



**This Week  
May 19, 2010**

**National News..... 3**

- Kerry, Lieberman Announce Comprehensive Energy Strategy ..... 3
- Geothermal Energy: International Market Update 2010 to be Unveiled at Geothermal Energy Association Global Geothermal Showcase and Forum in Washington, D.C. .... 4
- BLM Nevada Geothermal Lease Sale Results Posted ..... 5
- Murkowski EPA Disapproval Resolution Likely to Come to Vote ..... 5
- Senators Urge Appropriations Committee to Boost DOE Geothermal Funding to \$105 million in FY 2011 ..... 6

**Company News..... 6**

- Nevada Geothermal Power: Record Power Production at Faulkner 1; Financing Update ..... 6
- Ram Power: 2010 First Quarter Results Announced..... 7
- Raser Technologies: First Quarter Update and Financial Results Announced ..... 7
- Sierra Geothermal: Merger Likely, Says Chief Executive..... 8

**Renewable Energy and Climate Change..... 8**

- Berkeley Lab Releases Preliminary Evaluation of Recovery Act Grant Program ..... 8
- Bingaman Proposes Renewable Energy Manufacturing Credits as Part of Tax Code ..... 8
- U.S. Electrical Generation from Renewable Sources Continues to Rise ..... 9

**State News ..... 9**

- California: REAT Agreement Will Aid Proposed Renewable Energy Projects ..... 9
- California: PUC Approves 20-Year Geothermal Contract ..... 10
- California: Imperial County Geothermal Project Construction to Begin..... 10

**International News ..... 10**

- Australia: A\$652 Million Renewable Energy Fund Planned ..... 10
- Australia: Geelong Locals Suggest Alternate Project Site..... 10
- Chile: Fifteen Areas for Geothermal Exploration to be Auctioned ..... 10
- Chile: Magma Energy Gains Permit for 50-MW Maule Plant ..... 11
- Chile: U.S.-New Zealand Partnership Considering Geothermal Station ..... 11
- Nevis: Minister Emphasizes Need for Renewable Energy Support in Caribbean ..... 11
- New Zealand: Station Near Taupo Given Go-Ahead; to be Completed in 2013 ..... 11
- Philippines: Geothermal Firms in Talks for Exploration Farm-In Deal..... 12

**Notices ..... 12**

- New This Week ..... 12
- Geothermal Power Plant Technician Program in Iceland ..... 12
- California Transmission Planning Group Releases Phase 2 Study Plan..... 12
- Íslandsbanki's Releases Iceland Geothermal Market Report ..... 13

Notices ..... 13  
 BLM Seeks Comments on Geothermal Lease Applications North of Magic Reservoir (June 3)..... 13  
 Award-Winning *Energy for Keeps* Introduces Expanded 3<sup>rd</sup> Edition..... 14  
 BLM Seeking Public Comments on Nevada Geothermal Exploration Proposal..... 14  
 The Department of Energy Wants to Hear Your Stories ..... 14  
 DOE Geothermal Technologies Database Available On-Line ..... 14

**Employment..... 15**

Added This Week..... 15  
 Geologist, Ormat Technologies, El Centro, CA..... 15  
 Staff Geologist, Ormat Technologies, Reno, NV..... 15  
 Employment Opportunities..... 16  
 Geophysicist, Calpine, The Geysers, California..... 16  
 Program Manager, Office of Geothermal Technologies, U.S. DOE, Washington, DC (June 1) ..... 17  
 Project Engineer, Magma Energy, Reno, Nevada ..... 18  
 Geothermal Operations Manager, CalEnergy Operating Corporation, Calipatria, CA..... 19  
 Environmental & Permitting Manager, Raser Technologies, Provo, UT ..... 20  
 Renewable Energy Mechanical/Systems Engineer, Idaho International Laboratory ..... 21  
 Project Specialist, SMU Geothermal Laboratory..... 22  
 Project Manager ..... 22  
 Development Engineer ..... 23  
 Project Manager Geothermal Exploration, Europe ..... 24  
 Senior Director, Business Development, Major Geothermal Company ..... 24  
 Geothermal Project Supervisor, Central American Bank for Economic Integration, Costa Rica..... 25

**Requests for Proposals..... 25**

Closing This Week ..... 25  
 Geothermal Advanced Project Development Grant, Colorado (May 24) ..... 25  
 Climate Change Education, NSF (May 24) ..... 25  
 Added This Week..... 26  
 Department of Energy Announces \$20 Million to Boost Development of Innovative Geothermal Technologies (July 9)..... 26  
 State PUCs and Energy Efficiency, DOE (June 7)..... 26  
 Efficiency and Renewables in Rural America, DOA (June 30) ..... 26  
 Manufacturing Innovations, DOC (July 15) ..... 27  
 RFP Announcements..... 27  
 State Energy Program, U.S. DOE (May 18 — August 3)..... 27  
 Climate Adaptation and Disaster Resilience – Indonesia (July 26) ..... 27  
 Greenhouse Gas Mitigation, Indonesia (September 15)..... 27  
 U.S. DOE Office of Science (September 30) ..... 27  
 Power, Controls and Adaptive Networks, NSF (October 7) ..... 27

**Events..... 28**

Happening This Week..... 28  
 Project Peer Review, DOE Geothermal Technologies Program, Crystal City, VA (May 18–20)..... 28  
 GEA Global Geothermal Showcase and Forum, Washington, DC (May 21)..... 28  
 Clean Energy and Business Development Mission, U.S. Department of Commerce, Indonesia (May 23–25)29  
 Added This Week..... 30  
 Colorado Geothermal Working Group Annual Meeting (May 27) ..... 30  
 GEA Events..... 30  
 13<sup>th</sup> Annual Congressional Renewable Energy + Efficiency EXPO + Forum, Sustainable Energy Coalition, Washington, DC (May 27) ..... 30  
 GEA Geothermal Energy Workshop, Las Vegas, NV (July 22) ..... 30  
 GEA Geothermal Energy Expo and GRC Annual Meeting, Sacramento, CA (October 24-27)..... 30  
 Why Should You Attend GEA Events? ..... 31  
 Other Events ..... 31  
 Policy Event – Breakfast on Parliament Hill, CanGEA, Ottawa, ON (June 17) ..... 31

CanGEA's Third Annual Conference & Trade Show, CanGEA, Vancouver, BC, (August 9 & 10).....	31
Geothermal Investment Forum and Networking Event, CanGEA, Toronto, ON, (September 14).....	31
Geothermal Investment Forum and Networking Event, CanGEA, Calgary, AB (December 3) .....	31



<http://www.geo-energy.org/updates.aspx>



## **National News**

### **Kerry, Lieberman Announce Comprehensive Energy Strategy**

In the climate bill unveiled last week by U.S. Senators John Kerry (D-MA) and Joseph Lieberman (I-CT), a reduction in greenhouse emissions is targeted at 17% below 2005 by 2020 and 80% by 2050. "The American Power Act will finally change our nation's energy policy from a national weakness into a national strength," Kerry said in a statement. "This is a bill for energy independence after a devastating oil spill, a bill to hold polluters accountable, a bill for billions of dollars to create the next generation of jobs and a bill to end America's addiction to foreign oil and protect the air our children breathe and the water they drink."

The details include auctioning off 25% of emission allowances early on, with the remaining 75% distributed free to a variety of entities such as electricity local distribution companies. From 2013 until 2015, 51% of credits go to local distribution companies that service electric utilities. By 2035, 100% of emission allowances will be auctioned, with the revenues directed back to consumers.

Nevada Senator Harry Reid responded that clean energy legislation introduced by Senators Kerry and Lieberman would improve national security, create Nevada jobs, and reduce pollution.

"I applaud the efforts of Senators Kerry and Lieberman to develop a proposal that deserves careful consideration by all Senators and the public," Reid said in a statement. "The recent oil spill in the Gulf of Mexico demonstrates the urgent need to free our nation from its heavy dependence on oil and to create new clean energy industries and technologies.

"All Americans would benefit from a comprehensive national energy plan that creates millions of clean energy jobs, improves our national security and reduces pollution. Already in Nevada, we have seen how critical investments in solar, geothermal and wind energy, as well as in energy efficiency, create reliable jobs that can never be outsourced and diversifies our state's economy.

"As I work with Senators Kerry and Lieberman, the relevant committee chairs and the White House to move this process forward, I welcome the ideas of my colleagues to strengthen this proposal. To be successful we will need significant bipartisan cooperation, and I am hopeful Republicans will join us in working to further develop this bill so that it has broad support and can pass this year."

See <http://www.nytimes.com/cwire/2010/05/14/14climatewire-kerry-lieberman-bill-uses-fewer-buckets-in-g-61970.html>, <http://democrats.senate.gov/journal/entry.cfm?id=324875&>,

## Geothermal Energy: International Market Update 2010 to be Unveiled at Geothermal Energy Association Global Geothermal Showcase and Forum in Washington, D.C.

Press Release, May 10 – Leading developers, researchers and policy makers from the U.S. and abroad will convene on Friday, May 21, at The Ronald Reagan Building and International Trade Center in Washington, D.C. for the Geothermal Energy Association (GEA) Global Geothermal Showcase and Forum. A major highlight for this year's event will be the release of the GEA's *Geothermal Energy: International Market Update 2010*, a comprehensive study detailing the state of the geothermal industry around the world.

"The geothermal energy industry is a key player in today's global market, and this is a very exciting time for geothermal as we watch exponential growth throughout the industry," said GEA Executive Director Karl Gawell. "This conference explores how good business and policy have driven the industry's growth and how support for long-term and robust funding of DOE's geothermal technologies program, as well as a 6-year extension of geothermal tax credits, will continue that progress for years to come."

Slated for release at the conference, GEA's *Geothermal Energy: International Market Update 2010* will offer an international context for industry growth, will point to key players and policies in the global scene, and will explore how the industry can continue on its current trajectory. Data released during the recent World Geothermal Congress in Bali, Indonesia showed the United States continues to lead the world in geothermal power production, with over 3,000 MW produced; enough baseload energy to power 750,000 homes or a city the size of Washington, D.C. GEA's recent U.S. Geothermal Industry Update showed 26% growth in U.S. geothermal development over 2009 and detailed the growth of the industry across the country. Geothermal power was strong in traditional states such as Nevada and California, but has begun pushing into new areas including Texas and the Gulf Coast region.

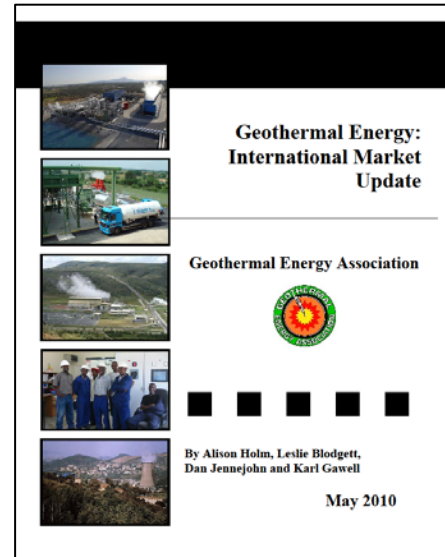
The forum agenda features discussions on the current state of U.S. and global geothermal markets, showcases of projects under development in the U.S. and abroad, and trends in the U.S. and global geothermal industry. Other topics to be covered include national and international policies to support geothermal development, the global potential for geothermal energy, and technology developments.

Organizations and companies will be on hand to discuss the latest in innovation. Tabletop exhibitors include: U.S. Department of Commerce, U.S. Department of Energy, Pratt & Whitney Power Systems, Potter Drilling, Energent Corporation and Perma Works.

The Forum and Showcase is sponsored by Gold Level Sponsor Pratt & Whitney Power Systems (PWPS). PWPS markets the PureCycle® system that can harness heat in the form of hot water from many different sources such as geothermal or oil & gas co-produced fluids, reciprocating engines, and industrial waste heat to generate clean and reliable electricity. PWPS also offers the international Turboden line of ORC products in the range from 400 kW to about 2.2 MW for biomass and waste heat applications. PWPS provides comprehensive maintenance, extended service contracts, and 24/7/365 remote monitoring services.

