource: \$41.5 Million in New Resources will Finance Rigs, Services

Press Release—August 12, [ThermaSource, LLC Completes \\$41.5 Million Private Equity Financing](#)

ThermaSource LLC, one of the fastest growing providers of drilling, engineering and consulting services to the renewable geothermal energy sector, is pleased to report the completion of a new round of private equity financing, raising \$41.5 million from Riverstone Holdings LLC, U.S. Renewables Group, and Rustic Canyon Partners. ThermaSource is using these resources to finance the acquisition of geothermal drilling rigs and to develop the associated drilling services including engineering, mud-logging, cementing and exploration. The initial equity investment in February of 2007 by Riverstone and U.S. Renewables Group was \$20 million. To date, ThermaSource has raised \$93 million of equity and debt over the past two years. The company expects to double employment, from 210 currently to more than 420 by the end of the year, as it expands operations domestically and internationally. "This equity investment represents a solid endorsement of our business strategy, which indicates we are delivering on our business plan and have established a platform for long term, sustained growth," said Louis E. Capuano, Jr., president and CEO of ThermaSource LLC. For more information about ThermaSource, visit www.thermasource.com.

Western GeoPower: \$25 Million Financing Will Fund Geysers Project

Press Release— August 7, [Western GeoPower Announces \\$25 Million Financing](#)

Western GeoPower Corp. (TSX Venture Exchange Trading Symbol: WGP), a renewable energy development company, today announced it has arranged up to \$25 million in equity funding by way of a non-brokered private placement of 100,000,000 Units (the "Units") at a price of \$0.25 per Unit.

Each Unit consists of one common share and one transferable share purchase warrant exercisable into one common share for a period of 24 months from closing at a price of \$0.45 per share during the first 12 months and \$0.50 per share during the last 12 months.

The funds will be used for the ongoing drilling and development of the 35-MWe Western GeoPower Unit 1 geothermal project at The Geysers geothermal field in California and for general working capital.

"This funding is intended to satisfy the requirement for additional equity resulting from the increase in plant capacity from 28 MWe to 35 MWe as announced April 9, 2008," said Kenneth MacLeod, President and CEO of Western GeoPower. "With construction scheduled to commence in Spring 2009, the focus will shift to securing a construction loan for the balance of the project financing."

The warrants are subject to an acceleration provision, which provides that, if the Company's shares trade at \$0.50 or more for ten consecutive trading days during the first year or \$0.55 or more for ten consecutive trading days during the second year, it will trigger a 30 day timeframe within which to exercise the warrants or they will expire.

A finder's fee of 6% payable in Units, is applicable on a portion of the proceeds. The private placement is subject to regulatory approval and the Units will be subject to a four-month hold.

For news releases from Western GeoPower, visit <http://www.geopower.ca/newsp1.htm>.

Renewable and Climate Change News

Simbol Mining to Tap Geothermal Resources for Lithium

Simbol Mining has raised \$6.7 million funding for mining lithium from geothermal brine, according to earth2tech.com. The valuable lithium is used to make batteries for electric vehicles.

Mining lithium from geothermal sites is cleaner and more cost-effective than extracting it from large salt ponds as is typically done, says Simbol, according to the article. Josh Green of Mohr Davidow, one of the companies funding the project, says Simbol's technology could help revive the U.S. lithium extraction industry, which has declined due to overseas projects.

See <http://earth2tech.com/2008/08/10/simbol-mines-first-round-to-extract-lithium-from-geothermal/>.

DOE National Labs Improvements to Save \$13 Million in Annual Energy Costs

DOE has announced contracts for \$140 million in energy efficiency improvements at four of its national laboratories under DOE's Transformational Energy Action Management (TEAM) initiative, reports *EERE Network News*. The projects will help DOE save about \$13 million on energy-related costs per year. The projects are as follows:

- o Idaho National Laboratory: Energy source for the boiler will be changed. Savings: \$1.7 million/year
- o Lawrence Livermore National Laboratory: Energy management control system will be upgraded. Savings: \$1.3 million/year
- o National Energy Technology Laboratory: Biogas boilers, green roofs, hybrid lighting, advanced metering, solar lighting, rooftop wind turbines, and natural gas well dewatering. Savings: \$800,000/year
- o Oak Ridge National Laboratory: Biomass steam plant will be built. Savings: \$8.7 million/year

See http://www.eere.energy.gov/news/news_detail.cfm/news_id=11905.

MIT Researchers On the Path to Solar Revolution

Massachusetts Institute of Technology researchers have found a way to store solar energy for use when the sun isn't shining, according to renewableenergyworld.com. The daytime-only trait of solar energy is currently a major obstacle in the industry, the article says. The MIT Solar Revolution project was funded by the National Science Foundation and by the Chesonis Family Foundation.

MIT's Daniel Nocera and Matthew Kanan developed a process of using the sun's energy with a new catalyst to split water into hydrogen and oxygen gases so it can later be combined inside a fuel cell. The method was inspired by the photosynthesis of plants.

"This is the nirvana of what we've been talking about for years," Nocera told the press. "Solar power has always been a limited, far-off solution. Now we can seriously think about solar power as unlimited and soon."

See <http://www.renewableenergyworld.com/rea/news/story?id=53214>.

