

Geothermal Energy Weekly

A publication of the
Geothermal Energy Association

~formerly the GEA Weekly Update~



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December 22, 2009

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www.geo-energy.org/publications/updates



National News

White House Proposal Adds \$5b to Renewable Tax Credit Program

The Obama Administration has proposed to provide an additional \$5 billion for the advanced energy project credit initiative that supports U.S. jobs and global competitiveness; enhances energy security; and helps reduce our environmental footprint. The proposal raises the cap of the present tax credit to \$7.3 billion from \$2.3 billion. Investment in wind, geothermal, and solar manufacturing projects in the U.S. would climb to an estimated \$15 billion in total capital investment, leading to tens of thousands of new jobs.

The Sec 48C program will help bolster domestic production of geothermal equipment by providing a 30% federal tax credit to U.S. manufacturers and suppliers who re-equip, expand, or establish U.S. production capability.

This incentive was created in the 2009 Recovery Act and compliments other existing federal incentives such as the Production Tax Credit and Investment Tax Credit that support the purchase and deployment of geothermal energy technology. Congress provided \$2.3 billion in the initial year of operation and reportedly more than 1,000 applications were received, demonstrating the program’s strong appeal and inadequacy of the initial funding level.

The Administration’s plan builds on the “American Clean Technology Manufacturing Leadership Act” (S 2857) introduced recently by Senator Bingaman (D-NM) that would have added \$2.5 billion to the program. “

See also <http://dealbook.blogs.nytimes.com/2009/12/17/white-house-plan-would-increase-clean-energy-tax-credit/> and <http://www.politico.com/news/stories/1209/30698.html>.

Feinstein and Merkley Measure Would Extend Renewable Energy Development Grant Program

On December 18, Senators Dianne Feinstein (D-Calif.) and Jeff Merkley (D-Ore.) introduced a measure to expand a Treasury Department grant program for renewable energy development. The program, scheduled to expire at the end of 2010, would be extended for two years and would allow public power utilities, currently not included, to participate.

Senator Feinstein told press: "One of the consequences of the economic crisis was the shelving of major solar and wind projects, as readily-available financing evaporated. The stimulus bill established a new grant program to help restart these projects by allowing renewable energy developers to qualify for grants, or payments, from the Treasury Department instead of claiming tax credits. But the grant program is set to expire at the end of next year, before most construction is expected to occur and well before experts expect the tax equity markets to thaw. If the grant program is not extended, bank profits will again become the limiting factor on renewable energy development in the United States, and that makes no sense. This legislation would extend the grant program for two additional years, until 2012. It would also allow public power utilities to qualify for the grants program, since they provide energy for as many as 45 million Americans.?"

Senator Merkley said, "This bill makes sure incentives for renewable energy keep functioning during this recession and keep acting as job-creation engines. It also extends this important job-generating program to utilities that serve many smaller Oregon towns and rural areas."

See <http://california.realestaterama.com/2009/12/18/senators-feinstein-and-merkley-introduce-measure-to-spur-renewable-energy-development-ID0529.html>.

Copenhagen Talks End with Nonbinding Agreement, Focus Moves Back to Domestic Steps

Copenhagen negotiations that ended last week did not conclude with an international treaty but did reach a nonbinding climate deal between the U.S., China, India, Brazil, South Africa and about 20 other countries to commit to emission cuts that will be open to international review. U.S. negotiators moved talks along without bending from limitations of not having passed domestic climate legislation.

Reactions were varied. "Home run," said Mark Helmke, a top staffer to Sen. Richard Lugar (R-Ind.), the ranking member of the Foreign Relations Committee. "Satisfied the Europeans. Made China into a major world player, but made them accountable. Elevated India, Brazil and South Africa to world stage. Cut an important side deal with Russians on arms control."

In a statement, Sen. Lisa Murkowski of Alaska said: "Much has been made of the Senate majority's failure to prioritize a climate bill ahead of the negotiations in Copenhagen, but the past two weeks have made clear that domestic legislation will not resolve the full range of fundamental, international disagreements. Emissions cuts and reporting commitments from countries around the world cannot be advanced by the U.S. Congress, and any

sum of money that America is capable of providing to developing nations will probably be rejected as too small by its would-be recipients.”

“The president can demonstrate his dedication to doing something positive about climate change and America’s energy security by prioritizing full Senate passage in the new year of the energy bill approved back in June by the Senate Energy and Natural Resources Committee,” Murkowski added.

President Obama remained optimistic and acknowledged there was much still to do. “Even though we have a long way to go, there’s no question that we’ve accomplished a great deal over the last few days,” Obama said. “I want America to continue to lead on this journey, because if America leads in developing clean energy, we will lead in growing our economy and putting our people back to work, and leaving a stronger and more secure country to our children.”

See also <http://www.nytimes.com/cwire/2009/12/21/21climatewire-obama-negotiates-copenhagen-agreement-with-senate-6121.html> and <http://www.akbizmag.com/from-our-elected-officials/43-government-news/1384-murkowski-comment-on-conclusion-of-copenhagen-conference.html>.

