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National News

U.S. Climate Change Bill: Legislation Pushed to Late September; States Ask to Keep Climate Plans

The climate change bill has been again delayed in the Senate, now pushed to “later in September.” The legislation was originally to be introduced around late July.

Reasons for the delay were current struggle in Congress over health care legislation, the death of Senator Edward Kennedy, Senator John Kerry’s hip surgery last month, and the need to work out suitable language in the bill as some moderate Democrats join opposition to the bill.

Backers say approved climate change legislation would have a positive impact worldwide. President Obama is looking to a December deadline, when the United Nations will hold a global summit in Copenhagen to discuss controlling greenhouse gas emissions.

Meanwhile, a September 1 article in *Reuters* stated five states have asked U.S. Senate leaders to allow them to keep state climate plans that would impose stricter limits on greenhouse gas emissions than what would be outlined under the federal legislation. The climate bill passed in the House of Representatives in June has a goal to cut total U.S. emissions by 17% by 2020. This would overrule initiatives in place such as the Regional Greenhouse Gas Initiative and the Western Climate initiative.

The states also called on the Senate to strengthen the bill by pushing the reduction target up to 20% by 2020. The letter was sent by attorney generals of the following states – Edmund Brown of California, Richard Blumenthal of Connecticut, Anne Milgram of New Jersey, Terry Goddard of Arizona, and Joseph Biden III of Delaware.

See <http://www.reuters.com/article/latestCrisis/idUSN31451301> and <http://af.reuters.com/article/energyOilNews/idAFN0149870120090901?pageNumber=1&virtualBrandChannel=0>.

BLM Hosts National Renewable Energy Summit

August 31–September 3, 2009

Secretary Salazar has tasked the Bureau of Land Management (BLM) to implement important portions of President Obama's New Energy for America agenda. To discuss how to move forward with project permitting, transmission lines, and establishing Renewable Energy Coordination Offices (RECO) BLM convened a Renewable Energy Summit August 31-September 3 in Las Vegas, Nevada.

"The Summit will provide BLM managers and staff an opportunity to interact with panels of experts and to share knowledge and tools to address the unique issues posed by renewable energy development," according to BLM. Several hundred federal and state officials attended the event, including many BLM field and district managers from across the West. Officials from US EPA and other federal agencies, state energy and environmental agencies, and others involved with renewable energy were in attendance.

Karl Gawell, GEA's Executive Director, spoke at the event as part of a panel discussing geothermal energy and the public lands. He presented an overview of the industry today and its future potential and stressed the importance of BLM leasing and permitting to geothermal energy being able to achieve its potential energy contribution. In addition, Jack Peterson of BLM and David Batts of EMPS discussed the recently completed Programmatic Geothermal EIS. Kermit Witherbee, BLM's Geothermal Program Manager, chaired the panel.

"It was exciting to hear the discussion at the Summit about how to support renewable energy development on public lands," Gawell noted. "The Administration clearly wants to transform the BLM."

The BLM Meeting Notice and draft agenda are available at:

http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_information/2009/IB_2009-087.html

Renewables Associations Write to Secretary Chu on Proposed Financial Institutions Partnership Program

In a letter dated September 2, the American Wind Energy Association, Biomass Power Association, Geothermal Energy Association, National Hydropower Association, Solar Energy Industries Association, and U.S. Clean Heat and Power Association wrote to Secretary Chu regarding issues related to the

Department of Energy's proposed Financial Institutions Partnership Program. Here is the letter in its entirety.

Dear Dr. Chu:

Our organizations, representing thousands of clean energy technology companies, appreciate your personal attention to the Title XVII Loan Guarantee Program and your commitment to expediting the disbursement of loans and loan guarantees authorized under the American Recovery and Reinvestment Act (the "Recovery Act"). We are writing to urge you to take the actions set forth below related to the proposed Financial Institutions Partnership Program ("FIPP") for renewable energy projects that employ commercial technologies to ensure that it is properly structured and implemented without further delay.

Since February, our members and the financial community have been waiting for the opportunity to apply for loan guarantees for renewable energy projects that employ commercial technologies. Commercially viable renewable energy projects, including projects with power purchase agreements, construction contracts, permits and sites, are in some cases being delayed due to the continued tight conventional credit markets for some technologies, the cost of capital in those markets and the absence of credit support from the Department of Energy ("DOE").

This element of the Recovery Act has accordingly had an anti-stimulus effect, as some developers wait to seek financing support from DOE. A DOE loan guarantee for these projects could create thousands of new jobs in the United States and advance the Administration's clean energy and climate change goals. We understand that DOE plans to exercise its authority to provide loan guarantees to renewable energy projects that employ commercial technologies under the Recovery Act through FIPP. Unfortunately, DOE has not published any plans for FIPP to date, and we are left with speculation regarding how the program will function and whether it will be structured so that it is functional for both borrowers and private lenders. Based on information that has been circulated regarding FIPP, we understand that DOE is considering pre-qualifying private commercial lenders to issue loans to renewable energy projects and related manufacturing facilities. Then, the private commercial lenders would apply to DOE for a loan guarantee in an amount equal to 80% of the loan. A commercial lender would be required to provide the balance of the loan funds on an un-guaranteed basis.