U.S. DOE Announces Energy-Efficient Commercial Building Efforts

Press Release Highlights—August 5, U.S. Department of Energy to Pursue Zero-Net Energy Commercial Buildings: National Renewable Energy Laboratory Announces Support for Clean Tech Open

U.S. Department of Energy (DOE) Deputy Assistant Secretary for Energy Efficiency David Rodgers today announced the launch of DOE's Zero-Net Energy Commercial Building Initiative (CBI) with establishment of the National Laboratory Collaborative on Building Technologies Collaborative (NLCBT). These two efforts both focus on DOE's ongoing efforts to develop marketable Zero-Net Energy Commercial Buildings, buildings that use cutting-edge efficiency technologies and on-site renewable energy generation to offset their energy use from the electricity grid by 2025.

"DOE's Commercial Building Initiative and the Collaborative are urgently needed to accelerate innovation and market adoption in the field of high-performance buildings," said Deputy Assistant Secretary Rodgers. "Now we are bringing to bear the unprecedented collaboration in scientific resources of five National Laboratories to bring about the needed transformation of the built environment, lower our carbon footprint in buildings and accelerate commercial deployment of clean, efficient building technologies."

In 2005, commercial buildings used 18% of energy in the United States, accounting for 18% of greenhouse gas emissions. The Zero-Net Energy CBI strives to make new commercial buildings capable of generating as much energy as they consume available by 2025. Energy generation will be achieved through advanced energy efficiency technologies and on-site renewable energy generation systems, such as solar power and geothermal energy.

For news releases from the DOE, visit <http://www.energy.gov/news/6454.htm>.

EPA Criticized for Ignoring Global Warming

The Environmental Protection Agency is facing criticism from Democratic senators, the state of California, and others because of their slowness in responding to global warming, according to planetark.com.

The EPA said in July that global warming poses risk to human health, including more heat-related deaths, more heart and lung diseases due to increased ozone and health problems related to hurricanes, extreme precipitation, and wildfires. But others have expressed the opinion that the EPA's response is too little, too late.

Democratic senators have called for the resignation of Stephen Johnson, head of the EPA, saying he sided with polluters during critical times. Also, California will sue the EPA for "wantonly" ignoring its duty to regulate greenhouse gas emissions from ships, aircraft, and construction and agricultural equipment, according to articles from planetark.com.

See <http://www.planetark.com/dailynewsstory.cfm/newsid/49597/story.htm>, <http://www.planetark.com/dailynewsstory.cfm/newsid/49419/story.htm>, and <http://www.planetark.com/dailynewsstory.cfm/newsid/49608/story.htm>.

State News

California: Utilities Commission Underlines Necessity of Tax Credits

The California Public Utilities Commission's quarterly update on renewable efforts to fight global warming says the state will miss the 2010 deadline for using 20% renewable power if Congress does not extend tax credits, according to [sfgate.com](http://www.sfgate.com). Utilities companies probably won't reach the goal until 2012 or 2013.

If Congress does not extend the tax credits that expire this year, many of the projects that are in line to power the utilities companies will not even reach construction, the article said.

Many environmentalists are realistic about the possibilities. "We have to understand we're trying to do something that's never been done before," Carl Zichella, regional director for the Sierra Club in California, told the press. "We shouldn't be beating ourselves up too much if we fall a little short on our deadlines. ... It's like this: We're building the car while we drive it, and we're trying to drive it very fast."

The 2010 deadline has already helped increase public interest and efforts from utilities, and while the pressure on Congress to pass the tax credits is necessary, the California renewables industries seem optimistic, according to the article.

See <http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2008/08/02/MN281240PJ.DTL>.

Florida: Chena Power Leads Geothermal Oil Field Project

Chena Power, UTC Power, and Quantum Oil and Gas are teaming up for a geothermal power project using oil field water in Jay, Florida, according to [newminer.com](http://www.newminer.com). Chena Power, led by Bernie Karl, has proven the technology at Chena Hot Springs in Alaska, and this will be the first commercial application. Testing is expected to begin in 2009 and to last two years.

Karl told press that once proven commercially, the technology will be applied at wells in Alaska. Additionally, the Rocky Mountain Oilfield Testing Center in Wyoming is studying the technology.

See <http://www.newminer.com/news/2008/aug/11/chena-power-studies-potential-oil-field-geothermal/>.

Oregon: Oregon Tech to Build Geothermal Power Plant

The Oregon Institute of Technology plans to build a geothermal power plant on campus, according to *OPB News*. According to the article, the school is already heated by geothermal power, and with the addition of the power plant, will become the first university in the world to be entirely powered by the heat of the earth. The school hopes that students will be able to learn and research geothermal energy.

"Oregon, and in particular this part of the state, can be the Saudi Arabia of renewables. All the sun, and geothermal, and wind. We're really well positioned to go gangbusters on renewables," Democratic Sen. Ron Wyden told the press while on campus to promote federal support for the project.

See <http://news.opb.org/article/2760-oregon-tech-would-be-worlds-first-fully-geothermal-campus/>.

Utah: Local News Reports on State's Geothermal Development

Deseret News reported on geothermal development in Utah, citing the Geothermal Energy Association's August 2008 *U.S. Geothermal Power Production and Development Update*. Utah has six projects in various stages of development.

See <http://deseretnews.com/article/1,5143,700249098,00.html>.

International News

Australia: TRUenergy Commits \$57m to Petratherm Geothermal

The Chinese-owned TRUenergy has committed to invest \$57 million in Petratherm's Paralana geothermal project, according to *AdelaideNow*. It would initially contribute \$6 million towards drilling two wells and would later add \$7 million towards a 7.5-MW pilot plant. Finally, it would contribute \$44 million towards a 30-MW demonstration plant. This would add up to a 30% stake in geothermal projects, the article said.