Geothermal Energy Association to Hold Finance Forum in New York City

On Thursday, January 14, the Geothermal Energy Association (GEA) will host a Geothermal Energy Finance Forum bringing together the finance and investment community of New York City and providing a tutorial on geothermal energy investment with top experts and major players in geothermal development and finance.

While the United States is the global leader in generating electrical power from geothermal resources, the potential of the industry has yet to be tapped. With a growing demand for sustainable energy, geothermal energy is a clean, renewable energy source that has the potential to preserve the environment, create jobs, and better lives.

“The United States’ \$350 million investment in geothermal energy, through the federal Recovery Act, has made geothermal an even more enticing investment in green energy,” said GEA Executive Director Karl Gawell. “We look forward to bringing geothermal industry leaders to New York City’s finance community for this important workshop highlighting an industry that is poised to make incredible growth in both the near and long term.”

The forum agenda includes presentations and panel discussions on project development and design, risk mitigation, costs and financial modeling, government finance and incentives, and case studies from developers and financiers with recent success stories. Speakers include Karl Gawell, Executive Director, GEA; Arni Magnusson, Executive Director, Islandsbanki; Dan Tobin, Senior Investment Officer at The US Department of Energy; Jimmy Leung, Head of the Technology Investment Banking Group at Raymond James; and Dan Kunz, Co-Founder, President, and CEO of US Geothermal Inc.

For more information, including the full agenda, visit: <http://www.geo-energy.org/registration1.asp>.



Company News

Sierra Geothermal: Tier One Projects Updated

Press Release, December 18, Vancouver BC -- Sierra Geothermal Power Corp. (SGP) (TSX VENTURE: SRA) provides an exploration update on its Tier One projects. The update covers exploration drilling at the Reese River Project, the completion of an observation well at the Alum Project in the Paymaster District as well as other Paymaster District advances, and the completion of an airborne survey at the Barren Hills Project.

In addition, SGP has been informed that Nevada's Bureau of Land Management has accepted SGP's lease unitization proposals for all four of SGP's Tier One projects. Lease unitization gives SGP resource control, during exploration, development and production, over land that adjoins each of the Tier One projects and that is not currently under lease by SGP or other developers. The BLM unitization approval affects a combined 47 square kilometers of currently unleased adjoining lands, for a total unitized and leased land position of 154 square kilometers on our Tier One projects.

"The Reese River exploration program was particularly helpful as it increased the size of the thermal anomaly and will help us to target future drilling locations," said Gary Thompson, President and CEO. "We believe that our short term geothermal exploration program, which is well funded with nearly US\$11 million raised since August 2009 and US\$10 million in matching grants, will go a long way towards attracting prospective joint venture partners and moving our project to feasibility."

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



Renewable Energy and Climate Change

Renewable Energy Sources Supplied 10.21% of U.S. Electricity in First Nine Months of 2009

Conventional hydropower accounted for 6.89% of U.S. net electrical generation during the first nine months of 2009, according to "Electric Power Monthly." Other renewable resources including biomass, geothermal, solar, and wind accounted for 3.32%, for a total of 10.21% from renewable energy sources.

In the same first three quarters of 2008, renewables accounted for 9.18% of net electrical generation with hydropower at 6.27% and non-hydro at 2.91%. In the same period in 2007, renewables accounted for 8.72% of net U.S. electrical production, hydro - 6.28%, non-hydro - 2.44%.

Data and graphs available at http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html.



State News

California. DOE Funds USC Geothermal Project for Research and Modeling in Geysers Area

The USC Viterbi School of Engineering was awarded a Department of Energy grant for a 3-D geothermal mapping and modeling project focusing on the Geysers area in Northern California. The project is expected to be completed in two years and will investigate knowledge of the reservoir such as permeability, fracture size, fracture spacing, reservoir discontinuities (leaky barriers) and impermeable boundaries.

Methods for better characterization of fractures in an enhanced geothermal system will be improved. "This will be accomplished by creating a 3-D seismic velocity model of the field using the micro-seismic data, collected under another Department of Energy-funded project," Aminzadeh, research professor in the Mork Family Department of Chemical Engineering and Materials Science and managing director of the USC Energy Institute's Global Energy Center, told press.

See http://uscnews.usc.edu/science_technology/professor_wins_grant_for_geothermal_research.html.

New Mexico. Jemez Pueblo Awaits Geothermal Grant Money

Jemez Pueblo was awarded funding by the DOE for a geothermal drilling project that uses new seismic imaging techniques and a new chemical tracing method developed by researchers at Los Alamos National Laboratory and the University of Utah.

The tribe awaits the funds, though no time frame has been given. "The reality is if we have to wait, the irrigation season here starts mid-March and it ends around the first of November and during that time farmers are out in the fields working. But we'll just have to work through it whenever we get the formal award in place," Steve Blodgett, director of Jemez Pueblo's resource protection office told press. Blodgett had hoped to get the funding in place and start work in January.

