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National News



President Targets Clean Energy Economy in State of the Union Address

In his State of the Union address, President Obama appealed to Americans to join him in setting a new goal to double the nation’s share of clean electricity in the next 25 years. “This is our generation’s Sputnik moment,” he said.

“Now, clean energy breakthroughs will only translate into clean energy jobs if businesses know there will be a market for what they’re selling. So tonight, I challenge you to join me in setting a new goal: by 2035, 80% of America’s electricity will come from clean energy sources. Some folks want wind and solar. Others want nuclear, clean coal, and natural gas. To meet this goal, we will need them all – and I urge Democrats and Republicans to work together to make it happen.”

The President also said, "The nation that leads the clean energy economy will be the nation that leads the global economy." He plans to do this through making a wide range of clean energy sources available to utilities, encouraging deployment of capital interest, providing a market to drive innovation, and complementing the research and development agenda at DOE. The clean energy standard should be tailored to protect customers, the White House has affirmed, and ensure fairness among regions that have differing needs and resources. The White House and Congress will also need to determine which energy sources would be considered "clean."

The [White House Clean Energy Standard fact sheet](#) outlines plans to build on recent progress in renewable energy, noting that 16,000 MW of new electric generating capacity has come on line since 2008 in wind, solar, and geothermal energy — an increase of nearly 60% in two years. In particular, the 1603 grant program could be expanded:

“Expanding production through the successful “1603” grant program: The renewable energy grant program under the Recovery Act has been an essential tool in deploying renewable energy resources in the U.S. over the past two years, successfully increasing U.S. manufacturing and creating tens of thousands of new American jobs. The Recovery Act converted these pre-existing tax credits into grant payments, making it easier for recipients to quickly expand clean energy generation and hiring. To date, the 1603 program has helped encourage more than 4,000 clean energy projects. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 extended the 1603 program for one year.”

Energy negotiations have died off in recent months, but [senators now appear ready to start up again soon](#). Sens. Lindsey Graham (R-S.C.), Tom Carper (D-Del.) and Mark Begich (D-Alaska) have expressed their support of a CES. Energy and Natural Resources Chairman Jeff Bingaman (D-N.M.) last week said he is "anxious" to work on "a proposal that does what the president outlined."

[Green energy companies supported the President's focus](#). Geothermal company ThermaSource president Richard Chow said clean energy "really plays to all of our strengths," since renewable energy supports national security, climate change imperatives, competitiveness and jobs.

"We feel it's the beginning of a boom," said Bill Rossi, chief marketing officer at solar panel parts manufacturer Enphase Energy, also in Sonoma County, where revenue for all solar power firms is about \$200 million a year.

Senator Bingaman Outlines 112th Congress Energy Priorities

In remarks to the New Democratic Network, Senate Energy [Committee Chair, Jeff Bingaman \(D-NM\)](#) detailed the [energy priorities](#) for the 112th Congress. The following are excerpts from Senator Bingaman's remarks.

On why the U.S. needs a strong energy policy:

"At the beginning of this new Congress, it is already becoming clear that energy policy will have a major place on this Congress's agenda.

"Part of that is because the President made clear last week in his State of the Union Speech he will give energy a major priority in his administration.

"In part, it is because our energy security is dependent on overseas supplies and global stability. The events that we have seen unfold in North Africa and the Middle East are stark reminders that the world is an unpredictable place. Whenever geopolitical events potentially affect our access to affordable energy supplies, it is a spur to consider energy policies that might reduce those geopolitical risks.

"But perhaps more important than any of those reasons is the competitive pressure we are experiencing from other major world economic powers, as they take a very leading role in clean energy markets.

"According to Bloomberg New Energy Finance, new investment in clean energy globally reached nearly a quarter of a trillion dollars in 2010. That was a 30 percent jump from where it was in 2009, and a 100 percent increase from the level in 2006."

On how the U.S. can succeed in the energy market:

"So the question is: How do we respond to this competitive world for the clean energy jobs? I believe that to remain at or near the forefront of this strongly developing market, we need to do at least four things:

"First, we need to ensure that we remain at the forefront of energy research and development, since innovation is the source of our greatest competitive strength. The President made that point in his State of the Union Speech and in other forums, as well.

“Second, we must ensure that we have a strong domestic market for clean energy technologies. Without clean energy market-pull in the United States, there will not be the incentive to manufacture and deploy these technologies here.