We believe that if properly structured, FIPP could be the catalyst for the construction of hundreds of renewable energy projects and thousands of new jobs. For FIPP to realize its potential, however, the rules governing the program must accommodate the market needs of borrowers and lenders.

There is a risk that FIPP will contain fatal flaws that render it an unattractive financing option. We believe that it is critical that you act to eliminate this risk by implementing a public process through which key elements of FIPP would be made available to interested parties, who could provide valuable feedback before the FIPP solicitation is issued.

Based on information that has been made available about FIPP to date, there are many aspects of the proposed program that raise serious concerns, including the following:

1. DOE should accept applications under FIPP on a rolling basis and review and approve applications as they are received. FIPP would have the most immediate stimulus effect if DOE provides loan guarantees to qualified projects on a rolling basis rather than conducting competitive reviews of applications. We note that other federal credit programs administered by the Overseas Private Investment Corporation and the Export-Import Bank do not require competitive reviews, which could otherwise delay construction of worthy projects. Applications should be reviewed and approved based on their merits when the project achieves necessary project milestones as preconditions for financing.
2. FIPP must permit borrowers to use Federal Financing Bank loans for the portion of the loan that would be guaranteed by DOE. Under DOE's existing loan guarantee solicitations, if a borrower applies for a full guarantee of a loan (for 80% of project costs), that loan will be issued by the Federal Financing Bank. In the case of FIPP, we understand that a portion of the loan would be guaranteed by DOE and the remaining

portion of the loan would not be guaranteed. DOE should permit the guaranteed portion of the loan to be issued by the Federal Financing Bank rather than requiring that the guaranteed portion of the loan be syndicated to commercial lenders. This would ensure that borrowers could benefit from the relatively low interest rates of Federal Financing Bank loans to the same extent as borrowers under DOE's existing loan guarantee solicitations.

3. FIPP must provide opportunities for long-term financing of up to thirty years without limiting the ability of un-guaranteed lenders to maintain their own liquidity requirements. The Energy Policy Act, which governs DOE's Title XVII Loan Guarantee Program, permits DOE to guarantee loans for up to the lesser of 90% of the projected useful life of project assets or thirty years. FIPP must be designed to allow project developers to obtain a loan guarantee for the maximum term authorized under the Energy Policy Act. Most commercial lenders, however, are currently unwilling to provide loans for terms longer than five to seven years due to internal liquidity constraints. To address existing market conditions, while also allowing borrowers to benefit from long-term financing provided by the Federal Financing Bank, FIPP must permit lenders that provide the unguaranteed portion of a loan flexibility to syndicate the loan, including through assignments and participations to other financing institutions, and to assign the loan after an acceptable timeframe, in order to provide unguaranteed funding for a term matching the DOE guarantee. We believe that there are a number of approaches that DOE could adopt to address this critical issue without impairing the alignment of risks between DOE and commercial lenders that FIPP is intended to provide.

4. FIPP must allow project bundling. FIPP must ensure that developers have the ability to bundle small projects, such as distributed generation systems, under one loan guarantee to gain the efficiencies necessary to make the programs attractive for small projects. Absent a mechanism to provide guarantees to support financing of multiple small projects, FIPP would not be helpful to, for instance, a simple distributed generation project, because the transaction costs would outweigh the benefit of the guarantee, leaving such projects stranded.

5. FIPP must be adequately funded. Ever since the Recovery Act appropriated \$6 billion for the credit subsidy cost of loan guarantees issued under DOE's Section 1705 Loan Guarantee Program (under which FIPP would be established), developers of renewable energy projects have been relying on the availability of a sufficient portion of this amount to provide liquidity for hundreds of shovel ready projects. Then, in early August, Congress transferred \$2 billion of the Recovery Act's \$6 billion appropriation to the "Cash for Clunkers" program, which currently, given allocations of that appropriation already made by DOE under other solicitations, leaves only \$715 million for the credit subsidy cost of loan guarantees to renewable energy projects that employ commercial technologies. This sudden and unexpected drop in Recovery Act support for these projects discourages continued development and equity investment. It also reduces the interest of financial institutions that may participate in FIPP. DOE must work with Congress to restore the \$2 billion appropriation that was transferred to the "Cash for Clunkers" program. In the interim, with assurances from Congress and the President that this amount will be restored, DOE must make \$2.715 billion in credit subsidy costs provisionally available for loan guarantees issued under FIPP.

