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National News

Bi-Partisan Senate Legislation Introduced to Spur Geothermal Exploration, Heat Pumps and Direct Use, and Co-Production

Senators Tester (D-MT), Murkowski (R-AK) and Reid (D-NV) introduced geothermal legislation on Thursday. The bill, S. 1142, has three major sections. The first would create a loan fund for "high risk geothermal exploration wells." The second part would establish a program of "research, development, demonstration and commercial application for geothermal heat pumps and direct use of geothermal energy [including large scale projects and district heating]." The third would allow producing federal oil and gas leases to obtain non-competitive geothermal leases to utilize coproduction of geothermal energy.

Despite the impasse in Washington over major issues, smaller energy bills, like the "Geothermal Exploration and Technology Act of 2011" may be able to work through the process. Both House and Senate sources indicate that this "small bites" approach may be the best approach to moving issues like geothermal development ahead in the current political environment, and the bi-partisan sponsorship of the measure also speaks well to its chances.

The legislation was referred to the Senate Committee on Energy and Natural Resources, and the sponsors are hoping that the Committee will hold a hearing on the bill in the coming months.

House Committee Starts on FY12 Energy and Water Appropriations – Increases for Fossil and Nuclear, Cutbacks for Renewables Programs

The House Appropriations Committee has released and begun consideration of the FY 2012 Energy and Water Appropriations Bill for 2012. "This is a fair bill that recognizes the stark fiscal reality that faces our country. The subcommittee has worked hard to ensure that our highest priorities – defense of our country and support for American innovation and competitiveness – receive critical funding. At the same time, the recommendation cuts back on programs with large unspent balances, ensuring that every hard-earned taxpayer dollar will be well spent," Subcommittee Appropriations Chairman Rodney Frelinghuysen (R-NJ) said in a prepared statement.

Overall the Subcommittee proposal would cut the Department of Energy about \$6 billion from the Administration's request for FY 2012, which is only a 3% cut from FY 2011 funding which was recently adopted as part of the continuing resolution. The major energy technology areas FY2011 funding and subcommittee proposed FY 2012 levels were as follows:

DOE Program Area	FY 2011	FY 2012	% change
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Energy Efficiency and Renewables	1,795,641,000	1,304,646,000	-27%
Fossil Energy R&D	444,529,000	476,993,000	+7%
Nuclear Energy	725,824,000	733,633,000	+11%

This table, however, compares FY 2011 funding, which was significantly reduced as part of the Continuing Resolution adopted by Congress earlier this year. The Administration's original FY 2012 budget request for renewable energy and energy efficiency programs was significantly higher, \$3,200,053,000, making the FY 2012 proposal a 59% reduction from the request. Geothermal program funding for FY 2012 was set by the Subcommittee at \$38 million, which is equal to its final FY 2011 funding but \$64 million below the FY 2012 request.

For more information on the FY 2012 Energy and Water Appropriation bill, go to: <http://appropriations.house.gov/>.

House Holds Hearing on American Energy Initiative: Roadblocks to Wind and Solar Energy

On Wednesday, June 1, the House Committee on Natural Resources held a Full Committee Oversight Hearing on "American Energy Initiative: Identifying roadblocks to wind and solar energy on public lands and waters, [Part II – The wind and solar industry perspective](#)." The Hearing Webcast is available for viewing: [Watch the Archived Hearing Webcast](#).

Witnesses at the Hearing were: Roby Roberts, Co-Chairman, Legislative Committee, American Wind Energy Association; Susan Reilly, President & CEO, Renewable Energy Systems Americas Inc.; James S. Gordon, President Cape Wind Associates, LLC; Jim Lanard, President Offshore Wind Development Coalition; Rhone Resch, President and CEO, Solar Energy Industries Association; Frank DeRosa, Senior Vice-President, First Solar, Inc.; Dr. Martin Piszczalski, Industry Analyst, Sextant Research; Dan W. Reicher, Executive Director, Steyer-Taylor Center for Energy Policy and Finance, Stanford University

The American Energy Initiative takes an all-of-the-above approach regarding energy sources in the energy development package. The first hearing in this series, "American Energy Initiative: Identifying Roadblocks to Wind and Solar Energy on Public Lands and Waters, Part I – Department of Interior Officials" was held on Friday, May 13.

John Bryson Nominated for Approval as New Secretary of Commerce

On Tuesday, President Obama nominated John Bryson for approval as the new head of the Commerce Department. The President cited Bryson as a business leader and innovator who can create jobs and persevere through tough times. Many in the geothermal community know Mr. Bryson from his years as CEO of Edison International.

President Obama said in making the announcement: "As Commerce Secretary, John is going to be an important part of my economic team, promoting American business and American products across the globe. By working with companies here at home, and representing America's interests abroad, I'm confident that he's going to help us meet the goal that I set of doubling our nation's exports. In this new role, John will be able to draw on decades of business experience across a range of industries — from his role on the boards of major companies like Disney and Boeing, to his leadership in the clean energy industry. That's the expertise that will help us create new jobs and make America more competitive in the global economy."

Bryson's career as detailed in The White House Press release has included:

- Chairman and Chief Executive Officer of Edison International, 1990 to 2008.
- Director of The Boeing Company, Walt Disney Company and Coda Automotive, Inc
- Senior advisor to KKR.
- Chairman of the board of BrightSource Energy, the Public Policy Institute of California (PPIC), and the Keck School of Medicine of the University of Southern California (USC) Board of Overseers.
- Co-chairman of the Pacific Council on International Policy (PCIP).
- Trustee of the California Institute of Technology
- Director of The California Endowment and the W. M. Keck Foundation.
- Advisory Board of Deutsche Bank Americas.
- Previously served on a number of educational and environmental boards, including as chairman of the California Business Roundtable, co-chairman of the Electric Drive Transportation Association (EDTA), trustee of Stanford University, and as a member of the U.N. Secretary-General's Advisory Group on Energy and Climate Change (AGECC).
- Previous president of the California Public Utilities Commission, chairman of the California State Water Resources Control Board, and on the board of the Council on Foreign Relations.
- Co-founder and attorney for the Natural Resources Defense Council (NRDC), a national and international environmental group.
- Graduate of Stanford University and Yale Law School

A [Wall Street Journal editorial welcomed Mr. Bryson to the world of Washington by harshly criticizing his record in the solar energy business](#). The Wall Street Journal's editorial was entitled, "The Secretary of Subsidies."



Company News

Ormat Technologies: Company Planning Additional Geothermal Development in Hawaii

In a meeting with residents of the Kula District of the Hawaiian island Maui, representatives from Ormat Technologies stated their intention to conduct preliminary [geothermal exploration and drilling activities in the area of Ulupalakua](#). If early development is successful, Ormat could move forward with the construction of a geothermal power plant capable of producing two dozen megawatts. The exploration stage of developing the geothermal resource will take place in an 8,000 acre area, although a complete geothermal power plant would only require the usage of around 20 acres. According to Ormat, additional geothermal capacity would not only help Hawaii achieve its renewable energy generation target of 40% by 2030, but it would also provide around 250 construction jobs and 30 full-time positions, as well as millions of dollars in taxes and royalties.

U.S. Geothermal: Company signs 19.9-MW, 25-year PPA with NV Energy

[Press Release](#) — BOISE, Idaho, June 1 — (NYSE Amex: HTM; TSX: GTH) U.S. Geothermal Inc., a leading renewable energy company focused on the development, production and sale of electricity from geothermal energy, today announced the signing of a Power Purchase Agreement ("PPA") between its wholly owned subsidiary USG Nevada LLC and NV Energy, for the purchase of an annual average of up to 19.9 net megawatts of clean, renewable energy from the San Emidio Geothermal Project located in Washoe County, Nevada. The 25-year PPA anticipates the development of two electric power generation units at San Emidio. The Unit 1 power generation plant, scheduled to achieve commercial operation during the 4th quarter of 2011, is currently under construction and will replace the existing 3.6 net megawatt plant at San Emidio. Subject to successful production well development, the Unit 2 power generation plant is scheduled to be on line during the 2nd quarter of 2013. Two additional Units 3 and 4 are also planned at San Emidio after sufficient drilling has been completed to define additional reservoir production capacity.

"We are pleased to extend for another 25 years the already long and successful relationship this geothermal power project has with NV Energy", said Daniel Kunz, President and CEO of U.S. Geothermal Inc. "With Unit 1 funded and under construction, this PPA is an important milestone that allows for completion of the remaining field activities required to develop additional reservoir production capacity".