“Third, we have to ensure that we have the necessary financial infrastructure and the incentives to provide the capital needed to build advanced energy technology projects.

“And finally, we need to have explicit policies to promote the development of U.S. manufacturing capabilities for these clean energy technologies.

“I think these four items or elements should be at the heart of whatever comprehensive energy legislation that we undertake in this Congress.”

Company News



Bob Lawrence & Associates: New Report Outlines Benefits of Geothermal Use in Washington State

Press Release, Alexandria, VA, January 31 — Bob Lawrence & Associates, Inc. in partnership with the Geo-Heat Center of the Oregon Institute of Technology announces the release of the report entitled, "[The Economic, Environmental, and Social Benefits of Geothermal Use in Washington State.](#)"

Authored by the Geo-Heat Center, the report concisely describes Washington State's geothermal resources, their current uses and benefits for spas and resorts, and their potential uses and benefits.

The current modest use of geothermal resources in Washington State offsets greenhouse gas emissions of 10,287 pounds of carbon dioxide annually. This is equivalent to consuming 525 gallons of gasoline.

The National Renewable Energy Laboratory projected that Washington State's estimated geothermal electric potential of 300 megawatts (MW) could produce about 2.5 billion kilowatt-hours (kWh) of electricity a year - enough to provide more than 265,000 average U.S. homes with electricity.

Pratt & Whitney Power Systems: PURECYCLE® Systems Ordered for Turkish Project

Press Release, Conn., January 28 -- Pratt & Whitney Power Systems (PWPS) is breaking into the Turkish renewable energy market with the sale of three modular PURECYCLE® Organic Rankine Cycle units with the capacity to generate up to 780 kW of net geothermal power. Pratt & Whitney is a United Technologies Corp. (NYSE: UTX) company.

"Turkey has demonstrated a strong commitment to developing its geothermal resources to help meet the region's energy needs," said Chuck Levey, vice president of sales and marketing for Pratt & Whitney Power Systems. "Our PureCycle Organic Rankine Cycle units will create a new source of clean, renewable power for the area."

The Jeoden Electricity production project, located in Denizli, near Izmir, Turkey, is expected to be operational by April 2011. Existing low-temperature geothermal resources, at about 120 degrees Celsius, will be used to fuel three PureCycle systems and generate 780 kW of net power. This is believed to be the first time that electrical power will be produced from geothermal resources of less than 125 degrees Celsius in Turkey using the Organic Rankine Cycle technology.

The project will be installed, owned and operated by Jeoden Geothermal, a joint venture between NRG Enerji and MDO Group.

Ram Power: Purchase of Additional Geysers Property Announced

[Press Release](#), January 25 — Ram Power, Corp. (TSX: RPG) ("Ram Power"), a leading renewable energy company focused on the development, production and sale of electricity from geothermal energy, announced today that it has acquired, through its wholly-owned subsidiary Skyline Geothermal, LLC, an undivided 50% interest in the geothermal rights to 215 acres of land (the "Filley Property") associated with the identified steam resource for Ram Power's Geysers Geothermal Project (the "Project") in Northern California. The Filley Property provided a portion of the steam to a 55 megawatt power plant operated by Pacific Gas and Electric until 1989. The remaining undivided 50% interest in the geothermal rights in the Filley Property is being leased by another Ram Power wholly-owned subsidiary, Western GeoPower, Inc. ("Western"), under a long-term lease which has been amended to eliminate certain performance conditions by Western to maintain the lease. Under the amended lease Western has agreed to the payment of an annual minimum guaranteed royalty.

The Filley Property has one fully tested production well which can support approximately 20% of the 25-35 megawatt Project and has several existing well pads that could provide access into undeveloped areas of the steam field. The Filley Property is adjacent to the Mayacamas property which consists of 421 acres of land owned by another wholly-owned subsidiary of Ram Power. The Mayacamas property has three fully tested production wells which can support over 80% of the Project. Ram Power is actively pursuing project financing for the Project and is in discussions with an engineering, procurement, and construction contractor for the development of the Project. It is expected that financing will close by the second quarter of 2011 with construction and further development of the steam field to follow. The Company expects the Project to be completed by 2013.