"Advancing geothermal technology and establishing energy policy that helps promote development of geothermal and other renewable power projects is important as the United States looks for additional green sources of energy," Peter Christman, president of Pratt & Whitney Power Systems, said. "That is why Pratt & Whitney Power Systems is happy to sponsor the Geothermal Energy Association's Global Geothermal Showcase and Forum."

Scheduled speakers include: Karl Gawell, Executive Director, Geothermal Energy Association; Charles Baron, Geothermal Program Lead, Climate and Energy Team, Google.org; Toni Volpe, President of Enel North America,



James M. Kiiru, Commercial Attache, Embassy of the Republic of Kenya, Magnus Gehringer, Senior Energy Specialist, The World Bank, Chris Miller, Senior Advisor to Senator Harry Reid, and more.

*For media credentials, please contact Garret Drexler at 646-695-7042 or [garret@rosengrouppr.com](mailto:garret@rosengrouppr.com).*

*For more information, including the draft agenda, visit:*

[http://www.geoenergy.org/workshops/workshop\\_may21.aspx](http://www.geoenergy.org/workshops/workshop_may21.aspx)

## **BLM Nevada Geothermal Lease Sale Results Posted**

The May 11 Nevada Bureau of Land Management geothermal lease sale in Reno generated \$2.76 million in bids for 84 parcels, for a combined 210,000 acres. Half of geothermal lease revenues will go to Nevada, the other half to the U.S. Treasury and a reclamation fund.

This was only a portion of the 114 parcels offered for auction. Atanda Clark, branch chief for minerals adjudication with the BLM Nevada told press this could be due to the amount of land already leased in previous sales. "We have a lot of acres out there (being leased) already," Clark said. "We have about 1.7 million acres already leased."

Winning bids ranged from \$2 per acre to a high of \$1,000 per acre, which was posted by Magma Energy for a 640-acre parcel in Churchill County.

The royalty rate for geothermal energy produced on the lands is 1.75% for the first 10 years of production followed by 3.5% thereafter. Winning bids serve as a preliminary fee, while the actual rental fee is \$2 per acre for the first year and \$3 thereafter. Beyond 10 years, the annual leasing fee goes up to \$5 per acre.

Results are available at

[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).

See also <http://www.rgj.com/article/20100511/BIZ/100511038/-1/CARSON/BLM-auctions-geothermal-rights-to-hundreds-of-thousands-of-acres-of-Nevada-land-today>.

## **Murkowski EPA Disapproval Resolution Likely to Come to Vote**

The Senate is soon expected to consider S.J. Res. 26, offered by Sen. Lisa Murkowski, R-Alaska, which would disapprove of the Environmental Protection Agency's endangerment and cause or contribute findings regarding greenhouse gas pollutants. In *Massachusetts v. EPA* the Supreme Court ordered EPA to determine whether greenhouse gases could "reasonably be anticipated to endanger public health or welfare" under the Clean Air Act. The findings were signed in December 2009 and became effective January 14, 2010.

The EPA proposed to find that six greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) threaten the public health and welfare of current and future generations; also that the combined emissions of many of these from motor vehicles contribute to concentrations of these greenhouse gases in the atmosphere and to the threat of climate change.

Following the adoption of the findings, EPA and the National Highway Traffic Safety Administration together developed a federal greenhouse gas and fuel economy program, the National Program. One benefit of the program, according to a Democratic Policy Committee Fact Sheet is that it would reduce oil consumption by 1.8 billion barrels and greenhouse gas emissions by 960 million metric tons over the lifetime of motor vehicles regulated under the program. The adoption of the Murkowski resolution would negate the EPA's portion of that program.

According to the Democratic Policy Committee, "Adopting the Murkowski resolution would also be a step backwards for the Senate, which has declared on a bipartisan basis that greenhouse gas accumulation from human activity poses a substantial risk of increased frequency and severity of floods and droughts. A vote to disapprove the endangerment finding would also be viewed by some as a vote which positions the United States behind China on the issue of climate change, and puts the United States more in line with the position of Saudi Arabia."

On releasing the disapproval resolution, Murkowski stated, "Our bipartisan resolution deals with an incredibly important question: whether or not members of this body are comfortable with the actions EPA will take under its

current interpretation of the Clean Air Act. I'm not comfortable with those actions, and neither are the senators who have already agreed to add their names to this effort." She added, "The Clean Air Act was written by Congress to regulate criteria pollutants, not greenhouse gases, and its implementation remains subject to oversight and guidance from elected representatives. We should continue our work to pass meaningful energy and climate legislation, but in the meantime, we cannot turn a blind eye to the EPA's efforts to impose back-door climate regulations with no input from Congress."

See [http://dpc.senate.gov/dpcdoc.cfm?doc\\_name=lb-111-2-66](http://dpc.senate.gov/dpcdoc.cfm?doc_name=lb-111-2-66), [http://dpc.senate.gov/dpcdoc-murkowski\\_dis\\_res\\_doc.cfm?doc\\_name=fs-111-2-65](http://dpc.senate.gov/dpcdoc-murkowski_dis_res_doc.cfm?doc_name=fs-111-2-65), [http://dpc.senate.gov/dpcdoc.cfm?doc\\_name=fs-111-2-76](http://dpc.senate.gov/dpcdoc.cfm?doc_name=fs-111-2-76), and [http://murkowski.senate.gov/public/index.cfm?p=PressReleases&ContentRecord\\_id=7a4b5017-15eb-41ff-922b-6ae3975cbe87&ContentType\\_id=b94acc28-404a-4fc6-b143-a9e15bf92da4&Group\\_id=c01df158-d935-4d7a-895d-f694ddf41624&MonthDisplay=1&YearDisplay=2010](http://murkowski.senate.gov/public/index.cfm?p=PressReleases&ContentRecord_id=7a4b5017-15eb-41ff-922b-6ae3975cbe87&ContentType_id=b94acc28-404a-4fc6-b143-a9e15bf92da4&Group_id=c01df158-d935-4d7a-895d-f694ddf41624&MonthDisplay=1&YearDisplay=2010).

## Senators Urge Appropriations Committee to Boost DOE Geothermal Funding to \$105 million in FY 2011

A letter signed by 11 senators urges the Senate Committee on Appropriations to boost the Department of Energy funding in FY to \$105 million.

"The Geothermal Technologies Program (GTP) seeks to expand the use of geothermal resources and develop advanced technologies to effectively tap this resource throughout the nation," the letter reads. "While the U.S. Geological Survey estimates that US geothermal resources have the potential to produce between 39,000 and 89,000 megawatts of additional electricity using readily available conventional geothermal power technologies, most of these resources remain untapped. Therefore, we believe it is critical that a strong investment also be made for exploration activities, under a cost-share program with industry. We urge you to fund the GTP at \$105 million, with the increase over the Administration's request going towards cost-share exploration programs."

The letter is addressed to Chairman Byron Dorgan and Ranking Member Robert Bennett, and is signed by: Sen. Robert Menendez, Sen. Joseph Lieberman, Sen. Jeanne Shaheen, Sen. Ron Wyden, Sen. Roland Burris, Sen. Daniel Akaka, Sen. Sheldon Whitehouse, Sen. Mark Begich, Sen. Jeff Merkley, Sen. Benjamin Cardin, and Sen. Ted Kaufman.

The House and Senate are expected to take action on the FY 2011 Energy and Water Appropriations bill sometime in the coming months. The Administration requested \$55 million in FY 2011 for geothermal technologies (all specified for Enhanced Geothermal Systems).

See [http://www.stoel.com/files/RenewableEnergyFY11AppropsRequestLetter\\_March262010.pdf](http://www.stoel.com/files/RenewableEnergyFY11AppropsRequestLetter_March262010.pdf) and <http://www.energy.gov/news/8588.htm>.

## Company News



### **Nevada Geothermal Power: Record Power Production at Faulkner 1; Financing Update**

Press Release, May 10 — Nevada Geothermal Power Inc. (TSX.V: NGP, OTCBB: NGLPF) is pleased to provide the following update on its activities.

Blue Mountain, Faulkner 1 Geothermal Plant Output: The Faulkner 1 geothermal plant has been operating continuously since its restart on March 5th. For the period of April 1st to 30th, with cable repairs completed, output averaged approximately 37 MW (net) and plant availability was greater than 98%. Gross revenue generated for the month was approximately US\$2.0 million.

The plant has achieved record electric power production over the past week, with peak outputs exceeding 53MW (gross) and with 41MW (net), enough power to supply 40,000 homes, being delivered to the grid. The increased production was enabled by operational adjustments at the plant.

Construction work (pump installation, pipeline construction, and power line) is underway to connect production well 44-14 which is expected to raise potential plant output by a further 5-7 MW.

Following completion of the well field work in mid-June, NGP will be in a position to apply for a further ITC/cash grant to recover approximately \$7M in costs.

Debt Financing Update: Work continues in earnest by the Company, its lender John Hancock, and the Department of Energy (DOE) on a senior debt financing of up to US\$98M under the DOE's Commercial Technology Loan Guarantee Program.

Other Development Projects: The Company is preparing for production drilling in 2010, final feasibility studies in 2011, and for plant completion by the end of 2013 for the Pumpnickel and Crump Geyser Development Projects to position them for ITC/Cash Grants. At Pumpnickel, prerequisite technical surveys have been completed and three production/injection wells are sited and fully permitted. At Crump Geyser, an aeromagnetic survey has recently been flown to define target structures. Permit applications have been filed for temperature gradient, reservoir confirmation and production wells. Initial well permits are expected shortly.

See <http://www.nevadageothermal.com/s/News.asp>.

### **Ram Power: 2010 First Quarter Results Announced**

Press Release, May 13 — Ram Power, Corp. (TSX: RPG) ("Ram Power" or the "Company"), today reported its financial and operating results for the first quarter ended March 31, 2010. This earnings release should be read in conjunction with Ram Power's MD&A and financial statements, which are available on the Company's website at [www.ram-power.com](http://www.ram-power.com) and have been posted on SEDAR at [www.sedar.com](http://www.sedar.com).

Concurrent with today's release, Hezy Ram, CEO of Ram Power, said, "In keeping with our business plan, the Company is continuing the process of consolidating its operations as a result of the October 2009 business combination. The construction at our San Jacinto-Tizate project proceeds both on budget and on schedule. The Company commenced drilling in Nicaragua and California, entered into new geothermal leases in the United States and began negotiations with relevant parties to accelerate development of some of its properties. We also drew down the first amount under the \$77 million credit facility for the San Jacinto Phase I expansion and have begun the negotiation process for the Phase II expansion's financing."

Mr. Ram continued, "The financial results for the quarter were in line with our expectations, and we continue to make great strides in our Company."

See <http://www.marketwire.com/press-release/Ram-Power-Announces-2010-First-Quarter-Results-TSX-RPG-1259884.htm>.

### **Raser Technologies: First Quarter Update and Financial Results Announced**

Press Release, May 10 — Raser Technologies, Inc. (NYSE: RZ) an energy technology company, today announced financial results for the first quarter 2010, the period ended March 31, 2010.

#### Recent Highlights:

\* Announced that it completed installation of the bottom cycle project at its Thermo No. 1 plant in southern Utah ahead of schedule. Raser anticipates utilizing the bottom cycle process within the next few days; the bottom cycle process re-directs a portion of the geothermal water coming out of the top cycle units and runs it through PureCycle units currently sitting idle allowing additional energy to be utilized from the geothermal water and converted to electricity.