The PPA is subject to the Public Utilities Commission of Nevada ("PUCN") approval and is expected to be submitted to the PUCN by NV Energy within 100 days. USG Nevada LLC is currently investigating remedies for certain existing constraints related to transmission that may limit the total output of the project to 16 net megawatts.

US Geothermal: Company Announces Stock Option Grant

Press Release, BOISE, Idaho, June 3 — (NYSE Amex: HTM, TSX: GTH) U.S. Geothermal Inc., a renewable energy development company focused on the production and sale of electricity from geothermal energy, announced today that it has granted options pursuant to its Stock Incentive Plan to directors, employees and consultants to acquire 2,590,000 shares in capital of the company. The options are exercisable at a price of US\$0.83 per share for a term of 5 years expiring June 3, 2016. The options will vest subject to the Company's Stock Incentive Plan.

The Stock Incentive Plan was approved by the shareholders of the company at an Annual General Meeting held December 17, 2009.

Renewable Energy and Climate Change



SEAB Natural Gas Subcommittee Identifying Improvements for Hydraulic Fracturing

On May 5, 2011, U.S. Energy Secretary Steven Chu charged the Secretary of Energy Advisory Board (SEAB) Natural Gas Subcommittee to make recommendations to improve the safety and environmental performance of natural gas hydraulic fracturing from shale formations. The Subcommittee will work to identify any immediate steps that can be taken to improve the safety and environmental performance of hydraulic fracturing. They will also develop advice for the agencies on shale extraction practices that ensure protection of public health and the environment.

The first day of a two-day public hearing of the [SEAB Natural Gas Subcommittee](#) this week at DOE focused on [large environmental impacts from gas drilling](#).

Senate Postpones Decision on Green Bank

The U.S. [Senate postponed the final decision on the creation of much debated "green bank"](#) back one month. As proposed, the Clean Energy Deployment Administration (CEDA) would essentially provide loan guarantees for renewable energy projects. Critics of CEDA include a number of environmental groups who have expressed concern that too wide a range of technologies stand to benefit from CEDA and that less environmentally friendly technologies could be subsidized under the program. Additionally, Republicans are concerned about the cost of CEDA, which is currently estimated to require around \$10 billion to create.

Geothermal Energy Article on AmericanRecycler.com

An [article on AmericanRecycler.com](#) gives an overview of geothermal energy and quotes a recent GEA report showing the total number of projects under development increasing 12 percent. It also cites a Pike Research report showing global geothermal power capacity could grow between 34 percent and 134 percent by 2020 — a large span, representing both conservative and high-growth forecast scenarios. The current installed capacity is 10.7 GW, spread across 26 countries, outputting about 67 terawatt hours of electricity.

The article quotes GEA Executive Director Karl Gawell: “The growth we’ve seen since 2005 continues in 2011. Four years ago there were four states with geothermal power production and now there are nine. In the near future there should be at least 15. And that’s substantial growth.”

Steve Hirsch, vice president of project development at Geothermal Development Associates (GDA), designs and builds complete geothermal power plants, gave a perspective of the global market: “Our business is going well, but we are encountering unfair competition from companies in other countries whose governments provide subsidized export credit. The Chinese, for instance, will provide subsidized credit to the buyer. Instead of the interest rate being 9 or 10 percent; the Chinese export-import bank may offer 2 or 3 percent. Other countries, such as the French, mix export credit with foreign aid grants which results in a lower overall interest rate to the foreign buyer. It’s hard for us to compete on overseas projects when our competitors are able to offer subsidized credit,” said Hirsch.

Saf Dhillon, who handles investor relations for U.S. Geothermal, Inc. discussed the Neal Hot Springs project, a 23-MW facility that was the first geothermal plant to qualify to receive the ITC and the DOE Loan Guarantee Program. “DOE will provide and guarantee a low interest loan of approximately \$97 million,” Dhillon explained. “In addition, 60 days after the plant starts production, we will receive a check for 30 percent of the plants total capital expenditure under the Treasury Grant Program.”



State News

California: Digging Mammoth — California Geothermal Forum and Field Day Attracts Wide Interest

By John McCaull ~ GEA Western States Representative, June 3, 2011. In the midst of late season Sierra snowfall, the [California Geothermal Energy Collaborative \(CGEC\)](#) hosted their [2011 annual summit](#) at Mammoth Lakes, CA last week. In his keynote address to the May 26th Forum, Karl Gawell of the Geothermal Energy Association welcomed everyone to Mammoth and said “we need events like this to build the creative thinking going into new geothermal developments.”

With almost two years of planning, the CGEC decision to host a statewide “issues summit” and full day field trip through the Long Valley caldera in the Mammoth Mountain region was somewhat of an experiment. Judy Fischette, the CGEC’s Associate Director remarked, “We chose Mammoth because we wanted to explore the critical issues facing the geothermal industry, and we knew there was a desire to also learn about geothermal resources first hand in a beautiful setting.” Despite high winds that prevented planes from landing, and temporary mountain pass closures, the multi-day event drew a diverse and enthusiastic audience.

The May 26th Forum focused on the tremendous opportunity for geothermal energy development spurred on by states establishing “renewable portfolio standards.” Just as California is now requiring that all “load serving entities” procure at least 33% of their electricity from renewable sources, other western states are pursuing similar mandates and policies. Although the Forum was primarily focused on California, there was strong participation from both panelists and attendees from many western states.

Although CGEC Executive Director William Glassley was not able to attend, he noted in his prepared opening remarks that “Historically, geothermal power generation has been the leading renewable energy resource in California. Significant development of new resources has stalled in recent years, and we must increase awareness of geothermal energy’s importance as part of the overall renewable energy package.” This theme was reiterated by Karl Gawell, in his keynote address. “What is turning heads in Washington D.C. is when I show maps showing the progress of the new states bringing geothermal projects on line. We have grown from four states to fifteen in just over five years!”

The day-long Forum focused on the major challenges currently facing the geothermal industry. Discussions and presentations included transmission issues, resource exploration and assessments, environmental issues such as water use and permitting and regulatory challenges. Another unique perspective was provided by Mono County Supervisor Duane “Hap” Hazard. A strong proponent for geothermal energy, Supervisor Hazard told the story of

how the [Mammoth Pacific Power Plant](#) was sited in Mono County, and how important it is for local community benefits to be considered when siting utility scale renewable energy and transmission infrastructure.

Another highlight of the Forum was a presentation by a group of U.C. Davis graduate and undergraduate students on their field work in the Long Valley Caldera. A major goal of the CGEC is to develop a credible geothermal resource assessment methodology for California that can be used in variety of geographic settings. The decision was made to use the Long Valley Caldera as the “test case” for this new assessment approach. The presentation by Gene Suemnicht of EGS, Inc., Professor Robert Zierenberg and UC Davis Geology Department students Scott Bennett, Maia Kostlan, Andrew Fowler, and Maya Wildgoose signaled a growing interest within the college and university system to expand curriculum and research related to geothermal resources and geothermal power production.

The two-day event wrapped up with a full-day guided tour of the Long Valley Caldera on May 27th. The conference participants were also joined by a group of geology students on a summer field study session from San Diego State University led by Professor David Kimbrough. John McCaull, GEA’s Western States Representative noted: “Prior to our stop at Ormat’s Casa Diablo plant, many of the students I talked to had never seen an operating geothermal power facility. They had impressive knowledge of geology and earth sciences, but were just now learning of the potential of geothermal power. If we can expand on this interest, we can have geothermal courses in colleges throughout California in the next five years.”

To learn more about the activities of the California Geothermal Energy Collaborative, please contact Elise Brown at elisebrown@gmail.com or William Glassley at geobg@nf.au.dk.

California: Plans for Cap-and-Trade Program to Continue Despite Challenge

The California Air Resource Board moved to allow [preparations for the state's cap-and-trade scheme to continue](#) while the case on a San Francisco judge’s ruling for further analysis is with the appeals court. The Association of Irrigated Residents incited the challenge due to concerns that cap and trade would enable large emitters of pollution.

The program is expected to launch in 2012. Allan Bedwell, vice-president and director of global sustainability strategies at San Francisco-based brokers CantorCO2e said the judge’s ruling and the appeal was spurring an increased level of transactions in the market.

California: Geothermal Energy a “Strong Candidate” for Partnership at Salton Sea

A [study commissioned by the Salton Sea Authority](#) and conducted by the firm InfraConsult found the area in and around the Salton Sea could produce enough renewable energy to power 6.5 million homes, and that geothermal and solar projects could generate over \$5.3 billion annually. In capital costs, geothermal development would require between \$4.7 billion and \$8.1 billion, while solar energy would require between \$5.6 billion and \$16.5 billion. In revenues, geothermal could provide up to \$1.4 billion a year, while solar could provide up to \$3.9 billion a year.