Renewable Energy and Climate Change

New DOE/Commerce Partnership will Further RE Modeling Cooperation



[Press Release](#), January 24 — The Department of Energy (DOE) and the Department of Commerce today announced a new agreement to further collaboration between the agencies on renewable energy modeling and weather forecasting, which will help enable the nation's renewable energy resources to be used more effectively by business and entrepreneurs. The Memorandum of Understanding signed by Acting Under Secretary of Energy Cathy Zoi and Under Secretary of Commerce for Oceans and Atmosphere and Administrator of the National Oceanic and Atmospheric Administration (NOAA) Jane Lubchenco, Ph.D., will encourage the two agencies to work together to develop and disseminate weather and climate information needed for renewable energy technologies that are dependent on short-term weather and longer-term climate trends. Better information on weather patterns and improved modeling of the variability of the wind, sun, water, ocean currents, and other sources of renewable energy will ultimately increase the country's ability to efficiently and reliably integrate renewable energy into the electrical grid.

"This collaboration will bring together scientists and experts across the federal government to support our efforts to integrate renewable energy into our power system," said Zoi. "By providing us with a deeper understanding of how weather impacts the generation of renewable energy, this partnership will help to more effectively deploy these important resources across America."

White House Council Issues Final Guidance on NEPA Mitigation

[Press Release](#), January 28 — On January 14, 2011, the White House Council on Environmental Quality ("CEQ") issued final guidance on the use of mitigation under the National Environmental Policy Act ("NEPA"). Titled "Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact" ("Guidance Memorandum"), the guidance became effective through publication in the Federal Register on January 21, 2010 (76 *Fed. Reg.* 3843). Undertaken by CEQ to mark the fortieth anniversary of NEPA's enactment, the Guidance Memorandum is the second of three new guidance documents intended to "modernize and reinvigorate" the statute. The first guidance document addressed the creation and use of categorical exceptions and was issued in final form on November 23, 2010. The third guidance document, which was published in draft form and has now completed the public comment process, addresses the consideration of the effects of climate change and greenhouse gas emissions.

The Guidance Memorandum focuses on ensuring the efficacy of mitigation and monitoring proposals that often are included in environmental assessments (EAs) and environmental impact statements (EISs). Thus, in order to provide assurance that mitigation measures relied on by federal agencies in their environmental documents achieve their intended results, the new guidance sets forth recommendations for federal agencies with regard to:

- developing procedures for implementation and monitoring mitigation commitments;
- providing for public disclosure of the mitigation commitments and implementation process; and
- establishing a process for remedying non-implemented or ineffective mitigation.

Importantly, the Guidance Memorandum also affirms the use of mitigated Findings of No Significant Impact (“mitigated FONSI”) to allow agencies to use an EA rather than a more detailed EIS when environmental impacts can be mitigated below a level of significance through mitigation commitments—a move that should help agencies support and defend their use during the NEPA process.

Energy Industry Braces for Funding Cuts by Congress

Sustainable Energy Coalition/SUN DAY Campaign [\[Politico\]](#) — Energy interests of all stripes are on alert to defend their share of tax breaks, loan guarantees and other financial sweeteners amid growing calls to slash spending. For example, the conservative Republican Study Committee recently outlined \$2.5 trillion in spending, tax breaks and subsidies it wants to see cut over the next decade, including billions of dollars in Energy Department research, vehicle, fuels, weatherization and energy efficiency programs. House Energy and Commerce Committee Chairman Fred Upton is planning his own examination of energy subsidies, with a particular eye on wind and solar power. Accordingly, industry groups and their lobbyists are calling in their chits in what’s sure to be a highly competitive war, pitting region against region and energy resource against energy resource.

State News

Transmission Named Top Energy Priority for States in 2011

The Council of State Governments has [released a study highlighting the top five energy and environment policy issues affecting states in 2011](#). Transmission is the number one area, according to the council, and current estimates show it will take at least \$55 billion to meet current and short-term energy needs. Other top issues were climate change, greenhouse gas regulations, ensuring energy affordability, and how states can take advantage of the new energy economy. John Mountjoy, CSG's director of policy and research told press states are struggling to attract more business, which will mean more revenue, while at the same time providing now to accommodate the increased power supply that growth of manufacturing and business will require. “It’s a real Catch-22 and another example of how we are struggling across the country with an aging infrastructure,” he said.

Idaho: BLM Proposes New Geothermal Lease

The Bureau of Land Management is [considering a geothermal lease on a 760-acre site in south-central Idaho](#). The lease is up for public comment until February 25. BLM will then determine whether to move forward, and if it is approved, will put it up for auction by July.