Richard McIndoe, managing director of TRUenergy, told press the company had committed close to \$1 billion to expand its renewable and clean energy portfolio.

See <http://www.news.com.au/adelaidenow/story/0,22606,24124366-913,00.html>.

Costa Rica: Central American Bank to Fund Geothermal Energy

The Central American Economic Integration Bank will fund US\$200 million toward geothermal development in the province of Guanacaste, according to *insidecostarica.com*. Pedro Quiros, president of the Instituto Costarricense de Electricidad, said Costa Rica's volcanic areas contain 800 MW of geothermal potential.

See <http://insidecostarica.com/dailynews/2008/august/04/nac04.htm>.

Dominica: Geothermal Resources to Contribute to Caribbean Renewables Projects

An article found on *Caribbean Net News* reports on efforts in Dominica toward renewable energy development, particularly geothermal. Dominica's geothermal resources have been considered in several Caribbean renewables initiatives such as "Preparation of a Geothermal-based Cross-Border Electrical Interconnection in the Caribbean" and the "Geothermal Energy in the Caribbean Islands Project," according to the article. Most recently, the Dominican government granted a license to West Indies Power Dominica Limited for geothermal development in the south of the island.

In his 2008/2009 Budget Address, on the subject of renewable energy, Prime Minister Skerrit said, "This Government is clear that all options including, but not limited to geothermal, wind, hydro, and solar should be investigated as alternatives to fossil fuel. In that regard, we continue to work with interested investors to adopt energy technologies that are not highly dependent on fossil fuel."

See <http://www.caribbeannetnews.com/news-9549--31-31--.html>.

Dominica: Groups Voice Concern Over Geothermal Contract

Waitukubuli Ecological Foundation (WEF), an environmental group, is against the geothermal contract between the Dominican government and West Indies Power Dominica Limited, according to *istockanalyst.com*. Former WEF president Bernard Wiltshire said that the agreement did not follow a required tendering process, and businessman Busin Washway Douglas told press he was against placing the island's geothermal resources in the hands of foreigners.

See http://www.istockanalyst.com/article/viewiStockNews+articleid_2473812&title=Environment_Group.html.

Indonesia: Pricing Plan on Electricity Threatens Geothermal Development

The Jakarta Post reported geothermal development in Indonesia is threatened by a national BPP pricing plan that would put the price of geothermal energy between 7 and 9 U.S. cents per kWh, up from the current 4.52 U.S. cents per kWh.

The price for geothermal-based power will be based on the average cost of electricity in other areas under regulations from the Energy and Mineral Resources Ministry. The BPP refers to the average cost PLN, the state power firm, spends producing one kilowatt of electricity (BPP) at oil, gas, coal, and hydro-electrical power stations. The price of electricity for geothermal plants with capacities between 10 MW and 55 MW is set at 85% of PLN's BPP. Plants over 55 MW in capacity will be priced at 80% of PLN's BPP.

The government has said geothermal power will contribute 30% to its 10,000 MW electricity program. Suryadarma, chairman of the Indonesian Geothermal Association, said PLN and the government must resolve the pricing matter by the end of this year, "Otherwise, the 10,000 MW project will be delayed."

Indonesia's geothermal capacity is estimated at 27,000 MW, around 40% of the world's capacity, with 18 geothermal fields currently producing 1,050 MW, according to the article.

See <http://www.thejakartapost.com/news/2008/08/11/geothermal-energy-hangs-pricing-plan.html>.

Kenya: Reuters Article Spotlights Africa's Energy Needs

An article on *Reuters* talks about geothermal development in Kenya and its potential to help the east African economy with its proven 7,000 MW of potential. Kenya has been facing economy problems that have deterred foreign investors, but geothermal could help change that, the article said. On top of that, much of Africa faces electricity supply challenges. Around 80% of Kenyans are not even linked to the electricity grid.

"We have intensified exploration of geothermal resources because we want to find a way to bring the cost of power down and hopefully bring in investors ... By 2030, at least 80% of Kenyans will have power," said Alfred Odawa, chief geologist at the Energy Ministry.

The International Energy Agency says Africa needs to spend an estimated \$560 billion by 2030 to generate an additional 260,000 MW of power.

Nick Nuttall, spokesman for the United Nations Environment Program, told press, "The huge benefits, of course, are that you are getting indigenous electricity which doesn't rely on expensive oil imports." He added, "The other benefit is that you don't get any CO₂ emissions."

See <http://www.reuters.com/article/worldNews/idUSL1714781120080811>.

Nevis: Locals Show Interest in Geothermal Drill Site

The local population is interested in Nevis's geothermal development, according to the *Caribbean Net News*. West Indies Power's Bobby Tinsley told press that people were coming to see the Nevis 2 site, and that security guards were showing people around the location.

Tinsley said that drilling at the new site was going well and had reached 1600 ft.

See <http://www.caribbeannetnews.com/news-9655--35-35--.html>.

Notices and Employment Opportunities

FINAL REMINDER: FOA, U.S. DOE, Enhanced Geothermal Systems Research, Development, and Demonstration (Applications Due August 12)

From DOE:

This will be the final reminder regarding submissions for the current funding opportunity announcement: Enhanced Geothermal Systems Research, Development, and Demonstration (attached). Applications will be accepted until August 12, 2008 at 11:59pm (EST). Application forms and instructions are available at Grants.gov. To access these materials, go to <http://www.grants.gov/>, select "Apply for Grants," and then select "Download Application Package." Enter the CFDA and/or the funding opportunity number located on the cover of the announcement and follow the prompts to download the application package.