6. Other FIPP issues. FIPP must also address several other important issues. For example, projects should not be required to meet any specific requirements regarding the commercial status of their technology, provided that they otherwise meet criteria established by DOE and un-guaranteed lenders. We believe that FIPP can still achieve its goals of providing financing for renewable energy projects and creating thousands of jobs if it is implemented expeditiously and resolves certain key issues in a manner that enables the financing community and borrowers to participate in the program. We urge you to undertake a more open process to ensure that FIPP could achieve its objectives. We believe that this process could be completed in under two weeks, which at this point would not seem to cause any further delays to the program. We would welcome the opportunity to share additional thoughts on the structure and implementation of FIPP and to discuss any of these issues in more detail. Thank you for your attention to this critical matter.

Sincerely,

Denise Bode, CEO, American Wind Energy Association
Karl Gawell, Executive Director, Geothermal Energy Association

Linda Church Ciocci, Executive Director, National Hydropower Association
Bob Cleaves, President, Biomass Power Association
Rhone Resch, President and Chief Executive Officer, Solar Energy Industries Association
Jessica Bridges, Executive Director, United States Clean Heat and Power Association

Sterling Planet to Provide Carbon Offsets for October's Geothermal Meetings and Expo

The Geothermal Resources Council announced that Sterling Planet will provide offsets for the carbon footprint made by the upcoming GRC Annual Meeting and GEA's Geothermal Energy Expo. Sterling Planet will finance projects to reduce greenhouse gases, thus shifting the meetings and expo to a carbon neutral status.

DOE National Geothermal Action Plan Available for Comment

DOE's draft National Geothermal Action Plan is now available for review and comments (PDF 4.1 MB). You can download the report, and find the "link" to submit comments at:
<http://www1.eere.energy.gov/geothermal/ngap.html>

The following is from the DOE web site:

"When finalized, the National Geothermal Action Plan (NGAP) will be the foundation and guiding document for an integrated approach to advancing geothermal technology development to the benefit of the Nation's energy supply. This Review Draft of the NGAP is the result of many months of intense effort by the Geothermal Technologies Program (GTP), U.S. Department of Energy, working in cooperation with the Geothermal Technologies Interagency Working Group facilitated by the National Research Council's Committee on Earth Resources.

"It is the strategic mission of the U.S. Department of Energy (DOE) to work in partnership with public and private organizations to support the research, development and demonstration (RD&D) of technologies able to meet our Nation's energy challenges and secure America's future. The DOE's Geothermal Technologies Program (GTP) actively supports scientific inquiry into the potential of geothermal technologies as a contribution to the diversification of energy supplies and the lowering of greenhouse gas emissions.

"The NGAP defines the roles and responsibilities of key Federal agencies in the development of geothermal technologies and describes their primary activities. It also highlights the activities of those Federal agencies that as early adopters are deploying geothermal technologies for end-use applications. In identifying these Federal initiatives, it is the purpose of this document to provide an overview of relevant Federal policies and programs for the geothermal industry, financial community, policymakers, state and local government, other stakeholders and the general public.

"Comment on the National Geothermal Action Plan: Evaluation of this draft NGAP by geothermal technology developers, members of the broader geothermal community, and the general public is essential. We welcome the opportunity to receive your comments and look forward to moving forward together on these actions so vital to the well-being of our Nation.

Please provide comments and feedback on the NGAP by using the form available at:
<http://www1.eere.energy.gov/geothermal/ngap.html>

GEA Publishes New Issue Briefs

GEA's web site hosts a range of important reports and documents, ranging from guides to geothermal technology and environmental issues to data about geothermal projects across the nation. GEA has added

several "Issue Briefs" to the site on key issues. These new documents seek to provide up-to-date information on key issues in a brief format.

Five Issues Briefs are now available at: <http://www.geo-energy.org/publications/reports.asp>. The five topics covered are: Geothermal Energy and Induced Seismicity, Geothermal Energy and Greenhouse Gas Emissions, Geothermal Energy and Water Consumption, Geothermal Energy and Jobs, and Geothermal Energy's Future Potential. All are available to download as PDF files at the link above free of charge.

Company News

ElectraTherm, Inc.: Geothermal Resource Gains Two 50-kW Green Machine Heat-to-Power Generators

Press Release, September 9 — ElectraTherm, Inc. announced today the planned deployment of two 50-kW ElectraTherm Green Machines slated to generate electric power from geothermal heat at the Florida Canyon Mine in Northern Nevada.

Scheduled for commissioning in September, the project is the first commercial geothermal application of ElectraTherm's Organic Rankine Cycle (ORC) technology powered by its patented Twin Screw Expander.

Florida Canyon Mining, Inc. learned of ElectraTherm's technology while looking to exploit the geothermal water used in their processes. The ElectraTherm Green Machines will take advantage of existing 220°F groundwater at Florida Canyon to create fuel-free, clean electrical power while cooling that geothermal water for further use in mining operations.

"We are proud to have a solution that makes green power from our geothermal energy that has, until now, been lost as waste heat," said Joel Murphy, Vice President of Operations and General Manager at Florida Canyon Mines. "That green power is nearly free because we already pump the water for our mining operations. Florida Canyon Mining is committed to being part of the energy efficiency solution in America and we are developing multiple sources of clean power at the mine."