\* Raser has also replaced 18 out of 50 recirculation pumps on the 50 PureCycle units with more efficient pumps, with full replacement of all pumps expected by the end of May 2010. Utilizing the bottom cycle process and the replacement of the 50 recirculation pumps with more efficient pumps should enhance the overall output at the Thermo No. 1 plant to a range of 7-8.5 MW; \$30 million of the grant proceeds the Thermo No. 1 plant received from the U.S. Treasury currently are in an escrow account, which will be used to fund obligations under the amended financing arrangements for the Thermo No. 1 plant. Final test to be completed by June 30, 2010.

\* Engaged a placement agent to monetize the remaining tax benefits from the Thermo No. 1 project with a new tax equity partner, replacing Merrill Lynch who was redeemed out of the project in December of 2009. The tax benefits result primarily from accelerated depreciation Raser is not in a position to fully utilize in the near term.

These proceeds would be in addition to the \$33 million the project received early this year as part of the U.S. Treasury grant program for the benefit of Raser.

\* Released a video update on its relationship with Hyundai Heavy Industries, a global leader in grid-electrical equipment and renewable energy generation equipment. The two companies recently completed meetings to further discussions for greater cooperation in the production of clean, renewable energy and manufacturing of plug-in electric vehicles.

\* Selected Barbour Well, Inc., of Henderson, Nevada to begin drilling in May 2010 on the Lightning Dock, New Mexico project; a drilling rig has been mobilized. The Lightning Dock resource, located in southwest New Mexico, is one of the most studied, undeveloped resources in the country. It is a shallow resource, with primary production expected from depths of less than 3,000 feet and at temperatures between 285 and 310 degrees Fahrenheit. Phase 1 is for 15MW's and Raser has entered into a power purchase agreement with the Salt River Project.

\* Raised approximately \$1.7 million gross proceeds through a Controlled Equity Offerings, or "at-the-market," program announced on April 8, 2010. Raser later terminated the offering on May 10, 2010.

For more, see <http://www.rasertech.com/news>.

### **Sierra Geothermal: Merger Likely, Says Chief Executive**

Sierra Geothermal Power Corp. will likely announce a merger this month, Gary Thompson, Sierra chief executive told press. "Our view is basically a merger is probably the most likely outcome of this," Sierra chief executive Gary Thompson said. "If there was an outright purchase I think that would have been made in the market already," Thompson said in an interview.

See <http://www.vancouversun.com/business/Merger+likely+Sierra+Geothermal/3011879/story.html>.



## **Renewable Energy and Climate Change**

### **Berkeley Lab Releases Preliminary Evaluation of Recovery Act Grant Program**

A new Berkeley Lab report, requested by the Committee on Ways and Means of the U.S. House of Representatives and funded by the DOE, evaluates the first year of the Section 1603 program, considering Recovery Act goals of retaining and creating jobs while also expanding the use of renewable energy. The program enabled qualifying renewable power projects to choose a 30% cash grant in place of either the federal production tax credit (PTC) or investment tax credit (ITC).

As of March 1 the report found that wind power projects overwhelmingly subscribed to the option, receiving 86% of the nearly \$2.6 billion in Section 1603 grants; geothermal had received 6%, solar had received 4.5%, and biomass power 2.8%.

The report also finds that the program reduces dependence on third-party tax equity and that the grant is favored from a renewable project developer's perspective, potentially driving additional renewable capacity additions.

Potential concerns were that grants reward investment rather than performance and the fact that some of the jobs generated may be going overseas, though the majority of jobs supported by the program were estimated to be domestic.

See <http://www.articleant.com/gen/78948-berkeley-lab---s-preliminary-evaluation-of-recovery-act-grant-pr.html> and <http://www.lbl.gov>.

### **Bingaman Proposes Renewable Energy Manufacturing Credits as Part of Tax Code**

Sen. Jeff Bingaman (D-N.M.) proposes to extend the manufacturing tax credit for renewable energy technologies, created last year to allow companies a tax credit for 30% of the cost of creating, expanding, or reequipping facilities. Bingaman's proposal would make the tax credit permanent. Likewise, the Senate climate bill introduced last week also includes reauthorizing the tax credit for up to \$5 billion.

"It's worth considering making this a permanent part of the tax code," said Bingaman spokesman Bill Wicker.

"They're going to look at where the U.S. stands in the rankings of green tech compared to the rest of the world, why we're there, and how do we change that."

See <http://www.eenews.net/EEDaily/2010/05/17/6/>.

## U.S. Electrical Generation from Renewable Sources Continues to Rise

From Sustainable Energy Coalition/SUN DAY Campaign: The latest edition of EIA's "Electric Power Monthly," which provides data through February 28, 2010, reveals continued growth of renewable energy sources (i.e., biomass, geothermal, solar, water, wind) in the nation's electrical generation mix. For the first two months of 2010, conventional hydropower produced 42,519 thousand megawatt-hours; by comparison for the same periods in 2009 and 2008, conventional hydropower provided 41,716 thousand megawatt-hours and 39,568 thousand megawatt-hours respectively. Similarly, non-hydro renewables generated 22,959 thousand megawatt-hours during January and February 2010 combined, compared with 22,891 thousand megawatt-hours for the first two months of 2009 and 19,600 thousand megawatt-hours in January-February 2008. Overall, renewable sources accounted for 9.64% of electrical generation during the first two months of 2010 (6.26% from hydropower and 3.38% from non-hydro sources).

See [http://www.eia.doe.gov/cneaf/electricity/epm/epm\\_sum.html](http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html).

## State News

### California: REAT Agreement Will Aid Proposed Renewable Energy Projects

Press Release, May 19 — The joint Federal and State Renewable Energy Action Team (REAT) announced today the signing of an agreement to enable renewable energy projects proposed in the California Desert to address mitigation requirements through the use of a deposit account rather than having to individually undertake mitigation for each project.

The necessary amount of funds to mitigate a project's impacts to wildlife and habitat will be determined project by project. This process will expedite the projects and ensure that a wider range of mitigation measures can be used to address environmental impacts.

The REAT is comprised of representatives of the Fish and Wildlife Service, Bureau of Land Management, California Department of Fish and Game, and the California Energy Commission.

The REAT account will be managed by the National Fish and Wildlife Foundation (NFWF). The NFWF is a non-profit organization established by the U.S. Congress in 1984, with the mission of sustaining, restoring, and enhancing the nation's fish, wildlife, plants, and habitats. Dispersal of the funds to implement mitigation will then be made by NFWF based on what specific mitigation actions a REAT agency determines is appropriate.

"This is another tool we can use to help renewable energy projects while ensuring mitigation of impacts is both efficient and effective," said Jim Abbott, California State Director of the Bureau of Land Management.

Funds from individual energy projects that are deposited to the REAT account can be pooled in order to acquire contiguous blocks of quality wildlife habitat that will provide for wildlife connectivity and climate change adaptation. Funds can also be used to improve existing management programs or develop new beneficial management programs for existing conserved lands.

Although the REAT account is limited to the Mojave and Colorado Desert regions of southern California, this type of agreement could be established in other parts of the country where renewable energy projects are being proposed.

The REAT was created by a Governor's Executive Order and a Memorandum by Interior Secretary Ken Salazar. This effort supports both the Governor's and the Secretary's goals of creating green jobs, reducing dependence on foreign energy sources, and meeting aggressive green house gas reduction goals.

For more information about renewable energy in California, including Questions and Answers about the REAT account, go to <http://www.energy.ca.gov/renewables/index.html>

## California: PUC Approves 20-Year Geothermal Contract

The California Public Utilities Commission approved a 20-year geothermal energy contract for Southern California Edison. The site is planned to come on line in 2013 in Imperial County and will be operated by Ram Power and Orita Geothermal. It is expected to have an initial capacity of 50 MW which could then be expanded to 100 MW. The PUC additionally authorized two similar contracts for Edison for future projects.

See <http://www.labusinessjournal.com/news/2010/may/07/puc-approves-geothermal-contract/>.

## California: Imperial County Geothermal Project Construction to Begin

Catalyst Renewables and partners are ready to begin construction on the Hudson Ranch 1 geothermal plant in Imperial County, Congressman Bob Filner announced. Congressman Filner helped to secure \$105,000,000 in federal stimulus funds for the geothermal plant. Construction is expected to last 21 months and to create 125 full-time jobs, with operations planned to begin by the end of 2011.

"This project is critical to economic development in Imperial County and I'm glad I could help make sure they got the funds they needed to move forward," Filner told press. "Not only will this bring jobs to the region, it will serve as an example of how we can create energy without sacrificing the environment."

See [http://www.imperialvalleynews.com/index.php?option=com\\_content&task=view&id=7181&Itemid=2](http://www.imperialvalleynews.com/index.php?option=com_content&task=view&id=7181&Itemid=2).



## International News

### Australia: A\$652 Million Renewable Energy Fund Planned

Australia will create an A\$ 652 million (US\$ 588 million) fund to develop renewable energy, according to businessweek.com. Earlier in the year, a plan to cut carbon output by 5% was blocked in the upper house Senate.

"We will roll out the most substantial renewable energy plan this country has seen," Treasurer Wayne Swan said in his budget speech today. "This government accepts the science of climate change and the need for combined global and domestic action."

See <http://www.businessweek.com/news/2010-05-11/australia-to-establish-a-652-million-fund-for-renewable-energy.html>.

### Australia: Geelong Locals Suggest Alternate Project Site

Residents of Gherang, the locations of a geothermal project in beginning exploration stages, said the project would be better suited to Gheringhap, northwest of Geelong, according to [www.geelongadvertiser.com.au](http://www.geelongadvertiser.com.au). Greenerth Energy was awarded \$12 million in Federal and State Government grants to pursue the project; the company plans to begin explorations in the Gherang area in August, and eventually a 12-MW plant would be constructed.

"There is an alternate site at Gheringhap and it was discussed on Greenerth Energy's own website," according to Daniel Briggs, an outspoken critic of the project. "At a glance you can see the hotspot is Gheringhap. Compared to here, it's the perfect spot and makes much more commercial sense. The issue here is not about pushing this project onto other areas, it's about Gherang being an unsuitable site because of its rare and endangered flora and fauna," Briggs said.

See [http://www.geelongadvertiser.com.au/article/2010/05/12/172725\\_news.html](http://www.geelongadvertiser.com.au/article/2010/05/12/172725_news.html).

### Chile: Fifteen Areas for Geothermal Exploration to be Auctioned

Chile's Energy Ministry will auction 15 licenses to companies for geothermal energy exploration. The bidders are expected to spend over \$81 million on geothermal exploration. Additional areas are planned to be auctioned later this year, the Ministry told press.

See <http://www.bloomberg.com/apps/news?sid=a135AdJPsEpU&pid=20601087>.

\*Chile

## Chile: Magma Energy Gains Permit for 50-MW Maule Plant

Chile has issued a geothermal exploitation permit to Magma Energy to develop a 50-MW plant on Laguna de Maule. Drilling in 2009 showed temperatures above 200°C at approximately 650 m. Magma is now drilling the second of five slim hole wells in the Mariposa Reservoir, all expected to be completed by December.

"This geothermal exploitation permit will enable us to proceed directly to construction of our operating plant once we complete our drilling program and studies on detailed capital and operating costs and environmental impacts," Catherine Hickson, Magma's chief geologist and vice president of exploration told press. "I look forward to seeing continuing positive results at Maule in the months ahead."

See <http://www.rechargenews.com/energy/geothermal/article214118.ece>.

## Chile: U.S.-New Zealand Partnership Considering Geothermal Station

New Zealand's state-owned Mighty River Power, with U.S. partner GeoGlobal Energy is considering a geothermal station in Chile. GGE has already been granted a commercial extraction permit for the Tolhuaca site, with an estimated 55 MW to 75 MW potential. The project would take three years from start to finish. GGE has four other permits to explore in the region at Alitar and has been approved for a permit at Puchuldiza in the north.

MRP chief executive Doug Heffernan said the government supported the investment. "If you talk to any of these guys that work in geothermal on the reservoir side, they just go around the world wherever the good projects are. So we want to have projects that are going to be exciting to young kids that are going through university and think: 'I want to be in geothermal'," Heffernan said. One report said Chile intends to develop as much as 2000 MW in the next 10 years.