An unidentified company filed for the Cassia County lease in 2008, the first company to use the new lease process. The parcel is located near the Raft River Project site being developed by US Geothermal, though [CEO Dan Kunz told press](#) his company would probably not participate in the auction.

Idaho: Legislation Introduced for Geothermal Development

Idaho's House Resources and Conservation Committee this [week introduced legislation to facilitate and encourage geothermal development](#) in the state. The proposed bills would eliminate the existing 640-acre limit of a geothermal lease and eliminate the 10-year limit on lease durations, expanding to up to 49 years. Also included would be the elimination of the 10% minimum on royalties for geothermal projects to allow more flexibility, as well as clarification to ensure bonding requirements don't duplicate those already required by the Department of Water Resources. "We've got to make these changes to encourage that geothermal development," committee chairman Rep. Bert Stevenson told press. The proposal is supported by Gov. C.L. "Butch" Otter.

International News



Americas

Geothermal Energy Delegation Visits U.S.

The U.S. Trade and Development Agency welcomed the LAC Regional Geothermal Energy Reverse Trade Mission to the United States this month. The energy sector delegation represents senior government officials and the private sector from Latin America and Caribbean. Chile, Colombia, Dominica, El Salvador, Peru, St. Kitts and Nevis, St. Vincent and the Grenadines were among the countries that were represented.

The delegation visited government offices and the Geothermal Energy Association in Washington DC, where they discussed potential plans for connecting on projects as well as unique obstacles such as the cost of getting the necessary drilling equipment to island nations.

A business briefing in Reno, Nevada brought the delegation together with the U.S. geothermal industry to review the latest developments in the sector with project sponsors directly responsible for procurements and project opportunities.

USTDA partnered with Koeppen, Elliott & Associates to facilitate the reverse trade mission. See <http://www.kealtd.com/>.

Europe

Greece: Tender Announced for Geothermal Potential of Unexplored Mining Areas

Greece's Ministry of Environment, Energy and Climate Change announced International Open Tenders for the leasing of the right to explore the geothermal potential of the public mining area in the area of Samothrace Island, Nestos River Delta, Evros River Delta and Chios Island. The winner of this tender will have the right to explore Greece's geothermal potential of the public mining area for a period of 5 years with an option for unilateral extension by the lessee for two (2) additional years. The date for submittal of bids is Wednesday, February 16. <http://www.balkans.com/open-news.php?uniquenumber=91290>

Africa

Kenya: Drilling at Menengai Begins; KenGen Names Pre-Qualified Olkaria Expansion Bidders

Kenya aims to make geothermal energy the top contributor to the energy supply, over hydro, by 2014. The 10-year, \$2.6 billion exploration plan will involve 566 wells — including work at Menengai and Olkaria:

The state-owned [Geothermal Development Co. begins drilling this week at the Menengai Crater](#). Two rigs acquired from China are expected to lower the geothermal drilling costs from KES520m (US\$6.4m) down to KES250m. GDC is asking for an increased annual allocation of up to KES15bn over the next three years. Other investment commitments include [\\$90 million from the Export-Import Bank of China and \\$73 million from the French Development Agency](#). Silas Simiyu, chief executive officer of GDC is looking forward to much needed energy stability: "We should not see a situation of power shortages like we had before," he told press.

Kenya Electricity Generation Co. has [named four companies as pre-qualified bidders for the expansion of the Olkaria](#) geothermal plants: Mitsubishi Corp., Toshiba Corp., Alstom SA, and Fuji-Electricity Holding Co. Tender documents are due February 24. The existing Olkaria sites have 212 MW of installed capacity; the expansion will involve four new 70-MW units.

Pacific/Asia

India: Thermax to Ink MOU on Geothermal Power Plant

An MOU is expected between the [Maharashtra Energy Development Authority \(MEDA\) and energy company Thermax for the first geothermal power plant](#) in the country. Thermax would conduct a study of available high temperature geothermal resources in the area and would then set up at least one 5 MW power plant as a pilot project within a three-year time-line.