For more information about the ElectraTherm Green Machine, visit <http://www.electratherm.com/products.html>.

Nevada Geothermal Power: Photos, Videos of Blue Mountain Plant Available

Nevada Geothermal Power Inc. has posted photos and video of the newly completed 49.5 MW Blue Mountain 'Faulkner 1' geothermal power plant. The photos and video are available at www.nevadageothermal.com or http://www.youtube.com/results?search_query=NGPGeothermal&search_type=&aq=f.

Raser Technologies: Video Outlines Utah Plant Updates

Raser Technologies has released a new video showing latest steps to bring the Thermo, Utah Hatch plant to full capacity. The video highlights developments to the 5th production well, well casing, pumps, permanent piping, generators, and overall well field optimization. Principal Executive Officer Richard D. Clayton told press, "We've learned a great deal about the geothermal resource at Thermo, UT, which will help us build future power plants more efficiently. We're currently selling 5 MW of clean, green geothermal power to Anaheim, CA and we're ramping up to full capacity."

The video is available at www.rasertech.com/plantupdate.

Raser Technologies: Raser Provides Update on DOE Loan Guarantee Program

Press Release, September 2 — Raser Technologies, Inc. (NYSE:RZ), an energy technology company, announced today that it has received notice from the Department of Energy ("DOE") that its loan guarantee application for its "East Thermo" project has been denied. In its notice, the DOE stated "we believe that the East Thermo project possesses fundamental strength, but would benefit from continued development...."

Project East Thermo is a future phase Thermo-area proposed development, approximately six miles to the east of Raser's Thermo No. 1 plant. Raser submitted the loan guarantee application in an effort to extend its range of potential financing options, which also includes potential pre-paid power purchase agreements.

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

Western GeoPower: Western GeoPower President & CEO MacLeod Resigns

Press Release, September 1 — Western GeoPower Corp., a renewable energy company, today announced the resignation of Kenneth MacLeod as President, CEO and a Director of the company effective immediately. Daryl Clark has been named President & CEO on an interim basis, also effective immediately.

The changeover reflects the expected completion of the previously disclosed business combination between Western GeoPower and two other geothermal companies, resulting in a more broadly diversified entity under the leadership of Hezy Ram and the Ram Power management team.

For more, see <http://www.geopower.ca/newsp1.htm>.

Renewable Energy and Climate Change News

Recovery Act: Treasury, Energy Announce \$500m in Awards; Wind Projects Emerge as Big Winner

Treasury Secretary Tim Geithner and Energy Secretary Steven Chu announced on September 1 \$502 million in the first round of awards from the federal stimulus program. This will provide cash assistance to energy production companies in place of tax credits, creating additional upfront capital to create jobs and begin construction on projects that may have been stalled.

"The Recovery Act is investing in our long-term energy needs while creating jobs in communities around the country," Treasury Secretary Tim Geithner told press. "This renewable energy program will spur the manufacture and development of clean energy in urban and rural America, allowing us to protect our environment, create good jobs and revitalize our nation's economy."

A *New York Times* article on September 1 stated that the Klondike Wind Power Projects, owned by Iberdrola Renewables, a Spanish energy company, were big winners on the first round of grants, winning roughly \$295m of the \$502m. That includes the two largest individual projects: a \$114 million grant to the Penascal Wind Farm in Sarita, Tex., and a \$59 million grant to the Locust Ridge II wind farm in Shenandoah, Pa.

"We hope to get another \$251 million soon," Jan Johnson, a company spokeswoman told press. "The public policy that's in place now has certainly been a big factor in our business planning in the United States." Johnson added that Iberdrola Renewables, which is investing \$1.8 billion in wind power in the U.S. in 2009, plans to invest an additional \$6 billion over the next four years.

See <http://www.energy.gov/news2009/7851.htm> and <http://greeninc.blogs.nytimes.com/2009/09/01/iberdrola-wins-big-on-stimulus-grants/>.

Germany's Progress in Geothermal and Other Renewables "Inspiring"

An article by Judy Collins on ezinearticles.com describes how renewable energy legislation in Germany has fast-tracked the country's energy success. Collins writes, "A country with relatively moderate sun exposure and no volcanic activity in 7,500 years is actually a leader in producing solar power and geothermal energy. To say that Germany is inspiring is a vast understatement. If the U.S. made a serious attempt to duplicate Germany's success, the impact on the environment would be staggering."

Germany's Energy Feed-in Law of 1991 set things in place for an energy revolution, as Collins explains. The 2000 revision to the law added geothermal energy to the list of qualifying resources. This law gave new investors a time frame of 20 years, giving them the reassurance to commit to projects. Called the Renewable Energy Sources Act, Germany's goal was set to reduce 3% of carbon emissions by 2010 with renewable energy as 10% of the overall energy mix; this goal was surpassed in 2007, when green energy reached 12.5% of Germany's mix. Further revisions in 2004 raised the bar to 27% by 2020, as well as extending the law to up-and-coming market developments and rewards for innovations. Tariffs were put at a fixed rate for 20 years. Changes in the legislation have been a call to action; by moving forward, producers can take advantage of the lengthy time limits that protect them from future changes to the law.

