

Geothermal Energy Weekly

A publication of the
Geothermal Energy Association

~formerly the GEA Weekly Update~



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February 19, 2010

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



National News

Geothermal Technologies Program Database Details More Than 170 Projects

Press Release, February 18, DOE's Geothermal Technologies Program (GTP) announces the GTP Projects Database. Created to help increase the transparency of GTP's funding activities, specifically those related to the American Recovery and Reinvestment Act of 2009, the database allows users to access details for more than 170 GTP-funded projects.

Users can interactively search for projects by state, awardee, technology, partner, and more. Summaries provide details such as participants, funding level, background, objectives, and possible impacts on projects dealing with Enhanced Geothermal Systems, geothermal energy production, ground source heat pumps, innovative exploration technologies, and the National Geothermal Data System.

Projects in the database are revised regularly when updates from project teams become available.

See <http://apps1.eere.energy.gov/geothermal/projects/> and http://apps1.eere.energy.gov/news/progress_alerts_archive.cfm.

Commissioners Invited to Follow Nevada's Geothermal Development at NARUC Meeting

The National Association of Regulatory Utility Commissioners held their Winter Committee Meetings, February 14–17 in DC. In a joint session with the ERE, Electricity, Water, Consumer Affairs and Critical Infrastructure Committees, panelists discussed geothermal energy potential and risks.

Brenda Pierce, USGS, discussed the organization's national assessment on geothermal energy. Ed Wall, DOE, gave an overview of 2009–10 activities. Jim Slutz, Star Energy, focused on examples in Indonesia where geothermal helps blackout areas. Todd Bright, Denham Capital, spoke on their projects with Vulcan. Rebecca Wagner, the Nevada Public Services Commissioner, gave a very positive message, inviting others to follow the success story of Nevada's geothermal development.

Audience questions indicated interest in geothermal energy technologies, particularly those that can be utilized across the Eastern seaboard.



Company News

Raser Technologies: Utah Project Approved for \$33m Stimulus Grant

Press Release, February 17, Provo, UT – Raser Technologies, Inc. (NYSE: RZ), an energy technology company, announced today that the U.S. Treasury has approved its renewable energy grant application for the Company's Thermo No. 1 geothermal power plant. The grant is provided by the U.S. Treasury Department under the Section 1603 renewable energy grant program created by the American Recovery and Reinvestment Act of 2009. Raser should receive the funds within five business days.

"We are very pleased with the approval of our application," said Nick Goodman, Chief Executive Officer of Raser Technologies. "These grant funds place the Company in a strong position to continue developing our extensive geothermal assets, and to deliver clean renewable energy."

As previously announced, the funds will go to retire debt and obligations relating to the Thermo No. 1 Project. In addition to the grant funds, Raser is reaching out to new potential tax equity partners in an effort to capitalize on the remaining estimated \$15 to \$20 million of tax benefits at the Thermo No. 1 project, such as deductions for accelerated depreciation. As part of the project restructuring announced in December of 2009, Raser became the sole owner of the Thermo No. 1 project, opening the door for Raser to bring in a new tax-equity partner in the future.

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



Renewable Energy and Climate Change

NOAA Announces New National Climate Service

From EESI Climate Change News: On February 8, the Obama administration announced plans to create a new National Oceanic and Atmospheric Administration (NOAA) Climate Service. The proposed entity would create a central federal source "user-friendly" information to help businesses and governments adapt to the effects of climate change. While attention on Capitol Hill has focused on efforts to mitigate global warming by slashing greenhouse gas emissions, state and local governments as well as the private sector have asked for help understanding how the shifting climate will affect their operations. By providing critical planning information that our businesses and our communities need, NOAA Climate Service will help tackle head-on the challenges of mitigating and adapting to climate change, said U.S. Secretary of Commerce Gary Locke, whose department

includes NOAA. "American citizens, businesses and governments – from local to federal – must be able to rise to the challenges that lie ahead. And that's where NOAA's climate service will prove absolutely invaluable."

