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National News



Secretary Chu Desires to Maintain Loan Guarantee Program

During a May 18th Senate Appropriations Subcommittee hearing on DOE's \$30.5 billion FY 2012 budget request Energy Secretary Stephen Chu reiterated his support for the maintenance of a renewable energy loan guarantee program at DOE. While maintaining his support of the loan guarantee program Secretary Chu acknowledged it had shortcomings and emphasized his willingness to work with Congress on it.

The 2012 fiscal budget request for DOE's Geothermal Technologies Program is \$101.5 million.

To view the complete hearing go to <http://appropriations.senate.gov/ht-energy.cfm?method=hearings.view&id=ead0e160-eb80-4d30-928e-e51094187f4d>

Defeat of Oil Tax Break Repeal Opens Door for Future Energy Tax Proposals

On May 17 the U.S. Senate blocked a bill that would have repealed approximately \$2 billion of annual tax breaks for the country's five biggest oil companies. Only temporarily defeated in this regard, Democrats intend to include the tax break repeal in a deficit reduction package being negotiated between lawmakers and the Obama administration. Senate Majority Leader Harry [Reid expressed his confidence that future legislation will include a repeal of the tax break for the top five oil companies](#). He said "There is no justification for giving these companies that are making so much money, and their own executives said these subsidies are unnecessary, there's no justification for continuing that."

Some sources feel that the defeat of the tax break [repeal may pave the way for other energy tax proposals such as the clean energy bill being drafted by Finance Committee Chairman Max Baucus](#) (D-MT). Like the recently defeated oil tax break repeal, Senator Baucus' bill would eliminate some oil and gas tax breaks but it would also address ethanol tax credits and set up a funding mechanism for clean energy development. Whereas the current oil tax break repeal would have directed the revenue realized from a repeal of tax breaks for the top five oil and

gas companies to the reduction of the federal deficit, Senator Baucus' bill reportedly would direct those funds to promote the development of clean domestic fuels and clean energy infrastructure.

Prospects for a National Clean Energy Standard Unsure

Senator Jeff Bingaman (D-NM), Chairman of the Senate Energy and Natural Resources Committee, has stated that it is currently [unclear that the Obama Administrations intent to mandate a doubling of electricity from low carbon sources has enough votes to clear the committee.](#)

President Obama called for a national clean energy standard which would require utilities to procure 80% of their power from low emissions sources by 2035 in his recent State of the Union address. The standard would allow for utilities to utilize nuclear, natural gas, and coal plants with carbon capture and storage technologies, as well as renewables, to meet their requirements. The administration also hopes to keep the standard flexible by enabling it to accommodate new clean technologies in the future.

Although the administrations proposed clean energy standard would allow for flexibility, whether or not it will get enough supporting votes to clear the Senate Energy and Natural Resources Committee panel remains unclear. According to Senator Bingaman, "We are trying to figure out if we can put together a draft piece of legislation that can get enough votes to be seriously considered in our committee. We don't have the answer to that yet, but we are trying in a conscientious way to get to something that would achieve the kind of objective the president laid out."

Lawmakers Critical of Federal Obstacles to Renewable Energy Development

Representatives on [the House Natural Resources Committee railed against a general lack of federal support for renewable energy projects](#) last Friday. In spite of steps taken to ameliorate delays in renewable energy project development on public lands in recent years, lawmakers insist that development still is not moving fast enough.

In addition to financial uncertainty in the markets, renewable energy development on public lands is being held back by slow permitting processes and problems in approving power lines for the transmission of electricity from renewable energy zones. Bob Abbey, Director of the Bureau of Land Management, lamented delays in renewable energy development on public lands saying, "If you look at the amount of effort going in to the oil and gas program versus what we're doing in the renewable energy program, there is a lot more we could be doing in the renewable energy program."

Representative Ed Markey (D-MA) of the House Natural Resources Committee also lamented the delays facing renewable energy project on public lands in comparison with conventional forms of energy. According to Markey the approval process for renewables "is measured in months and sometimes years, while the time for oil and gas drilling permits is measured in weeks. And you don't need a blowout preventer on a solar panel." Representative

Markey was also critical of a Republican proposal that would the Department of Energy's Loan Guarantee Program by 70%.

Regulatory Uncertainty, Permitting Delays Stifle Renewable Energy Development

Press Release [\[Full Story\]](#), May 13, 2011 – Washington, D.C. – **Republicans Committed to Removing Obstacles to Advance All-of-the-Above Energy Agenda.**

As part of House Republicans' American Energy Initiative, the House Natural Resources Committee today held the first in a series of oversight hearings on "Identifying Roadblocks to Wind and Solar Energy on Public Lands and Waters." House Republicans are committed to advancing an all-of-the-above energy approach, which includes renewable energy, in order to create jobs, lower energy costs and decrease our dependence on foreign energy.

"Our federal lands are intended to be multiple-use lands – open to recreation, energy production and other types of job-creating activities. Yet too often we've seen attempts by Congressional Democrats and the Obama Administration to place our public lands off-limits to any type of economic activity," said Subcommittee on Energy and Mineral Resources Chairman Doug Lamborn (CO-05). "The United States has some of the most promising areas, especially in the West, for solar energy development. However, the Interior Department is offering less than 1% of this land for streamlined solar energy production. Steps should be taken to reduce the regulatory uncertainty, expedite the permitting process and remove roadblocks in order to quickly and efficiently expand the development of renewable energy projects on public lands."

At the hearing, Members highlighted numerous examples of roadblocks to developing wind and solar projects on federal lands.