Indonesia: Government Sights Set on Geothermal Despite Challenges

An [article at the Jakarta Post](#) discusses the vast geothermal energy reserves in Indonesia and the problems associated with developing them at this time. While the government fully supports green energy at the top levels, challenges exist in other areas: the investment required for development means smaller companies are not coming forward; lower levels of government lack coordination; and PLN, the state's buyer, is not aggressive toward geothermal since it is more expensive than electricity from coal-powered plants. With its enormous potential geothermal resources, the nation has its sights set on moving past these challenges and continues to move forward on plans to deliver up to 4,000 MW by 2014.

New Zealand: Nga Tamariki Resource Consent Obtained; Gas Vents Discovered at Lake Rotomahana

The Tauhara North No2 Trust along with Mighty River Power, the partnership which owns the Rotokawa and Nga Awa Purua geothermal power stations, has [obtained a resource consent for a third](#) at the Nga Tamariki field. Plans will be presented to owners and beneficiaries next month, Trust chief executive Aroha Campbell told press.

Meanwhile at Lake Rotomahana, [autonomous underwater vehicles \(AUVs\) have detected geothermal vents](#) emitting gas bubbles, indicating a large geothermal system. Information gathered by the AUVs is collected each day and processed into a 3D topographical map. Mapping is expected to be finished this week, and a seismic survey on the area will begin.

Turkey: Enel Reaches Agreement on Geothermal Surface Explorations

Enel Green Power and the Turkish group Uzun have reached an agreement to establish a research and exploration company for the development of geothermal plants in Turkey. The new company will carry out surface and deep exploration activities on a package of 142 exploration licenses in the west of the country. The agreement will be carried out by Enel and Meteor, a company that is 70% owned by Uzun. Enel will finance the initial surface exploration.



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

Notices

New This Week



GEA Collecting Information for Next US Geothermal Power Production and Development Update

GEA is in the process of preparing its next US Geothermal Power Production and Development Update. If you have any projects in development for which you would like to submit information for inclusion in the Industry Update please contact Dan Jennejohn at danj@geo-energy.org or at 202.454.5261. Information needed for project inclusion in the update includes new projects in development and changes to project status since the last Industry Update (April 2010). Also, if a projects status has not changed since the last update GEA still must be notified that no change has taken place.

For inclusion in the Industry Update project information must submitted to the GEA by Monday, February 28, 2011. If you have questions regarding the Industry Development Update please contact Dan Jennejohn at the email address or phone number previously given. To see a copy of the previous update click the following link: http://geo-energy.org/pdf/reports/April_2010_US_Geothermal_Industry_Update_Final.pdf

BLM Seeks Public Comment on Geothermal Lease Nominations

[Press Release](#), January 28, BOISE, ID – The public is being asked to provide comments to the Bureau of Land Management (BLM) Four Rivers Field Office about seven parcels of public lands in Washington, Payette, and Canyon counties recently nominated for geothermal leases. The parcels are first being evaluated by BLM under the National Environmental Policy Act (NEPA). Comments submitted will help the Bureau determine whether special stipulations to the leases will be needed, should the BLM decide to offer the parcels for lease. The deadline for submittal of comments is November 24, 2010.

The nominated parcels are located in two geographic areas. Two nominated parcels are approximately eight miles west of Weiser in Washington County. Five other nominated parcels are northeast of Parma in Payette and Canyon counties. Almost 1,100 acres are under consideration in Washington County, just less than 25,000 acres in Payette County, and approximately 400 acres in Canyon County.

To view the maps, applications and NEPA documents for these projects on the BLM's website, go to https://www.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do: 1) highlight "Idaho" in the State(s) box on the left, 2) then "ID-Four Rivers FO" in the Office(s) box, 3) "DNA" in the Document Type(s) box, 4) "2011" in the Fiscal Year(s) box, 5) and "All" in the Program(s) box. Next, click on "Search" to the right. The two different projects should be listed with a link to each on the next screen that pops up.

To submit comments or issues specific to these leases, contact Rebecca Lange, Fluid Minerals Geologist, BLM Idaho State Office (208) 373-3861, or email at Rebecca.Lange@blm.gov.

Geothermal Resources Council Call for Abstracts (March 4)

The Geothermal Resources Council (GRC) invites you to present your latest technical work in geothermal research, exploration, development and utilization at GRC's 35th Annual Meeting October 23-26, 2011 at the newly renovated Town & Country Resort & Convention Center in San Diego, California. The theme this year is "Geothermal: Sustainable, Green Energy." Authors can submit a poster and/or oral technical presentation at the GRC's 2011 Annual Meeting. The 1-2 page Abstract submission deadline is March 4, 2011.