For additional information see: [NOAA Press Release](#), [New York Times](#), [Guardian](#), [Bloomberg](#), [U.S. Climate Website](#)

"Alternative Alternative" Energy Sources Gaining Spotlight, Says *BusinessWeek*

An article at businessweek.com highlights geothermal, biomass, and wave power projects. Citing government initiatives underway, GEA Executive Director Karl Gawell was quoted, "Solar and wind got all the attention, but new funding is putting geothermal and other technologies front and center." State backing, and 24-hour-a-day availability of geothermal plant power, has also gotten the attention of private capital.

See http://www.businessweek.com/magazine/content/10_09/b4168055806951.htm.



State News

Arizona: Executive Order Removes State from Regional Cap and Trade Program

On February 2, Arizona Governor Jan Brewer (R) issued an executive order for a comprehensive review of the state's climate change initiatives and removed Arizona from a Western Climate Initiative cap and trade plan set for 2012. Citing dangers to the state's already weak economy, the governor said the state will support expanding programs that focus on clean energy, energy efficiency, and job creation. Benjamin Grumbles, Director of the Arizona Department of Environmental Quality, specified commitment to the solar, wind, and geothermal industries.

See <http://www.azcentral.com/arizonarepublic/news/articles/2010/02/11/20100211climate-brewer0211.html>.

California: Critics Announce Plan to Suspend Climate Law

State assemblyman Dan Logue (R-Marysville) and supporters have announced an effort to suspend California's climate change law until the state's unemployment rate is at or below 5.5%, according to latimes.com. AB 32, to take effect in 2012, mandates a cut in GHG emissions to 1990 levels by 2020 and another 80% by 2050. The measure "would put all our efforts at energy efficiency and renewable energy in the deep freezer for a long time," Mary Nichols, chairwoman of the California Air Resources Board told press.

See <http://www.latimes.com/news/local/la-me-ballot-warming6-2010feb06,0,5959308.story>.

Utah: Formal House Resolution Questions Climate Change

The Utah House of Representatives passed, by a vote of 56-17, a non-binding resolution on doubt towards the scientific basis for climate change, according to the *Salt Lake Tribune*. Proponents called for the federal government to cease all regulation of carbon dioxide. "I'm afraid of what could happen to our economy, to our rural life, to our agriculture, if such a detrimental policy continues to be pursued for political reasons," said Rep.

Kerry Gibson. House Minority Leader David Litvack quoted a letter from Brigham Young University scientists that argued against the resolution.

See http://www.sltrib.com/news/cj_14367692.



International News

Indonesia. Sumitomo to Build Geothermal Power Plant in Lampung

Sumitomo Corporation, appointed by state power firm PLM, will construct a geothermal power plant in Lampung, according to thejakartapost.com. The US\$156.7 m project will have two 55-MW capacity units. "The power plant is expected to begin commercial operations by 2012," PLN's president director Dahlan Iskan said at the contract signing ceremony. The project will be financed by a soft loan from the Japan International Cooperation Agency. The plant will supply power to the PLN grid in Lampung and South Sumatra.

See <http://www.thejakartapost.com/news/2010/02/18/sumitomo-named-build-new-pln-geothermal-power-plant.html>.

Kenya. Geothermal Development Company to Begin Menengai Drilling in October

Geothermal Development Company will begin drilling in Menengai, Nakuru in October, according to allafrica.com. "GDC will develop Menengai and offer steam as a Kenyan resource for power generation to attract a wider participation and eventually lower electricity costs," GDC managing director, Silas Simiyu told press. The company plans to use its own rigs acquired from China to reduce the cost of sinking a well by 46%, from \$6.5 m to \$3.5 m.

See <http://allafrica.com/stories/201002121016.html>.