See <http://www.google.com/hostednews/ap/article/ALeqM5iRkmYWb31SRR2iNpz3q68TbVs6awD9CJBN681>.



International News

Argentina. G4G Resources Concludes Agreement to Acquire Geothermal Property in Salta Province

Press Release, December 21 — G4G Resources Ltd. (TSX VENTURE:GXG) announces that it has entered into an agreement with Area Geofisica ENG s.a. (AG) to acquire 100% of the Anetta geothermal property located in the province of Salta, Argentina. Details of the agreement will be forthcoming upon completion of due diligence.

The Anetta property covers an area of 6,555 hectares and is located 170 kilometres south of the city of Salta, which is the capital of the province of Salta. In close proximity to Anetta is the city of Rosario de la Frontera, which has population of approximately 30,000.

"G4G Resources is extremely pleased with the agreement to acquire the Anetta geothermal property," stated Basil Botha, President & CEO. The property is adjacent to established electricity lines and roads, and close to markets for power. We look forward to developing the project to its full potential."

For more, see http://pr-canada.net/index.php?option=com_content&task=view&id=152785&Itemid=65.

EU. Geothermal Industry Position Paper States Priority Over CCS

On December 15 the European Geothermal Energy Council (EGEC) released a position paper on carbon capture and storage addressing "the synergies and conflicting issues in both technologies." The EGEC calls for joint research between the geothermal and CCS communities in order to decrease costs and resolve environmental concerns.

The EGEC suggests

- The CCS projects financed by the European Economy Recovery Plan (ca. €1.050 billion) and the NER300 must share with the public their results on exploration and storage
- The CCS exploration license must be granted for a defined area and for a specified period of time. The area and the duration of the license should be appropriate for the size and type of the project as done in the oil and gas industry
- The potential of deep geothermal in Europe must be evaluated (with a special emphasis on Enhanced Geothermal Systems (EGS))

The paper concludes that carbon capture and storage "is essentially a bridging technology whereas geothermal energy is a sustainable energy resource," and that priority should be given to geothermal energy in cases of dual use capability. "The increase of a renewable energy source, a long term solution, must not be hampered by a technology, CCS, that has the potential only to serve as a temporary, interim GHG mitigation measure," according to the EGEC.

The position paper is available at http://www.europolitics.info/pdf/gratuit_en/263334-en.pdf.

See also <http://europolitics.info/sectorial-policies/geothermal-industry-wants-priority-over-ccs-art258076-14.html>.

Indonesia. Third Unit of Wayang Windu Geothermal Plant Slated for 2012

Star Energy will invest up to US\$300 million for geothermal next year. The company will build the third unit of the Wayang Windu geothermal power plant located in West Java. The project is expected to begin operations in 2012 and will be followed by another unit in 2014.

See <http://www.tradingmarkets.com/.site/news/Stock%20News/2724306/>.

Kenya. GDC Aims for 2000 MW Geothermal Over 10 Years

The Geothermal Development Company (GDC) plans to install 200 MW per year over the next ten years, or 2,000 MW by 2020 and will attempt to deliver the same increase the following decade, according to [evwind.es](http://www.evwind.es). GDC is seeking 20 billion shillings (178 million euros) in funding per year for the next five years, and the Kenyan government has given a guarantee for the same amount. Silas Simiyu, GDC managing director told press several U.S., European, Chinese and local companies were interested.

See http://www.evwind.es/noticias.php?id_not=3005.

Mexico. Etna Resources Inc. Announces Option to Acquire Lithium Rights in Geothermal Ope

Press Release, December 22 — Etna Resources Inc. ("Etna") (TSX VENTURE:ETN) is pleased to announce that it has entered into a Share Option Agreement (the "Option Agreement") dated December 18, 2009, with Escondidas Internacional S.A. de C.V., a privately held Mexican corporation ("Escondidas") and the shareholders of Escondidas (the "Shareholders"). Following the entry into the Option Agreement, the Shareholders granted an option to Etna to acquire 76% of the shares of Escondidas (the "Option"). Escondidas has entered into a joint venture and development agreement (the "CPI Joint Venture") with CPI Internacional S.A. de C.V., a privately held Mexican corporation ("CPI"), whereby CPI and Escondidas have agreed to jointly process lithium and precious metals in the Cierro Prieto geothermal brines that are owned by CPI through concessions and located in Baja California, Mexico, roughly 30 km south of the city of Mexicali.

CPI is the owner of concessions granted by the Mexican Federal Water Commission that hold residual brine waters which are produced from deep wells at Cierro Prieto by the Mexican Federal Electrical Commission (the "MFEC"). The MFEC operates the Cierro Prieto geothermal power plant, which, at 720 MW, is the second largest such plant in the world. MFEC pumps brines from these deep wells and diverts the steam fraction to its power plant, delivering the residual brines to CPI.

For more, see http://pr-usa.net/index.php?option=com_content&task=view&id=306072&Itemid=29.