- To advance the over \$80 million set aside for renewable energy projects in President Obama's so-called Stimulus bill, the Administration created a "fast-track" list that initially contained 34 projects (14 solar, 7 wind, 6 geothermal, and 7 transmission). Of these, only 12 were approved by the end of 2010 (9 solar, 1 wind, 2 geothermal).
- In 2011, BLM, in consultation with the Fish and Wildlife Service (FWS) and the National Parks Service (NPS), gave "priority status" to 20 projects (10 solar, 5 wind, and 5 geothermal). Of these, one geothermal project has been approved. There are currently 95 solar permit and 47 wind permit applications pending within the BLM.
- BLM has instituted the creation of 24 proposed "solar energy zones" (SEZ) on public lands in six western states that could be used for priority development areas for utility-scale projects. Of the 120 million acres of BLM managed land in these states, only 22 million acres would be available for solar development. Of

this, only 677,400 acres have been identified as proposed SEZ's –less than 1% of BLM land that the Department has made available to streamline solar energy production.

The Natural Resources Committee is committed to advancing an all-of-the-above American energy agenda. In the future, the Committee will focus on wind, solar, hydropower and biomass legislation through the American Energy Initiative.

Department of Interior and EPA Facing 2012 Budget Reductions

[The House Appropriations Committee released proposed budgets for the 12 annual appropriations committee.](#) In the proposed budgets the Interior and Environmental Appropriations Subcommittee was allotted \$27.5 billion for the agencies it funds. When compared with enacted budget levels this amounts to a \$2 billion reduction. It is also close to \$4 billion less than what the President requested the EPA and the Department of Interior.

According to Representative Mike Simpson (R-Idaho), the committee's staff will be soliciting agencies for input on how to cut money from their budgets with the least amount of disruption. Representative Simpson claimed he "wouldn't be surprised" if some of the proposed budget cuts came from regulatory programs, such as those implemented by the EPA to target green house gas emissions.

DOE Wrapping Up Renewable-Energy Project Loan Guarantee Program

May 16, 2011 – The U.S. Department of Energy ([DOE](#)) [recently has stopped accepting applications for loan guarantees](#) under the Section 1705 "commercial technologies" program. Section 1705 of the Loan Guarantee program expires September 30 of this year, and only projects begin construction and close their loans guarantees by that date will be eligible to receive a guarantee, according to DOE. DOE also indicated that approximately \$800 million in remaining Loan Guarantee funds will be awarded to companies that have already applied, whose applications are the furthest advanced, and who appear the most likely to meet the September 30 deadline.

National Geothermal Academy Highlighted in Recent Clean Tech Workforce Article

A [recent article released by Solve Climate News](#) highlighted the University of Nevada Reno's National Geothermal Academy's role in preparing a new generation of clean tech professionals to meet the nations renewable energy needs.

The National Geothermal Academy is a consortium of US universities that are working together to offer an intensive curriculum aimed at training professionals in the principles of geothermal energy development and utilizations. The Academy's first eight week course will kick off at the University of Nevada, Reno this summer where 40 students and professionals will participate in modules on geothermal drilling and engineering, power plant design and construction, business development, and permitting issues as well as other topics.

The Academy helps to address the geothermal industry's growing need for new talent versed in the principles of geothermal energy development. Academy Coordinator and Director of the Great Basin Center for Geothermal Energy, Wendy Calvin, remarked that, "The industry as a whole is very excited to see that they can send people that are working for them to get specific training related to geothermal, or that they'll have a crop of educated people to pick from when jobs come up, in terms of the potential growth of the industry."

Company News



Nevada Geothermal Power Reports Record Output & Operations Revenue for the Quarter Ended March 31, 2011

Press Release [[Full Story](#)] – Vancouver, B.C., May 19, 2011

Nevada Geothermal Power Inc. (NGP) (TSX.V: NGP, OTCBB: NGLPF) today announced results for the quarter ended March 31, 2011. Gross margin for the three months was \$3.6 million and the net loss was \$1.4 million. The full financial results are available at www.sedar.com and on the Company's website at <http://www.nevadageothermal.com>.

Power production for the quarter ended March 31, 2011 averaged 47 MW (gross), 37 MW (net), resulting in revenue of \$6.3 million from operations, which represents a 9% increase over the previous quarter ended December 2010, and a 110% increase over the comparative quarter in 2010.

The Company's President and CEO, Mr. Brian Fairbank, commented on the results, saying that "Operations at Blue Mountain were satisfactory over the quarter, continuing to deliver robust gross profit margins, and enabling the Company to report EBITDA of \$5.0 million for the quarter ended March 31, 2011. The plant delivered an average of approximately 47 MW (gross), 37 MW (net), or 95% of nameplate capacity, establishing a new record for power generation since the plant was put into service in October 2009. "

The latest drilling program at Blue Mountain was completed during the quarter without an immediate increase in injection or production capabilities, which led to a downward revision of the Blue Mountain power production forecast. The Company is continuing with a wellfield testing and stimulation program, which could result in an improvement in plant output.

Highlights

- Record output at Blue Mountain, tempered by ongoing resource issues.
- Drilling of a development test well suitable for use as an injection well completed at the Crump Geyser joint

venture project, which will help the project qualify for an ARRA grant.

- Exclusive right to purchase California properties from Iceland America Energy (IAE) obtained.

Subsequent to quarter end

- Application for a cash grant in respect of most recent drilling program at Blue Mountain submitted.
- Resource confirmation drilling financed by Ormat Nevada Inc. resumed at Crump Geyser joint venture.
- Discussions with EIG regarding potential changes to loan terms initiated, with a view to enabling a tax-assisted financing.
- Due diligence on IAE transaction continuing.

Mr. Fairbank said, "We are continuing to develop our pipeline of geothermal properties, as well as Blue Mountain, focusing on the joint venture at Crump Geyser with Ormat and on finalizing the acquisition of two new advanced stage exploration projects in the Imperial Valley, Southern California."

U.S. Geothermal Commences Well Repairs at Raft River

Press Release [Full Story] – Boise, Idaho, May 17, 2011

U.S. Geothermal Inc. ("U.S. Geothermal"), a leading renewable energy company focused on the development, production and sale of electricity from geothermal energy, today announced the signing of a Repair Services Agreement ("RSA") between its wholly owned subsidiary US Geothermal Services ("USG Services") and Raft River Energy I LLC for the repair of two production wells at Unit 1 of the Raft River project.