Kenya. Ormat Signs Letter of Intent to Increase Capacity of Olkaria III Geothermal Plant

Press Release, February 17 -- Ormat Technologies (NYSE: ORA), announced today that its project subsidiary has signed a letter of intent with the off-taker, Kenya Power & Lighting Co. Ltd ("KPLC"), for further expansion of its Olkaria III power plant by up to 52 MW (from 48 MW to up to 100MW) within the framework of the existing power purchase agreement ("PPA"). The expansion is to be developed in two phases. Phase I comprising of 36 MW within 3.5 years from finalizing the amendment to the existing PPA with an option for phase II comprising of 16 MW within 4.5 years from commercial operation of phase I. The amendment to the existing PPA is subject to applicable governmental approvals and the consent of the lenders that provided the financing to the existing power plant.

Dita Bronicki, Chief Executive Officer of Ormat Technologies said, "We are excited about the opportunity to leverage the success of the existing power plant and are looking forward to working with KPLC on this project. We expect that contractual documents on the amendment to the PPA will be completed in the near future.

Kenya is a proven and significant resource for geothermal energy, and it is our belief that the proposed expansion will provide Kenya with much needed renewable, dependable and cost-effective electricity."

For more, see <http://www.oramat.com/relation.php?did=84>.

New Zealand. Contact Seeks Consent for Phase 2 of Geothermal Development

Contact Energy has filed resource consent applications for Phase 2 of its 250-MW Tauhara geothermal resource development near Taupo, according to nbr.co.nz. The new Environmental Protection Agency (EPA) process will speed up the process to within nine months of the application. "Once developed and commissioned, Tauhara 2 will generate enough renewable baseload electricity to power a quarter of a million homes. The development of the project will represent investment of more than \$1 billion and will make an important contribution to a secure and increasingly renewable supply of electricity for New Zealand consumers," Contact managing director David Baldwin told press.

See <http://www.nbr.co.nz/article/contact-seeks-consent-geothermal-development-118829>.

Turkey. Dora-1 Geothermal Plant to Receive Funds from Rock Band U2's Carbon Offsets Initiative

Irish rock band U2 will raise money for the Dora-1 geothermal power plant in the Aegean province of Aydn, according to hurriyetdailynews.com. Carbon certificates to offset travel emissions of U2 fans will be available at their shows and will raise approximately \$450,000. Offset Options identified four projects to support, with the other three located in China, India and Indonesia. Offset certificates for the initiative will cost fans \$1.89.

See <http://www.hurriyetdailynews.com/n.php?n=u2-project-to-help-geothermal-plant-2010-02-08>.



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



Notices

Closing This Week

2009 Excellence in Renewable Energy Awards, Renewable Energy World (February)

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/>.

New This Week

DOE Loans Programs Office Offers Email Updates

From the DOE Loans Programs Office: The U.S. Department of Energy's Loan Programs Office invites you to sign up for our email list. On a periodic basis, we will forward program updates including announcements of solicitations, conditional commitments of loan guarantee and closings, and upcoming events in our web-based seminar series. You will find the subscription form on-line at: www.usaenergyadvisors.com/DOE/doe-newsletter-signup.htm

Please feel free to contact DOE's Loan Program Help Desk at doehelpdesk@usaea-connect.com, or 614-324-5940. Or visit DOE's Loan Program on-line at: www.lgprogram.energy.gov for additional information about the Loan Program. Our mailing list is secure and is not distributed or disclosed in any way.

Notices**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/>.



Employment**Employment Opportunities****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: droberts@penderfinancial.com

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 Integracion Economica, 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

Closing 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

Renewable Energy Credits (February 22)

The Defense Logistic Agency, Defense Energy Support Center, seeks up to 101,062,000 kWh of renewable energy certificates for ultimate transfer to various Federal civilian customers. Responses due 2/22/10. For more info, contact Ashleigh Johnson at Ashleigh.Johnson@dla.mil or go to.

https://www.fbo.gov/?s=opportunity&mode=form&id=187f0eb8c0084f759ce482ef4877affa&tab=core&_cview=0. Refer to Sol# SP0600-10-R-0412. (FBO 1/22/10)

RFP Announcements

Seeking Investor, Geothermal Project, Oregon

“Oregon investment group performing feasibility work at SE Oregon location is seeking one additional early round investor, knowledgeable in geothermal energy exploration preferred, but not required. Project has secure land block, initial financing, and access to extensive historical database of target site. If interested, contact Peter Hall at Pueblo Valley Geothermal (pbh@bendbroadband.com) for additional details”.