See <http://www.stuff.co.nz/business/industries/3674333/Mighty-River-gets-hot-in-Chile>.

## Nevis: Minister Emphasizes Need for Renewable Energy Support in Caribbean

Hon. Carlisle Powell, Natural Resources and Public Utilities Minister in the Nevis Island Administration (NIA), spoke recently in Berlin to representatives from Latin America and the Caribbean and the European Union regarding the need for support in renewable energy development.

Regarding geothermal energy development, Mr. Powell said, "Imagine one Caribbean interconnected with renewable energy produced cheaply in one state (Nevis) transported to high demand areas. In my small island of Nevis, at peak we use only 9 MW of power. It is estimated that we may have as much as 900 MW of geothermal power that can be harnessed. That is enough to export to the neighboring islands so all of us can enjoy cheaper energy, lower our carbon footprint, reduce our drain on foreign exchange and have extra funds from the avoided costs for other government programs," he said.

Mr. Powell encouraged small island leaders to become more proactive. "Unfortunately, we only seem prepared to act when the price of oil rises; when the price falls our search to find alternate cheap sources of energy also falls. Let us remain focused on the urgent need to reduce our dependence on foreign oil," he said.

See <http://www.sknevibes.com/News/NewsDetails.cfm/14122>.

## New Zealand: Station Near Taupo Given Go-Ahead; to be Completed in 2013

Mighty River announced it has been granted permission for a NZ\$ 400m (US\$ 287m) geothermal power station near Taupo. The 110-MW project is a joint venture with the Tauhara North No.2 Trust and is expected to be completed by winter 2013.

Doug Heffernan, chief executive of Mighty River Power said, "Once commissioned in 2013, Ngatamariki will take us – in partnership with our Maori Land Trust partners – close to operating 500 MW of geothermal electricity - enough power to supply half a million households."

Aroha Campbell, Chief Executive of the Tauhara North No. 2 Trust said, "In the long-term, the success of these projects will have significant economic benefits for the Trust's shareholders and future generations."

See <http://www.waterconserve.info/water-conservation/new-zealand-steps-up-efforts-to-tap-geothermal-potential/> and <http://www.stuff.co.nz/business/industries/3690861/Go-ahead-for-geothermal-plant-at-Tahorakuri>.

## Philippines: Geothermal Firms in Talks for Exploration Farm-In Deal

Guidance Management Corporation and APC Group Inc. are in negotiations with a foreign investor for a possible farm-in agreement in Kalinga-Apayao. The area has a 60-MW power potential. The transaction is expected to be completed in about six weeks. Aragon and GMC expect to spend \$3.7 million over five years for exploration activities.

See <http://www.mb.com.ph/articles/257092/geothermal-firms-eyeing-exploration-farm-in-deal>.



<http://www.geo-energy.org/updates.aspx>



## Notices

### New This Week

#### Geothermal Power Plant Technician Program in Iceland

From the Keilir Institute of Technology: Recent developments within the technologies of geothermal power plants have led the expansion of technical training in Iceland to cope with the demand for technicians. The Geothermal Power Plant Technician course at the Keilir Institute of Technology is set to address the growing need for skilled geothermal power plant technicians as well as health, safety and environmental issues.

The Geothermal Power Plant Technician course at Keilir is split into two separate programs, which are then spread across two years. The first year is an Associate of Applied Science Degree (worth 60 ECTS), where students receive hands-on training in running and maintaining power plants. The second year is an Associate of Science Degree (also worth 60 ECTS), which is more focused on the academic methods and techniques used for planning daily operations, maintenance and purchasing equipment/spare parts – the combination of the two results in a total of 120 ECTS.

Students will show a great deal of initiative, implement improvements and perform follow-up actions throughout the program. Students will also be trained with a 'sense of ownership' towards running, operating and maintaining geothermal power plants. This will of course be beneficial towards the impact of long-term employment opportunities.

In addition, students will learn how to significantly reduce maintenance costs through specialized training, without the need for a manufacturer's service. The Geothermal Power Plant Technician Program is available from September 2011 at the Keilir Institute of Technology in Keflavik, Iceland.

To find out more regarding geothermal power in Iceland, the course and Keilir visit: <http://en.keilir.net> or contact Arnbjorn Olafsson, Department Manager at Keilir Institute of Technology.

#### California Transmission Planning Group Releases Phase 2 Study Plan

The 2010 CTPG Phase 2 Study Plan incorporates "comments and recommendations of many stakeholders and entities with roles in the planning, development, and implementation of transmission facilities, most notably the California Renewable Energy Transmission Initiative and the State's principal energy agencies," states the report.

"As more resource procurement scenarios become available and clearer, CTPG envisions that the transmission plans it develops will require additional reviews and further studies to reflect such updated scenarios as well as other relevant updates, including renewable resource development progress and changes in circumstances or regulations."

The report is available at [http://www.ctpg.us/public/images/stories/downloads/2010-05-07\\_final\\_phase\\_2\\_ctpg\\_study\\_report.pdf](http://www.ctpg.us/public/images/stories/downloads/2010-05-07_final_phase_2_ctpg_study_report.pdf).

## Íslandsbanki's Releases Iceland Geothermal Market Report

From Íslandsbanki: Recently, Íslandsbanki published its first geothermal energy market report on its home market Iceland.

In the current economic environment, Iceland is looking more than ever to the energy sector as one of the potential key drivers for economic development and foreign investment. At the same time, there is a vigorous political debate about issues surrounding the development of new power generation capacity, foreign involvement, environmental aspects and the general impact of new development in the broader scheme of development.

The report aims to provide a constructive look at investment needs for geothermal power development in Iceland. It also seeks to highlight available opportunities and the depth of the experience in this sector in Iceland.

It comprises an overview of the current Icelandic energy market, geothermal energy in Iceland, the outlook for the energy market and geothermal energy, and investment needs.

With current installed electricity generating capacity from geothermal energy of 575 MW, Iceland ranks number 7 in the international context, deriving 62% of its primary energy consumption from geothermal sources. Current projects represent additional capacity of 1,080 MW with an overall potential of about 4,300 MW.

The report can be accessed via the website of the energy team at: [www.islandsbanki.is/energy](http://www.islandsbanki.is/energy).

## Notices

### BLM Seeks Comments on Geothermal Lease Applications North of Magic Reservoir (June 3)

Press Release, May 3 — The Bureau of Land Management (BLM) Shoshone Field Office is asking for comments or concerns about two geothermal leases requested for public lands at the north end of Magic Reservoir as part of its consideration under the National Environmental Policy Act. Comments should be submitted by June 3, 2010 and will be used to determine whether special stipulations to the leases will be needed, should the BLM decide to issue them.

The requested parcels are located near Highway 20 at the north end of Magic Reservoir in Blaine and Camas counties. The total area under consideration is 2,840 acres. The management plans currently in effect for these lands were amended to allow for geothermal energy activity by the 2008 programmatic environmental impact statement (PEIS) for geothermal leasing in the Western United States.

The BLM Idaho Renewable Energy Support Team is reviewing these applications as part of a Bureau-wide effort that recognizes the importance of renewable energy resources on the public lands. RE support teams and RE coordination offices allow the BLM to focus staff resources on processing geothermal, wind and solar energy applications and applications for electric transmission facilities on public lands.

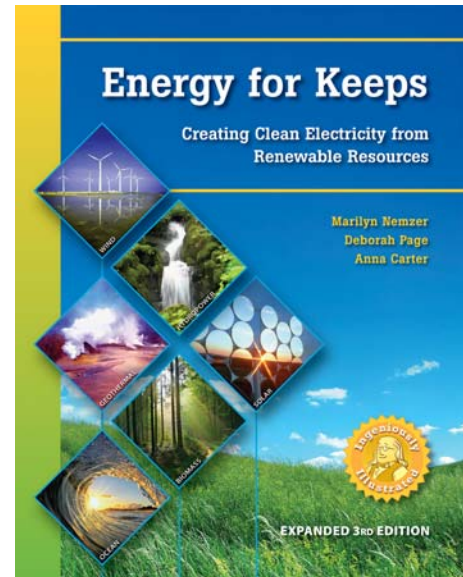
For more, see [http://www.blm.gov/id/st/en/info/newsroom/2010/may/blm\\_considers\\_geothermal.html](http://www.blm.gov/id/st/en/info/newsroom/2010/may/blm_considers_geothermal.html). To submit comments, concerns or issues specific to these leases, or with other questions, contact Rebecca Lange, BLM Idaho State Office (208) 373-3861, or email at [Rebecca.Lange@blm.gov](mailto:Rebecca.Lange@blm.gov). Additional information about the applications is also available on the BLM.

## Award-Winning *Energy for Keeps* Introduces Expanded 3<sup>rd</sup> Edition

*Energy for Keeps: Creating Clean Electricity from Renewable Resources* is an illustrated guide for everyone who uses electricity. From students to energy policymakers, it helps readers of all ages understand the energy issues that now loom large in our daily news. With clear language and engaging illustrations, this book covers all renewable energy sources, the science of electricity generation, energy history, environmental considerations, and energy conservation and efficiency.

This not-too-technical book truly explains all the renewables in a comprehensive, impartial and even-handed manner. It includes biomass, geothermal, hydro, ocean, solar and wind. In its prior editions, *Energy for Keeps* won the 2004 Innovation Award by the Interstate Renewable Energy Council and the 2006 Green Power Leadership Award by the U.S. Environmental Protection Agency, the U.S. Department of Energy, and the Center for Resource Solutions.

Marilyn Nemzer, M.A., developer and editor of *Energy for Keeps*, has produced award-winning energy education projects and materials since 1990. She serves on several state and national advisory boards that focus on energy and the environment, is a trustee of the Marin County Board of Education and directs the Geothermal Education Office and the Energy Education Group. She is joined by lead write Deborah Page and technical editor Anna Carter. *Energy for Keeps* is available at [www.energyforkeeps.org](http://www.energyforkeeps.org).



## BLM Seeking Public Comments on Nevada Geothermal Exploration Proposal

The Bureau of Land Management is accepting written comments following an environmental assessment (EA) for the Coyote Canyon/Dixie Meadows Geothermal Exploration. The two projects, proposed by Terra-Gen Power Dixie Development Company are in the western portion of Dixie Valley. Comments will be accepted through May 10 and should be sent to: Desna Young, planning and environmental coordinator, Stillwater Field Office, 5565 Morgan Mill Road, Carson City, NV 89701. Comments may also be submitted via email to [desna\\_young@blm.gov](mailto:desna_young@blm.gov).

Email should include "Coyote Canyon/Dixie Meadows" in the subject line. The EA and supporting documents are posted at [http://www.blm.gov/nv/st/en/fo/carson\\_city\\_field/blm\\_information/nepa.html](http://www.blm.gov/nv/st/en/fo/carson_city_field/blm_information/nepa.html). A printed copy of the EA can be provided upon request. A copy of the EA is also available in the BLM Carson City District Office during the comment period.

## The Department of Energy Wants to Hear Your Stories

Energy Empowers (<http://www.eereblogs.energy.gov/energyempowers>) is all about your stories from the clean energy economy. This blog and multimedia site, run out of DOE's Office of Energy Efficiency and Renewable Energy, seeks to put a human face to the people, places, technologies and developments that will define our energy future – showing everyone that these advancements are real, growing and becoming part of our communities around the United States. We encourage everyone working in the energy space to visit and share their own success stories at <https://www1.eere.energy.gov/pnp/stories/stories.aspx>.

These stories can include DOE and ARRA projects, but we are also eager to see communities, private citizens and businesses taking the initiative in building America towards a clean energy future.