Nicaragua. Ram Power Subsidiary Begins Construction of Major Geothermal Project

Press Release, December 15 — Ram Power, Corp. (TSX: RFG) ("Ram Power"), through its wholly owned subsidiary, Polaris Energy Nicaragua S.A. ("PENSA"), is pleased to announce that it has commenced the on-site construction of the 36 MW Phase 1 expansion at the San Jacinto–Tizate geothermal power project near Leon, Nicaragua. The gala official groundbreaking ceremony for the expansion was attended by the President of Nicaragua, the honorable Jose Daniel Ortega Saavedra, the Ram Power Board of Directors led by Chairman Chris Thompson, Hezy Ram, President and CEO of Ram Power, Tom Ogryzlo, Ram Power's Senior Vice President for Latin America, and other distinguished guests.

The Phase 1 expansion is the first of two phases designed to expand production of the San Jacinto–Tizate geothermal power project to 46 MW from its current 10 MW, and ultimately to its full 72 MW by the end of 2011. The expansion represents the first step in bringing state of the art geothermal technology to an already operational utility scale power facility that will supply cost effective geothermal energy to the region.

For more, see <http://www.prnewswire.com/news-releases/ram-power-corp-begins-construction-of-major-geothermal-project-in-nicaragua-79324327.html>.

Switzerland. Swiss Geologist Acquitted of Charges of Causing Earthquakes

On December 21, a Swiss court acquitted a geologist accused of causing earthquakes while drilling to produce clean energy. The Basel criminal court acquitted Markus Haering because he had not deliberately damaged properties or acted carelessly on the heat mining project.

In response to the acquittal of a Swiss geologist charged with intentionally causing earthquakes stemming from a geothermal energy project in Basel, the Geothermal Energy Association released the following statement from GEA Executive Director Karl Gawell.

“Geothermal energy has been used safely around the world for decades to provide electrical energy. As one of the handful of renewable sources able to provide base-load power, geothermal plays a significant role in the renewable energy industry. It currently is the largest source of renewable energy in California and recent ARRA grants are fueling its expansion across the United States.

New enhanced geothermal technologies are expanding the range of geothermal power’s capacity to provide clean, renewable energy, and GEA recognizes this growth as an opportunity for research and development as well as the implementation of strong safety and siting guidelines.

In the United States, GEA is working alongside industry leaders and government regulators to assure that geothermal energy’s decades long safety record is maintained as we pursue the new technologies that will allow us to grow our geothermal resources.”

See also

<http://www.google.com/hostednews/ap/article/ALeqM5hjxhLyhdM2ULBdssUr1h76e6MN4QD9CNRK583>.

Tunisia. Gov't to Increase Geothermal Irrigation Of Greenhouses

The 2009–2014 Presidential program plans to double the current 194,000 hectares dedicated to geothermal resources to reach 310,000 hectares in 2010. The thermal water is primarily used for greenhouses in the Kebili, South Tunisia region.

See <http://www.tunisiaonlinenews.com/?p=31357>.

UK. Cornwall Geothermal Project Gets DECC boost

Geothermal Engineering Ltd has been awarded £1,475 million in funding for a project that will cost £40 million. Located in Cornwall it will produce 55MW annually for local use and 10MW for the national grid. The award comes from the Department of Energy and Climate Change Deep Geothermal Challenge Fund of £6 million, launched in October. Ryan Law, managing director, told press. "We are delighted to receive this initial funding which, subject to planning, we will use to start the drilling process in 2010."

See http://www.falmouthpacket.co.uk/news/fpfalmouth/4814729.Hot_rocks_for_Cornwall_gets_a_boost/.



www.geo-energy.org/publications/updates



Notices

New This Week

Colorado ARRA Grant Schedule Posted, Governor's Energy Office

The Governor's Energy Office (GEO) has posted a schedule of anticipated American Reinvestment and Recovery (ARRA) grants to begin in January of 2010. The GEO plans to hold a webinar for each grant solicitation approximately one week after the official posting date. Note: the timeline is subject to change; grants may be pushed back to later dates, but will not open earlier. The schedule is available at

<http://www.colorado.gov/energy/index.php?/resources/category/funding-opportunities/>.

EPA's RE-Powering America's Lands Web Site Updated

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency's (EPA) RE-Powering America's Land: Siting Renewable Energy on Potentially Contaminated Land and Mine Sites initiative Web site has been updated.

Highlights include:

- The Google Earth interactive mapping tool, national and state maps and public spreadsheet have been updated to incorporate the following new information:
 - New sites – all EPA tracked sites in Puerto Rico and landfill sites tracked by EPA's Landfill Methane Outreach Program (LMOP) New renewable energy technologies analyzed – sites with potential for geothermal (flash and binary power plants and geothermal heat pump); landfill gas energy projects; and photovoltaic (PV) policy driven, which includes sites that have solar potential due to solar-specific state policies in place
- The Google Earth interactive mapping tool and public spreadsheet now include basic information on whether a state has a renewable portfolio standard (RPS), RPS goal, solar set-aside, solar multiplier, or distributed generation provision.
- New renewable energy on contaminated land success stories have been added.