Geothermal developers have taken advantage of this. Collins states that there are 150 geothermal plants in the development stage in Germany, but they are held back due to the cost of drilling equipment. Despite these setbacks, German manufacturing plants are expanding drill production for the geothermal sector, and six geothermal plants are opening in 2009 and into 2010.

See <http://ezinearticles.com/?Germanys-Bid-For-Solar-Excellence-Scuppered-by-Upstart-Geothermal?&id=2105449>.

State News

Arizona, New Mexico: Plans Announced for Supercritical CO₂-Driven Geothermal Facility

A demonstration plant utilizing supercritical carbon dioxide to drive a geothermal power facility is in the works with the announcement of a joint venture agreement between Enhanced Oil Resources and GreenFire Energy.

Located in Apache County, Arizona and Catron County, New Mexico, the demonstration project is expected to commence in 2010 with the drilling of four deep wells to access high heat crystalline rock underlying St Johns Dome; construction of the 2-MW plant will follow in 2011, according to *Reuters*.

The St Johns Dome area is considered an optimal location for the project due to low-cost natural CO₂, the likelihood of a thermal reservoir, and local connection to the power grid. The joint venture intends to apply for funding from DOE through the federal stimulus plan.

See <http://www.reuters.com/article/pressRelease/idUS158134+03-Sep-2009+PRN20090903>.

Utah: DOE to Fund U of U on Increasing Productivity of Geothermal Plants

Researchers at the University of Utah will conduct a study to boost productivity of geothermal power plants and increase feasibility nationwide. The five-year study will involve injection of cool water and pressurized water into a dry geothermal well to create new pathways in the rock.

“Using these techniques to increase pathways in the rock for hot water and steam would increase available of geothermal energy across the country,” geologist Ray Levey of the Energy & Geoscience Institute at the university told press.

“We’re going to take a geothermal field and improve its productivity,” EGI geologist Joe Moore added. “We’re going to test the techniques on one well at Raft River. We’re testing methods to take wells that are not productive and make them productive.”

The Department of Energy will pay \$7.4 million of the project’s projected \$10.2 million cost. “The Department of Energy is funding this as a research program because hot rock exists everywhere,” Moore said.

See http://www.eurekaalert.org/pub_releases/2009-09/uou-mgm090509.php.

International News

Argentina: G4G Resources to Acquire Geothermal Properties in San Juan Province

Press Release, September 8 — G4G Resources Ltd. (TSX VENTURE:GXG) announces that it has signed a Letter of Intent (LOI) to acquire from Geotermia Andina SA a 90% interest in the 3,600 hectare Despoblados geothermal energy project in the San Juan Province of Argentina. The agreement provides that Energia Provincial Sociedad Del Estado (EPSE), the local provincial utility company of San Juan, will co-joint venture the Los Despoblados property and will retain 10% of the project. Details of the agreement will be forthcoming upon signing of a definitive agreement.

For more, see <http://www.marketwire.com/mw/release.do?id=1040978>.

China: Ministry Announces Plans to Up Shallow Geothermal Development

China’s Ministry of Land and Resources has announced plans to speed up shallow geothermal energy development (200 meters or less) over the next five years and will put in place a strict supervision system for the review and approval of mining licensing, according to English.people.com.cn.

At a recent shallow geothermal energy and geothermal resources management conference, the Ministry stated geothermal resources reduced carbon dioxide emissions by over 25 million tons in 2008. And at the end of June 2009, China’s shallow geothermal energy use supplied heating and refrigeration to 2,236 construction projects.

See <http://english.people.com.cn/90001/90778/90857/90860/6747720.html>.

Germany: One-Well System Expected to Cut Geothermal Plant Costs

Germany plans to build a 2-MW plant in the country’s northwestern region, according to cleantech.com. The GeneSys plant would use a one-well pumping system that has been researched by German scientists, rather than two to pump water into the ground to heat water and pump it back again to produce heat or electricity. The system is expected to help cut drilling costs in half.

See <http://www.cleantech.com/news/4927/well-efficiencies-cut-costs-germany>.

New Zealand: Mighty River Power Announces Record Dividend

Press Release, September 3 — Mighty River Power marked its 10th anniversary by delivering a record annual result, a net profit after tax of \$159.6 million. The profit for the year ended 30 June 2009 is an increase of \$48.7 million on the previous year. Key drivers for the result were a major boost in renewable generation and nearly 30,000 new customers for Mercury Energy, the Company's retail arm.

Mighty River Power Chair Carole Durbin says the record profit was achieved as the result of a combination of strategic initiatives in geothermal development that began years ago and fortuitous weather in the year under review. "The key element in the Company's operations contributing to this year's stand-out financial result was a significant increase in renewable generation, which was up by 1,500GWh – a 36 per cent increase on 2008," says Ms Durbin.