“The revenue and cost clearly suggest as strong of a candidate that we've seen for a (public-private partnership) possibility,” said principal consultant Mit Jha of the outlook for geothermal development.

California: Residents Oppose Cobb Mountain Geothermal Expansion

Friends of Cobb Mountain, a citizens group, is taking the [environmental impact report on expansion of the Bottle Rock Power Plant to the courts](#), saying it is inadequate and does not address noise, heavy industrial traffic, and residents' exposure to the hydrogen sulfide gas “rotten egg” odor. The group says they are not opposed to the project itself.

Bottle Rock General Manager Brian Harms said the report was adequate, while Supervisor Rob Brown also said the report was adequate but that he understands residents' concerns.

Hawai'i: Islands Have Great Geothermal Potential; Maui May Get Geothermal Plant

Hawai'i's geothermal potential has gotten attention lately: “Geothermal electricity could power Hawaii at a quarter of the current cost of fossil fuel based power,” according to an article at TriplePundit.com: [“Hawaiian Geothermal Energy: A Gift from the Gods?”](#).

In [a new PBS documentary film](#), “Hawaii: Roots of Fire,” scientists use isotopic evidence they discover within Mauna Kea to negotiate perspectives of Earth processes. The film is funded by the National Science Foundation Continental Dynamics and Informal Science Education Programs.

Ormat Technologies, which has produced geothermal technology on the Big Island of Hawai'i for 20 years, is considering [Ulupalakua Ranch as a site for a geothermal project on Maui](#). Ormat is currently looking at developing a three-dimensional model of the region and then drilling between two and six test wells, work that would likely take much of a \$5 million grant provided by the DOE.

But pending siting and permitting, Ormat could break ground on the project as early as next year, and expects to provide about 150 construction jobs and 30 full-time positions. Ormat representative Christopher Heaps announced the project to Kula residents in a public forum and answering questions and concerns.

Idaho: Geothermal Developers Pass up State's Geothermal Prospects for More Proven Resources

A recent article describes how [geothermal companies may be largely opting out of development opportunities in the state](#) of Idaho. A recent geothermal lease auction, held by the Bureau of Land Management (BLM), in Denver, CO yielded just \$108,000 in bids for 25,000 acres in Idaho. Although Idaho is home to many natural hot springs, their temperature is usually relatively cooler when compared to resources located in other western states, such as Nevada. Also, geothermal resources are not as well characterized in Idaho as they are in other places, making them a more risky investment for development companies. Still, the state of Idaho is endeavoring to make itself an attractive destination for geothermal developers, and has approved legislative reforms reduce state royalty and bonding requirements in a bid to attract increased development from the geothermal industry.

International News



Africa

Kenya: Geothermal Development Project Estimated at \$652 Million

Kenya's Minister for Energy, [Mr. Kiraitu Murungi, recently stated](#) that the amount of investment required for Kenya to achieve its geothermal development goals amounts to approximately 56 billion Kenyan Shillings (~\$652 million). The Kenyan government has allocated approximately sh. 8 billion towards developing the nation's geothermal resources. Other partners to Kenya's geothermal development, including the African Development Bank, European Investment Bank, SREP World Bank and AFD Bank, have pledged funding that will make up the rest of sh. 56 billion.

Kenya's government has set a goal to bring 5,000 MW of geothermal energy online by 2030. The state run Geothermal Development Company (GDC) has been busy drilling geothermal bore holes in the Menangai area where it recently completed the drilling of a geothermal well capable of producing 10 MW.

Europe

Iceland: Alterra Power Sells 25% of Iceland Subsidiary HS Orka

Press Release [\[Full story\]](#) — Vancouver, May 31 — Alterra Power Corp. (TSX: AXY) announces the signing by its wholly-owned subsidiary, Magma Energy Sweden AB ("Magma Sweden"), of a Share Purchase Agreement with Jarðvarmi slhf ("Jarðvarmi"), a company owned by a group of 14 Icelandic pension funds. This transaction was

previously announced on April 18, 2011 and has now been formalized with the completion of a definitive Share Purchase Agreement. Under the terms of the agreement, Magma Sweden will sell a 25% interest in its 98.5%-owned Icelandic geothermal power company HS Orka hf to Jarôvarmi for ISK 8.06 billion (approximately US \$69.8 million). The transaction is expected to close by June 2, 2011.

Magma Sweden was advised on the transaction by Saga Investment Bank based in Iceland. Magma Sweden has also signed a Share Purchase Agreement with four Icelandic municipalities to purchase a 1.5% interest in HS Orka hf for ISK 475 million (approximately US\$ 4.1 million). This transaction is expected to close by June 9, 2011. Upon completion of the transactions, Magma Sweden will own a 75% interest in HS Orka and the remaining 25% will be owned by the Icelandic pension funds' company Jarôvarmi.

UK: Newcastle Geothermal Exploration Project in Final Drilling Stages

The new arrival of a hydraulic hoist rig at the [Newcastle geothermal energy project](#) marks the final stages of the drilling project, with 1,750m remaining to drill. Project lead Prof Paul Younger, director of the university's Newcastle Institute for Research on Sustainability, said: "Our aim is to see if we can provide some, if not all, of the energy requirements for Science Central from the most low-carbon energy source there is."

Pacific

Indonesia: PLN to Take Over Development of Sarulla Geothermal Plant

PT PLN, the Indonesia state electricity utility announced it will [take over construction of the 3 x 110-MW Sarulla geothermal plant](#) in North Sumatra. Negotiations with a consortium of members Medco Energi Internasional, Ormat International and Itochu Corporation had not reached conclusions, perhaps delaying construction plans. "PLN has completed all its [internal] negotiations, but negotiations among investors and other related parties have not been completed," PLN president director Dahlan Iskan said.

Geothermal Heat Pumps and Direct Use



ARRA Funded Project Underway in Tulsa, Oklahoma

The [drilling of 120 boreholes to depths of 500 feet has commenced at the Brady Arts District](#) in Tulsa, Oklahoma. The geothermal wells are part of a geothermal heat pump system that will heat and cool the Tulsa Paper Co and the Hardesty Arts Center. According to Jim Bose, a faculty member at Oklahoma State University and manager of the International Ground Source Heat Pump Association, the geothermal heat pump system being constructed at the Brady Arts District will save approximately 50% on operating costs and result in a 30% energy savings. The project has been the recipient of numerous grants, including approximately \$2.5 million from the American Recovery and Reinvestment Act of 2009 (ARRA) and \$200,000 from the Oklahoma Department of Environmental Quality.



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

Notices

Closing This Week

Snohomish County Public Utility District to Receive Geothermal Exploration Proposals This Week (June 8)

The Board of Commissioners of Public Utility District No. 1 of Snohomish County will receive and open sealed proposals for the following work: Request for Proposal No. 1292

PWC – SLIM DIAMETER GEOTHERMAL EXPLORATION WELL DRILLING

At the District office of Contracts/Purchasing, 1802 - 75th Street SW, Everett, Washington, on Wednesday, the 8th day of June, 2011, at 2:00 p.m. (Local Time). Address proposals to P.O. Box 1107, Everett, Washington 98206-1107. Proposals received after this time will not be considered. The bid opening is public and all proposals will be read aloud. Each bid shall be accompanied by bid security in the amount of 5 percent (5%) of the total amount bid, excluding tax.

This project is to drill a new approximately 5,000 foot deep slim-diameter vertical well at the Garland Mineral Springs project site for resource characterization and production of geothermal fluids. The well is expected to be a minimum of 4,000 feet deep, and as deep as 6,000 feet, depending on geologic conditions. The well will be drilled from a new drilling pad, to be constructed within the project boundary. To provide water for project purposes, the Contractor shall drill a water supply well near the project site. The project is located at Garland Mineral Springs, approximately 12 miles north of the town of Skykomish, Washington, in Snohomish County.

There will be a pre-bid meeting on Thursday, May 26, 2011, at 9 a.m. at the District's Electric Building Headquarters in Room TC1-A, located at 2320 California Street, Everett, Washington, 98201. A site showing will be conducted immediately following the pre-bid meeting.

This Notice to Bidders, the Planholders List, Addenda, Bid Responses, and Award Recommendation are available for viewing on the District's website at www.snopud.com. For more information concerning this work, please call: (425) 783-5500 or E-mail us at bids@snopud.com.

The District encourages minority and women's business enterprises to request these contract documents and to bid on this work.