Download the new Renewable Energy Interactive Map at

http://www.epa.gov/renewableenergyland/mapping_tool.htm.

BLM's Colorado State Office Posts List of Proposed Parcels for Upcoming Oil and Gas Lease Sale; Geothermal Offered for First Time

Press Release, December 11, Denver--The Bureau of Land Management Colorado State Office posted its list of parcels for the quarterly competitive oil and gas lease sale scheduled 9 a.m., Feb. 11, 2010, at the State Office. The 11 oil and gas parcels in the sale include 3,511 total acres and are located within BLM Colorado's Royal Gorge (Cañon City) Field Office.

For the first time in Colorado, the sale will also include geothermal leasing. One parcel of 799 acres with subsurface Federal mineral rights will be offered for geothermal development in Chaffee County, near the Mt. Princeton Hot Springs Resort west of Buena Vista. This single parcel was deferred from the November 2009 sale to allow time for the Colorado Department of Natural Resources to confer with BLM Colorado on topics relating to geothermal development.

Protests of parcels being offered for lease must be in writing and delivered by 4 p.m., Wednesday, Jan. 27, 2009, by hand, postal delivery, or fax, (303) 239-3799, to the BLM Colorado State Office, 2850 Youngfield St., Lakewood, Colo. 80215.

The BLM manages 253 million acres – more land than any other Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The Bureau, with a budget of about \$1 billion, also administers 700 million acres of sub-surface mineral estates throughout the nation. The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

Lease sale information can be obtained online at

http://www.blm.gov/co/st/en/BLM_Programs/oilandgas/leasing.html, at each of the Bureau's field offices, and the BLM Colorado State Office Public Room, 2850 Youngfield St., Lakewood, Colo

Notices

DOE Issues Final Renewable Energy Loan Guarantee Rules

Federal Register — Office of the Chief Financial Officer, Department of Energy

On August 7, 2009, the Department of Energy (DOE or the Department) published a Notice of Proposed Rulemaking and Opportunity for Comment (NOPR) to make certain changes to the existing regulations for the loan guarantee program authorized by Section 1703 of Title XVII of the Energy Policy Act of 2005 (Title XVII or the Act). Section 1703 of Title XVII authorizes the Secretary of Energy (Secretary) to make loan guarantees for projects that “avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.” Section 1703 of Title XVII also identifies ten categories of technologies and projects that are potentially eligible for loan guarantees. The two principal goals of section 1703 of Title XVII are to encourage commercial use in the United States of new or significantly improved energy-related technologies and to achieve substantial environmental benefits. DOE believes that commercial use of these technologies will help sustain and promote economic growth, produce a more stable and secure energy supply and economy for the United States, and improve the environment.

Through experience gained implementing the loan guarantee program authorized by section 1703 of Title XVII, and information received from industry indicating the wide variety of ownership and financing structures which participants would like to employ in implementing projects seeking loan guarantees, DOE believes it is appropriate to make certain changes to the existing regulations to provide flexibility in the determination of an appropriate collateral package to secure guaranteed loan obligations, facilitate collateral sharing and related intercreditor arrangements with other project lenders, and to provide a moreworkable interpretation of certain statutory provisions regarding DOE's treatment of collateral, consistent with the intent and purposes of Title

XVII. Having considered all of the comments submitted to DOE in response to the NOPR, the Department today is issuing this final rule.

DATES: This rule is effective December 4, 2009.

FOR FURTHER INFORMATION CONTACT: David G. Frantz, Director, Loan Guarantee Program Office, 1000 Independence Avenue, SW., Washington, DC 20585-0121, e-mail: lgprogram@hq.doe.gov; or Susan S. Richardson, Chief Counsel for the Loan Guarantee Program, Office of the General Counsel, 1000 Independence Avenue, SW., Washington, DC 20585-0121, e-mail: lgprogram@hq.doe.gov.

Special Financing Programs Available for Mustang 4-F1 (December 31)

Atlas Copco Customer Finance North America has partnered with Wells Fargo Equipment Finance – Construction Group to offer beneficial financing and leasing programs for new Mustang customers. Atlas Copco's Mustang Geothermal Drill Finance Special offers 36-, 48- and 60-month options. There is no advance payment on a standard loan and only one advance payment on the lease special.

These special financing programs are available until December 31, 2009, and local Atlas Copco representatives will have the most current rates and terms available. All transactions are subject to credit approval.

For further information please contact

Shawn McGill, Business Development Manager, Atlas Copco Customer Finance North America, Telephone: 803-817-7435; Fax: 803-817-7467, E-mail: shawn.mcgill@us.atlascopco.com

Joanna Canton, Marketing Communications Director, Atlas Copco Construction Mining Technique USA Telephone: 303-253-6922; Fax: 303-217-2840, E-mail: joanna.canton@us.atlascopco.com

Christina Fisher, Public Relations Manager, Ellenbecker Communications, Inc., Telephone: 507-945-0100; Fax: 877-572-9860, E-mail: chris@ellcom.us

GEA Supports Announcement from DOE on Awards for Geothermal Projects

Access this weeks' article from GEA on "A Turning Point for Geothermal: DOE Funding Wins Industry Approval" at <http://www.renewableenergyworld.com/rea/news/article/2009/11/a-turning-point-for-geothermal-doe-funding-wins-industry-approval>.