The members of Raft River Energy I LLC have approved the RSA for the repair of production wells RRG-2 and RRG-7. Under the terms of the RSA, USG Services will fund and manage the repairs with a budget of up to \$1.65 million. The cost of the repairs will be repaid from future project cash flow. A fee of 12.75% of the actual repair cost incurred will be paid to USG Services. The outstanding balance of the repair cost will also earn USG Services interest income at the rate of 12.0% per-annum.

Production well RRG-2 was shut down in June 2010 after a pump failure. Production well RRG-7 has a leak in a cement seal that failed where two steel casing sections overlap, allowing cooler geothermal fluid to enter the well bore. The flowing production temperature in RRG-7 has declined from 299°F to 240°F over the past two years. A pump rig was mobilized to the Raft River site on May 16 and began working on well RRG-2. Upon successful completion of the repair program, the annual average output of the plant is expected to increase 25% from a current level of 8 megawatts annual average to approximately 10 megawatts.

In addition to the well repairs, a flow stimulation technique called deflagration will be applied to wells RRG-2 and RRG-7 which may increase fluid flow from the known production zones. Deflagration has been used successfully in geothermal wells that contain productive zones that have been damaged by drilling mud or drill cuttings during drilling operations, with demonstrated increases in well permeability of up to 50%. Additional power generation may be realized from the well stimulation program.

Ormat Technologies Secures \$20 Million Contract for its Product Segment Backlog

Press Release [\[Full Story\]](#) – Reno, Nevada, May 12, 2011 -- 13th Geothermal Plant in New Zealand Using Ormat's Technology

Ormat Technologies, Inc. (NYSE: ORA) today announced that its subsidiary entered into a supply contract with Norske Skog Tasman Limited of New Zealand ("Norske Skog") to supply a new geothermal power plant that is to be constructed in the Kawerau Geothermal Field in New Zealand. The contract is valued at a total of approximately \$20 million and delivery of the power plant is expected to be completed within 13 months from the contract date.

Norske Skog is a world leader in the use of renewable energy in the production of newsprint, with a history of over 50 years of utilization of geothermal energy from the Kawerau field in New Zealand. This new project will mean a substantial proportion of the Mill's electricity needs will be provided directly or indirectly from renewed geothermal energy.

Dita Bronicki, CEO of Ormat Technologies, said, "This new contract is Ormat's fourth geothermal installation in the Kawerau field. We are excited for the opportunity to once again supply our equipment in New Zealand and take part in the efforts to achieve the New Zealand government's target for greenhouse gas emissions reductions to between 10% to 20% below 1990 levels by 2020 and increased renewable electricity generation to 90% by 2025."

Ms. Bronicki concluded, "This contract increases our products backlog as of March 31, 2011 to \$104 million. We view this contract as a demonstration of the reliability of Ormat's solutions and it further reinforces the applicability of our renewable energy solutions to the world electricity markets."

Ormat Technologies Provides an Update on DOE Loan Guarantee Application

Press Release [\[Full Story\]](#) – Reno, Nevada, May 12, 2011

The Company has received several inquiries from the press and industry analysts regarding its pending application for a DOE loan guarantee under section 1705 in respect of a financing for the Company's Jersey

Valley, Tuscarora, and McGinness Hills projects with John Hancock Life Insurance Company (U.S.A.) as the Lender Applicant.

These inquiries have apparently been triggered by DOE's update and publication on May 10, 2011, on the DOE website, of the form of letters that it sent to various companies regarding their pending loan guarantee applications (indicating that a loan guarantee application is moving forward, or indicating that it has been put on hold). As a result, the Company is today confirming that it has received a letter from the DOE stating that its application for the Jersey Valley, Tuscarora, and McGinness Hills projects is moving forward. Receipt of the DOE letter does not provide any assurance or guarantee that the project company has met, or will be able to meet, all of the DOE requirements for the issuance of a guarantee or that DOE will in fact ultimately issue a loan guarantee, as expressly noted in the DOE letter.

Magma Energy Announces 2011 Third Quarter Results

Press Release [\[Full Story\]](#) – Vancouver, B.C., May 12, 2011

Magma Energy Corp. (TSX: MXY) today reported its financial and operating results for the third quarter of fiscal 2011 ending March 31, 2011. Highlights of the quarter were:

- Quarterly revenue of \$18.7 million, EBITDA of \$5.2 million and net income of \$9.0 million (\$0.03 per share).
- Merger announced with Plutonic Power Corp. and name changed to Alterra Power Corp. Transaction is effective May 13 and adds hydro, wind and potentially solar power production to Magma's geothermal portfolio, taking total power capacity to 366 megawatts generating 1,800 gigawatt hours of electricity annually.
- Awards of the Mensano and Roccastrada geothermal concessions in Italy, located in a renowned geothermal power production area in Tuscany. Subsequent to the quarter Magma was also awarded two geothermal concessions, Loriscota and Crucero, in a promising region of southern Peru.
- Subsequent to the quarter an agreement was reached to sell a 25% interest in Magma's 98.5%-owned HS Orka subsidiary to a group of Icelandic pension funds for ISK 8.06 billion (approximately \$71.5 million). This transaction is expected to close in late May.

Ross Beaty, Chairman and CEO, commented, "In this third quarter of fiscal 2011 we continued our rapid growth by agreeing to combine with Plutonic Power to create Alterra Power Corp. This will build us into a larger, stronger, more diversified clean energy company. Geothermal power will remain a core focus of Alterra, but we will also have hydro, wind and possibly solar power assets and a broader mix of growth opportunities. And equally important - we have an outstanding team of clean energy operators and developers to deliver greater value creation for all shareholders."

Magma Energy and Plutonic Power Corporation Complete Merger to Create Alterra Power Corp.