Current Notices

Department of Commerce Seeks to Promote U.S. Geothermal Exports

As part of its efforts to better serve a wide array of U.S. industries and sectors, the Department of Commerce's Advocacy Center is marketing its services to U.S. renewable energy companies. Since many geothermal energy projects have significant government involvement (via financing, tax or tariff reductions, or regulatory approval mechanisms), diplomatic support from the U.S. Government can be essential in ensuring U.S. companies have every opportunity to participate. U.S.-based geothermal companies seeking to compete in foreign, public-sector tenders are therefore encouraged to contact the Advocacy Center to learn more about export promotion and advocacy services.

Mission

The mission of the Advocacy Center is to coordinate U.S. Government (USG) resources in order to level the playing field on behalf of U.S. business interests as they compete against foreign firms for specific international contract of other U.S. export opportunities. Since its creation in 1993, the Advocacy Center has helped hundreds of U.S. companies – small, medium, and large enterprises in various industry sectors – win government contracts across the globe.

Why we Advocate

The principal reasons for USG advocacy are to:

- Promote U.S. exports, create and retain U.S. jobs, and increase global market share for U.S. businesses;
- Counter foreign government advocacy and political pressure;
- Encourage transparency, promote fair treatment of U.S. companies and address bribery and corruption in tender processes

Advocacy assistance can also help to focus foreign decision makers on the merit of U.S. technology and capabilities, in both commercial and defense projects.

How we Advocate

USG advocacy assistance varies but typically involves the engagement of high-level USG officials with overseas governments or government owned corporations. USG advocacy ranges from U.S. Embassy and Consulate assistance to Sub-Cabinet and Cabinet messages delivered through a variety of channels. The Advocacy Center also works with Ex-Im Bank, the U.S. Trade and Development Agency and the Overseas Private Investment Corporation to marshal USG financial assistance, where appropriate, in support of bids by qualified U.S.

companies. In addition, the Advocacy Center has liaisons to five Multilateral Development Banks to assist U.S. firms and to advocate on their behalf when they compete for bank-funded tenders.

The Advocacy Center focus almost exclusively on international tenders that involve foreign government decision makers and does not typically become involved in private sector commercial transactions. The Advocacy Center does not engage in policy advocacy. The Advocacy Center can best support a U.S. exporter when the details of a particular opportunity are clearly established and sufficient time remains to develop and implement an effective strategy.

How to Request Advocacy

Companies interested in requesting advocacy assistance are required to submit an Advocacy Questionnaire and Anti Bribery Agreement. Once a companies request has been determined to be in the national interest, the Advocacy Center will work with relevant USG agencies, the company, and the bidder of record, if applicable, to devise and implement an appropriate advocacy strategy.

To obtain and Questionnaire and Anti Bribery Agreement, or to learn more about how the Advocacy Center helps U.S. companies compete and win in foreign markets, visit www.export.gov/Advocacy

IPGT White Papers Available for View

The International Partnership for Geothermal Technology (IPGT) is a forum for government and industry leaders to coordinate their efforts. Partners (currently Australia, Iceland, Switzerland and the United States) share information on results and best practices to avoid blind alleys, limit unnecessary duplication, and efficiently accelerate the development of geothermal technologies.

The IPGT Stimulation Procedures, Reservoir Modeling and Zonal Isolation/Packers Working Groups have prepared draft white papers in order to outline needs and relevant issues for advanced geothermal systems. These papers define the current state of the art, identify technology needs and will help the IPGT determine critical R&D gaps.

The period to provide feedback is over, but please follow the links below to view the white papers:

http://internationalgeothermal.org/Working_Groups/Stimulation_Procedures.html

http://internationalgeothermal.org/Working_Groups/Modeling.html

http://internationalgeothermal.org/Working_Groups/Zonal_Isolation.html

For more information on the IPGT, please see the website: <http://internationalgeothermal.org/>

Funding Opportunity: Technology Advancement for Rapid Development of Geothermal Resources in the U.S.

From Office of Energy Efficiency and Renewable Energy (DOE) — In early June 2011, the U.S. Department of Energy's Geothermal Technologies Program (GTP) intends to issue a Funding Opportunity Announcement to expand its partnership with the geothermal community on geothermal systems research and development throughout the United States in order to support GTP's goal of lowering the cost of geothermal energy to 6 ¢/kWh. This Notice of Intent is designed to provide an opportunity for potential applicants to begin developing partnerships and begin the process of gathering data to prepare their application.

GTP's goal is to address the high exploration and drilling risks and costs for geothermal development and key technical barriers for enhanced geothermal systems (EGS) in reservoir creation and sustainability. GTP hopes to achieve this goal by obtaining ideas to advance current drilling, reservoir engineering, and characterization technologies in order to identify and develop sustainable reservoirs at lower cost in the following Topic Areas:

- Advanced Exploratory Drilling Technologies
- Advanced Well Completion Technologies
- Zonal Isolation
- Observation Tools and Data Collection System for Reservoir Stimulation
- Geophysical Exploration Technologies
- Geochemistry/Rock-Fluid Interactions

For more information, see the [notice of intent](#) at FedConnect.

BLM Accepting Nevada Geothermal Lease Sale Land Nominations (June 24)

From Branch of Minerals Adjudication, BLM — On March 8, 2011, a Notice of Nevada Geothermal Lease Sale Land Nominations (Notice) was posted announcing acceptance of nominations of lands for competitive geothermal leasing for the geothermal lease sale tentatively scheduled for January 24, 2012. The non refundable filing fee for geothermal nominations reflected in the Notice is changed to comply with the Fiscal Year 2011 Processing and Filing Fee Table contained in 43 CFR §3000.12. The change is noted below in bold.

Each nomination must be submitted with a nonrefundable filing fee of \$105 per nomination plus **\$0.11** per acre of lands nominated. If a land parcel consists of fractional acreage, please round the land acres up to the nearest whole acre. All land nominations must be received by the Nevada State Office no later than June 24, 2011, in order to be considered for the January 2012 Geothermal Lease Sale. Nominations received after June 24, 2011, will be processed for the next sale.

If you have any questions regarding this notice, please call Irene Hoiby at (775) 861-6641; facsimile at 775-861-6710; write to the attention of NV923 .i at the address on this letterhead; or send electronic mail to ihoiby@nv.blm.gov.

GEA Honors -- Nomination Deadline Extended (July 1)

Deadline for nominations has been extended to July 1, 2011 for entries for the first-ever GEA Honors award program. We are thrilled to be giving away our first ever GEA Honors Awards! "We are excited about the awards and the opportunity to recognize the geothermal industry's most innovative and inspiring developments from the past year," said Karl Gawell, Geothermal Energy Association Executive Director. "The GEA Honors will shine a light on the contributions being made by the individuals and companies who are doing an exemplary job of promoting and growing geothermal power." In this inaugural year, awards will be given to GEA member companies in the following categories:

- *Technological Advancement* – Awarded to an individual or company that has developed a new, innovative, and/or pioneering technology to further development
- *Environmental Stewardship* – Awarded to an individual or company that has fostered outstanding environmental stewardship through the use of geothermal systems. Award to be presented in conjunction with the Environmental and Energy Study Institute (EESI)
- *Economic Development* – Awarded to an individual or company that has made a substantial contribution to the development of local, regional, or national markets through the development of geothermal systems

The above awards will be given to one company for each award. Additionally, the GEA Honors will be accepting nominations for special recognition of those individuals and companies who have made outstanding achievements in the geothermal industry. These awards are open to GEA members as well as non-member companies and individuals. To place nominations for GEA Honors 2011 please go to: <http://www.geo-energy.org/GEAHonors.aspx>.

Employment

Employment Opportunities

Research Geologist/Geophysicist, United States Geological Survey

The USGS in Menlo Park, California, has an opening for a Research Geologist/Geophysicist to conduct research in support of geothermal energy assessments, with a focus on the structural, geomechanical, thermal, and hydrologic properties of fault-hosted hydrothermal systems. Detailed information on the position can be found at



<http://tinyurl.com/USGSGeothermalJob>. Individuals must apply online at <http://www.usajobs.gov/> to receive consideration. For more information about the USGS, visit: <http://www.usgs.gov/ohr/great.html>.

Tenure-line Position, Energy Resources Engineering, Stanford University

The Department of Energy Resources Engineering at Stanford University [invites applications for a tenure-line faculty appointment](#). The position is at the assistant professor level. It is desired that the selected candidate be able to start by January 2012.