Please do also consider the open DOE solicitation for \$10 billion in loan guarantees for renewable energy projects, including geothermal. DOE's Loan Guarantee Program encourages the commercial use of new or significantly improved energy technologies and is an important step in paving the way for clean energy projects. Please direct specific questions to the DOE Loan Guarantees Program Office: lgprogram@hq.doe.gov.

Truckhaven Geothermal Leasing Area ROD Available, BLM

Notice of Availability of Record of Decision for the Truckhaven Geothermal Leasing Area Final Environmental Impact Statement, California AGENCY: Bureau of Land Management, Interior.

The BLM has announced the availability of the Record of Decision (ROD) for the Truckhaven Geothermal Leasing Area, Imperial County, managed by the El Centro Field Office. The El Centro Field Manager has signed the ROD, which constitutes the final decision of the BLM.

The appeal period will end 30 days after publication of this notice (Friday, August 1, 2008) in accordance with 43 CFR 4.411(a).

Copies of the ROD are available upon request from the Field Manager, El Centro Field Office, Bureau of Land Management, 1661 S. 4th Street, El Centro, CA 92243 or via the Internet at <http://www.ca.blm.gov/elcentro>. Copies of the ROD are available for public inspection at the following locations:

- Bureau of Land Management, California State Office, 2800 Cottage Way, Suite W-1834, Sacramento, CA 95825.
- Bureau of Land Management, El Centro Field Office, 1661 S. 4th Street, El Centro, CA 92243.
- Bureau of Land Management, California Desert District, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553.

For Further Information Contact: John Dalton, Truckhaven Geothermal Leasing Area EIS Project Manager, at (951) 691-5200, Bureau of Land Management, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553; john_dalton@ca.blm.gov.

Supplementary Information: The Truckhaven Geothermal Leasing Area encompasses approximately 14,731 acres of Federal minerals in western Imperial County, California, north of State Route 78 and generally west and south of County Highway S-22. The area is part of the California Desert Conservation Area. The main issues addressed in the Final EIS were geothermal resource leasing, recreation, and special status species. Three alternatives were analyzed in the Final EIS: (1) No action, which would not lease any geothermal resources; (2) leasing only lands with existing noncompetitive lease applications; and (3) the proposed action, which would offer all BLM managed lands within this area for lease, subject to certain stipulations and mitigation measures to be applied either at lease issuance or at the development stage.

After careful consideration of all factors, including balancing the need for renewable energy, the need to protect biological, cultural and visual values, and the need to maintain areas for recreational opportunities associated with the Ocotillo Wells State Vehicle Recreation Area, the BLM has selected Alternative 3 as the preferred alternative. Some areas will be required by stipulation to unitize as appropriate in order to consolidate production facilities and, thereby, minimize surface impacts. Two power plants are anticipated to be constructed within the planning area, which would involve an initial disturbance of approximately 502 acres. Following construction, approximately 95 acres would be reclaimed, leaving approximately 405 acres disturbed by roads, well pads, pipelines, and the two plants. Various site-specific Conditions of Approval will be imposed at the development stage to protect other resources and uses.

Comments on the Truckhaven Geothermal Leasing Area Draft EIS received from the public and via internal BLM review were incorporated into the Final EIS. These comments resulted in corrections, clarifying text, and the addition of new data used in the analysis of impacts. The Final EIS Truckhaven Geothermal Leasing Area addresses comprehensive, long-range decisions for the use and management of geothermal resources in the planning area and management of other resources and uses potentially affected by geothermal resource management decisions. The ROD for this project addresses only BLM's decisions for public lands and resources administered by BLM.

Truckhaven Geothermal Record of Decision:

<http://www.blm.gov/ca/st/en/fo/elcentro/truckhaven.html>

Truckhaven Geothermal Notice of Availability in the Federal Register:

<http://frwebgate4.access.gpo.gov/cgi-bin/PDFgate.cgi?WAISdocID=620148110373+1+1+0&WAIAction=retrieve>

Truckhaven Geothermal News Announcement:

http://www.blm.gov/ca/st/en/info/newsroom/2008/august/CDDNews0860_NOA_Truckhaven_ROD.html

Vice President of Business Development, Ormat Technologies

Ormat Technologies has an immediate opening for a full time Vice President of Business Development located in Reno, NV. The ideal candidate will 10+ years in sales, marketing and business development in the energy/renewables industry. To apply for the position please send a resume to Chris@redfishtech.com.

Position Title: Vice President, Business Development

Department: Business Development

Location: Corporate Office

Reports to: President/COO

Position Summary: The Vice President of Business Development is responsible for overseeing the Business Development function in North America.

Essential Functions

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

Other Responsibilities

- o Provide ongoing training and development to business development team to obtain a high level of performance

Education, Experience and Skills Required

- Bachelor degree, ideally in business or engineering disciplines
- 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

Physical Requirements

- In office: walking and standing 20% of the time, seated 75% of the time
- Ability to stand, walk and sit for varied degrees of time associated with travel

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. To apply for the position please send a resume to Chris@redfishtech.com.

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

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, submit to NCPA HR, 651 Commerce Dr., Roseville, CA 95678. Open until filled.

Release of Forseo's "Investor's Guide to Geothermal Energy" (August)

“The Investor’s Guide to Geothermal Energy” provides a comprehensive and market driven insight into all important aspects of geothermal business and project development. It serves as a practical reference tool for the financial community, for stakeholders from the industry, and for novices to geothermal energy.