## DOE Geothermal Technologies Database Available On-Line

The Geothermal Technologies Program's (GTP) projects database details various GTP-funded projects throughout the United States. You can search this database by keyword, state, project title, technology, awardee,

partner, Funding Opportunity Announcement (FOA) number, or funding source. For each project you will find a profile that includes background information, objectives and milestones, and a listing of participants. See <http://apps1.eere.energy.gov/geothermal/projects>



## **Employment**

### **Added This Week**

#### **Geologist, Ormat Technologies, El Centro, CA**

##### Position Summary

Employee will conduct geological evaluations of geothermal projects throughout the world. Assist Project Manager in preparing reports, drilling records, and daily costs. Conduct geothermal exploration programs utilizing geological, geochemical, and geophysical methods as directed by Project Manager. Aid with execution of contract exploration and drilling programs as defined by Project Manager. Help in planning, reporting, and documentation of activities.

##### Essential Functions

- Prepare geologic maps that incorporate geochemical/geophysical data.
- Prepare technical reports.
- Compile data sets and evaluate data.
- Coordinate contract drilling and exploration services.
- Prepare lithological and temperature logs,
- Oversee drilling operations under supervision of Project Manager.
- Research existing literature and prepare summaries for project evaluation.
- Prepare subsurface and structure geological maps under supervision of Project Manager.
- Learn drilling operations.

##### Other Responsibilities

- File reports.
- Maintain well and prospect files.
- Aid drilling staff.

##### Education, Experience and Skills Required

- Bachelor Degree in Geology/Engineering.
- Lithological mapping of boreholes.
- Field mapping experience.
- Proficiency in computer applications such as CAD and MS Office.

##### Physical Requirements

- Ability to navigate and work in remote field locations.
- Work outdoors in difficult weather conditions.
- Ability to lift 75 pounds.
- Travel approximately 60% of time.
- Drive in remote terrains using 4 wheel drive vehicles.

To apply click here: <https://home.eease.adp.com/recruit/?id=487718>

#### **Staff Geologist, Ormat Technologies, Reno, NV**

##### Position Summary

Conduct geologic field evaluations of geothermal exploration projects and integrate with existing published data to assist in definition of new development projects. Assist Manager in preparation of geologic/geophysical reports and conduct independent mapping, sampling, drilling and geophysical programs as directed by Manager. Assist

with execution of contract geophysical and drilling projects as defined by Manager. Assist in planning, reporting and documentation of geologic investigations.

#### Essential Functions

- Prepare geologic maps and presentations of geophysical/geochemical data
- Prepare technical reports under supervision of Project Manager
- Compile data sets and evaluate data quality using statistical and graphical methods
- Coordinate contract field crews performing geotechnical evaluations
- Prepare lithologic and temperature logs of boreholes
- Sample outcrops, soils, springs and wells for geochemical analysis
- Oversee gradient and slimhole drill site operations
- Perform structural interpretations and stress-field analysis of prospect areas
- Schedule and arrange environmental site clearance for drilling activities
- Research existing literature and prepare summaries for project evaluation
- Assist in acquisition of remote sensing imagery and integration into mapping and GIS data bases.

#### Other Responsibilities

- File reports and samples with regulatory agencies
- Maintain well files and other geotechnical files
- Assist drilling staff in location of access roads and well pads
- Maintain inventories on exploration materials and equipment

#### Education, Experience and Skills Required

- Masters Degree in Geology, preferred
- Field mapping experience with structural background
- Geophysical or geochemical training
- Proficiency in visual presentations using computer applications such as CAD, Rockworks, Surfer, as well as MS Office Applications

#### Physical Requirements

- Ability to navigate and work in remote field locations
- Work outdoors in difficult weather conditions
- Ability to lift 50 lbs periodically
- Travel approximately 40% of time

To apply click here: <https://home.eease.adp.com/recruit/?id=495811>

## Employment Opportunities

### Geophysicist, Calpine, The Geysers, California

#### Essential Duties and Responsibilities:

Continuously evaluate and update the state of seismicity in The Geysers. Report to management and staff on the progress of such evaluations. Interface with researchers at the national laboratories (e.g. Lawrence Berkeley National Laboratory), the U.S. Geological Survey and universities conducting investigations of Geysers seismicity and related phenomena (e.g. subsidence). Assist in the planning and execution of drilling programs and injection strategies. Assist in the evaluation of geothermal reservoir performance.

1. Evaluation of induced seismicity in The Geysers steam field. This will be an ongoing effort to constantly upgrade and update our understanding of the relationship between seismic activity and production/injection.

2. Report to staff and management on the progress of seismic evaluation.

3. Interface with researchers at the national laboratories, the USGS and universities conducting studies of induced seismicity in The Geysers. Facilitate the exchange of information useful in advancing knowledge of Geysers seismicity.

4. Work with Resource and Reservoir Engineering staff to evaluate injection strategies with respect to their potential effects on seismicity. Conduct and/or assist in the design of reservoir injection tests to evaluate effects on seismicity of various injection strategies.

5. Supervise the work of consultants in preparing periodic reports on Geysers Seismicity in fulfillment of stipulations in use permits and environmental documents.
6. Assist in the planning and execution of injection strategies.
7. Participate in the planning and execution of drilling programs for new wells, redrills of existing wells and workovers. Develop drilling targets and casing program recommendations.
8. Develop (with the assistance of Resource staff) a working knowledge steam field reservoir geology and geochemistry. Acquire proper field techniques of obtaining geochemical samples.
9. Assist in evaluating potential geothermal properties acquisitions.
10. Conduct or assist in geotechnical evaluations of potential landslides and mitigate risks to Calpine assets in the Geysers.

**Qualifications:**

1. Strong academic background in seismology, supported by a sound geological background, especially in structural geology and petrology.
2. Highly developed computer skills. Expertise with databases, spreadsheets, mapping programs, etc.
3. Ability to represent Calpine at community meetings in which steam field seismicity may be a major topic. Presentation skills, in particular, ability to convey technical concepts to "laymen" are a necessity.
4. Ability to clearly, effectively and concisely communicate, both orally and in writing, at all levels within the Corporation.

**Education:**

M.S. or PhD. degree in Geology/Geophysics required from an accredited academic institution that has an active Geology Department.

**Experience:**

Minimum of three to five years in the following experience is considered highly desirable:

1. Prior work experience with a resource based company, state or federal geological survey or national laboratory.
2. Participation in study or studies relating to induced seismicity.
3. Geological/geophysical field work, including installation/maintenance of seismic array, geologic mapping or geotechnical studies.

To apply online, see

[https://www.hrapply.com/calpine/AppJobView.jsp?link=3645&page=AppJobList.jsp&skimSessionName=com.hrlogix.view.cont.app.JobListTable&skimName=requisition.requisition\\_id&skimNdx=4&op=reset](https://www.hrapply.com/calpine/AppJobView.jsp?link=3645&page=AppJobList.jsp&skimSessionName=com.hrlogix.view.cont.app.JobListTable&skimName=requisition.requisition_id&skimNdx=4&op=reset).

**Program Manager, Office of Geothermal Technologies, U.S. DOE, Washington, DC (June 1)****Job Summary:**

The U.S. Department of Energy is an excellent, family friendly employer and an exciting place to work. Our overarching mission is to advance the national, economic and energy security of the United States, to provide scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national weapons complex. Winning more R&D awards than any private sector organization and twice as many as all other federal agencies combined, DOE is the Nation's top sponsor of research and development in fields such as alternate fuel vehicles, energy efficiency, gene research, supercomputers and microelectronics.

**Key Requirements:**

- \* U.S. Citizenship
- \* Background and/or Security Investigation required.
- \* Position involves travel

**Duties:**

The mission of the Office of Geothermal Technologies Program (OGT) is to provide the overall policy, management, and direction necessary for a balance program of technology planning, research, development, test, analysis, evaluation, and communication that will increase the viability of geothermal technologies. The

outcome of these efforts will be to provide clean, competitive, reliable power options for use in all energy supply and end-use sectors of the economy.

The OGT Program represents and provides the national leadership in geothermal technologies for the formulation and execution of national energy policies and programs, and is responsible for the establishment of priorities and maintaining program balance among sub-programs with the Office. The OGT Program works closely in partnership with the U.S. geothermal energy industry to advance the technology, reduce development and operating costs, and maintain a competitive position in domestic and international markets for renewable energy.

The incumbent manages and directs the development, implementation, and evaluation of a national program that involves geothermal technologies including technology planning, research, development, demonstration and regulatory strategies. The incumbent also identifies and interprets legislative requirements for the OGT Program, and manages the implementing activities that satisfy these needs. Oversees the development and implementation of geothermal technology transfer plans; the review, evaluation, and modification of technology transfer performance; and coordinates with the Federal Energy Management Program to demonstrate these technologies at DOE sites and federal facilities.

The incumbent manages and works closely in partnership with the U.S. industry, academia, and national laboratories to advance the technology, market, and policy needs to create and maintain a robust industry for the development of geothermal technology.

For more information, visit [http://www1.eere.energy.gov/office\\_eere/jobs.html](http://www1.eere.energy.gov/office_eere/jobs.html).

### **Project Engineer, Magma Energy, Reno, Nevada**

#### **Position Summary:**

In line with Company policy and accepted government and industry guidelines, provide engineering design and construction expertise and direction in support of Magma's advanced stage development projects. As Senior Project Engineer the candidate shall be responsible for managing geothermal power plant development projects from feasibility stage through detailed design, construction and commissioning. This includes technical oversight, scope development, managing all aspects of design and engineering and ensuring that project development activities are conducted to the highest standards of safety and health, conforming to Magma Energy Corp's mission, goals and objectives for safety and health.

#### **Major Responsibilities and Essential Duties:**

- Responsible for the design and construction of new projects and the preparation of conceptual studies for geothermal exploitation and expansions.
- Retain the required contractors and service providers to undertake aspects of the design and construction of the projects' infrastructure as well as the preparation of conceptual project studies for geothermal expansions.
- Manage employees and consultants involved with exploration, construction and expansion work.
- Prepare daily, weekly and monthly reports and schedules as required and take on other duties related to the ongoing operations or projects of the Company as may be reasonably required and assigned from time to time.
- Interact with project staff and business unit managers as required to ensure that corporate guidelines and procedures are followed.
- Work effectively with other functional areas in a proactive manner, maintaining a customer-focused perspective

#### **Job Specific and/or Technical Skills Required:**

- University degree in mechanical or chemical engineering (electrical may be considered) combined with professional registration (PE) in the State of Nevada (preferred).
- Minimum of 10 years practical experience, with a strong emphasis and grounding in engineering design including experience working in an engineering consulting environment and managing engineering consultants and contractors.
- EPC or EPCM experience working on projects from conceptual stage through construction and commissioning is essential.
- Proven record in contract administration and in supervision of engineering and construction services.

- Candidate must have a solid technical background and be able to understand and ideally develop heat and mass balance models for power plants.
- Experience with geothermal power plant engineering and operations is an asset but is not essential;
- Candidate shall have first-hand experience with corrosion control and mitigation systems in geothermal plants.
- Must be able to develop and maintain project schedules using Microsoft Project or other scheduling software.
- Preparation of daily, weekly and monthly reports and other duties related to the ongoing operations or projects may be required and assigned from time to time.
- Excellent communication skills (both written and verbal) and team leadership skills are important and the ability to manage employees and consultants involved with exploration, construction and expansion work. Spanish would be an asset.
- Interacting with project staff and business unit managers as required ensuring that corporate guidelines and procedures are followed.
- Frequent travel may be required but work will initially be focused on project development activities at the facility in Fallon Nevada

Software Knowledge Requirements:

- Microsoft Office Suite
- Microsoft Project

Contact: Kim Borgna, Magma Energy, at 775.787.7050 ext. 2006 or [kborgna@magmaenergycorp.com](mailto:kborgna@magmaenergycorp.com)

**Geothermal Operations Manager, CalEnergy Operating Corporation, Calipatria, CA**

Purpose of Position:

The geothermal operations manager is accountable for the development and execution of the CalEnergy Operating Corporation (CEOC) Operations Business Plan. This individual develops the department's annual budget and is accountable for CEOC power generation revenues and operations sites. The geothermal operations manager develops and implements long range plans, provides leadership and direction to plant operating personnel and is responsible for the overall safe, environmentally clean and effective performance of power production facilities for CEOC. Responsibilities and duties are carried out in accordance with the company's policies and procedures, as well as all applicable governmental regulations and guidelines. Work is performed under the direction of the president of CalEnergy Generation U.S.