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/>.

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-](https://e-center.doe.gov/iips/faopor.nsf/UNID/39C0D96768F2083F8525759A0068F216?OpenDocument)

[center.doe.gov/iips/faopor.nsf/UNID/39C0D96768F2083F8525759A0068F216?OpenDocument](https://e-center.doe.gov/iips/faopor.nsf/UNID/39C0D96768F2083F8525759A0068F216?OpenDocument)

<http://www07.grants.gov/search/search.do;jsessionid=9x3VJydGP2TfWHPRK9mfnpLqsWpm1TQmDJTzS6XLD>

p1QJKpb2SM!-1267850137?oppId=46833&flag2006=false&mode=VIEW. Refer to Sol# DE-FOA-0000058. (Grants.gov 4/16/09)

Renewables, Efficiency and Water Conservation – Worldwide (TBA April 5)

The U.S. Navy announces its intent to request proposals for Renewable Energy Technologies – Energy and Water Conservation Services for Navy Facilities. This work is intended to promote the use of renewable energy technologies, acquire energy and water conservation services, reduce energy and water consumption and/or associated utility costs, and reduce energy and water-related operations and maintenance costs, as specified in each task order issued against the contract. The work will be performed at DOD facilities globally. DOD anticipates release of the RFP on 4/5/10. For more info, contact Dyanne Van Der Kamp at dyanne.vanderkamp@navy.mil or go to: https://www.fbo.gov/?s=opportunity&mode=form&id=5366f2e24697c02cbe9b7eae834546a2&tab=core&_cvie w=0. Refer to Sol# N6258310R0333. (FBO 1/22/10)

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 or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=50515>. Refer to Sol# APS10-005. (Grants.gov 12/7/09)

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)



Events

Happening This Week

Geothermal Industry-Blm Quarterly Meeting, February 24 (Reno, NV)

The Geothermal Industry-Blm Quarterly Meeting will be held February 24, 2010 @ 1.00 pm, at the BLM state office in Reno, NV.

Draft Agenda:

Welcome

Introductions

Requests from last meeting November 10, 2009:

- BLM ePlanning update and requirements/qualifications for NEPA contractors / information package review (Marguerite McKee)
- Update on BLM Renewable Energy Position Hiring Status on each Field Office and information sheet with names (Mel Meier)
- Sage Grouse Update (Mel Meier)
- Draft of IM 2008-022, changes/revisions (Sheila Mallory)
- Case Study / Lessons Learned / Suggested Improvements
- DOE funded projects and BLM participation
- EPAC Funding from Budget Office Report
- Update on functioning of the Battle Mountain RECO team - comments from Industry regarding Geothermal Application Project (GAP) info package

Geothermal Leasing

- Schedule of upcoming lease sales (Atanda Clark or Chris Pullium)
 - Geothermal Leasing over/on top of Mining Operations (Atanda and Gary Johnson)
- DOI Budget Goal for Permitting:
- Requesting specific ideas of how Nevada BLM is going to meet the administration's stated objective of permitting huge amounts of new generation capacity (9,000 MWs of new solar, wind and geothermal) by the end of 2011. (Industry suggestion. State office to provide specific direction to FO management and staff to find ways to expedite overall permitting to meet national objective.)

Next quarterly meeting date

Adjourn

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

Renewable Energy World North America 2010 is this week, February 23-25, at the Austin Convention Center in Austin, TX. Visit GEA at Booth 813 in the Exhibit Hall! Sessions in the GEOHERMAL TRACK will be in Room 19A.