2009 Excellence in Renewable Energy Awards, Renewable Energy World

Presented by the editors of RenewableEnergyWorld.com and Renewable Energy World North America magazine, these awards recognize the most outstanding projects, programs and technologies in the wind, solar, biomass, geothermal and hydroelectric energy sectors. Awards will be presented during Renewable Energy World North America Conference & Expo in Austin, Texas, February 23-25, 2010. Submit your nominations today! See <http://www.renewableenergyworld.com/partner/rew/online/2009-11-17/>.



Employment

Employment Opportunities

Exploration Geologist, Western U.S.

The Exploration Geologist is responsible for overseeing the planning and execution of geothermal projects including compilation and evaluation of existing data, new file data acquisition and mapping, integration of disparate data sets, and development of geological occurrence models for geothermal resources. The exploration focus is the Western U.S., principally California, Nevada, Oregon, and Utah. This role could grow into Exploration Manager for a major geothermal development company.

Essential Functions: Candidate must have a demonstrated capability to work with a team of geoscientists to achieve corporate goals. The ability to communicate in writing and through speaking is essential. Candidate must be able to identify potential resources in known geothermal districts and to identify possible new occurrences in novel settings.

Education, Experience, and Skills Required.

- Bachelor's in Geology from an accredited university is a minimum requirement.
- 10-15 years experience in geothermal exploration, drilling and logging of exploration holes, and conduct of field surveys.
- The successful candidate may be required to spend up to 50% of their time in the field and must be able to withstand the rigors of extreme heat, cold, and wind for short periods of time.
- Travel within the U.S. will be required.

This is a fulltime position that will be located in Reno, NV. A benefit package is available and includes medical, dental, vision, 401(k), and long-term disability. Salary is negotiable, but dependent on experience and qualifications.

For consideration please email or fax resumes to: kborgna@magmaenergycorp.com, 775.787.7069 (fax)

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 - www.cabei.org



Requests for Proposals

Added This Week

Request for Bids. Pilgrim Hot Springs Property Sale Extended (February)

The December 10, 2009 deadline for bids on Pilgrim Hot Springs near Nome, Alaska has been extended. The Catholic Bishop of Northern Alaska, owner of the property, is selling the Pilgrim Hot Springs property and is requesting bids to be submitted toward the end of February.

If you would like to be notified when the bid package is available, please send a reply by email to Tom Buzek (tom@cbna.org) or George Bowder (finance@cbna.org). Thank you for your interest in the Pilgrim Hot Springs property.

RFP Announcements

Geothermal Energy Development, Department of the Navy

Department of the Navy Naval Air Systems Command Naval Air Warfare Center Weapons Division Dept. 3a Recovery Act - The purpose of this Broad Agency Announcement (BAA) is to solicit proposals for investigations of geological properties associated with active geothermal systems within select regions of Naval Air Station (NAS) Fallon, NV; Naval Air Facility (NAF) El Centro, CA; Chocolate Mountains Gunnery Range (Chocolate Mountains), CA; and Hill Air Force Base (AFB), UT. The object is to perform geological investigations that could potentially lead to the discovery of a geothermal resource. This notice constitutes a BAA as contemplated in FAR 6.102(d)(2). A formal Request for Proposal (RFP)/Solicitation will not be issued. The Naval Air Weapons Division (NAWCWD) will not issue paper copies of this BAA. NAWCWD reserves the right to select for award, all, some, or none of the Proposals in response to this BAA. NAWCWD reserves the right to fund all, some, or none of the Proposals received under this BAA. NAWCWD provides no funding for direct reimbursement of proposal development costs. Technical and Cost Proposal (or any other material) submitted in response to this BAA will not be returned. It is the policy of NAWCWD to treat all Proposals as competition sensitive Bid and Proposal Information and to disclose their contents only for the purpose of evaluation. Awards will be to United States (U.S) companies only. All contracts resulting from this announcement are subject to the federal Acquisition Regulation and the Department of Defense Federal Acquisition Regulation Supplement. SEE ENCLOSED ATTACHMENT FOR SPECIFIC INFORMATION AND FORMATTING THAT MUST BE FOLLOWED WHEN PREPARING PROPOSALS FOR THIS CONTRACTING EFFORT. This enclosure calls out another document "Genetic Occurrence Models for Geothermal Prospecting, N68936-04-C-0057", which is attachment 2 to this notice. Place of Performance (if applicable): Naval Air Station (NAS) Fallon, NV; Naval Air Facility (NAF) El

Centro, CA; Chocolate Mountains Gunnery Range (Chocolate Mountains), CA; and Hill Air Force Base (AFB), UT.