Direct Reports:

- Operations site managers
- Technical trainer
- Administrative specialist

Primary Job Duties and Responsibilities (Essential Job Functions):

- Adhere to, support and enforce all safety and environmental rules, policies and procedures, regulations and statutes.
- Develop both long and short term strategic operating direction and establish implementation plans to achieve targeted goals.
- Commit the sale of megawatts to established buyers to maximize company profit.
- Perform administrative activities necessary for the effective management of the department, including employee safety, selection and development of employees, salary administration, budget administration, employee counseling and motivation, organization goals and objectives and planning, organizing, integrating, measuring and reporting the work performed within the department.
- Maintain focus on critical plant parameters and programs.
- Make recommendations and decisions that support the company goals and business needs.
- Define, communicate, and acquire resources needed to most effectively operate the facilities.
- Define technical support needed.

Qualifications:

- Bachelor's of science degree in electrical, mechanical, chemical, industrial or petroleum engineering from an accredited university or equivalent training/experience. (Typically six years of related, progressive work

experience would be needed for candidates applying for this position who do not possess a bachelor's degree.)

- Six or more years of related experience in plant operations and maintenance with five or more years of experience at the managerial level is required.
- Knowledge of PC software applications including spreadsheet, word processing, and database.
- Effective verbal and written communication skills, including presentation skills.
- Effective analytical, problem solving and decision-making skills.
- Ability to prioritize and handle multiple tasks and projects concurrently.
- Ability to read and interpret written documents such as accounting reports, safety rules, policy manuals, and professional periodicals/journals. Ability to write routine reports, business correspondence and manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and employees at all levels.
- Ability to define obscure and incomplete problems, collect data, establish facts, and draw valid conclusions. Able to conceptualize and develop creative alternatives to problem resolution. Capability of interpreting an extensive variety of technical instructions in written, oral, diagram or schedule form. Ability to deal with abstract and concrete concepts.
- A valid California's driver license is required upon employment.

**\*Note: New Contact Number.** Contact Lori Rinkert, Sr Recruiter, MidAmerican Energy at 515-281-2707 or [lsrinkert@midamerican.com](mailto:lsrinkert@midamerican.com)

### **Environmental & Permitting Manager, Raser Technologies, Provo, UT**

Job Summary: This position is primarily responsible for obtaining, coordinating and managing all of the company's permitting and environmental compliance activities.

#### Essential Functions:

- Works with department heads in the project planning process to coordinate and manage all of the company's permitting and environmental compliance activities.
- Prepares and submits all federal, state and local permit applications across department lines e.g. drilling, air, storm water, water rights, CUP, Haz Mat, ROW, construction, etc.
- Prepares and tracks permitting budget.
- Procures the services of and manages environmental contractors who perform permit related activities e.g. Phase I, EA, cultural resource and wildlife surveys, hydrologic and soil studies, etc.
- Prepare compliance matrices (punch list) to be utilized by on-site personnel in maintaining regulatory/permit compliance.
- Provide regular training to on-site managers and personnel to allow them to correctly and effectively comply with regulatory/permit requirements.
- Conducts environmental site reviews, manages permit issues, incident reporting, as well as auditing contractors and other on-site third parties for compliance to regulatory requirements.
- Continually evaluate the status of permitting and compliance activities of each project and plant site with the objective of ensuring that all required environmental permits are in place and that all the requirements and applicable Federal, State and Local rules are in compliance.
- Regularly travels to project locations as well as to meet with stakeholders.
- Management of Occupational Health and Safety.
- Coordinates and collaborates with other departments of the corporation in establishing and carrying out responsibilities.
- Maintains appropriate communications within area of responsibility.
- Consults with all segments of management responsible for policy or action. Ensures compliance within area of responsibility. Makes recommendations for improving effectiveness of policies and procedures.
- Assumes other activities and responsibilities from time to time as directed.

#### Qualifications:

- Bachelor's Degree in related field e.g. environmental engineering, environmental science or other related science discipline.
- Five or more years related experience in permitting and environmental compliance.

- Demonstrated success in environmental permitting and regulatory compliance activities, particularly working with; BLM and other federal agencies, state agencies; e.g. oil & gas, state engineers, AQ and environmental quality and local rural governments.
- Excellent technical writing skills.
- Strong negotiation skills.
- Proficient in Microsoft Word and Excel. GIS and Primavera a plus.
- Geothermal renewable energy experience is preferred but not required.

#### Competencies:

To perform the job successfully, an individual should demonstrate the following competencies to perform the essential functions of this position.

- Strong work ethic, with a high level of energy and commitment to the position.
- Effective leadership skills which demonstrate the ability to participate in strategic thinking and problem solving.
- Excellent communication and presentation skills, both oral and written, with the ability to communicate with individuals at all levels both internally and externally.
- Well-developed interpersonal skills. Ability to get along with diverse personalities. Tactful, mature.
- Ability to establish credibility and be decisive—but able to recognize and support the organization's preferences and priorities.
- Ability to function effectively and efficiently in a fast-paced and changing environment with multiple priorities and objectives.

Compensation will include base salary and performance-based stock incentive based on level of experience. We also offer a full range benefit package.

Further information on Raser may be found at: [www.rasertech.com](http://www.rasertech.com).

Resumes can also be directly submitted to: [jobs@rasertech.com](mailto:jobs@rasertech.com).

### **Renewable Energy Mechanical/Systems Engineer, Idaho International Laboratory**

Idaho National Laboratory is seeking a Renewable Energy Mechanical Systems Engineer. This position will involve the assessment of the overall design and operation of geothermal power plants, as well as individual processes and components within a plant. It will also support development of power system performance assessments and designs. The candidate must be able to apply and interpret standard theories, principles, methods, concepts, tools, and technologies associated with electrical power generation from renewable power sources. Work will include evaluation of the effects of innovative concepts and components on power generation costs. The candidate will make preliminary selections and adaptations of technical alternatives. The candidate will provide technical support to the DOE and Work for Others (WFO) customers which will vary in nature, but will include planning, engineering design, data analysis and analytical support activities as well as monitoring of DOE field research projects. In addition to interfacing with customers, the candidate is expected to document, report and present results on work performed, contribute to program progress reports, participate in peer review work of others and manage individual cost and schedule performance metrics. The candidate will contribute to development of new capabilities within the division as well as contribute to scientific and technical products such as patents, software, journal papers, reports, proceedings, and policies. The candidate may also contribute to the development of intellectual property leading to patents, publications, and/or copyrights.

#### Qualifications

S&E Scientist/Engineer 2. A PhD in Mechanical Engineering with relevant experience in power generation is preferred. Applicants with a MS in Mechanical Engineering with two years of relevant post graduation experience in power generation or a related field will be considered. Applicants with Chemical Engineering degrees and documented experience in Geothermal Power Plant design and operations will be also considered, though a Mechanical Engineer degree is preferred. Ability to obtain and maintain and Department of Energy Q security clearance. Must be a United States citizen.

Job ID: #5414, Interested Candidates, please contact:

Vanessa Van Dyk at Idaho National Laboratory: [Vanessa.VanDyk@inl.gov](mailto:Vanessa.VanDyk@inl.gov), 208-526-6325

OR apply on line at: [www.inl.gov/careers](http://www.inl.gov/careers)

### **Project Specialist, SMU Geothermal Laboratory**

Project Specialist (Grants/Contracts Specialist for Geothermal Lab) – (Job ID 1371) – (\$20.00 - \$30.00 an hour) – This is a part time position of approximately 20-30 hours per week. The Project Specialist will work with faculty, staff and students on grants/contract related to geothermal energy.

Primary duties and responsibilities include, but are not limited to:

- Overseeing the solicitation of grants including finding new grants, submitting applications, contracting, budgeting, and working with faculty staff, and student projects associated with the grants;
- Assisting with the development of project strategies and timeline, as well as overseeing progress on project;
- Writing, submitting and presenting project summaries and contract reports to the agency;
- Overseeing administration of grant paperwork and monthly requirements for payroll, budgets, supplies, invoices, and travel;
- Serving as liaison and conduit of information for other SMU offices, government agencies and other institutions;
- Assisting in the planning and coordination of the Geothermal Energy Utilization Conference, including developing the marketing strategy to achieve desired attendance of 200+ and sponsorship coordination and solicitation;
- Responding to requests for information via email and telephone.

Bachelor's degree is required, preferably in Science. Masters of Science in a science field is highly desirable.

Job ID 1371 details at:

[https://access.smu.edu/ps/ps/EMPLOYEE/HRMS/c/HRS\\_HRAM.HRS\\_CE.GBL?Page=HRS\\_CE\\_HM\\_PRE&Action=A&SiteId=1](https://access.smu.edu/ps/ps/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_HM_PRE&Action=A&SiteId=1).

### **Project Manager**

Summary: Responsible for implementation of all aspects of project development from project inception through turn-over to engineering for final design and construction and provide assistance after turn-over to engineering as needed. Will manage multi-disciplinary teams, focused on executing company developmental plans and achieving project goals.

Duties and Responsibilities:

- The PM's two fundamental responsibilities are preparing and maintaining project schedules and budgets. As necessary the PM draws on resources (Development, Senior Scientists, top management) to meet the master project schedule and budget as approved by top management.
- Responsible for oversight, facilitation and implementation of all aspects of project development from initial prospect evaluation to turn over to engineering for final design. Key project factors (schedule, budget) are set by top management. PM's role is to ensure that top management policy is met.
- Negotiates contracts and other agreements related to the sale and transmission of electricity.
- Assists in preparation of financial documents to raise funding necessary to fund project
- Manages Project Development team
- Manages Consultants through the selection process, task assignment, coordination of actions, and quality control.
- Oversee all project land/lease acquisition activities, including contract negotiations.
- Oversees selection of transmission line routes, locations and corresponding transmission agreements
- Provide support to geoscience, drilling, legal, finance, engineering and other departments as needed.
- Meets with government officials and public as necessary.

Supervisory Responsibilities:

- Oversee various project managers, engineers and consultants to facilitate the timely completion of geothermal projects. Direct staff will consist of 3-6 employees.

**Qualifications:**

- Bachelor's degree (B.A. /B.S.) in related field or equivalent preferred.
- Six or more years related experience.
- A broad understanding of permitting on federal lands, drilling, resource development, power plants and transmission systems.
- Ability to gather project information sufficient to create very detailed project development schedules and to build detailed project budgets and financial models to facilitate implementation of the schedules.

Contact: Andrew Matkovic / Vice President  
The Carmon Group Inc.  
[andrewmatkovic@carmongroup.com](mailto:andrewmatkovic@carmongroup.com)  
(216) 539-7668

**Development Engineer**

Job Title: Development Engineer

Summary: Responsible for taking the lead on negotiating the technical sections and provisions in all major project contracts and agreements including; Power Purchase Agreements, Transmission Service Agreements, Interconnection Agreements, EPC contracts and project financing agreements.