News Release [[Full Story](#)] – Vancouver, B.C., May 13, 2011 -- Magma Energy Corp. ("Magma") (TSX: MXY) and Plutonic Power Corporation ("Plutonic") (TSX: PCC) today announced the completion of the merger of Magma and Plutonic pursuant to a plan of arrangement (the "Arrangement"). As previously announced, the Arrangement was approved by the Supreme Court of British Columbia on May 9, 2011.

Pursuant to the Arrangement, Magma has acquired all of the outstanding shares of Plutonic on the basis of 2.38 common shares of Magma and Cdn. \$0.0001 in cash for each Plutonic common share. In addition, all of the outstanding stock options to purchase Plutonic common shares are now exercisable for common shares of Magma in accordance with the same exchange ratio.

In connection with the Arrangement, Magma will change its name to "Alterra Power Corp." and its common shares will, subject to receipt of final approval of the Toronto Stock Exchange ("TSX"), trade on the TSX under the symbol "AXY". For trading purposes, the change of name and trading symbol are expected to become effective, subject to TSX approval, as of the commencement of trading on May 18, 2011.

Subject to TSX confirmation, Plutonic common shares are expected to be delisted from trading on the TSX as of the close of business on May 17, 2011.

Nevada Geothermal Power Project Status Report

News Release [[Full Report](#)] – Vancouver, B.C., May 11, 2011 -- Nevada Geothermal Power Inc. (NGP) (TSX-V: NGP, OTC-BB: NGLPF) is pleased to update the status of on-going work.

Nevada Geothermal Power is a leading geothermal developer focused on geothermal power development in the US for continued growth. World events, including political instability in Middle East oil producing regions and the tragic nuclear power plant failure in Japan provide renewed impetus for the U.S. Government plan to encourage the construction of clean, renewable power plants, the development of new clean energy technology and the strengthening of the power grid to bring new power to market. At present, the U.S. is the largest producer of geothermal power in the world with over 3000 MW of geothermal power capacity on line, 1600 MW of new geothermal capacity under development and over 5000 MW of identified geothermal resources for potential future development (Geothermal Energy Association, 2011).

NGP operates the 49.5 MW Faulkner 1 power plant at the Blue Mountain Geothermal Project, Humboldt County, Nevada. Near term growth is planned to come from development of the Crump Geyser (Oregon) and Pumpnickel (Nevada) properties, as well as project acquisitions in Imperial Valley (California) from Iceland America Energy, Inc. (IAE).

NGP has sufficient cash reserves to enable further development of its plans through 2011. The Company is well advanced in its program to acquire three new geothermal properties in the Imperial Valley from IAE and in its resource development in a joint venture at Crump Geysers with Ormat Nevada Inc. The Company is also planning to further pay down mezzanine debt related to the Faulkner 1 plant.

Renewable Energy and Climate Change



GEA Team Completes New York to Washington D.C. Climate Ride

On May 17 Kathy Kent (Director of Events, Membership and Marketing, GEA), Leslie Blodgett (GEA Editor-in-Chief, Media and Outreach Director, GEA), and Shawna Seldon (Senior Vice President, The Rosen Group) completed Climate Ride NYC-DC. Climate Ride is a non-profit organization that organizes and holds charitable bike rides to support sustainable solutions and environmental causes.



Kathy, Leslie, and Shawna participated in Climate Ride NYC-DC 2011 as team “Geothermal Rock & Rollers”. Completing the 300 mile long course in 5 days to raise awareness about climate change, the Geothermal Rock & Rollers joined approximately 150 other climate riders for a final rally on Capitol Hill. The team raised nearly \$8,000 to benefit organizations taking actionable steps to fight climate change. For more information visit www.climateride.org or the team page at <http://climateride.donordrive.com/index.cfm?fuseaction>

[=donorDrive.team&eventID=501&teamID=5027](http://climateride.donordrive.com/index.cfm?fuseaction=donorDrive.team&eventID=501&teamID=5027)

Photo Above: Geothermal Rock n Rollers meet Senator Ben Cardin (D-MD) at the end of their journey.

National Academy of Science Claims “Pressing Need” for Climate Action

Press Release [\[Full Story\]](#) – Washington, D.C., May 12, 2011

A report issued by the National Academy of Sciences calls for the U.S. to take substantial action to mitigate climate change and to take necessary preparations to adapt to its impacts. The report supports previously offered scientific evidence indicating that human activities are the likely cause of global warming. The report recommends that the U.S. develop a coordinated response to climate change. It also emphasizes that such coordination occur under iterative risk management framework which allows for actions to be revised as new knowledge is gained.

One of the reports primary recommendations is the large scale reduction of greenhouse gas (ghg) emissions as soon as possible in order to lower the risk of adapting to climate change to acceptable levels. Committee Chair Albert Carnesale sated that “It is our judgment that the most effective strategy is to begin ramping down emissions as soon as possible.” As a means of achieving emissions reductions the report recommends a nationally uniform price on ghg emissions. Such as price should be substantial enough to spur investment in efficiency and low carbon technologies the report says.

National Renewable Energy Laboratory and Navigant Release Guidebook on Geothermal Power Finance

The [National Renewable Energy Laboratory has coauthored, with Navigant, a guidebook on financing geothermal power projects](#). The guidebook is intended to facilitate increased investment in geothermal development in the U.S. and identifies trends in geothermal project finance.

The emergence, in recent months, of several positive developments in geothermal project financing is identified in the report. These developments include:

- Improved access to capital and financing terms. This is evident in the anticipated return of a specific type of bridge finance to the U.S. geothermal project finance market and in the loosening of construction financing.
- Innovative structures to facilitate deals. Groups of investors are pooling resources to create risk profiles in line with their objectives. Construction and term loans are being bundled, reducing transaction costs and streamlining investment.
- Anticipated return to the tax appetite needed to facilitate tax equity transactions. A return to profitability for many institutional investors is a critical input to successfully monetizing the federal tax credits that complement the Treasury Cash Grant program.