She says the commissioning of the 100MW Kawerau Geothermal Power Station which came into production earlier than expected, at a greater capacity and under budget boosted the Company's renewable generation capacity.

For more, see <http://www.mightyriverpower.co.nz/News/Detail.aspx?id=2099>.

Philippines: Sen. Angara Pushes Geothermal Development

An article written by Senator Edgardo J. Angara and calling geothermal energy the "green gold of the future" was published on businessmirror.com.ph. Angara describes how the Philippines, one of the top producers of geothermal energy in the world, using the Renewable Energy Act (sponsored by Angara) could surpass the U.S. to become the #1 top producer.

Angara chairs the Congressional Commission on Science, Technology and Engineering which recently hosted an international conference on renewable energy technologies to jump-start implementation of the Renewable Energy Act. The legislation "has adopted best practices in the world, such as Germany's feed-in tariff system, and provides for a Renewable Portfolio Standard System, requiring energy companies to eventually source a portion of their supply from renewables. It also provides substantial financial incentives to attract investors and assuage the initial high cost in investment," Angara writes.

See <http://businessmirror.com.ph/home/opinion/15689-philippines-saudi-arabia-of-renewable-energy.html>.

Philippines: EDC's Green Core Wins Palinpinon-Tongonan Geothermal Bidding

Green Core Geothermal Inc., owned by the Energy Development Corp, has submitted the highest bid of \$220 million for the 192.5- MW Palinpinon and 112.5-MW Tongonan geothermal power plants.

The Palinpinon plant, located in Valencia, Negros Oriental, consists of two power stations approximately 5 km apart — the 112.5-MW Palinpinon I and the 80-MW Palinpinon II. The Tongonan geothermal power plant consists of three 37.5-MW units.

See <http://business.inquirer.net/money/topstories/view/20090902-223231/Lopez-firm-tops-Palpinon-Tongonan-bidding>.

Spain: Petratherm España to Survey Tenerife Island for Drilling Location

Petratherm España plans an extensive magneto-telluric (MT) survey of Tenerife, part of Spain's Canary Islands, in October 2009, according to newsstore.smh.com.au. Geosystems has been contracted to complete the survey work to determine the location for a deep test well site. Petratherm España is also seeking potential partners to fund the subsequent deep drilling.

See <http://newsstore.smh.com.au/apps/previewDocument.ac?docID=GCA00986136PTR>.

Notices

New This Week

Update: GEA Preparing New Industry Update to be Released Fall 2009

GEA is in the process of collecting information for its Fall 2009 Geothermal Industry Update. GEA is looking for information on geothermal projects under development in the U.S. The past GEA Industry Updates have been important sources of information for many people interested in the geothermal industry from policy makers to financiers.

To make sure your project is included, or to make sure we are reporting accurate information about your project, contact Dan Jennejohn by emailing danj@geo-energy.org or calling 202-454-5261.

If you have already been contacted by GEA regarding the development of your organization's geothermal project(s), please be sure to send updated information as soon as possible to danj@geo-energy.org.

9 Billion Dollar Energy Investment Fund

From Randy Chamberlain, 801-318-3905, info@rgarthstudios.com:

I represent a 9 billion dollar investment fund to be loaned out for any energy related project or company that meets our criteria. My objective is to diversify the fund beyond oil and gas by focusing on renewable rather than carbon based fuels.

After reviewing the criteria, if you have or know of companies or projects that need funding please contact Randy Chamberlain (contact info above).

Basic Criteria to Qualify for the Fund:

- Client or project must have existing monthly production revenues or equivalent in signed power purchase agreements.
- The fund will only fund start-ups if the client has significant experience in their energy field and has existing monthly production revenues to back the start-up until it is in revenue production.
- We loan capital based off of your current net income and projected net income over 5 years.
- We want no equity in your company or project. This is 5 year top line money at very attractive sweep rates.
- We will write a term sheet commitment letter in 2 days assuming your finances are in order to verify net income revenue.
- We can fund within 45 days of due-diligence.
- The 9 billion dollar fund is to be used for both domestic and international energy related projects and companies.

Thank you for your attention regarding this new way to finance renewable energy.

GEA Annual Meeting Agenda Being Prepared, GEA Board Approves Nominees for Election to the Board of Directors

GEA's Annual Members Meeting will take place on Saturday, October 3, from Noon-4pm at the Peppermill in Reno, Nevada. This year's meeting will combine a national and state issues workshop with the regular annual members meeting.

Several national and state speakers have been invited to address the GEA Annual Members meeting, and GEA plans to release a draft agenda later this week. In addition, several leading lawyers will brief GEA Members on the latest in federal and state policies and programs.

Also, GEA Members will vote on the nominees to the GEA Board. The Nominating Committee proposed, and the Board approved, nomination of Domenic Falcone, Domenic J. Falcone Associates, Inc.; Dan Schochet, Ram Power; John Pritchett, Science Applications International Corp; and John McKinsey, Stoel Rives all to two-year terms on the GEA Board.