Each project stage, from site identification, exploration, site development, power plant construction to operation and maintenance is looked at from an investor’s point of view, including capital costs & cost affecting factors, financing instruments & incentives, associated risks & risk mitigation tools, geoscientific & technology barriers and solutions, and investment opportunities and market drivers.

Recognized experts and leading geothermal companies are sharing their insight to make this publication the first of its kind. Sterr-Kölln & Partner is the main contributor to the content of the publication. The target groups are investors and lenders, project developers, utilities, consultancies, insurance companies and other market players. The publication is endorsed by the IGA (International Geothermal Association) and SEFI (Sustainable Energy Finance Initiative).

For more information please contact Birgit Eggl at birgit.eggl@forseo.de or visit <http://www.forseo.eu/english/publications/the-investor-s-guide-to-geothermal.html>.

Rio Tinto Alcan and the International Business Leaders Forum, Prize for Sustainability (Responses Due September 12)

Rio Tinto Alcan and the International Business Leaders Forum seek nominations for the Rio Tinto Alcan Prize for Sustainability. The prize recognizes organizations demonstrating a comprehensive approach to addressing, achieving and further advancing economic, environmental and/or social sustainability. First prize is \$1 million. Responses due 9/12/08.

For more info, go to: <http://www.alcanprizeforsustainability.com/intro.php>.

Engineering Manager, Western GeoPower, Inc.

Western GeoPower, Inc. (WGPI) has an immediate opening for a full time Engineering Manager to be located in our Healdsburg, CA office. WGPI is looking for a flexible and entrepreneurial person who can

assist in a variety of tasks to grow WGPI into world class renewable power developer/operator. The ideal candidate will possess 5+ years of technical design, project engineering and operational support in the geothermal power industry. Must have geothermal power and experience working in the Geysers and Salton Sea or similar geothermal field. H2S abatement strategies, steam quality, production/injection systems and plant operations are all a plus.

The Engineering Manager will report to the Operations Manager and be responsible for the following key tasks:

- Technical support for Project Permitting
- Technical oversight of the Detailed Engineering Contract (power plant and gathering system)
- Evaluation of Value Engineering and Technical Betterment Projects
- Technical support for Project Construction issues (technical support for WGP's Construction Manager)
- Technical support for New Development Projects
- Technical support for future Plant Operations, Reporting, Plant Optimization, Environmental Compliance, Safety and Training

*To apply for the position, please send a Word formatted resume to Redfish Technology
Chris@redfishtech.com.*

Requests for Proposals (RFPs)

RFP for Renewable Energy, Arizona Public Service (August 13)

The Arizona Public Service seeks at least 35,000 MWh and up to 1,000,000 MWh from renewable energy resources. Notice of Intent to Bid is due 7/11/08, final proposals due 8/13/08.

*For more info, contact Gordon Samuel at RenewableRFP@aps.com or go to:
<http://www.aps.com/aps/rfp/renewable2008/default.html>.*

RFP for Renewable Energy, Tucson Electric Power Co. and UNS Electric (September 5)

Tucson Electric Power Company and UNS Electric RFP seek up to 150,000 MWh from eligible renewable energy resources and associated credits to meet Arizona's RPS requirements. Responses due 9/5/08.

*For more info, contact Carmine Tilghman at ctilghman@tep.com or go to:
<http://www.uesaz.com/Wholesale/>. (Green Power Network 6/7/08)*

RFP for Energy Frontier Research Centers, U.S. DOE (October 1)

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

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

RFP for Early Stage Clean Energy, New York State Energy Research and Development (October 1)

The New York State Energy Research and Development Authority requests proposals for Early Stage Support for Developers of Renewable and Clean Energy Technologies. Though this initiative, NYSERDA seeks to create sustainable support networks and infrastructure for early stage renewable and clean energy technology companies and entrepreneurs and provide them with critical opportunities to facilitate partnerships and develop or market products. \$5.77 million expected to be available, individual awards NTE \$1.5 million. Responses due 10/1/08.

For more info, contact Judy Jarnefeld at jj1@nyserda.org or go to: <http://www.nyserda.org/Funding/1216pon.asp>. Refer to PON# 1216.

RFP for Renewable Energy Resources, Public Service Company of New Mexico (October 15)

PNM issued a request for proposals (RFP) for renewable energy projects on July 18, 2008. The RFP is seeking multiple proposals for wind, solar, geothermal and bio-fuel energy resources. PNM is seeking renewable energy sources that can be available beginning in 2009 and no later than 2011. A pre-bid conference will be held at the PNM downtown office in Albuquerque and via teleconference on July 30, 2008. RFP Responses due October 15.

All inquiries and other communications relating in any manner to this RFP must be directed in writing, by mail, facsimile or email, to the PNM RFP administrator. The questions and corresponding answers (without identification of the party asking the questions) will be emailed to all parties that have provided a Notification of Intent to Respond (“Notification”) to this RFP. Contact information is provided below.

RFP Administrator
Public Service Company of New Mexico
Alvarado Square MS 1006
Albuquerque, N.M., 87158-0001
Phone: 505-241-4700
Fax: 505-241-2202
Email: renewableRFP@pnm.com

The entire RFP can be found at http://www.pnm.com/rfp/renewables/docs/rfp_renewables.pdf.

RFP for Climate Change and Sustainability Conferences, EPA (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 12/9/08.