The Department of Energy Resources Engineering focuses on a wide range of activities related to the recovery of the Earth's energy resources (e.g., hydrocarbons, geothermal, and renewables). The Department also has active research programs on carbon sequestration and clean energy conversions. ERE offers degrees in both energy resources engineering (B.S., M.S., Ph.D.) and petroleum engineering (M.S., Ph.D.). The ideal candidate should have research and teaching interests beyond traditional petroleum engineering disciplines.

We seek scholars with a Ph.D. in a relevant field with novel and innovative research interests in energy resources, such as in one or more of the following areas:

1. Energy systems modeling and optimization, for example integration of energy recovery and carbon sequestration
2. Engineering of enhanced geothermal systems
3. Recovery of unconventional energy resources, such as coalbed gas, shale gas or gas hydrates
4. Renewable energy resources

Please apply online at <https://academicjobsonline.org/ajo/jobs/685/> in electronic format (pdf only) with the following application material:

- cover letter
- curriculum vitae
- a statement outlining research and teaching interests
- the names of three references including e-mail addresses
- copies of up to five selected papers published in refereed journals over the past three years

We will begin reviewing applications on April 15, 2011 and will continue until a suitable candidate is identified.

Reservoir Engineering Manager – Geothermal, Chevron, Jakarta, Indonesia

Chevron Asia Pacific Exploration and Production is accepting online applications for the position of Reservoir Engineering Manager located in Jakarta, Indonesia. To learn more about this exciting position and to apply visit www.chevron.apply2jobs.com and search by requisition 081116435. All applicants must apply via the Chevron online application process.

Sr. Applications Engineer, ElectraTherm

Start date: Immediate, Posting Date: 3/9/2011

Contact: Jan Petersen – jpetersen@electratherm.com, 775-398-4680

Consultant to Assess the Geothermal Market in Turkey, EBRD

The European Bank for Reconstruction and Development is considering a wide range of renewable energy proposals in Turkey, some of which are in the geothermal sector, and as such requires a consultant to provide an assessment of the Geothermal Market in Turkey. See <http://www.ebrd.com/pages/homepage.shtml> and <http://www.balkans.com/open-news.php?uniquenumber=91332>

NREL Seeking Applicants for Geothermal Analysis Group

We're looking for applicants with geothermal or related technical backgrounds that have strong analytical skills and good writing/communication skills. If you have any graduate students, post-docs, former undergrads with some experience, or other contacts that are looking for employment and would be good fits for any of these positions, please forward them the information. They can also apply for the positions online at http://www.nrel.gov/employment/job_openings.html.

Requests for Proposals**New This Week****Request for Expression of Interest, Consultancy Services, Nile Basin Initiative, Regional Power Trade Project (June 15)**

GRANT TF094586 NB

Expression of Interest

This request for expressions of interest follows the general procurement notice for this project that appeared in Development Business No. 26, No. 611 of 31st July 2003.

The Regional Power Trade Project under the Nile Basin Initiative Shared Vision Program has requested a grant from the International Bank for Reconstruction and Development and International Development Association and intends to apply part of the proceeds of this grant to payment under the contract for the following Capacity Building Services:

High Level Workshop on Development of Renewable Energy Resources

This workshop will be delivered over a three (3) days period. The general objective of this workshop is to provide a moderated forum for high level decision makers in the power sector to deliberate, exchange experience on existing barriers to market-based scaling up of renewable energy in the region and to formulate strategies to increase both access to modern energy services and energy security for economic and social development of the Nile Basin people. As a result of this workshop, participants are expected to benefit from improved understanding of the critical success factors, opportunities and challenges in the exploitation of renewable energy resources in the region. They will also familiarize themselves with financial options and packaging techniques for mobilizing funds for renewable energy projects. The workshop will develop a common plan of action for stimulating and scaling up renewable energy exploitation in the Nile Basin Region. The main topics of the workshop shall comprise but not limited to the following: policy, regulatory and other barriers to exploitation of renewable resources; availability & sharing of scientific data at regional and international levels; opportunities for capacity building in resource exploration, identification and assessment of renewable energy resources; incentives and innovative tariff structures targeting non-conventional renewable generation; project packaging and resource mobilization; risks associated with implementation of renewable power projects; etc. etc. For this assignment, consultant will be required to demonstrate knowledge of the power development activities in the Nile Basin region, in particular those relating to exploitation of renewable energy resources (wind, solar, geothermal, etc) under different initiatives.

The Regional Power Trade Project now invites eligible consultants to indicate their interest in providing the capacity building services listed above. Interested consultants must provide information indicating that they are qualified and adequately experienced to perform the services. To facilitate evaluation of EOI, information submitted shall be in the form of *brochures with relevant successful assignments, client references, firm's annual reports, description of experience on similar assignments, availability of appropriate skills among proposed instructors, adequacy of the proposed course program, knowledge of the power situation/development activities in the region, etc.* Consultants may associate as necessary to enhance their qualifications.

A consultant firm will be selected in accordance with the procedures set out in the World Bank's Guidelines: Selection and Employment of Consultants by World Bank Borrowers, May 2004. These are classified as small value assignments and the method of selection is CQ: Consultants Qualifications. This consultancy will only take place subject to availability of the requested funds.

Interested consultants may obtain further information from the RPTP Project Management Unit (PMU) at the address below from 0900 to 1600 hours East African Time or from the NBI website rpt.nilebasin.org under announcements - procurement. Queries may be sent directly to: rptinfo@nilebasin.org or Fax: +255 22 2121132.

Expressions of interest (1 hard + 1 CD) should be delivered to the PMU office at the address below by 12:00 hrs on 15th June 2011.

Regional Power Trade Project
Old TANESCO Building,
5th Floor Annex, Samora Avenue,
P.O Box 71101,
Dar es Salaam, TANZANIA

Proposal Announcements

Pacific Gas & Electric Solicitation for Renewables (June 15)

Pacific Gas and Electric (PG&E) is seeking capacity from new renewable energy projects and renewable energy credits. Additionally, PG&E is soliciting ownership offers, including build-own-transfer arrangements, and sites for development. PG&E's deadline for the submission of proposals is June 15, and it plans to select a short list of candidates by August 15. The date for the submission final agreements to the CPUC has not yet been determined by PG&E.

For more information on PG&E's 2011 RFO go to:

<http://www.pge.com/b2b/energysupply/wholesaleelectricssolicitation/renewables2011/index.shtml>

Geothermal Development, Commonwealth of Dominica (June 17)

Request for Expressions of Interest to Engineer, Procure, Construct and Operate 5-to-10-MW Geothermal Power Plant (Note: The deadline for submission of EOIs has been extended from the 31st of May 2011 until 17th of June 2011).



The Government of the Commonwealth of Dominica intends to proceed for the following services: the construction and operation of a small geothermal plant to provide electricity to the local grid whilst establishing the reaction of the reservoir to exploitation.

The services include:

- the partial or full financing of the drilling at the risk of the investor of 1 full size exploratory geothermal well with the Government of the Commonwealth of Dominica financing the drilling of 2 other exploratory wells;

- the construction of a small, 5 – 10 MW geothermal power plant with the geothermal fluids being re-injected back into the reservoir;
- agreement with the local utility and the Independent Regulatory Commission for the provision of electricity to the local grid.

The Government of the Commonwealth of Dominica now invites companies with the suitable expertise and financial backing to indicate their interest in providing the services. Interested companies must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments in the geothermal industry, experience in project development, experience in power plant operation, availability of appropriate skills among staff, financial capability, etc.). Companies may associate to enhance their qualifications.

The Client will prepare a short list of about 3-6 candidates to be pre-selected on the basis of the expressions of interest received to whom he will send a Request for Proposals to perform the services. In addition to the requested information, candidates should prepare a document indicating the key issues they wish to be addressed in the request for proposal with regard to project development. Expressions of interest must be delivered to the address below by June 17 (extended from 31st May 2011).

Ministry of Public Works, Energy & Ports

Attn: Mr. Jason Timothy

Project Coordinator

Geothermal Project Management Unit

3rd Floor Government Headquarters

Kennedy Avenue, Roseau

Commonwealth of Dominica

Tel: 767-266-3616/7/8

Fax: 767-448-0182

E-mail: geothermal@dominica.gov.dm; pmu.geothermal@gmail.com

Nevada Accepting Land Nominations for January 2012 Geothermal Lease Sale (June 24)

The Nevada State Office is now accepting nominations of lands for competitive geothermal leasing for the next [geothermal lease sale that is tentatively scheduled for January 24, 2012](#). Land nominations must be submitted on Department of the Interior (DOI), Bureau of Land Management (BLM) Form 3203-1, and comply with 43 CFR 3203 (72 FR 24406, May 2, 2007). Please refer to these regulations for nomination requirements regarding maximum acreage, acceptable land descriptions, and nominating parcels as a block. These regulations may be found at: <http://ecfr.gpoaccess.gov/> under Title 43, Volume 2, Chapter II, Part 3200. All land nominations must be received by the Nevada State Office no later than June 24, 2011, in order to be considered for the January 2012

Geothermal Lease Sale. Nominations received after June 24, 2011, will be processed for future sales. Questions, please call Irene Hoiby at (775) 861-66641; facsimile at 775-861-6710; ihoiby@nv.blm.gov.