Session: GEOHERMAL TECHNOLOGIES AND APPLICATIONS

Date: Wednesday, February 24, 2010

Time: 9:30 – 11:30 AM

Chair: Joe Lillard, Atlas Copco Mafi-Trench

Co-chair: Leslie Blodgett, Geothermal Energy Association

Session description: Geothermal power is one of the largest resources of baseload alternative energy which is expanding its share in the renewable energy market. This session offers presentations and discussions on the current and future technologies to bring more of this reliable, clean and climate-friendly energy on-line.

- “Geothermal in the Oilfield: Using Hot Produced Water for Power Generation”: Thomas C. Anderson, Lyle A. Johnson and Everett D. Walker, Rocky Mountain Oilfield Testing Center (DOE)
- “Energy Recovery from Low Temperature Heat Sources, Challenges and Opportunities”: Reza Agahi and Behrooz Ershaghi, Atlas Copco Mafi-Trench; Dr. Claudio Spadacini, EXERGY S.r.l.
- “Effect of Number of Flashing Units on Thermal and Exergy Efficiencies in Flash Geothermal Power Plants”: Shahin Amiri and Masoud Ziabasharhagh, McGill University, Shayan Amiri, Khaje Nashir University of Technology
- “Selection, Installation and Operation of Multiple 15 MW Turboexpanders in a Binary Cycle Geothermal Power Plant”: Joseph Lillard and Hasan Adam, Atlas Copco Mafi-Trench Co.; Brad Platt, Enel North America Inc.
- “A Feast of Cycles – Different Plants for Different Resources”: Kevin Wallace and Marshall Ralph, POWER Engineers Inc.; William Harvey, Reykjavik University

Session: GEOTHERMAL RESOURCE DEVELOPMENT AND INVESTMENT – PANEL DISCUSSION

Date: Wednesday, February 24, 2010

Time: 1:30 – 3:30 PM

Chair: Leslie Blodgett, Geothermal Energy Association

Co-chair: Karl Gawell, Geothermal Energy Association

Session description: Panelists will look at the geothermal market from the perspective of investors and development. Challenges will be discussed as well as opportunities.

- “Getting Started: Exploration and Development – Methodology, Risks, Costs and Opportunities,” Lou Capuano, ThermaSource
- “How to Finance Geothermal Energy,” Halley Dickey, TAS
- “Expansion of the World’s Largest Geothermal Facility,” Dennis Gilles, Calpine
- “Resource Challenges and Opportunities,” Dr. Frank Monastero, Magma Energy
- “Models for Power Plant Finance,” Gene Larson, SNC-Lavalin

Session: GEOTHERMAL MARKETS, TRENDS AND POLICIES – PANEL DISCUSSION

Date: Thursday, February 25, 2010

Time: 8:00 – 9:30 AM

Chair: Karl Gawell, Geothermal Energy Association

Co-chair: Joe Lillard, Atlas Copco Mafi-Trench

Session description: Key players in the geothermal industry will approach the markets of geothermal energy in the U.S., will discuss trends and what they mean for the future of this increasingly significant baseload energy source, and will explain how support of geothermal energy in the nation's policy efforts will lead to a cleaner, more self-reliant nation.

- "Geothermal Power Industry Today and Tomorrow, an Overview and Key Issues," Karl Gawell, Geothermal Energy Association
- George Alcorn Jr., Universal Geopower
- "Addressing Critical Issues Affecting the Development Process for Geothermal Projects," Dan Fleischmann, Ormat
- "State and Federal Renewable Energy Incentive Trends and Their Implications for Geothermal," John A. McKinsey, Stoel Rives
- Panel/Audience Discussion, led by Thomas King, U.S. Renewables Group

Visit <http://www.renewableenergyworld-events.com> for full details.

Added This Week

Canadian Geothermal Code Investment Seminar and Reception

St. Andrews Club – Toronto, Ontario

March 3, 2010 – 12:30 to 7:00 PM

From CanGEA: CanGEA has developed the Canadian Geothermal Code for Public Reporting to promote an industry standard for resource disclosure in geothermal energy. To further assist industry stakeholders with the full integration and comprehension of the code, CanGEA is hosting a Canadian Geothermal Code Investment Seminar and Reception in Toronto on March 3, 2010.