The online submission form is available at:

<http://geothermal.informz.net/geothermal/data/images/2011submissionform.pdf>

Content related questions: Andy Sabin at andrew.sabin@navy.mil or (760) 939-4061.

Format and general submission questions: Anh Lay at alay@geothermal.org or (530) 758-2360.

GRC Website: www.geothermal.org.

Join or Contribute to Brita Climate Ride, Geothermal Rock & Rollers powered by GEA (May 13-17)

GEA has assembled a team to participate in the Brita Climate Ride from New York City to Washington, DC, May 13–17. The 5-day ride begins in Manhattan and passes through Princeton, Pennsylvania Amish Country, and Maryland horse country. The ride ends at the US Capitol where riders will have a chance to meet with Congressional representatives.

Climate Ride is a non-profit organization that puts on fully supported, charitable bike rides to support sustainable solutions and environmental causes. Participation in the event helps provide finances and awareness to renewable energy and environmental causes.

You can join our team or contribute to help us reach the donation goal at:

<http://climateride.donordrive.com/index.cfm?fuseaction=donorDrive.team&eventID=501&teamID=5027>

Current Notices

National Geothermal Academy Applications Now Available (February 15)

The National Geothermal Academy presents an 8-week intensive summer course in all aspects of geothermal energy development and utilization. The course is a collaborative effort among faculty from the University of Nevada, Reno (UNR), Stanford University, Cornell University, Oregon Institute of Technology (OIT), University of Utah, Southern Methodist University, University of Massachusetts

Dartmouth, and West Virginia University with additional consultants and support from the Department of Energy Geothermal technologies program. The course will be offered for either undergraduate or graduate credit in the summer of 2011. Individual modules will also be offered for professional development through UNR's Continuing Education. Funding from DOE will defray room and board costs, and some program fees, for up to 20 students to attend from across the nation.

Applications to the Academy are due on February 15, 2011. Full course information and application materials, including financial aid, are posted at <http://www.unr.edu/geothermal/NGA.htm>

DOE Seeks Peer Review Comments on Geothermal Life-Cycle Analysis

Life-Cycle Analysis Results of Geothermal Systems in Comparison to Other Power Systems
Draft for Peer Review

The Geothermal Technologies Program is soliciting peer review comments on the draft report Life-Cycle Analysis Results of Geothermal Systems in Comparison to Other Power Systems from Argonne National Laboratory. ANL concludes that "despite the large amount of steel and concrete required per MW power capacity, enhanced geothermal systems are one of the lower GHG emitters of the renewable systems studied per unit of lifetime kWh output. EGS GHG emissions can be reduced even further as well depth decreases."

See <http://www1.eere.energy.gov/geothermal/plans/comments.cfm?doc=lifecycle>

DOE Seeks Peer Review Comments on Geothermal Water Use

Water Use in the Development and Operation of Geothermal Power Plants
Draft for Peer Review

The Geothermal Technologies Program is soliciting peer review comments on the draft report Water Use in the Development and Operation of Geothermal Power Plants from Argonne National Laboratory. ANL concludes that "Overall, geothermal technologies appear to consume less water on average over the lifetime energy output than other power generation technologies."

See <http://www1.eere.energy.gov/geothermal/plans/comments.cfm?doc=wateruse>

Employment

New This Week

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. The EBRD now objective of the assignment is to enable the



Bank to effectively assess geothermal project risks and make informed decisions on the financing of these projects. The selected consultant will be required to undertake the following tasks:

- Desktop review of the country's various geothermal resource basins and their technical characteristics (low, high and intermediate enthalpy resources);
- Desktop review of the various basins with regard to their environmental sensitivity;
- List the technical, commercial and regulatory barriers to the development of geothermal energy in Turkey, differentiating between direct heat uses and electricity;
- Provide a detailed cost analysis, including multiple scenario analysis to determine what availability of geothermal resource, load factors, capex, opex, gearing and financing costs are required for profitable geothermal electricity and direct heat use investments in Turkey;
- Provide a detailed analysis of the various risk mitigation products which are used in the development of geothermal energy world wide. Design suitable risk mitigation schemes and identify and approach local banks/ insurance companies to assess their appetite to manage such a product. Source; EBRD

<http://www.ebrd.com/pages/homepage.shtml>

<http://www.balkans.com/open-news.php?uniquenumber=91332>

Employment Opportunities

For more on employment opportunities listed here visit http://geo-energy.org/empl_opport.aspx.