Southern California Edison Solicitation for Renewables (June 27)

Southern California Edison (SCE) has announced that it is seeking proposals to expand the capacity of its renewable energy portfolio. SCE will hold a proposal conference for interested parties on May 26. Renewable energy project proposals are due to SCE by June 27 and the utility plans to submit completed contracts to the California Public Utilities Commission (CPUC) for approval by mid-2012.

To see SCE's 2011 RFP Schedule and related information go to:

<http://www.sce.com/EnergyProcurement/renewables/2011-request-for-proposal.htm?from=renewrfp>

Call for Expressions of Interest, Geothermal Development Company Ltd, Kenya

Bogoria-Silali Block Phase I

1. Introduction: Geothermal Development Company Limited (GDC) is a 100% state-owned corporation, tasked with accelerating development of geothermal resources in Kenya. GDC is supporting development of at least 10,000MW by 2030 in line with Vision 2030 targets. GDC is undertaking steam field development in the Bogoria-Silali Block which comprises Bogoria, Baringo, Arus, Korosi, Chepchuk, Paka and Silali prospects. Detailed surface studies estimates the Block's potential to be about 3000 MW. The current plan is to develop 2000 MW within this Block in four phases; Phase I- 800 MW by 2017, Phase II-400 MW by 2019, Phase III-400 MW by 2021 and Phase IV-400 MW by 2023.
2. Status and Electricity Demand: The current peak power demand stands at about 1,200 MW and is projected to grow by 10% to at least 17,000 MW over the next 20 years.
3. Project Development Plan: The 800MW Bogoria-Silali Phase I Geothermal Project in configurations of 8x100MW power plants is projected to be completed by 2017. A total of 200 wells will be drilled using 8 rigs starting in January, 2012.
4. Project Status: Detailed surface studies have been completed and acquisition of regulatory licenses is in progress. Infrastructural development will start from July, 2011.
5. Objective of EoI: GDC intends to short list potential investors to develop 8x100MW power plant units at its Bogoria-Silali Block.
6. Investment Scope
 - 6.1 GDC: Under this project, GDC will undertake Resource Development and Management covering the Development of Civil Infrastructure, Exploration and Appraisal Drilling, Feasibility Studies, Production Drilling, Reservoir, Condensate and Brine System Management.
 - 6.2 Investors: The Investors role will include financing, design, construction, operation and maintenance of the power plants. In addition, subject to positive feasibility study, GDC will require the selected investors to partner in financing the steam development. Funds obtained from the investors, on terms and conditions to be agreed, will

be a loan to GDC which will be repaid from steam sales revenues. While steam field is under development, the investor will have the opportunity to install wellhead generation units for early power generation. The Government of Kenya will not provide sovereign guarantees relating to this investment and therefore the investors should seek other alternatives such as MIGA (World Bank)

7. Bidding Timeline: This Expression of interest will result in short listing of interested investors who will be invited to submit proposals. It is expected that the short listing will be completed by September, 2011 followed by request for detailed proposal. The Selection of preferred investors will be completed by December, 2012. The award to the preferred investors will be subject to the investor successfully negotiating a Power Purchase Agreement (PPA) with Kenya Power and Lighting Company Limited (power off-taker), securing a generation license from the Energy Regulatory Commission, conclude a steam (fuel) supply agreement with GDC, obtain ESIA license for power generation from NEMA and conclude financing within ONE (1) YEAR from December 2012. A period of 30 months will be provided for power plant construction.

8. Evaluation Criteria: Interested Investor(s)/Consortium must provide information indicating that they are qualified to successfully undertake the envisioned development. Short listing of Investor(s)/Consortium will be based on the following:

- i. Capability to mobilize adequate financing for the power plant. The expected capital structure for the power plants is at least 25% equity and 75% debt. The interested investor(s)/consortia shall establish that they have the capability to raise at least US\$ 400 million for the development of each 100 MW supported by letters from credible financier(s).
- ii. Certified copies of audited annual reports for the last five years, articles and memorandum of association and certificate of incorporation will be required.
- iii. Evidence of experience in geothermal/thermal project implementation with at least one project of a size not less than 30 MW implemented in the last 10 years.
- iv. A list and CV's of the consultants/ contractors they propose to employ for the development including names of their lead project managers within their organizations, contractors and consultants.
- v. A list of names, location, current power plant(s) status and size of geothermal/thermal projects undertaken by themselves or their proposed consultants and contractors in the last 10 years including indicative project costs.
- iv. Declaration of all pending litigation(s) against the investor(s)/consortia which shall in total not represent more than 10%, (ten percent) of the investor(s)/consortia's net worth.

Interested investors may request in writing for further information and clarifications on this matter at the following address

Manager, Supply Chain

Geothermal Development Company Limited,

Taj Tower, 9th Floor, Upper Hill Road, Upper Hill

P.O. Box 100746 – 00101

NAIROBI, KENYA

E-mail: asaat@gdc.co.ke and copy to pngugi@gdc.co.ke

Any updates on this EOI will be posted on the GDC website: www.gdc.co.ke/tenders

9. Submission of Expressions of Interest: One (1) Original and two (2) Copies, of Expressions of Interest in English and in a sealed envelope, superscribed "Expressions of Interest, - Bogoria – Silali Block Phase I: Development of 800 MW Geothermal Power Plants" and bearing the address below, must be deposited in the Tender Box on the 1st Floor, GDC Riverside Office, Riverside Drive, Nairobi no later than 14:00hrs on August 8, 2011. All late submissions will be rejected.

The Managing Director & CEO,
Geothermal Development Company Limited,
Taj Tower, 9th Floor, Upper Hill Road, Upper Hill
P.O. Box 100746 – 00101
NAIROBI, KENYA

E-mail: md@gdc.co.ke

GDC reserves the right to reject any or all Expressions of Interest without engaging any investor whatsoever.

San Diego Gas & Electric Solicitation for Renewables (July 11)

In order to expand its renewable energy portfolio San Diego Gas & Electric (SDG&E) is seeking project proposals from renewable energy developers. SDG&E is seeking proposals including a power purchase agreement of up to 30 years, with deliveries beginning between 2011 and 2015. SDG&E is especially interested in proposals that can help it meet near term renewable power needs in 2011, 2012, and 2013. Bidders conferences will be held by SDG&E on June 2 and June 8. The deadline to submit questions is July 1. The closing date is July 11.

For more information on SDG&E's RFO go to:

<http://www.sdge.com/documents/rfo/renewable2011/2011RFODocument.pdf>

Events

New This Week

Workshop to Examine Drilling and Funding for First Geo Power Test Hole, Colorado Geothermal Working Group (June 23)

The Colorado Geothermal Working Group invites you to attend an afternoon workshop on "The Path to Colorado's First Geothermal Power Test Hole" on June 23 in Golden. To foster accelerated development and investment in geothermal electricity production, better data is needed to confirm the quantity and quality of Colorado's geothermal resources. The best way to collect this data is with one or more deep, exploratory test holes. Yet this is a very expensive process. This workshop will look at the factors involved with exploratory



drilling as well as financing mechanisms. Presentations will cover the best locations for test holes, deep geothermal drilling equipment and techniques, what data is needed, drilling costs and timelines, and funding options. The meeting is free and open to the public. It will be held in the Lookout Mountain Conference Room of the Jefferson County Administration Building from 1 - 4:30 pm. If you are interested in attending, please RSVP to: benorthcutt@comcast.net with the subject: I Plan to Attend the GWG GeoPower Test Hole Workshop.

GEA Events

GEA to Hold First Ever National Geothermal Summit in Reno, Nevada (August 16–17)

GEA is thrilled to announce the first ever National Geothermal Summit to be held Tuesday, August 16th and Wednesday, August 17th, 2011 at the Grand Sierra Resort and Casino in Reno, NV.