To access the guidebook go to [Guidebook to Geothermal Power Finance](#)

State News

State Renewable Portfolio Standards Thought to Have Minimal Impact on Electricity Rates

As the renewable energy generation goals of state renewable electricity standards (RES) are ramping up and becoming more ambitious, [questions regarding their impact on electricity rates and the general cost of renewable energy policies are increasing](#).



While calculating the impact of a RES on electricity is no simple task a few studies have been completed with varying results. A study conducted by Lawrence Berkley National Laboratory analyzed data on a dozen state renewable energy policies. The study found the impact of renewable energy policies on electricity rates to be a fraction of a percent in most cases, and just over 1% in Connecticut and Massachusetts. Additionally the U.S. Energy Information Administration projected little difference in electricity rates through 2030 with or without a national renewable energy standard. On the other hand the Minnesota Free Market Institute and the American Tradition Institute conducted a study that concluded that Minnesota's RES would cause rates to increase as much as 37% by 2025.

While the conclusion of various studies on the impacts of renewable energy policies on electricity rates may vary the experience of utilities seems to support the claim that such policies will have little impact on electricity rates. Xcel Energy projects a minimal \$0.003 rate increase through 2025 under its proposed wind expansion plan. Other utilities have cited renewable resources as actually being cost competitive with more traditional forms of generation as well as their benefit as a hedge to electricity rate increases in the event natural gas prices go up. When asked about the claim that renewable energy policies will increase electricity rates, Xcel Energy Steve Roalstad said, "It doesn't seem to be moving in that direction." Roalstad added that the cost of adding renewable energy capacity continues to fall and is becoming very competitive with conventional energy sources.

International News



Africa

Kenya: GDC Strikes Geothermal Steam in Menengai

Press Release [\[Full Report\]](#) – Nairobi, Kenya, May 16, 2011

The state-owned Geothermal Development Company (GDC) has struck steam in Menengai. The company said the first well in the Menengai Geothermal Project, located in Nakuru County, was successfully completed and it is now undergoing tests to ascertain the exact yield.

"We are happy to announce that GDC has found commercially exploitable geothermal steam in Menengai. Preliminary tests indicate that the well is very productive. Our scientists are still conducting more tests to ascertain the exact productivity of the well," said Dr. Silas Simiyu, the GDC's Managing Director & CEO.

Dr. Simiyu made the announcement over the weekend when he took the press on a tour of the geothermal site that is being developed.

“The success of Menengai is the success of Kenya. As GDC continues to prove more steam in Menengai, it means that as a nation we are inching closer to an era of affordable, reliable and clean energy. It is the geothermal energy portfolio that will drive the country toward the Vision 2030,” the MD said.

The exploratory well drilled at Menengai is estimated to produce [8 MW](#) of geothermal energy. Estimates of the entire Menengai geothermal field run up to 1,600 MW. GDC plans to drill a total of 120 wells in the area by 2018.

Americas

Argentina: Earth Heat Resources Announces Copahue Project Resource Upgrade

Press Release [\[Full Story\]](#) – May 18, 2011

Earth Heat Resources Limited ('Earth Heat' or 'the Company') is pleased to release the results of the resource Review by SKM of its flagship Copahue project in Argentina.

This represents an increase of over 150%_in total resources interpreted to be at Copahue, versus historical estimates and provides for significant additional scope of developments to meet the needs of power consumers in the Neuquen Province of Argentina.

Of particular significance is the 'behind pipe' verification which provides a boost to the certainty of the stage 1 plant size and reduces the immediacy of resource extension drilling.

The scope and objectives of the Stage 1 concept study will be released this week, once finalized, in light of the new resource figures received by the Company.

Colombia and Ecuador to Develop 138 MW Geothermal Power Plant

Both [Colombia and Ecuador plan to jointly develop a 138 MW geothermal power plant](#), known as the Binacional Tufino-Chiles-Cerro Negro Project, on their shared boarder. The countries' state controlled power companies Isagen SA (Colombia) and Celec SA (Ecuador) intend to conduct geothermal exploration activities over an area of 5,000 hectares. Initial studies are expected to cost \$2.5 million.

Chile: ENAP to Abandon Geothermal Development

Chile's state oil and gas company, [Empresa Nacional del Petroleo SA \(ENAP\)](#), has announced that it will [abandon geothermal exploration and development activities in Chile](#) in order to concentrate on its core business of exploring for, producing, and refining natural gas and oil.

"For Enap, this is the culmination of a long process that began in 2000. Our objective was to contribute to the diversification of the nation's energy matrix, by helping to develop geothermal energy development," said Enap Chief Executive Rodrigo Azocar.

ENAP recently sold its 40% stake in a joint venture geothermal company to Australian company Origin Energy. The remaining 60% of that joint venture is owned by Antofagasta Minerals SA. ENAP will also sell its participation in the Apacheta geothermal project, which it was jointly developing with Italian utility Enel SpA.

Ecuador: Ecuador Adopts Feed-in Tariff for Geothermal and Other Renewables

The [Electricity Authority of Ecuador recently adopted a Feed-in Tariff](#) to provide incentive for the development of its domestic renewable energy resources, including geothermal. Feed-in Tariff levels for geothermal electricity in Ecuador and the Galapagos Islands are approximately \$0.13/kWh and \$0.15/kWh respectively. Contract terms are 15 years from January 1, 2013.

Ecuador is a new addition to a growing list of countries that are implementing Feed-in Tariffs to incentivize the development of geothermal resources. The following table provides a list of countries currently providing Feed-in Tariffs to geothermal energy.