See <http://www.tradingmarkets.com/.site/news/Stock%20News/2650824/>.

People, Prosperity and the Planet, EPA (January 5, 2010)

The U.S. Environmental Protection Agency requests proposals for the 7th Annual P3 Awards. A National Student Design Competition for Sustainability Focusing on People, Prosperity and the Planet. P3 supports R&D and design solutions to real world challenges involving the overall sustainability of human society. Areas of interest include: Energy, Built Environment, Materials and Chemicals, Water, and Agriculture. \$850K expected to be available, up to 46 awards anticipated. Responses due 1/5/10.

For more info, contact Cynthia L. Nolt-Helms at nolt-helms.cynthia@epa.gov or go to: http://epa.gov/ncer/rfa/2010/2010_p3.html. Refer to Sol# EPA-G2010-P3. (Grants.gov 8/28/09)

Environmental Justice Small Grants Program, EPA (January 8)

The U.S. Environmental Protection Agency requests proposals for the Environmental Justice Small Grants Program. This program supports projects that addresses a local environmental and public health issue within an affected community. There is a well-established scientific consensus that climate change will cause disproportionate impacts upon vulnerable populations. Therefore, this year the program will emphasize the disproportionate impacts of climate change in communities with environmental justice concerns. Areas of interest include, but are not limited to: Energy efficiency, renewables, water efficiency, Green jobs and green economy capacity building, and smart growth. \$1 million expected to be available, up to 40 awards anticipated. Responses due 1/8/10. For more info, including Regional contacts, go to:

<http://www.epa.gov/compliance/environmentaljustice/grants/ej-smgrants.html>. Refer to Sol# EPA-OECA-OEJ-10-01. (Grants.gov 10/28/09)

Energy Efficiency Block Grants – Recovery Act, CEC (January 12)

The California Energy Commission requests proposals for Energy Efficiency Conservation Block Grants. This program will provide support for energy efficiency projects in small CA cities and counties. \$35.5 million expected to be available. Responses due 1/12/10. For more info, go to:

<http://www.energy.ca.gov/contracts/recovery.html#eecbg>. Refer to PON# 09-001.

Environmental Management Fellowship Program, EPA (February 5, 2010)

The U.S. Environmental Protection Agency requests proposals for the National Network for Environmental Management Studies Fellowship Program. This program provides students an opportunity to participate in a fellowship project that is directly related to their field of study. Fellowship categories include: Environmental Policy, Regulation, and Law; Environmental Management and Administration; Environmental Science; and Public Relations and Communications. \$400K expected to be available, up to 40 awards anticipated. Responses due 2/5/10. For more info, go to: <http://www.epa.gov/education/students.html>. Refer to Sol# EPA-EED-10-01. (Grants.gov 11/5/09)

Power, Controls and Adaptive Networks, National Science Foundation (February 7, 2010)

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 2/7/10. For more info, contact Radhakishan Baheti at rbaheti@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13380. Refer to Sol# PD-10-1518. (Grants.gov 11/16/09)

Clean Energy Deployment, Recovery Act, New York (February 16, 2010)

The New York State Energy Research and Development Authority seeks proposals for Project Implementation Funding for State Energy Program American Recovery and Reinvestment Act. This RFP will support the implementation of energy conservation measures including energy efficiency, renewable energy, and clean fleet projects. \$74 million expected to be available. Responses due 10/26/09, 12/21/09, and 2/16/10. For more info, contact Ben Fox at bf2@nyserda.org or go to: <http://www.nyserda.org/funding/1613rfp.asp>. Refer to RFP# 1613.

Thermal Transport, National Science Foundation (March 3, 2010)

The National Science Foundation requests proposals for Thermal Transport Processes. This program supports engineering research aimed at gaining a basic understanding of the microscopic and macroscopic levels of thermal transport phenomena (heat and mass transfer) in energy conversion and conservation, the synthesis and processing of materials, cooling and heating of infrastructure and equipment, the interaction of industrial processes with the environment, the propulsion of air and land-based vehicles, and thermal phenomena in biological and environmental systems. Responses due 3/3/10. For more info, contact Theodore Bergman at

tbergman@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13367. Refer to Sol# PD-10-1406. (Grants.gov 11/16/09)

Energy for Sustainability, National Science Foundation (March 3, 2010)

The National Science Foundation requests proposals for Energy for Sustainability. This program supports fundamental research and education in energy production, conversion, and storage and is focused on energy sources that are environmentally friendly and renewable. Sources of sustainable energy include: Sunlight, Wind/Wave, Biomass, and Geothermal. Responses due 3/3/10. For more info, contact Gregory Rorrer at grorrer@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026. Refer to Sol# PD-10-7644. (Grants.gov 11/16/09)

Environmental Engineering, National Science Foundation (March 3, 2010)