The National Geothermal Summit will be held for GEA members, companies, and individuals in the geothermal industry with industry experts sharing real life approaches to getting geothermal projects in the ground and online. Topics for the Summit include Outlooks for Washington and the Western States, Building New Transmission Projects in the Western States, New Renewable Energy Policy Developments in CA, and Moving Geothermal Forward on Public Lands. Attached is the latest agenda for the Summit for you to see the impressive line-up we have in store.

There will also be an Expo Hall featuring government agencies, universities and leading geothermal developers from the growing geothermal industry. We are opening the Expo Hall to our members first. To see the floor plan for the Summit please visit: <http://www.geo-energy.org/nationalgeothermalsummit/FloorPlan.aspx>.

The Summit will kick off Tuesday, August 16th at 3pm with a GEA Members Meeting and Elections where GEA staff will present 2011 accomplishments and plans for 2012 and beyond and have Board elections. Following the GEA Members Meeting will be Keynote Presentations by high level invitees and a delicious networking dinner where GEA will give out the first *Annual GEA Honors Awards*. This will be a great evening commencing a great event. Wednesday, the 17th will be a chock full day with Keynote Presentations, two plenary sessions, an Expo, Job Fair, breakout sessions, and end of day closing reception.

The National Geothermal Summit will feature the who's who of the geothermal industry. It is an event not to be missed!

For more information, including the preliminary agenda and registration, visit: <http://www.geo-energy.org/nationalgeothermalsummit/main.aspx>

If you have not yet cast your nominations for the inaugural *GEA Honors* please do so by Friday, July 1st. More information about GEA Honors can be found online at: <http://www.geo-energy.org/GEAHonors.aspx>.

Geothermal Energy Expo® and GRC Annual Meeting 2011, San Diego, CA (October 23–26)

The GEA Geothermal Energy Expo is the world's largest gathering of vendors providing support for geothermal resource exploration, characterization, development, production and management. It provides a unique opportunity for exhibitors to showcase their projects, equipment, services and state of the art technology to the geothermal community. "The 2011 Expo is certain to be the largest-ever gathering of the geothermal community," said GEA Marketing and Events Director Kathy Kent. "Each year the growing geothermal industry comes together for this event and it has become the most vital gathering for companies and leaders developing geothermal resources around the world." The 2010 Expo in Sacramento featured more than 2,500 attendees from 42 different states and 13 different countries. The sold out Expo Hall featured 162 exhibitors coming from 34 different states and 10 different countries. Please contact Kathy Kent, Kathy@geo-energy.org for information, registration, sponsorship opportunities, etc.

Exhibitor Registration Open for GEA Geothermal Expo

Washington, DC (March 11, 2011) – Registration for exhibitors at the 2011 GEA Geothermal Expo in San Diego, Calif. from Oct 23-26 has opened at <http://www.geothermalenergy2011.com/>.

Sponsorship Opportunities Available for GEA Events

Your company has the opportunity for high visibility at GEA's 2011 events. In addition to providing the financial support needed for GEA to undertake successful events, GEA events feature media availabilities with sponsors which garner extensive coverage in mainstream press outlets. Sponsorship details are posted online:

<http://www.geo-energy.org/images/GEA2011SponsorshipOpps9.pdf>.

Other Events

***Update*: Geothermal Energy Utilization Associated with Oil and Gas Development, SMU Geothermal Laboratory, Dallas, TX (June 13–15)**

<http://smu.edu/geothermal/> — Please note that this year there is also a half-day '**Geothermal 101**' short course, **Monday, June 13, 1- 5 pm** for people newer to the industry. Continuing Education Credits will be given: 8 CECs for the conference and 3 CECs for the Geothermal 101 short course. For questions, please contact Cathy Chickering at 214-768-1510 (catherine@smu.edu) or Maria Richards at 214-768-1975 (mrichard@smu.edu).

Keynote speaker: Charles E. Levey, Vice President, Pratt & Whitney Power System: "Electric Power Industry Generation Trends and the Role of Renewable Energy"

From SMU — This focused two day conference brings together leaders from both business and research to discuss specific issues relevant to expanding geothermal electrical production in oil and gas fields. This Geothermal Energy Utilization conference presents tools to take an existing oil and gas field and transition it to geothermal energy production. It is a remarkable opportunity for oil and gas companies to have a new stream of revenue for low-yield producers or initial high-water volumes. Learn how to take these wells and instead of abandoning them, energize them with geothermal power. This is an opportunity to think outside the box for long-term field expansion.

The SMU Geothermal Laboratory is a leader in research on the conversion of oil and gas fields into geothermal energy projects. Today we know temperatures even at 190°F are capable of generating electricity. These are available in the Gulf Coast at depths as shallow as 10,000 feet. The necessary temperatures and drilling techniques for Enhanced Geothermal Systems are being researched in many areas of the US and world. The ability to use sedimentary basins as a starting point for EGS is key to advancing the geothermal community. There are many sedimentary basins with plenty of high temperature fluids to extract on purpose! New surface power plant technologies are entering the market and pushing the thermal-efficiency envelopes. Innovative well design research is anticipated to expand the extraction of geothermal energy into a broader resource base. The same energy conversion technology can also be used to capture the waste heat given-off by surface equipment.

Geothermal energy projects related to oil and gas fields are currently installed or near completion in Wyoming, Alaska, Mississippi, North Dakota, and Utah as well as China and Turkey. This conference provides you with the information necessary to develop geothermal energy.

***Update*: 14th Annual Congressional Renewable Energy & Energy Efficiency EXPO + Forum, Sustainable Energy Coalition, Washington DC (June 16)**

From Sustainable Energy Coalition — Efficiency + Renewables = Economic & National Security! On June 16, the Sustainable Energy Coalition - in cooperation with Members of the U.S. House of Representatives and U.S. Senate Renewable Energy & Energy Efficiency Caucuses - will host the 14th annual Congressional Renewable Energy & Energy Efficiency EXPO + Forum.

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

As Congress, the Administration, the business community, environmental advocates, and American voters search for options to stimulate the economy and “green jobs,” as well as address issues of national security, higher energy costs, increased reliance on energy imports, and the environmental threats associated with energy consumption, the EXPO will help address the role that sustainable energy technologies might play. This will include not only the technical aspects of renewable energy and energy-efficient technologies but also related issues such as economics, jobs potential, environmental benefits, current and near-term market potential, model programs in the public and private sectors, and institutional, financial and legal barriers.

The EXPO is free, open to the public, and no RSVPs are required.

When

Thursday, June 16, 2011

9:30 am - 4:30 pm (exhibits open for viewing)

11:30 am – presentations by Members of Congress (to be announced)

9:30 - 4:30 pm – Administration (see list to-date below), exhibitor speakers (to be announced)

Cannon House Office Building - Caucus Room, U.S. House of Representatives: Independence Avenue and New Jersey Avenue SE; Washington, DC

Did You Know? America’s economy has tripled in size since 1970 and three-quarters of the energy needed to fuel that growth came from energy efficiency advances – yet, much more can still be done. The economies of Japan and several European countries are about 50% more energy-efficient than the U.S.

Did You Know? According to the Energy Information Administration, in 2010 renewable energy sources provided 10.9% of domestic U.S. energy production and 10.3% of net U.S. electrical generation.

Did You Know? The U.S. solar energy industry's total market value grew 67% from \$3.6 billion in 2009 to \$6.0 billion in 2010. In total, 878 MW of photovoltaic capacity and 78 MW of concentrating solar power were installed in the U.S. in 2010. In parts of the United States, solar has already reached parity with grid rates.

Did You Know? America's wind power industry grew by 15% in 2010 to over 40,000 MW and provided 26% of all new electric generating capacity in the country - second in new generation capacity only to natural gas. Costs for wind-generated electricity are now on par with coal-generated power with some wind farms cost-competitive with natural gas.

Did you Know? The geothermal industry is developing 146 projects across 15 states. The total installed geothermal capacity of the U.S. is 3,102 MW, enough to power over 2 million American homes. Global geothermal power capacity could increase 134% by 2020.

Did You Know? The ethanol industry's 211 biorefineries across 29 states increased annual production by 23% in 2010 to 14.31 billion gallons. Advanced biofuels capacity could hit 718 million gallons this year. Ethanol production contributed \$53.6 billion to the gross domestic product in 2010 and employed more than 70,000 Americans.

Did You Know? Hydropower now provides 7% of the nation's net electrical generating capacity. The country has tremendous potential to add capacity to existing non-powered dams as 97% of about 79,000 dams in the United States are not generating any power.