Country	Feed-in Tariff (\$/kWh)
Germany (>10 MW)	\$0.14
(<10 MW)	\$0.21
France	\$0.27
(Overseas)	\$0.18
Greece	\$0.11
(Islands)	\$0.13
Italy	\$0.27
Spain (<50 MW)	\$0.09
Slovakia	\$0.27
Slovenia (<10 MW)	\$0.21
Switzerland (< 5 MW)	\$0.42
(<10 MW)	\$0.38
(< 20 MW)	\$0.30
(> 20 MW)	\$0.24
Croatia	\$0.24
Czech Republic	\$0.22
Serbia	\$0.10
Taiwan	\$0.17
Turkey	\$0.11
Uganda	\$0.08

*FIT amounts rounded up to the nearest hundredth

SOURCE: Paul Gipe, Wind-works.org: <http://www.wind-works.org/FeedLaws/TableofRenewableTariffsorFeed-InTariffsWorldwide.html>

Asia

China to Increase Geothermal Energy Utilization

[According to an article on RenewableEnergy.com](#) China's Geological Environment Department has stated that it will initiate a geothermal energy exploration and development project over the next five years. The program's goal is to result in 560,000 GWh of geothermal energy usage, nearly 1.7% of the country's overall energy consumption.

Europe

Hungary: Iceland based Mannvit Declares Hungary's Largest Geothermal Development Operational

Press Release [\[Full Story\]](#) – Budapest, Hungary -- May 3, 2011

A new geothermal district heating plant in the town of Szentlőrinc in Southwest Hungary is now fully operational. The plant produces 3.1 MW of thermal energy, providing heating and hot water for some 900 homes in Szentlőrinc, and has excess capacity for further expansion. The geothermal plant replaces the town's existing natural-gas powered district heating system with environmentally-friendly and sustainable geothermal energy.

Following the drilling of a successful 1,820 meter deep production well in September 2009, and later another effective well for reinjection, Mannvit commenced on an EPCM project, for the project owner Szentlőrinci Geotermia Zrt. (affiliated company of PannErgy Plc.), to deliver the fully functioning geothermal heating plant in the town of Szentlőrinc. The functional completion and start-up of the geothermal heating plant was completed on December 29th, 2011. The entire project cost 1,3 billion HUF and is the largest geothermal development enterprise to date in Hungary. The heating system is intended to be further developed to heat local schools and municipality buildings, while the return water can be used to heat green houses.

PannErgy Plc and the Icelandic engineering firm Mannvit have been working in collaboration for over four years through Mannvit's Budapest office. Mannvit, a leader in exploring and utilizing geothermal resources, offered its decades-long scientific and technological expertise in geothermal energy for the Szentlőrinc project from start to finish. The first phase tasks conducted by Mannvit included: geological and geophysical research, licensing, geothermal reservoir and environmental modeling, well siting and well design, drilling supervision and testing. The second phase Mannvit completed under an EPCM contract.

Pacific

Japan: Japan Considering Developing More Domestic Geothermal Development

As Japan recovers from significant radiation leaks and blackouts precipitated by the breakdown of the tsunami stricken Fukushima Dai-ichi nuclear reactors, [the country has seen renewed interest in developing the country's geothermal resources](#). Recently, Japanese Prime Minister Naoto Kan said that Japan would have to abandon its old energy policy, which favored nuclear development, to increase the development of its domestic renewable energy resources. As geothermal energy possesses the ability to supply electricity 24/7 with a 95% efficiency many see it as a natural replacement for nuclear energy in Japan. It has also been noted that eight of the country's 18 geothermal power plants are located in Tohoku, the region affected by the March 11th earthquake and tsunami. According to local media, four of the plants located in some of the hardest hit areas tripped but continued to operate as the nuclear reactors broke down and began to leak radiation. Also, Japan is estimated to have a significant geothermal potential of 23.4 GW.

While Japan recognizes the need to increase the development of its domestic geothermal, and other renewable, resources, obstacles to development remain. As of yet, Japan has not provided significant incentives for utilities to accommodate the development of utility scale renewables. Additionally, sensitivities surrounding the potential impact of geothermal development on hot springs, which have cultural significance as well as economic value, exist.

Philippines: Energy Development Corp. Plans to Commission BacMan Power Plants by June

The Philippine's Energy Development Corporation ([EDC plans to complete and commission the rehabilitated BacMan \(Bacon-Manito\) geothermal power plants](#)) by June.

According to Richard Tantoco, EDC's President and Chief Operating Officer, the plant is expected to produce 130 MW. Tantoco also stated that EDC plans to drill for additional reserves within the BacMan geothermal facility to increase generating capacity. EDC was unable to provide an estimate of the expected capacity increase, stating that more information on the expected capacity may be available by the second quarter.

The BacMan geothermal facility includes two power plants, which were in need of rehabilitation when they were acquired by EDC in 2010. EDC intended to speed up rehabilitation of the plants when they were acquired.

Indonesia, Philippines: Asian Development Bank Grants \$1.4 million to Arrow Resources Development, Inc. for Geothermal Development

The Asian Development Bank ([ADB has granted \\$1.4 million to Arrow Resources Development](#)) to augment its funding for the planning and design of two geothermal power plants in Indonesia and the Philippines. Site

selection for the power plants has already commenced and Arrow Resources has indicated it is ready to initiate project development on site.

Geothermal Heat Pumps and Direct Use



Bosch Launches Geothermal Product Line for US Market

Press Release [[Full Story](#)] – Ft. Lauderdale, FL, May 9, 2011

Bosch Thermotechnology North America, a leading provider of energy efficient heating and air conditioning comfort systems and high quality solar thermal systems and water heaters for homes and businesses, announced today a series of enhancements to its product portfolio and HVAC professional support network for its geothermal heating and cooling systems in the United States.

As part of the plan, Bosch announced the rebranding of its FHP residential line of geothermal heat pumps to the Bosch brand name. The new line of high efficiency geothermal heat pumps will feature three product families: Geo 1000, 3000 and 6000. FHP, acquired by Bosch in 2007 and manufacturer of geothermal heat pumps since 1970, will retain its production facilities in Ft. Lauderdale, FL and manufacture the entire Bosch geothermal heat pump line in the U.S.

According to Bosch officials, today's announcement marks a sustained commitment by the global conglomerate toward expanding the use of geothermal technology as a highly efficient heating and cooling solution for homes and businesses while offering an attractive growth opportunity for professionals in the HVAC industry.