The expert-led presentations will detail the salient technical and financial implications of code, offering attendees a clear perspective of how the code will affect businesses in the geothermal community. This seminar is a unique opportunity to sharpen your understanding of the geothermal value chain, and identify the genuine winners in the marketplace. For all geothermal developers and investors, this is an event you will not want to miss! For more, see http://www.cangea.ca/toronto_code_seminar.

GEA Events

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

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

UC Davis Campus

California Geothermal Forum

Hosted by the California Geothermal Energy Collaborative

May 12, 2010

8 am – 5 pm

Mondavi Center, UC Davis, Davis, California

The California Geothermal Energy Collaborative will be holding the 2010 California Geothermal Forum (formerly called the Summit) on May 12th as part of the UC Davis Energy Institute's UC Energy Week 2010.

The California Geothermal Forum will feature panels of recognized experts discussing:

- The current status of new transmission infrastructure
- The evolving California energy and environmental landscape – updates on draft California Air Resources Board (CARB) efforts, RPS and AB32/Green House Gas goals and what they mean for geothermal energy
- Community-scale geothermal efforts – distributed generation, hybrid applications and incentives

Over the last two years numerous changes have affected how California views and uses energy. Attendees will have an opportunity to hear about the current direction of technology, regulations and incentives that affect the use of geothermal energy. Leaders from the regulatory, industrial, utility, R&D and county/city/community arenas will discuss their perspectives regarding this dynamic and challenging time for the use of geothermal energy in the state.

A Tuesday evening reception from 5–7 p.m. will be a free event at the UC Davis Conference Center. It will provide an informal venue for participants from all areas of renewable energy to meet and discuss topics of mutual interest.

The program and registration forms will be available at a later date at <http://cgec.ucdavis.edu/>

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

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

GEA Trade Show and GRC Annual Meeting, October 24–27 (Sacramento, CA)

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.

Other Events

Imperial Valley Renewable Energy Summit & Expo, March 16–18 (East Imperial Valley, CA)

Geothermal. Wind. Solar. Biomass. 40,000 megawatts of opportunity. It's all here! With an abundance of renewable energy potential, the Imperial Valley will be the source of much of California's green energy. The 2010 Imperial Valley Renewable Energy Summit & Expo will feature industry experts covering a range of topics, a business exposition, networking reception and banquet. For more information, please visit www.ivedc.com or call (760)353-8332.

Imperial Valley Renewable Energy Summit & Expo, "Growing California's Green Economy"
March 16–18, 2010, Quechan Casino Resort, East Imperial Valley, CA

Oregon Geothermal Working Group Meeting, March 23 (Portland, OR)

Please save the date for the next Oregon Geothermal Working Group Meeting:

Date: Tuesday, March 23rd

Time: 8:30 AM – 2:30 PM, includes a lunch break on your own from 11:30 AM – 12:30 PM

Location: Portland State Office Building, 800 NE Oregon St, Portland

Agenda Focus: American Recovery and Reinvestment Act (ARRA) Projects in Oregon

More details and an agenda will be published closer to the date. If you would like to register early for the meeting, please e-mail Linda.Ross@state.or.us with your name and contact information.

Renewables Rendezvous, Power Engineers, March 23–24 (Boise, ID)

1st Annual Renewables Rendezvous, 23–24 March 2010, Boise, Idaho

From Power Engineers: Renewable energy is a hot topic right now, but we've been deep into it since 1987. If you are interested in renewable energy, join us at our Renewables Rendezvous this March for a two-day, technical conference. Whether it's resource, permitting, engineering or interconnection issues, do not miss your chance to learn from industry experts!

For conference topics, registration, and more go to www.powereng.com/news/events/event.aspx?id=549.

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

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. 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 or (202) 482-4693 or email CleanEnergyMission@doc.gov.

Geothermal Energy Weekly

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

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