The GEA Annual Meeting and Workshop is open to the public, but registration is requested. GEA Members and Exhibitors at the GEA 2009 Trade Show are admitted on a complimentary basis. The registration for non-members is \$50. For more information and registration, visit the GEA website at www.geo-energy.org. REGISTRATION AND A DRAFT AGENDA SHOULD BE AVAILABLE ONLINE FRIDAY, SEPTEMBER 11.

Other Notices Available on GEA Web Site

Notices from past weeks are now available on GEA's Web site:

GEA Preparing New Industry Update to be Released Fall 2009

GEA Members: GEA Board Nominations and Annual Meeting

Labor Department Offers \$500 Million for Clean Energy Job Training (August–October)

Comment Period Open for Amendments to Loan Guarantee Legislation (early September)

Call for Papers, Materials Challenge 2010 (September 21)

EPA Extends Comment Period for Renewable Fuel Standard Program (September 25)

For details, see <http://geo-energy.org/publications/updates.asp#Notices>.

Employment Opportunities

Employment Opportunities Available on GEA Web Site

Open Employment Opportunities are now available on GEA's Web site:

Drilling Program Manager, Major Geothermal Power Company in CA

Senior Director, Business Development, Major Geothermal Company

Geothermal Project Supervisor, Central American Bank for Economic Integration, Costa Rica

For details, see <http://geo-energy.org/publications/updates.asp#Employment>.

Requests for Proposals (RFPs)

Closing This Week

Renewables, Western U.S. (September 10)

RFP for Environmental Implications of Emerging Technologies, NSF (September 15)

RFP for Energy for Sustainability, National Science Foundation (September 15)

RFP for Thermal Transport Processes, National Science Foundation (September 15)

For details, see <http://geo-energy.org/publications/updates.asp#RFPs>.

Added This Week

Interconnection-Level Transmission Analysis and Planning - Recovery Act (September 14)

The U.S. Department of Energy requests proposals for Resource Assessment and Interconnection-Level Transmission Analysis and Planning. The objective of this initiative is to facilitate the development or strengthening of capabilities in each of the three interconnections serving the lower 48 states, to prepare analyses of transmission requirements under a broad range of alternative futures, and develop long-term interconnection-wide transmission expansion plans. The interconnections are the Western Interconnection, the Eastern Interconnection, and the Texas Interconnection. \$60 million expected to be available, up to 6 awards anticipated. Responses due 9/14/09. For more info, contact Meghaan Hampton at Meghaan.Hampton@netl.doe.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47961>. Refer to Sol#: DE-FOA-0000068. (Grants.gov 8/7/09)

Brownfields Assessment Grants (October 16)

The U.S. Environmental Protection Agency requests proposals for Brownfields Assessment Grants. A brownfield site is defined as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of hazardous substances, pollutants, contaminants, controlled substances, petroleum or petroleum products, or is mine-scarred land. This program supports inventories, characterizations, assessments, planning (including cleanup planning) and community involvement related to brownfield sites. \$37.3 million expected to be available, up to 171 awards anticipated. Responses due 10/16/09. For more info, including Regional contacts, go to: <http://www.epa.gov/oswer/docs/grants/epa-oswer-orcr-09-04.pdf>. Refer to Sol# EPA-OSWER-OBLR-09-04. (Grants.gov 8/12/09)

Brownfields Cleanup Grants (October 16)

The U.S. Environmental Protection Agency requests proposals for Brownfields Cleanup Grants. Cleanup grants provide funding to carry out cleanup activities at specific brownfield sites owned by the applicant. An individual applicant can apply for up to \$200K per brownfield site and can submit up to three site-specific cleanup proposals. \$35.1 million expected to be available, up to 163 awards anticipated. Responses due 10/16/09. For more info, including Regional contacts, go to: <http://www.epa.gov/oswer/docs/grants/epa-oswer-orcr-09-05.pdf>. Refer to Sol# EPA-OSWER-OBLR-09-05. (Grants.gov 8/12/09)

Brownfields Revolving Loan Funds (October 16)

The U.S. Environmental Protection Agency requests proposals for Brownfields Revolving Loan Fund Grants. This program provides funds for a grant recipient to capitalize a revolving fund and to make loans and provide subgrants to carry out cleanup activities at brownfield sites. \$7 million expected to be available, up to 7 awards anticipated. Responses due 10/16/09. For more info, including Regional contacts, go to: <http://www.epa.gov/oswer/docs/grants/epa-oswer-orcr-09-06.pdf>. Refer to Sol# EPA-OSWER-OBLR-09-06. (Grants.gov 8/12/09)

Fellowships for Graduate Environmental Study (October 22)