"With more than 45 years of combined expertise in geothermal heat pump manufacturing, the union of FHP and Bosch under the Bosch brand name represents a new era in geothermal technology for the United States," said Bosch Thermotechnology North America President and CEO, Ervin Cash. "From our geothermal heat pumps to condensing tankless water heaters and solar thermal water heating technology, a full suite of high efficiency heating, cooling and water heating products can now be found under the Bosch umbrella.



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

Notices

Closing This Week



RFO and Bidders' Conference Coming for 2011 RPS Plan, PG&E (May 19)

From PG&E — On May 4, 2011, PG&E filed its 2011 Renewable Portfolio Standard (RPS) Procurement Plan Compliance Filing in response to D.11-04-030. PG&E plans to issue the 2011 RPS Request for Offers (RFO) on May 11th, pending approval by the California Public Utilities Commission. For those parties interested in finding out more information, draft documents and schedules are available on our website, www.pge.com/rfo, by clicking on the “2011 Renewables RFO” link. PG&E plans to hold a Bidders' Conference on May 19, 2011 in San Francisco. If you plan to attend in-person, registration is required. Please submit the appropriate form (Attachment C to the Solicitation Protocol) to the email address listed below. Call-in and web link details will be available on the website, twenty-four hours before the event. Please email questions or requests for information to RenewableRFO@pge.com.

Current Notices

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.

Correction to Notice, Nevada Geothermal Lease Sale Land Nominations

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 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

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

Only basic information and contact is given below—more detail on all opportunities listed here is available at http://geo-energy.org/empl_opport.aspx.

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.

Director – Business Development, GeoTek, Midland, Texas

GeoTek is an early stage geothermal technology company, focused on maximizing alternative energy resources. We are seeking a Director of Business Development to add to our executive staff. As part of a cross-functional team, this person will manage and develop marketing and expansion opportunities for the company's geothermal energy technology. Qualified candidates should submit a resume to info@geotekenergy.com

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.

For Students! EPA Summer Employment Program Application Underway

From EPA: The U.S. Environmental Protection Agency is looking for energetic and highly motivated students for summer employment. [More information and application information is available on the EPA web site.](#)

Sr. Applications Engineer, ElectraTherm

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

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

Associate Director, California Geothermal Energy Collaborative, UC Davis Energy Institute

For more information on the position, go to the UC Davis staff web page

<https://www.employment.ucdavis.edu/applicants/jsp/shared/frameset/Frameset.jsp?time=1297906619426>

Click on search button and scroll down to the listing. The Quick link to apply will take you directly to the posting - www.employment.ucdavis.edu/applicants/Central?quickFind=58431

Sr. Engineer, McHale & Associates, Arvada, CO

McHale is seeking a Sr. Engineer to conceive, develop and implement projects of major significance to the business plan.

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>

General Manager, Geothermal Exploration, Origin Energy (Indonesia)

Jakarta based with domestic and international travel. If you are interested in this opportunity or other geothermal opportunities please contact: Jennifer Blake on +617 3867 0022 or email jennifer.blake@originenergy.com.au.

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.

Senior Level Assistant Site Manager, Operations and Maintenance

Contact: Richard@mrspokane.com or call 509-340-2852 Ext. 18

Senior Principal Geothermal Geologist – Brisbane, Australia

Shane Stevens / Talent Search Team Manager, Origin

Email: Shane.stevens@originenergy.com.au Phone: +61 00 11 73858 0237

Vice President Geology, Western US

Please send resumes to Bstevens@stmassociates.com

Geothermal Openings, NREL, Boulder, CO

Go to http://www.nrel.gov/employment/job_openings.html and search "geothermal"

Drilling Manager, NV

Contact: Andrew Matkovic / Vice President Clean Tech & Energy

(216) 539-7668 or andrewmatkovic@carmongroup.com

Renewable Energy Mechanical/Systems Engineer, Idaho International Laboratory, ID

Please contact: Vanessa Van Dyk at Idaho National Laboratory: Vanessa.VanDyk@inl.gov, 208-526-6325

OR apply on line at: www.inl.gov/careers

Project Manager

Contact: Andrew Matkovic, Vice President, The Carmon Group Inc.

andrewmatkovic@carmongroup.com or (216) 539-7668

(updated 8/20/10)

Development Manager

Contact: Andrew Matkovic, Vice President, The Carmon Group Inc.

andrewmatkovic@carmongroup.com or (216) 539-7668

(updated 8/20/10)

Project Manager Geothermal Exploration, Europe

Contact: droberts@penderfinancial.com

Requests for Proposals

Proposal Announcements



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

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.

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.

Refurbished 27-MW Marine Turbine, Ram Power

This turbine, originally designed by Westinghouse for aircraft carrier service, has been completely refurbished for geothermal service. It has been re-rated to 27,350 kW at design inlet conditions of 469,875 lb/h 60 psig, 307F inlet conditions; 3.0" HgA exhaust. At a steam flow of 431,215 lb/h, it is expected that the turbine will produce 25,100 kW.

New engineering performed for this machine includes: New steam path engineering and all new manufacturing/performance drawings are available, including interstage and inner gland steam sealing manufacturing drawings, turbine clearance diagrams, rotor lifting diagrams, and new flow path performance curves at the anticipated steam flow rates.

Hardware includes: New 5 stage rotor, new diaphragms, generator and governor end gland steam packing sets, interstage packing sets, T1 and T2 axial aligning journal bearings, one high capacity active thrust bearing and one high capacity inactive thrust bearing, with directed lubrication and temperature sensors. The machine is set up for mounting five Bentley Nevada XL-8mm proximity probes. Also included in the sale package are: turbine casing testing, final turbine assembly check, preparation and compilation of all material certifications, test reports and QA documents. The complete package (rotor, diaphragms, seals, and casings) can be prepared for ocean transport with appropriate preservation for short-term storage.