Executive branch speakers

Cannon caucus room

12:45pm–2:00pm

- **Heather Zichal, Deputy Assistant to the President for Energy and Climate Change
- **Sharon E. Burke, Assistant Secretary for Operational Energy Plans and Programs, U.S. Department of Defense
- **Jackalyn Pfannenstiel, Assistant Secretary for Energy, Installations and Environment, U.S. Navy
- **Philip D. Moeller, Commissioner, Federal Energy Regulatory Commission
- **John R. Norris, Commissioner, Federal Energy Regulatory Commission
- **Henry Kelly, Acting Assistant Secretary for Energy Efficiency & Renewable Energy, U.S. Department of Energy

Exhibitor speakers

Veterans' affairs committee room

9:30am–11:30am; 2:00pm–4:20 pm

- Asit Parikh, Metropolitan Building Consulting Group
- Bill Staby, Resolute Marine Energy, Inc.
- Bob Rose, Breakthrough Technologies Institute
- Brent Eskay, Solar Energy World
- Bruce Salkin, Enervation, Inc.
- Christopher O'Brien, Oerlikon Solar
- Dan Delurey, Demand Response & Smart Grid Coalition
- Daniel S. Henry, Hearth & Home Technologies
- David Sklar, STAR Island Bahamas
- Dawn Fenton, Diesel Technology Forum
- Don Moore, Harmonics Limited, Inc.
- Eric Huffman, SUNOPTICS
- Greg Dolan, Methanol Institute
- Jessica Bridges, U.S. Clean Heat & Power Association
- Joanne Ivancic, Advanced Biofuels USA

Karl Gawell, Geothermal Energy Association
Ken Smith, District Energy St. Paul
Laurie Actman, Viridity Energy
Melissa VanOrnum, GHD, Inc.
Michael Hindle, Mid-Atlantic Passive House Alliance
Michael J. McAdams, Advanced Biofuels Association
Mike Kennedy, Maryland Energy & Sustainability Cooperative
Nora Goldstein, American Biogas Council
Rhone Resch, Solar Energy Industries Association
Rob Thornton, International District Energy Association
Ruth Cox, Fuel Cell & Hydrogen Energy Association
Ruth McCormick, Business Council for Sustainable Energy
Scott Sklar, The Stella Group, Ltd.
Sean O'Neill, Ocean Renewable Energy Coalition
Susan Wickwire, US EPA Climate Protection Partnerships Div.
Thomas Horner, Water Management, Inc.
Tom Buis, Growth Energy

Exhibitors confirmed to date

Abengoa Solar, Advanced Biofuels Association, Advanced Biofuels USA, AFC First Financial Corporation, American Biogas Council, American Council On Renewable Energy, American Wind Energy Association, Beacon Power, Biomass Coordinating Council /LACORE Bob Lawrence & Associates, Business Council for Sustainable Energy, Continuum Energy Solutions, Demand Response & Smart Grid Coalition, Dialight Corporation, Diesel Technology Forum, District Energy St. Paul, Enervation Lighting, Environmental and Energy Study Institute, EPA's ENERGY STAR Program, Fuel Cell & Hydrogen Energy Association, Fuel Cells 2000, Geothermal Energy Association, Geothermal Exchange Organization, GHD Inc., Growth Energy, Harmonics Limited, Inc., Hearth & Home Technologies, International District Energy Association, Institute for Electric Efficiency, Maryland Energy & Sustainability Coop., Methanol Institute, Metropolitan Building Consulting Group, Mid-Atlantic Passive House Alliance, Natel Energy, Inc., National Biodiesel Board, National Hydropower Association, National Renewable Energy Laboratory, Ocean Power Technologies, Inc., Ocean Renewable Energy Coalition, Oerlikon Solar, Prodex Resolute Marine Energy, Inc., Solar Energy Industries Association, Solar Energy World, Solar Solution LLC, Standard Solar, Star Island Bahamas, Sunoptics High Performance Prismatic, Skylights, The Stella Group Ltd., U.S. Clean Heat & Power Association, U.S. Department of Energy – Clean Cities, Viridity Energy, Inc., Water Management / (more exhibitors to be announced)

For more information

Contact Ken Bossong, Sustainable Energy Coalition

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***New Date*: U.S. Government to Hold Webinar on Geothermal Opportunities in Indonesia (June 16)**

The date of the geothermal webinar has been pushed back to Thursday, June 16 at 10 a.m.

Indonesia is estimated to have approximately 40% of the world's geothermal energy reserves. By 2012, Indonesia expects to install 1,030 MW of additional geothermal capacity, and it is targeting 9,500 MW of installed geothermal capacity by 2025. U.S. companies have the expertise and technologies to help Indonesia meet this target. Join Commerce, USTDA, EXIM Bank, and the U.S. Embassy in Indonesia for a June 2 webinar on Indonesia's geothermal market and specific export opportunities. Learn how your company can take advantage of the upcoming reverse trade mission bringing Indonesian decision makers to the United States.

Read more here: http://www.export.gov/eac/show_detail_trade_events.asp?EventID=32199&InputType=EVENT

Register here: <https://emenuapps.ita.doc.gov/ePublic/newWebinarRegistration.jsp?SmartCode=1Q9A>

Time: 10:00 – 11:30 am (EST)/7:00 – 8:30 am (PST)

Agenda

- 10:00 am Jen Derstine, Renewable Energy Specialist – U.S. Department of Commerce
- Ms. Derstine will briefly introduce the webinar and speakers and provide a short overview of the U.S. Renewable Energy and Energy Efficiency Export Initiative (export.gov/reeee/re4i), which aims to facilitate private sector efforts to significantly increase U.S. exports in this sector.
- 10:05 am Shalizeh Nadjmi, Indonesia Desk Officer – U.S. Department of Commerce
- Ms. Nadjmi will provide a short country overview of Indonesia with examples of recent export success stories.
- 10:15 am Pinsuda Alexander, Country Manager – U.S. Trade and Development Agency
- Ms. Alexander will discuss USTDA's geothermal program and review the resources offered by USTDA to facilitate U.S. exports.
- 10:25 am Guy Nelson, Technical Expert – BCS, Inc. (USTDA Contractor)
- Mr. Nelson will report on the current geothermal development climate in Indonesia and discuss BCS, Inc.'s TDA-funded five-week training program, which targeted provincial energy officials responsible for the tendering and development of geothermal resources. He will also

provide information on opportunities for U.S. companies to participate in the upcoming reverse trade mission, comprised of senior geothermal energy officials from Indonesia.

- 10:40 am Ted Saeger/Anasia Silviati – U.S. Embassy, Indonesia
- Mr. Saeger and Ms. Silviati will report on the recent Energy Investment Roundtable held in Jakarta and review the resources offered by the U.S. Embassy and the U.S. & Foreign Commercial Service to help U.S. businesses identify, develop and sustain exports or investment in Indonesia.
- 10:50 am James Lewis, Senior Business Development Specialist – Export-Import Bank
- Mr. Lewis will provide an overview of the export finance services available to U.S. geothermal sector exporters.
- 11:00 am 30 minute Q&A

National Geothermal Academy, University of Nevada, Reno (June 20 to August 12)

This summer the [National Geothermal Academy will hold its inaugural summer session at the University of Nevada, Reno](#). Forty students will be involved in an 8-week geothermal energy education program. Cornell University, Stanford University, Southern Methodist University, West Virginia University, the Oregon Institute of Technology, the University of Utah and Dartmouth will all participate. The Department of Energy awarded UNR a \$995,000 grant for the academy. “Indonesia, New Zealand and Iceland have held similar academies, but this academy is the first in our country,” Wendy Calvin, coordinator of the academy and director of the University of Nevada Great Basin Center for Geothermal Energy, said in a statement. “Nevada has great local resources for the academy. The consortium selected our school because of its proximity to drilling sites, power plants and heat sources, as well as for its leadership in multidisciplinary research that has led to discovering new technologies for exploration, production and development of geothermal resources.” For more information go to <http://www.unr.edu/geothermal/NGA.htm>

XIX Annual Congress of the Mexican Geothermal Association (September 22–23)

XIX Annual Congress of the Mexican Geothermal Association (AGM)
Los Humeros, Pue., Mexico, 22-23 September 2011
<http://www.geotermia.org.mx>

***Update*: CanGEA Events (September and November)**

September 14–15, 2011 - Toronto, ON, Canada—CanGEA's 4th Annual Conference and Investment Forum
November 9th, 2011 – Calgary, AB, Geothermal Power Forum and Networking Event
<http://www.cangeaevents.ca>

GEOHERMAL ENERGY WEEKLY

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

Special thanks to Dan Jennejohn

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