**Duties and Responsibilities:**

- Work closely with the VP of Project Development and Legal Department to develop and negotiate the technical provisions in all major project contracts and agreements including PPAs, TSAs, LGIAs, EPC contracts and project financing agreements.
- Negotiate the technical provisions of the major project contracts.
- Coordinate with Management to acquire the technical information required to negotiate all major contracts and agreements.
- Provide progress reports to upper management

**Qualifications:**

- Demonstrated strong negotiation skills
- Minimum 10-15 years of power plant engineering and construction experience, geothermal or other renewable energy experience desired.
- Minimum of 5 years experience negotiating major contracts for the development of power plant projects.
- Strong knowledge of power plant O&M requirements including scheduling & dispatching energy, metering, maintenance & outage planning.
- Strong knowledge of Nevada and California Utility requirements and concerns with negotiating with Independent Power Producers.
- Strong knowledge of ISO requirements (particularly Nevada and California)
- Strong knowledge of selling power and Renewable Energy Credits on the open market.
- Self starter, excellent problem solving skills, excellent people skills
- Proficient oral and written communication skills
- Proficient computer skills
- Bachelor degree in engineering or equivalent

Contact: Andrew Matkovic  
Vice President  
The Carmon Group Inc.  
[andrewmatkovic@carmongroup.com](mailto:andrewmatkovic@carmongroup.com)  
(216) 539-7668

## **Project Manager Geothermal Exploration, Europe**

### Job Description

We are a new geothermal energy company, focused on the exploration and development of geothermal power resources in Europe. In 2010, we will be expanding our investigations of several regions that may host economic geothermal resources. Our principals are based in Canada and the US and have successfully developed oil & gas, mining and geothermal resources.

We require a project manager with field experience in geothermal exploration to coordinate in-country staff, consultants and contractors. This individual will have broad responsibility for project planning and management, budgets, liaising with government agencies, characterizing resources with appropriate exploration methods, and preparing detailed reports to describe a number of geothermal aquifers and their relative potential.

We are now interviewing candidates for this assignment. This is a contract position based in Europe that will require in-country and international travel. The initial term of this contract will be one year with the potential of extension for a second year. We will provide an excellent compensation package to the right person including equity incentives. This is an attractive and rewarding opportunity for an entrepreneurial professional.

### Responsibilities

- Design and manage the exploration programs
- Prepare and manage budgets
- Manage local staff, consultants and contractors
- Liaise with land owners and local and national governments
- Coordinate geological, geochemical and geophysical studies
- Develop geological and resource models
- Supervise exploratory drilling operations
- Prepare detailed assessments of target geothermal resources
- Prepare funding applications for development and technical assistance

### Requirements

- Geology or Geophysics degree, professional certification
- Over 10 years experience in the exploration of geothermal resources
- Oil & gas or mining background will be considered
- Proven leadership and project management abilities
- Proven negotiation and communication skills
- Strong geological and geophysical interpretive skills
- Experience using computer software applicable to exploration
- A problem solver, "get it done" attitude

Location: Europe

Contact: [drobot@penderfinancial.com](mailto:drobot@penderfinancial.com)

## **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  
<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)



## **Requests for Proposals**

### **Closing This Week**

#### **Geothermal Advanced Project Development Grant, Colorado (May 24)**

The GEO is now accepting applications for the Geothermal Advanced Project Development Grant. Funding for geothermal projects in any stage of development, from feasibility analysis to commissioning. Eligible applicants include local governments and independent contractors with demonstrated experience in geothermal development and/or with the support of experts in geothermal energy.

All RFA submissions must be received at [grants@state.co.us](mailto:grants@state.co.us) by 5:00pm on May 24th, 2010. For more information, including the application, go to <http://www.rechargecolorado.com/?/resources/category/funding-opportunities/> and look in the "April Grants" section.

#### **Climate Change Education, NSF (May 24)**

The National Science Foundation requests proposals for the Climate Change Education Partnership Program. This program seeks to establish a coordinated national network of regionally or thematically based partnerships devoted to increasing the adoption of effective, high quality educational programs and resources related to the science of climate change and its impacts. \$10 million expected to be available, up to 15 awards anticipated. Letters of Intent due 4/23/10, final proposals due 5/24/10. For more info, contact Karen Oates at [koates@nsf.gov](mailto:koates@nsf.gov)

or go to: [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf10542](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf10542). Refer to Sol# 10-542. (Grants.gov 2/24/10)

## Added This Week

### Department of Energy Announces \$20 Million to Boost Development of Innovative Geothermal Technologies (July 9)

From DOE – U.S. Department of Energy today announced up to \$20 million for research, development, and demonstration of cutting-edge geothermal technologies that could reduce U.S. demand for fossil fuels and significantly cut greenhouse gas emissions. DOE's objective through this funding opportunity is to demonstrate the technical and economic feasibility of non-conventional geothermal energy technologies in research areas including low-temperature fluids, geothermal fluids recovered from oil and gas wells, and highly pressurized geothermal fluids. Through this research, the Department hopes to provide clean, low-cost renewable energy by proving and commercializing technologies that might otherwise remain out of reach.

Funding will be available in the following topic areas:

- A. Low-temperature geothermal fluids at temperatures up to 300° Fahrenheit (F) or approximately 150° Celsius (C)
- B. Geothermal fluids produced from productive, unproductive, or marginal oil and gas wells, mining operations or other hydrocarbon or mineral extraction processes.
- C. Highly pressurized or "geopressured" fluid resources that show potential for cost-effective recovery of heat, kinetic energy, and gas.

Potential project proposals might include innovative cooling systems – for example, air-cooled, water-cooled, or hybrid systems – or use innovative working fluids. Other concepts might utilize more efficient heat exchanging materials or maximize of energy output through a combination of electricity generation and direct-heat technologies.

Prospective applicants for this Funding Opportunity Announcement are encouraged begin developing partnerships, formulating ideas, and gathering data for potential applications. The expected close date of this announcement is July 9, 2010.

The complete Funding Opportunity Announcement can be viewed on FedConnect:

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

DOE's Geothermal Technologies Program works in partnership with U.S. industry to establish geothermal energy as an economically competitive contributor to the U.S. energy supply.

For more information on these awards, please visit:

[http://www1.eere.energy.gov/geothermal/low\\_temperature\\_resources.html](http://www1.eere.energy.gov/geothermal/low_temperature_resources.html)

### State PUCs and Energy Efficiency, DOE (June 7)

The U.S. Department of Energy requests proposals for Stimulating Energy Efficiency Action from State Public Utility Commissions. This RFP will support PUCs or equivalent state regulator agencies develop an energy efficiency resource goal and the policies and programs needed to implement that goal. \$2 million expected to be available, up to 8 awards anticipated. Responses due 6/7/10. For more info, contact Kelly McDonald at [kelly.mcdonald@netl.doe.gov](mailto:kelly.mcdonald@netl.doe.gov) or go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000266&agency=DOE>. Refer to Sol# DE-FOA-0000266. (Grants.gov 4/28/10)

### Efficiency and Renewables in Rural America, DOA (June 30)

The U.S. Department of Agriculture requests proposals for Renewable Energy Systems and Energy Efficiency Improvements, under the Rural Energy for America Program. This RFP will provide support to agricultural producers and rural small businesses to purchase and install renewable energy systems and make energy efficiency improvements. \$51.5 million expected to be available, up to 2,000 awards anticipated. Responses due 6/30/10. For more info, go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=54175>. Refer to Sol# RDBCP-10-REAP-RES-EEI. (Grants.gov 4/30/10)

**Manufacturing Innovations, DOC (July 15)**

The U.S. Department of Commerce, National Institute of Standards and Technology (NIST), requests proposals for the Technology Innovation Program, in the area of "Manufacturing." Through this RFP, NIST seeks to create significant improvements in new and existing products and in their manufacture by accelerating the utilization of materials advances and overcoming critical manufacturing process bottlenecks to improve the competitiveness of U.S. manufacturers in the global marketplace. \$25 million expected to be available, up to 25 awards anticipated. Responses due 7/15/10. For more info, contact Deborah Dubeau at [deborah.dubeau@nist.gov](mailto:deborah.dubeau@nist.gov) or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=53791>. Refer to Sol# TIP-2010-B01. (Grants.gov 4/15/10)

**RFP Announcements****State Energy Program, U.S. DOE (May 18 — August 3)**

The U.S. Department of Energy requests proposals for the State Energy Program (SEP). This formula grant program provides support to states and territories, for the design and implementation of energy efficiency and renewable energy priorities. Lead applicant must be the state or territorial energy office administering the annual SEP. \$25 million expected to be available, up to 56 awards anticipated. Due date range 5/18 – 8/3/10. For more info, contact Sheldon Funk at [sheldon.funk@netl.doe.gov](mailto:sheldon.funk@netl.doe.gov) or go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000308&agency=DOE>. Refer to Sol# DE-FOA-0000308. (Grants.gov 3/26/10)

**Climate Adaptation and Disaster Resilience – Indonesia (July 26)**

The U.S. Agency for International Development, Mission in Indonesia, requests proposals for Climate Adaptation and Disaster Resilience (CADRE). Indonesia is particularly vulnerable to climate change and disasters. CADRE supports projects that address climate change and disasters by efficiently, effectively and sustainably addressing the needs for disaster risk reduction and climate change adaptation together, among vulnerable populations in Indonesia. Multiple awards ranging from \$500K to \$1.5 million anticipated. Concept Papers are due 1/25/10 and 7/26/10. For more info, contact Johanna Gardjito at [aps10-005@usaid.gov](mailto:aps10-005@usaid.gov) or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=50515>. Refer to Sol# APS10-005. (Grants.gov 12/7/09)

**Greenhouse Gas Mitigation, Indonesia (September 15)**

The U.S. Agency for International Development Mission in Indonesia requests applications for the Greenhouse Gas Mitigation Program. This RFP will support projects to reduce greenhouse gas emissions in both the land use/forestry sector and the energy sector. \$1.5 million expected to be available, up to 2 awards anticipated. Responses due 3/30/10 and 9/15/10. For more info, contact Dominic Soenarno at [aps10-011@usaid.gov](mailto:aps10-011@usaid.gov) or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppld=51783>. Refer to Sol# APS-INDONESIA-10-011. (Grants.gov 2/12/10)

**U.S. DOE Office of Science (September 30)**

The U.S. Department of Energy, Office of Science, announces its continuing interest in receiving grant proposals in areas including, but not limited to: Basic Energy Sciences, Biological and Environmental Research, and Advanced Scientific Computing. Proposals accepted through 9/30/10. For more info, including program-specific contacts, go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000179&agency=DOE>. Refer to Sol# DE-FOA-0000179. (Grants.gov 12/4/09)

**Power, Controls and Adaptive Networks, NSF (October 7)**

The National Science Foundation requests proposals for Power, Controls and Adaptive Networks. This program supports distributed control of multi-agent systems with embedded computation for sensor and adaptive networks. This program emphasizes electric power networks and grids, including generation, transmission and integration of renewable, sustainable and distributed energy systems, such as fuel cells and micro-turbines in large power networks; high power electronics and drives; and understanding of associated regulatory and economic structures. The program also emphasizes energy scavenging and alternative energy technologies, including solar

cells, ocean waves, wind, geothermal, low-head hydro, and the hydrogen economy. In addition, the program supports generation and integration in the National Grid (InterGrid), and interdependencies of critical infrastructure in power and communications. Responses due 10/7/10. For more info, contact Radhakishan Baheti at rbaheti@nsf.gov or go to: [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=13380](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13380). Refer to Sol# PD-10-1518. (Grants.gov 2/17/1)



## **Events**

### **Happening This Week**

#### **Project Peer Review, DOE Geothermal Technologies Program, Crystal City, VA (May 18–20)**

The Geothermal Technologies Program (GTP) will be holding a project peer review May 18-20, 2010, in Crystal City, Virginia. Key investigators involved in geothermal research projects will make short presentations and discuss their research with a panel of peer reviewers. Recently completed, in progress, and new projects will all be represented. On May 18, prior to the review, DOE managers will discuss GTP's challenges, opportunities, and plans for the future in a half-day meeting. DOE requires periodic third-party peer reviews of programs to evaluate their effectiveness, management, productivity, and relevance to DOE goals.

It has been several years since GTP's last peer review and the program is excited to see all its projects and principal investigators together in one place. The program looks forward to productive discussions and feedback on the projects.