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

RFP for Energy Efficiency, Renewable Energy, and Transmission Technologies, DOE (December 31)

This solicitation announcement (DE-PS01-08LG00001) invites the submission of applications for loan guarantees under Title XVII of the Energy Policy Act of 2005, 22 U.S.C. 16511-16514 (“Title XVII”),

from the United States Department of Energy in support of debt financing for projects in the United States that employ energy efficiency, renewable energy, and advanced transmission and distribution technologies that constitute New or Significantly Improved Technologies. This Solicitation is issued in accordance with the terms and conditions of Title XVII and the Final Regulations. All applicants are encouraged to review and become familiar with the requirements of Title XVII and the Final Regulations, the provisions of which govern this Solicitation; copies of these authorities may be found at <http://www.lgprogram.energy.gov/>.

DOE will make no more than \$10 billion in loan guarantee authority available under this Solicitation for projects employing energy efficiency, renewable energy and advanced transmission and distribution technologies that constitute New or Significantly Improved Technologies. The Department's authority to issue this amount of loan guarantees was provided by the Consolidated Appropriations Act, 2008, P.L. No. 110-161 (the "FY08 Appropriations Act"). Under the terms of the FY08 Appropriations Act, the availability of this loan guarantee authority expires on September 30, 2009.

Project Types

DOE is actively promoting projects that fall within the following three general but distinct project type categories: (1) manufacturing projects, (2) stand-alone projects, and (3) large-scale integration projects that may combine multiple eligible renewable energy, energy efficiency and transmission technologies in accordance with a staged development scheme. The applicant is requested to specify which, if any, of the below project types and technology categories most accurately represents its project:

Technology Categories

DOE will consider projects derived from the list of technology categories identified below and which fall within one of the three distinct project types described above. Attachment E provides an illustrative list of technologies potentially constituting New or Significantly Improved Technologies that fall within each of these technology categories.

Category 1: Alternative Fuel Vehicles

Category 2: Biomass

Category 3: Efficient Electricity Transmission, Distribution and Storage

Category 4: Energy Efficient Building Technologies and Applications

Category 5: Geothermal

Category 6: Hydrogen and Fuel Cell Technologies

Category 7: Energy Efficiency Projects

Category 8: Solar

Category 9: Wind and Hydropower

To the extent an applicant has questions relating to the application process at any time prior to submission of its application to DOE, the applicant may set forth its question in an email to the LGPO at lgprogram@hq.doe.gov. Please include in the subject line "RETDEE Solicitation Question." Completed applications must be submitted to DOE electronically through the Fed Connect website located at www.fedconnect.net no later than 11:59 pm (ET) on Wednesday, December 31, 2008.

The full announcement can be found at <http://www.lgprogram.energy.gov/keydocs.html>.

Upcoming Events

Geothermal Technologies Workshop, Western Area Power Administration, August 11-12 (Everett, WA)

Western Area Power Administration (Western) is hosting a Geothermal Technologies workshop. The theme is "Electric Utilities' Roles in Promoting Geothermal Energy Technologies." It is cosponsored by the American Public Power Association (APPA), the National Rural Electric Cooperative Association (NRECA), and the Utility Geothermal Working Group (UGWG).

The target audiences for the workshop are utility staff who are interested in learning about geothermal technologies—including geothermal heat pumps (GHP) and geothermal power production—who want to compare them with other resource options, or who want to learn how to improve on existing programs. Through class presentations, case histories, and demonstrations, attendees will learn about:

- Cost effectiveness tests of GHP from the utility and customer perspectives
- Case histories of GHP systems energy savings over conventional HVAC systems
- How GHP programs qualify as energy efficiency programs
- New drilling and installation techniques
- Cost comparisons of geothermal power and other resource options

Georg Shultz the Director, Electric Staff Division for the USDA's Rural Utility Services (RUS), will give an update on the RUS's work with cooperatives on promoting geothermal technologies in rural areas.

Workshop fees are \$90 for one day and \$125 for both days. Reduced fees for APPA, NRECA, NWPPA, and State Working Group members and Western Customers are \$60 and \$90. If you wish to attend, please fill out the registration form and send a check to made payable to Utility Forum Connection to:

Utility Forum Connection
PO Box 255
Lincoln City, OR 97367

Questions? Contact Guy Nelson, energyguy@utilityforum.com or (541) 994-4670.

High Sierra Energy Summit, August 11-15 (Mammoth Lakes, CA)

The 2nd Annual High Sierra Energy Summit, sponsored by the High Sierra Initiative, is a weeklong series of courses focusing on energy efficiency and renewable energy resources. It will take place from August 11-15 at Cerro Coso Community College. Courses will run from 8:30 a.m. to 5:00 p.m. Monday through Friday.

For more information or to register, please visit <http://www.highsierraenergysummit.com/index.html> or contact Rick Phelps at rphelps@highsierraenergy.org or 760-934-4650.

Groundbreaking Ceremony and Press Conference, Raser Technologies, August 18 (Hidalgo County, NM)

This groundbreaking ceremony will mark the beginning of the construction phase of the first commercial geothermal power plant to be built in New Mexico. Governor Bill Richardson, former U.S. Secretary of Energy will attend with other state and county government officials and will be available to discuss New Mexico's efforts to reduce emissions from power production facilities at the press conference and groundbreaking ceremony.

The groundbreaking ceremony is scheduled for August 18, 2008, at the power plant project site in Hidalgo County at 11:00 a.m. local time. Further information on Raser may be found at www.rasertech.com.