The National Science Foundation requests proposals for Environmental Engineering. The goal of this program is to encourage transformative research which applies scientific principles to minimize solid, liquid, and gaseous discharges into land, inland and coastal waters, and air that result from human activity, and to evaluate adverse impacts of these discharges on human health and environmental quality. Responses due 3/3/10. For more info, contact Paul Bishop at pbishop@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501029. Refer to Sol# PD-10-1440. (Grants.gov 11/16/09)

Environmental Sustainability, National Science Foundation (March 3, 2010)

The National Science Foundation requests proposals for Environmental Sustainability. This program supports engineering research with the goal of promoting sustainable engineered systems that support human well-being and that are also compatible with sustaining natural systems. Research in Environmental Sustainability typically considers long time horizons and may incorporate contributions from the social sciences and ethics. Responses due 3/3/10. For more info, contact Bruce Hamilton at bhamilto@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501027. Refer to Sol# PD 10-7643. (Grants.gov 11/16/09)

Environmental Implications of Emerging Technologies, National Science Foundation (March 3, 2010)

The National Science Foundation requests proposals for Environmental Implications of Emerging Technologies. This program provides support to develop and test the environmental effects of new technologies. The program also supports research on the development and refinement of sensors and sensor network technologies.

Responses due 3/3/10. For more info, contact Cynthia Ekstein at acekstein@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030. Refer to Sol# PD-10-1179. (Grants.gov 11/16/09)

Technology Solutions, 2010 Tech Awards Nominations (March 31, 2010)

Nominations are invited for the 2010 Tech Awards. This program awards individuals, organizations, and companies from around the world that are utilizing innovative technology solutions to address issues pertaining to health, education, the environment, economic development, and equality. Individual awards \$50K each. Responses due 3/31/10. For more info, go to: <http://techawards.thetech.org/>. (Foundation Center RFP Bulletin 11/6/09)

Emerging Frontiers in Research and Innovation (March 31, 2010)

The National Science Foundation requests proposals for Emerging Frontiers in Research and Innovation. Through this new funding opportunity, the NSF seeks proposals from interdisciplinary teams of researchers, with transformative ideas that represent an opportunity for a significant shift in fundamental engineering knowledge with a strong potential for long term impact on national needs or a grand challenge. Areas of interest include: 1) Renewable Energy Storage, and 2) Science in Energy and Environmental Design (SEED): Engineering Sustainable Buildings. This solicitation is in coordination with the U.S. Department of Energy and the U.S. Environmental Protection Agency. \$29 million expected to be available, up to 14 awards anticipated. Letters of Intent due 10/9/09, preliminary proposals due 11/13/09, final proposals due 3/31/10. For more info, go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf09606. Refer to Sol# 09-606. (Grants.gov 8/13/09)

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

The U.S. Department of Energy announces its intent to request proposals for the Smart Grid Investment Grant Program. Through this program, DOE seeks to stimulate the rapid deployment and integration of advanced digital technology that is needed to modernize the nation's electric delivery network for enhanced operational intelligence and connectivity. The program will support projects that promote deployment, including development of component technologies. Individual award range anticipated to be \$500K to \$5 million. The RFP will open on or about 6/17/09. Three due dates anticipated: 7/29/09, 12/2/09, and 3/31/10. For more info, contact Donna Williams at Smart-Grid.NOIComments@hq.doe.gov or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/39C0D96768F2083F8525759A0068F216?OpenDocument>
<http://www07.grants.gov/search/search.do;jsessionid=9x3VJydGP2TfWHPRK9mfnpLqsWpm1TQmDJTzS6XLDp1QJKpb2SM!-1267850137?oppId=46833&flag2006=false&mode=VIEW>. Refer to Sol# DE-FOA-0000058. (Grants.gov 4/16/09)



Events

GEA Events

GEA Geothermal Energy Finance Forum, January 14, 2010 (New York, NY)

Ritz-Carlton Battery Park

The Geothermal Energy Association (GEA), with Gold Level Sponsors, Islandsbanki and Vulcan Power, will be holding a one-day Geothermal Energy Finance Forum on Thursday, January 14, 2010 at the Ritz-Carlton, Battery Park in New York City. This program will bring the finance and investment community of New York City together and provide a tutorial on geothermal energy investment with top experts and major players in geothermal development and finance. The day's agenda includes presentations and panel discussion on; project development and design, risk mitigation, costs and financial modeling, government finance and incentives, and case studies from developers and financiers with recent success stories.

For information contact Kathy Kent at Kathy@geo-energy.org.

Renewable Energy World North America 2010, February 23-25, 2010 (Austin, TX)

<http://www.renewableenergyworld-events.com>

Austin Convention Center

CGEC California Geothermal Energy Summit, May 12, 2010 (Davis, CA)

<http://cgec.ucdavis.edu/>

UC Davis Campus

GEA Geothermal Symposium, May 21, 2010 (Washington, DC)

GEA Geothermal Energy Workshop, July 22, 2010 (Las Vegas, NV)

GEA Geothermal Expo and Conference, TBA

GEA's annual Geothermal Energy Expo, date and location to be announced

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

Geothermal Energy Weekly

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

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