The 2010 GTP Peer Review will be held at:

Hyatt Regency Crystal City  
2799 Jefferson Davis Highway  
Arlington, VA 22202

Visit <http://crystalcity.hyatt.com/hyatt/hotels/index.jsp> for more information. Block rates will be provided to GTP Peer Review attendees.

See [http://www1.eere.energy.gov/geothermal/news\\_detail.html?news\\_id=15832](http://www1.eere.energy.gov/geothermal/news_detail.html?news_id=15832).

*\*Note: For anyone attending the DOE GTP program review on May 18–20, GEA will extend the reduced GEA Member/Government Employee rate for admission to the GEA Global Geothermal Showcase and Forum on May 21 in Washington, DC. The program will include a panel of leading research project presentations!*

#### **GEA Global Geothermal Showcase and Forum, Washington, DC (May 21)**

GEA will be holding a one-day "Global Geothermal Showcase and Forum" in Washington, DC to showcase geothermal projects and governmental policies in the U.S. and around the world. There will also be a small exhibition area featuring exhibitors to date; GEA, U.S. Department of Commerce, U.S. Department of Energy, Potter Drilling, Perma Works, Emergent Corporation and our Gold Level Sponsor Pratt & Whitney Power Systems. Geothermal Energy is finally being recognized as part of the US' energy future, now we would like to help policy makers understand that geothermal energy is a global market with serious potential to help address global environmental and climate problems.

This event has been developed in conjunction with the U.S. Department of Energy and the U.S. Department of Commerce and is open to the geothermal industry. The Global Geothermal Showcase and Forum will be widely attended with two-hundred industry leaders, foreign diplomats, financiers and government officials expected to participate.

Confirmed speakers include:

- Jay Nathwani, Technology Manager, U.S. Department of Energy Geothermal Technologies Program
- Chris Miller, Senior Advisor to Senator Harry Reid
- Allyson Anderson, Professional Staff, Senate Committee on Energy and Natural Resources
- James M. Kiiru, Commercial Attache, Embassy of the Republic of Kenya

- Karl Gawell, Executive Director, Geothermal Energy Association
- Nick Goodman, CEO, Raser Technologies
- Jim Slutz, Director, North America, Star Energy
- Halley Dickey, Director of Geothermal Business Development, TAS
- Toni Volpe, President, Enel North America
- Lou Capuano, Jr., CEO, ThermaSource, LLC
- Jonathan Weisgall, VP, Legislative and Regulatory Affairs, MidAmerican Energy Holdings Co.
- C.J. Arrigo, Director, Glacier Partners Corp.
- Jim Echols, Project Acquisition Manager, Magma Energy Corporation
- George Alcorn, CEO, Universal GeoPower
- Josh Nordquist, Project Manager, Ormat Technologies
- Charles Baron, Geothermal Program Lead, Climate and Energy Team, Google.org
- Bernie Karl, Owner, Chena Hot Springs
- Dr. Jefferson Tester, Croll Professor of Sustainable Energy Systems, Cornell University
- Ryan Mulholland, International Trade Specialist, U.S. Department of Commerce
- Mark Taylor, Lead Analyst, CCS and Geothermal, Bloomberg New Energy Finance
- Kerry McDonald, West Indies Power
- Mike Ronzello, North American Sales and Business Development Manger, Pratt & Whitney Power Systems
- Randy Normann, CTO, Perma Works LLC
- Kermit Witherbee, National Geothermal Program Manager, Bureau of Land Management
- Stuart Johnson, Vice President of Geothermal Resources, Ram Power
- Brian Fairbank, President/CEO, Nevada Geothermal Power
- Alexander Richter, Director, Sustainable Energy, Corporate & Investment Banking, Islandsbanki
- Alexandra McCann, Export-Import Bank
- Magnus Gehringer, Senior Energy Specialist, The World Bank
- Carol Werner, Executive Director, Environmental and Energy Study Institute
- Roy Mink, Board of Directors, US Geothermal, Inc.
- Martin O. Saar, Assistant Professor, Gibson Chair in Hydrogeology and Geofluids, University of Minnesota
- Dimitrios Zevgolis, GEF Secretariat, Global Environmental Fund

When:

Friday, May 21, 2010

7:30 am Registration

9:00 am – 12:30 pm Morning Session

12:30 – 1:30 pm Luncheon

1:30 – 5:00 pm Afternoon Session

Where:

The Ronald Reagan Building and International Trade Center  
1300 Pennsylvania Ave., NW, Washington, DC, USA

GEA would like to say a special thanks to our Gold Level Sponsor, Pratt & Whitney Power Systems. For more information, including the full agenda, visit: [http://www.geo-energy.org/workshops/workshop\\_may21.aspx](http://www.geo-energy.org/workshops/workshop_may21.aspx). With any questions, please feel free to email Kathy Kent at [kathy@geo-energy.org](mailto:kathy@geo-energy.org).

**Clean Energy and Business Development Mission, U.S. Department of Commerce, Indonesia (May 23–25)**

Secretary of Commerce Gary Locke will lead a business development trade mission to Indonesia in May focused on clean energy deployment. Interested companies and trade associations can apply at [http://www.trade.gov/cleanenergymission/tg\\_main\\_002483.asp](http://www.trade.gov/cleanenergymission/tg_main_002483.asp). The mission should be a great opportunity for the U.S. geothermal industry to further deploy technologies in Indonesia. Contact Ryan Mulholland at [Ryan.Mulholland@trade.gov](mailto:Ryan.Mulholland@trade.gov) or (202) 482-4693 or email [CleanEnergyMission@doc.gov](mailto:CleanEnergyMission@doc.gov).

## Added This Week

### Colorado Geothermal Working Group Annual Meeting (May 27)

Thursday May 27, 2010, 8:30am to 5pm, Denver Museum of Nature and Science

Join the Governors Energy Office to learn about geothermal projects in Colorado, and help expand the uses of this abundant, clean and renewable energy resource. Morning plenary sessions provide updates on geothermal electric generation, direct uses, and geo-exchange / ground source heat pumps. Afternoon break-outs explore case studies in the three disciplines, followed by a networking reception and products / services expo from 3-5pm. Seats and expo display tables are still available, no cost to participate. Please extend the invite to all interested, and RSVP by reply email to [John@SustainableBusinessSolutions.net](mailto:John@SustainableBusinessSolutions.net)

## GEA Events

### 13<sup>th</sup> Annual Congressional Renewable Energy + Efficiency EXPO + Forum, Sustainable Energy Coalition, Washington, DC (May 27)

Sustainable Energy Coalition  
Cannon House Office Building — Caucus Room  
Thursday, May 27, 2009

On May 27, the Sustainable Energy Coalition - in cooperation with Members of the U.S. House of Representatives and U.S. Senate Renewable Energy & Energy Efficiency Caucuses - will host the 13th annual Congressional Renewable Energy & Energy Efficiency EXPO + Forum. Its theme will be "Renewable Energy + Energy Efficiency = Green Jobs".

This year's EXPO will bring together nearly fifty businesses, sustainable energy industry trade associations, government agencies, and energy policy research organizations to showcase the status and near-term potential of the cross-section of renewable energy (biofuels/biomass, geothermal, solar, water, wind) and energy efficiency technologies. A morning news conference will feature Members of the U.S. Congress while afternoon speakers will discuss the role sustainable energy technologies can play in meeting America's energy needs.

The EXPO is free, open to the public, and no RSVPs are required. For more information or to inquire about exhibiting contact Ken Bossong, Sustainable Energy Coalition, 301-270-6477 x.11, [kbossong614@yahoo.com](mailto:kbossong614@yahoo.com).

### GEA Geothermal Energy Workshop, Las Vegas, NV (July 22)

GEA is planning a Geothermal Energy and Utilities Workshop on July 22, 2010 in Las Vegas. This event will cater to the large number of utilities that are interested in geothermal energy. Registration opening in mid-April.  
Contact: [Kathy@geo-energy.org](mailto:Kathy@geo-energy.org)

### GEA Geothermal Energy Expo and GRC Annual Meeting, Sacramento, CA (October 24-27)

Exhibitor Registration is open. Booth spaces are more than 75% sold out, please book soon!! Register at <http://www.geothermalenergy2010.com/>.

Every year, the Geothermal Energy Expo® hosts the world's largest gathering of vendors providing support for geothermal resource exploration, characterization, development, production and management. It provides a unique opportunity for exhibitors to showcase their projects, equipment, services and state of the art technology to the geothermal community. The Expo is held in conjunction with the GRC Annual Meeting, [www.geothermal.org](http://www.geothermal.org).

Last year's count was 2300 participants and planning shows this year's numbers will top it. This year the Expo will be held in Sacramento, CA at the Sacramento Convention Center Complex, a component of the City of Sacramento Convention, Culture and Leisure Department.

**Exhibitor Benefits include:**

- \* 50-word company listing in the official event guide
- \* Exhibit Booths are 10' x 10' and has an 8' high back drape and 3' high side drapes
- \* A 7" x 4" identification sign with the Exhibitor's name and space number
- \* Each booth will also include a table, two chairs and a wastebasket.
- \* Enhanced Exhibitor Listing on event website, [www.geothermalenergy2010.com](http://www.geothermalenergy2010.com)
- \* For every 100 sq ft exhibitors receive 3 booth staff passes
- \* Complimentary Expo Hall passes to distribute to your clients and customers

To view the floor plan for the 2010 Expo, please go to: [http://www.geothermalenergy2010.com/floor\\_plan.asp](http://www.geothermalenergy2010.com/floor_plan.asp)

To register as an Exhibitor, please go to: <http://www.geothermalenergy2010.com/registration.asp>

To view the Exhibitors contract for 2010, please go to: <http://www.geothermalenergy2010.com/contract.asp>

More information including sponsorship opportunities, room block, and special events coming soon. We are looking forward to another great Expo! Please do not hesitate to let us know if you have any questions.

Contact: [Kathy@geo-energy.org](mailto:Kathy@geo-energy.org)

**Why Should You Attend GEA Events?**

As the national trade association for the geothermal industry, the Geothermal Energy Association (GEA) strives to create and deliver educational events involving the full range of the geothermal industry, reflecting the dynamic growth of the geothermal market, and communicating the benefits of geothermal energy to all. GEA events offer important opportunities to learn and network within the geothermal community, and to inform and educate companies and organizations outside today's industry that are interested in learning more about geothermal energy. The revenue generated from GEA events is used to advance the goal of the GEA, "to expand the production and use of geothermal energy in the United States and around the world." The revenue supports GEA's workshops and events, communications activities, outreach efforts, policy related activities and analysis, internet publications, and other initiatives designed to help achieve this goal. ONLY GEA puts your dollars to work in all of these ways to advance the future of the geothermal energy industry. And, GEA does not sell your email or postal address to junk mailers or spammers.

To keep track of new events and changes to this calendar go to: [www.geo-energy.org](http://www.geo-energy.org).

**Other Events****Policy Event – Breakfast on Parliament Hill, CanGEA, Ottawa, ON (June 17)**

Canadian Geothermal Energy Association

<http://www.cangea.ca/>

**CanGEA's Third Annual Conference & Trade Show, CanGEA, Vancouver, BC, (August 9 & 10)**

Canadian Geothermal Energy Association

<http://www.cangea.ca/>

**Geothermal Investment Forum and Networking Event, CanGEA, Toronto, ON, (September 14)**

Canadian Geothermal Energy Association

<http://www.cangea.ca/>

**Geothermal Investment Forum and Networking Event, CanGEA, Calgary, AB (December 3)**

Canadian Geothermal Energy Association

<http://www.cangea.ca/>

---

**Geothermal Energy Weekly**

**A newsletter for the geothermal industry written by Leslie Blodgett and Karl Gawell.**

**Copyright © 2010 Geothermal Energy Association**

**209 Pennsylvania Avenue SE, Washington, D.C. 20003**

**Phone 202-454-5261 Fax 202-454-5265**

**[research@geo-energy.org](mailto:research@geo-energy.org)**