National Clean Energy Summit, August 19 (Las Vegas, NV)

Join President Bill Clinton, New York City Mayor Michael Bloomberg, Nevada Senator Harry Reid, and Financier T. Boone Pickens at the National Clean Energy Summit.

For more information, please contact Ken Pierson, Director of Business Development at 800-336-1600 or kpierson@bizopp.state.nv.us

www.cleanenergysummit.org

Opportunities at the Intersection of the Oil and Gas Industry with Geothermal Energy in the U.S., Executive Management Roundtable, August 25 (Houston, TX)

Opportunities at the Intersection of the Oil and Gas Industry with Geothermal Energy in the U.S. will be a roundtable discussion with executive managers from DOE, DOI, the oil & gas, service, and geothermal industries. Seating will be at round tables. There will be a working lunch. The audience will be a roundtable of executive managers from DOE, DOI, the oil & gas, service, and geothermal industries. The event will be held from 8:00 am to 3:30 pm at the University of Houston: University Center, Bluebonnet Room (#250), 4800 Calhoun Road, Houston, Texas 77004

Confirmed Speakers:

- DOE: Assistant Secretary Karsner, Ed Wall
- Non DOE: Assistant Secretary Allred DOI; Don Paul, President, Energy and Technology Strategies LLC

Invited Speakers:

- DOE: Assistant Secretary Slutz
- Non DOE: Deputy Assistant Secretary Olsen, DOI; Colin Williams, USGS; Scott Tinker, Director of the Bureau of Economic Geology and State Geologist of Texas; Greg Vesey, President of Global Power, Chevron

8:00 Registration

8:30 Welcome and Framing of the Opportunity: Assistant Secretary Karsner, DOE EERE; Assistant Secretary Allred, DOI; Deputy Assistant Secretary Slutz, DOE FE

9:30 Review of the DOE Geothermal Programs: E. Wall, DOE, Geothermal Program Manager (EISA 2007 and program structure; Current RD&D activities by the Department)

10:15 Break

10:30 Review of Geothermal Resource Base: Current USGS geothermal resources assessment and ongoing activities; Potential connection to O&G leases and operations: Deputy Assistant Secretary M. Olsen, DOI; View from the perspective of the States

11:15 Review of the Geothermal Business Today: Global industry overview; View from the geothermal technology and service industry; Geothermal energy as a business for O&G companies

12:15 Framing the Business Opportunities for Intersection/Working Lunch: D. Paul, President, Energy and Technology Strategies LLC
(Elements of the business model; Opportunities for O&G field co-generation; Connection to carbon management; Technology leverage)

1:15 Facilitated Roundtable Discussion: D. Paul

2:45 Break

3:00 Defining the Next Steps for DOE and Industry: E. Wall, DOE (Input mechanisms for DOE programs and solicitations; Pathways for individual company engagement; Working groups of interest?)

3:30 Adjourn

International Geothermal Workshop, August 27–28 (Reykjavik, Iceland)

From DOE:

On August 27–28, 2008, the U.S. government, along with Australia and Iceland, will be holding a workshop in Reykjavik, Iceland to discuss potential areas of international collaboration on geothermal energy, specifically focusing on EGS and deep drilling. The workshop will include participation from government, industry, academia and others. Alongside this conference, Australia, Iceland and the U.S. will also be establishing an International Partnership for Geothermal Technology (IPGT).

The members of the IPGT are holding the workshop to bring together the major geothermal players from each participating country to ensure that our efforts are focused on relevant issues central to accelerating geothermal technology development and deployment. We envision the ongoing international dialog between government, industry, academia and others supported by this partnership to facilitate the research and development necessary to accelerate the deployment of enhanced geothermal systems (EGS) worldwide.

If you have any questions, Elizabeth Beckert can provide additional details about the workshop. She can be reached by phone at 202-586-6912 or email at elizabeth.beckert@ee.doe.gov.

Renewable Energy Philippines 2008, August 28–30 (Manila, Philippines)

This is the First International Exhibition & Conference on Renewable Energy in the Philippines.

Renewable energy is getting more and more attention because of global warming. Renewable Energy Philippines 2008 is a link to enable the U.S. Renewable Energy providers, manufacturers, and researchers to go overseas and encourage other countries to invest in environment friendly energy sources.

Asian Development Bank & World Bank will speak on Future Carbon Fund, Carbon Finance Program, and support of CDM Projects.

August 28–30, Hall 3, SMX Convention Center
Metro Manila, Philippines

The exhibition provides a one-stop B2B and technology exchange platform for equipment manufacturers and suppliers, project operators, financing institutions, oil & gas producing companies, state-owned companies and relevant Government Agencies to meet and do business under one roof and venue. Exhibition profile includes all equipment, technology applications and projects available for investment in alternative fuels, gas energy, geothermal energy, hydro energy, ocean energy, solar energy, wind energy, and others.

Contacts:

- o TDC Events International Inc., 1504 Francisco Street Berkeley, CA 94703
- o USA Contact: Maria Gomez, Tel: +1 305 4365751, Fax: +1 305 4365352, Cel: +1 305 7722549, e-mail: maria@andinalink.com
- o Latin America Contact: Andrea Valencia, Tel: +571 4821717, Fax: +571 3128782, e-mail: andrea@andinalink.com
- o Web site: www.dp-link.com

Geothermal Heating and Cooling Seminars, September 8–11 (Washington, D.C.)

HeatSpring Energy holds geothermal seminars for building professionals and will be hosting seminars in Washington, DC in September.