Turbine current delivery date is 3-4 months after a purchase agreement is established, ex-works Houston, TX, USA. Please contact info@ram-power.com for further information.

Alaska Fairbanks North Star Borough Offers \$1M Matched-Funds Grant

Alaska's Fairbanks North Star Borough is putting out a \$1 million grant through the Department of Energy for geothermal energy exploration for the proposal venture that can provide matching funds. Former Mayor Jim Whitaker initiated the request based on positive results of deep well testing 50 years ago. Luke Hopkins, Mayor of Fairbanks North Star Borough said researchers at the University of Alaska Fairbanks have shown interest. The goal is to find out whether the university's existing power plant could be replaced with a geothermal power plant.

See <http://www.azocleantech.com/details.asp?newsID=12786>, Fairbanks North Star Borough

<http://www.co.fairbanks.ak.us/>, PDF: <http://co.fairbanks.ak.us/Meetings/Ordinances/2010/2010-20-1o.pdf>

Events

GEA Events

GEA to Hold First Ever National Geothermal Summit in Reno, Nevada

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

This event will be held for companies and individuals in the geothermal industry with experts sharing real life approaches to getting geothermal projects done. 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.

There will also be an Expo Hall featuring government agencies, universities and leading geothermal developers from the growing geothermal industry.



Tuesday, August 16th will start at 3pm and will feature a GEA Members Meeting and Elections, Keynote Presentations by high level invitees, an Awards Ceremony and reception kicking off the Summit. Wednesday, the 17th will be a chock full day with Keynote Presentations, two plenary sessions, an Expo, Job Fair, breakout sessions, and an 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 about the National Geothermal Summit please go to: <http://www.geo-energy.org/nationalgeothermalsummit/main.aspx> or contact Kathy Kent at kathy@geo-energy.org.

We will be opening registration and providing an agenda for the event the week of Monday, May 23rd.

GEA 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

Renewable Energy and Energy Efficiency Advisory Committee Meeting, NYC (May 31, June 1)

The US Department of Commerce's *Renewable Energy and Energy Efficiency Advisory Committee's* next meeting is scheduled to take place in Manhattan, New York from 1:00-6:00pm on Tuesday, May 31 at Citigroup and from 8:00am-3:30pm on Wednesday, June 1 at Skadden, Arps, Slate, Meagher, and Flom.

The half-day meeting on May 31 will consist of presentations and input from the financial sector, and the Meeting June 1st is a full business meeting of the Committee. For information on the Committee, go to:

http://export.gov/reee/eg_main_023040.asp or contact Brian O'Hanlon (Brian.OHanlon@trade.gov)

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

For More Information

Contact Ken Bossong, Sustainable Energy Coalition*

301-270-6477 x.11; kbossong614@yahoo.com

*Founded in 1992, the Sustainable Energy Coalition is a coalition of 22 national business, environmental, and energy policy organizations supporting aggressive development of renewable energy and energy efficient technologies.

Speakers Confirmed to Date

Heather Zichal, Deputy Assistant to the President for Energy and Climate Change

John R. Norris, Commissioner - Federal Energy Regulatory Commission

Philip D. Moeller, Commissioner - Federal Energy Regulatory Commission

Henry Kelly, DOE Acting Assistant Secretary for Energy Efficiency & Renewable 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/Biomass Coordinating Council/LACORE, American Wind Energy Association, Beacon Power, Bob Lawrence & Associates, Business Council for Sustainable Energy, Continuum Energy Solutions, Demand Response & Smart-Grid Coalition, Dialight Corporation, Enervation Lighting, Environmental & Energy Study Institute, EPA's ENERGY STAR Program, Fuel Cell & Hydrogen Energy Association, Fuel Cells 2000, Geothermal Energy Association, Geothermal Exchange Organization, GHD Inc., Harmonics Limited, Hearth & Home Technologies, Maryland Energy & Sustainability Cooperative, Metropolitan Building Consulting Group, Mid-Atlantic Passive House Alliance, National Biodiesel Board, National Hydropower Association, National Renewable Energy Laboratory, Ocean Power Technologies, Inc., Ocean Renewable Energy Coalition, Oerlikon Solar, Resolute Marine Energy, Inc., Solar Energy Industries Association, Solar Energy World, Solar Solution LLC, Star Island Bahamas, Sunoptics High Performance

Prismatic Skylights, The Stella Group Ltd., U.S. Clean Heat & Power Association, Viridity Energy, Inc., Water Management

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>

Geothermal Research Symposium, Colorado School of Mines (May 23–24)

From Colorado School of Mines: [We are] pleased to announce a two-day joint Geothermal Research Symposium with the National Renewable Energy Laboratory, the Colorado Governor's Energy Office and the NAVY geothermal program on May 23 and 24th, 2011. This is the first geothermal symposium that focuses on research to identify evolving research needs from different stakeholders and to identify innovative technologies and ideas for the development of modern geothermal energy. Following this two-day research symposium, a geothermal field trip is planned by Dr. Stuart Simmons. We especially welcome graduate students and young professionals/academics. There will be a limited amount of scholarship funding available for graduate students. For further information and instructions on abstract submissions visit: www.mines.edu/Educational_Outreach

California Geothermal Energy Collaborative Summit, Mammoth Lakes, CA (May 26-27)

The California Geothermal Energy Collaborative will be holding its annual Geothermal Forum on May 26th and a Long Valley Field Trip on May 27th Registration is now OPEN at <http://www.regonline.com/2011geoforum>. Information on the Forum, Field Trip and directions to the Mammoth Mountain are also available. The day before the CGEC Forum (May 25th), the Geothermal Resources Council is holding a Technical Workshop. For more information and to register for their event, go to the GRC website at www.geothermal.org/works.html

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).

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>

CanGEA Events (September and November)

September 14th, 2011 - Toronto, ON, Geothermal Investment Forum and Networking Event

November 9th, 2011 – Calgary, AB, Geothermal Power Forum and Networking Event

GEOTHERMAL ENERGY WEEKLY

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

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