The U.S. Environmental Protection Agency requests proposals for Science to Achieve Results (STAR) Fellowships for Graduate Environmental Study. Through this RFP, EPA is offering Graduate Fellowships for master's and doctoral level students in environmental fields of study. 16 Topic Areas identified which include, but are not limited to: Global Change; Energy; Green Engineering/Building/Chemistry/Materials; and Environmental Behavior and Decision Making. \$4.5 million expected to be available, up to 120 awards anticipated. Responses due 10/22/09. For more info, contact Brandon Jones at 2009FellowshipsRFA@epa.gov or go to: http://epa.gov/ncer/rfa/2009/2009_star_gradfellow.html. Refer to Sol# EPA-F2009-STAR. (Grants.gov 8/19/09)

Environmental Information Exchange Network (November 20)

The U.S. Environmental Protection Agency requests proposals for the National Environmental Information Exchange Network Grant Program. This program supports the development of information technology and information management capabilities needed to actively participate in the Exchange Network, a secure, Internet and standards-based way to support electronic data reporting, sharing, and integration of both regulatory and non-regulatory environmental data. \$10 million expected to be available, up to 50 awards anticipated. Responses due 11/20/09. For more info, contact Edward Mixon at mixon.edward@epa.gov or go to: <http://epa.gov/exchangenetwork/grants/>. Refer to Sol# EPA-OEI-10-01. (Grants.gov 7/29/09)

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

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

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

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

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf09606. Refer to Sol# 09-606. (Grants.gov 8/13/09)

Other RFPs Available on GEA Web Site

Requests for Proposals listed in past weeks are now available on GEA's Web site:

RFP for State Energy Program, DOE (Due Dates Vary)

RFP for Contribution of Cost Share for Transportation Related Recovery Act RFPs, CEC (Due Dates Vary)

RFP for Technology and National Research Priorities, Recovery Act (Ongoing)

Rural Community Development Initiative (September 24)

RFP for Renewable Energy Resources, NV Energy (October 2)

Local Energy Assurance Plans, Recovery Act (October 8)

RFP for National Lab Partnerships for Energy Research, DOE (November 9)

RFP for Renewable Energy Resources, Los Angeles (March 11, 2010)

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

For details, see <http://geo-energy.org/publications/updates.asp#RFPs>.

Upcoming Events

Happening This Week

CanGEA Investment Workshop and Networking Reception, September 9 (Toronto, Canada)

For details, see <http://geo-energy.org/publications/updates.asp#Events>.

GEA Events

GEA: Geothermal Energy Expo/GRC Annual Meeting, October 4-7 (Reno, NV)

Every year, the Geothermal Energy Expo hosts the world's largest gathering of vendors providing support for geothermal resource exploration, characterization, development, production and management. It provides a unique opportunity for exhibitors to showcase their projects, equipment, services and state of the art technology to the geothermal community.

The Geothermal Energy Expo 2009 will be held at the Peppermill, Reno's premiere hotel and casino in Reno, Nevada. The Geothermal Energy Expo hosts the world's largest gathering of vendors providing support for geothermal resource exploration, characterization, development, production, and management. It provides a unique opportunity for exhibitors to showcase their projects, equipment, services, and state of the art technology to the geothermal community.

Booth space at the Geothermal Energy Expo is sold out. Speaking opportunities in the Expo Hall are still available through our first Geothermal Energy Webcast live from the Expo Hall on Tuesday, October 6th from 10am-1pm PT. This option is available for those unable to attend in person, those who were unable to secure booth space, or anyone interested. This Webcast is expected to reach an audience of a thousand or more. We will post a schedule of speakers in our Expo Guide, on GEA's website and on signage on site. Presentations are available in 15 minute slots. If interested, please contact Kathy Kent at kathy@geo-energy.org at your earliest convenience.

GEA is grateful to our Geothermal Energy Expo 2009 sponsors to date: Halliburton, Stoel Rives, LLP, GeoTek Energy, The Shaw Group, Geothermal Development Associates, Islandsbanki, Vulcan Power Company, TNG Energy Services, Geothermal Resource Group, Ormat Technologies, Tranter, Inc., DHI Services, NV Energy, Enel North America. We would also like to thank our media partners: altenergymag.com, New Energy Finance, Recharge, RenewableEnergyWorld.com, and NA Clean Energy. For more information about the Geothermal Energy Expo, visit: <http://www.geo-energy.org>.

Other Events Available on GEA Web Site

Upcoming Events listed in past weeks are now available on GEA's Web site.

Geothermal Symposium, Trinity University, September 19 (San Antonio, TX)

Renewable Energy Indonesia 2009 Trade Show, October 14–17 (Jakarta, Indonesia)

SMU Geothermal Conference, November 3–4 (Dallas, TX)

XVII Annual Congress and Annual Assembly, Mexican Geothermal Association, November 13 (Mexico)

31st New Zealand Geothermal Workshop 2009, November 16–18 (Rotorua, New Zealand)

For details, see <http://geo-energy.org/publications/updates.asp#Events>.



GEA Weekly Update

A newsletter for the geothermal industry written by Leslie Blodgett and Karl Gawell. For more information contact GEA at: 209 Pennsylvania Avenue SE, Washington, D.C. 20003. Phone: 202-454-5261; Fax: 202-454-5265; E-mail: research@geo-energy.org