Geothermal Heating and Cooling Systems

Location TBA

Washington, DC

September 8 - Introduction to Geothermal Systems (8 hours)

September 9 - Design Overview (Residential focus) (8 hours)

September 10 - Commercial Closed Loop Design (8 hours)

September 11 - Commercial Open Loop Design (8 hours)

https://www.heatspring.com/catalog_.php

Brita Climate Ride, September 20–24 (New York to D.C.)

Seeking participants from all sectors of renewable energy.

On the eve of the elections, one hundred Climate Riders will cycle from New York City to Washington DC to make a powerful statement about the need for renewable energy legislation and climate change awareness.

Join fellow Climate Riders for a beautiful ride that begins in the urban landscape of Manhattan, then meanders through rural New Jersey, Pennsylvania, and the equine estates of Maryland to the ride finale in Washington, DC. Along the way, expert speakers meet our cyclists each evening to discuss climate science, green technology, and how to reduce our carbon footprint. Meet people committed to resolving the climate crisis, make your voice heard, and benefit an important cause—all on an unforgettable vacation!

To learn more about Climate Ride and our beneficiaries, visit www.ClimateRide.org, or email info@climateride.org.

GEA Geothermal Issues and Outlook Workshop, October 4 (Reno, NV)

GEA in cooperation with GRC is planning a day-long workshop on October 4 examining the key issues and policies that will affect geothermal energy in future years. Experts and panel presentations are being planned on:

- Transmission Initiatives and Policies
- State and Federal Tax Incentives
- Climate Change Legislation
- Leasing and Permitting
- Research/Technology Developments
- State RPS Legislation and Regulations
- Geothermal Resource Assessment

A complete agenda is expected to be announced in the coming weeks. For more information contact Karl Gawell at 202-454-5264 or by email at karl@geo-energy.org.

GEA Trade Show/GRC Annual Meeting, October 5–8 (Reno, NV)

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

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

NZ Geothermal Workshop & NZGA Seminar 2008, November 11-13 (Taupo, New Zealand)

The NZ Geothermal Workshop will be held November 11-12 and the New Zealand Geothermal Association Seminar 2008 will be held on November 13. Both events will take place at the Great Lake Centre in Taupo, New Zealand.

The events mark the 30th anniversary of the Geothermal Workshop, which is New Zealand's longest running energy conference. This year's workshop will celebrate New Zealand's people and past achievements as well as the exciting future of geothermal energy use around the world. Particular focus will be on New Zealand's contributions to the research, education, and development of geothermal energy.

NZ Geothermal is calling for papers related to the history of achievement and the future potential of geothermal energy as well as paper on all aspects on Wairakei. The paper deadline is August 25 and must be submitted via email to geothermal08@auckland.ac.nz.

Workshop registration began June 1 and online registration will continue until November 4. Discounted rates will be available until early registration closes on October 12.

For more information or to register, please visit <http://www.nzgeothermal08.com/nzgeothermal/index.cfm>.

XVI Annual Congress of the Mexican Geothermal Association, November 14 (Morelia, Mexico)

The XVI Annual Congress of the Mexican Geothermal Association (AGM: Asociación Geotérmica Mexicana) will take place in the city of Morelia, Mexico, on November 14.

The AGM is calling for papers related to geothermics. Please send abstracts to Luis Gutiérrez-Negrín (luis.gutierrez@geotermia.org.mx) before July 25. Ten to twelve papers will be selected for oral presentation during the congress. Papers and presentations can be in Spanish or English.

The AGM is the Mexican association affiliated to the International Geothermal Association (IGA) It holds an annual technical congress and a general assembly, restricted to its membership, usually in a city of Mexico related to geothermics. The events are cosponsored by the geothermal division of the Comisión Federal de Electricidad, whose headquarters is in Morelia.

For more information, please visit the AGM Web site (<http://www.geotermia.org.mx>), and/or send a message to Luis Gutiérrez-Negrín.

Utah Geothermal Lease Sale, BLM, November 18

The Utah State Office has scheduled a proposed competitive geothermal lease sale. The proposed sale will be held in conjunction with the oil and gas lease sale on November 18, 2008.

If you have questions regarding this notice, please call Judy Nordstrom at 801-539-4108; facsimile at 801-539-4200; write to attention at the address on this letterhead; or send electronic mail to judy_nordstrom@blm.gov.

More information available at <http://www.blm.gov/ut/st/en/prog/energy/geothermal0.html>.

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.

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.

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

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

Contributions

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

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

Canadian Geothermal Energy Association Conference and AGM, April 16–17, 2009, (Vancouver, B.C.)

The Canadian Geothermal Energy Association (CanGEA) announces their Conference and AGM on April 16–17, 2009 in Vancouver, B.C.

CanGEA's also announces its corporate members website is up and running. Corporate members have access to job postings, committee information (progress, research), presentations, and business opportunities (international JVs, work up for bid, or other geothermal prospects).

Updated library of links and pdfs of Canadian geothermal research papers and documents (from multiple resources), reserves (geothermal energy potential, estimates for Canada), and online advertising opportunities will soon be available.

Visit the Web site for information: <http://www.cangea.ca/>.



GEA Update

A newsletter for GEA Members written by Leslie Blodgett and Karl Gawell.
For more information contact GEA at: 209 Pennsylvania Avenue SE, Washington, D.C.
20003. Phone: 202-454-5261; Fax: 202-454-5265; E-mail: research@geo-energy.org