Program Manager, Office of Geothermal Technologies, DOE (February 7)

The Department of Energy continues to look for a program manager for its Geothermal Technologies Program. This is a full time permanent position located in Washington, DC. Applications will be accepted from all United States Citizens. Noncompetitive consideration: Current career Senior Executives, Service (SES), Qualifications Review Board (QRB) certified graduates of an SES Candidate Development Program, and individuals with SES reinstatement eligibility may be considered noncompetitively for appointment to this position if they meet the mandatory Technical Qualification requirements.

How to apply:

- 1.) Submit an online resume and respond to the job specific questions. Apply online at [USAJOBS](#)
- 2.) If you are unable to apply online, call the Human Resources Specialist listed in the announcement between the hours of 8:00 a.m. to 5:00 p.m. Eastern Standard Time (EST).
- 3.) Submit all required documents by 11:59 pm EST on the closing date of the announcement in order to receive consideration.

For a full description and application instructions see

<http://jobview.usajobs.gov/GetJob.aspx?JobID=95291623&JobTitle=Program+Manager%2c+Office+of+Geothermal+Technologies%2c+ES-0340->

00&brd=3876&vw=b&FedEmp=Y&FedPub=Y&jbf565=1&Facet=E&q=Program+Manager&where=&x=144&y=22&AVSDM=2011-01-06+14%3a06%3a00.

General Manager, Geothermal Exploration, Origin Energy (Indonesia)

- Lead our Indonesia geothermal exploration business
- 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.

Landman, Nevada Geothermal Power

The Company offers excellent health benefits, competitive remuneration, and opportunities for career advancement in an exciting field of endeavor. No phone calls please. Only qualified candidates will be contacted for an interview. Email resumes to: careers@nevadageothermal.com, Fax resumes to: 604-688-5926

Staff Geologist/GIS Technician, Nevada Geothermal Power

The Company offers excellent health benefits, competitive remuneration, and opportunities for career advancement in an exciting field of endeavor. No phone calls please. Only qualified candidates will be contacted for an interview. Email resumes to: careers@nevadageothermal.com, Fax resumes to: 604-688-5926

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. You may also contact:

Senior Level Assistant Site Manager, Operations and Maintenance

Contact: Richard@mrsokane.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

Geophysicist, Calpine, The Geysers, CA

To apply online, see

https://www.hrapply.com/calpine/AppJobView.jsp?link=3645&page=AppJobList.jsp&skimSessionName=com.hrlogix.view.cont.app.JobListTable&skimName=requisition.requisition_id&skimNdx=4&op=reset.

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****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 Bently 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.

WaterSMART - California (January 31)

Responses due 1/31/11. For more info, contact Mary Sims at msims@usbr.gov or go to:

<http://www.grants.gov/search/search.do?mode=VIEW&oppld=58759>. Refer to Sol# R11AF20006. (Grants.gov 11/15/10)

Open Tender for Geothermal in Aceh, Indonesia (January 31)

Tender Committee of The Seulawah Agam Geothermal Working Area of Aceh Government will conduct tender for Seulawah Agam Geothermal Working Area, Aceh Besar Regency that has been decreed by the Minister of Energy and Mineral Resources. Minister EMR Decree No. 1789.K/33/MEM/2007, 45,000 ha, estimated 160 MWe potential, 55 MWe Phase 1 Development Plan. Interested parties can submit written enquiries on tender process through January 31, 2011, with a pre-bid meeting on February 9, 2011. Authorized personnel must include one copy of business license when registering. Amount of bidding guarantee and account number for the tender committee will be informed during pre-PQ enquiry period. Information can be communicated to the tender committee via email: tendcom.sag@gmail.com. Office of the Aceh Mining and Energy Agency is: Jlm. T. Nyak Arief No. 195 Banda Aceh, Tel. +62-651-7551773, 7554737, Fax +62-651-7553080

Industry/University Cooperative Research Centers (February 2)

Responses due 2/2/11. For more info, contact Rathindra DasGupta at rdasgupt@nsf.gov or go to: <http://www.nsf.gov/pubs/2010/nsf10601/nsf10601.htm>. Refer to Sol# 10-601. (Grants.gov 8/17/10)

USTDA-Sponsored Indonesia Geothermal Power Training Program Is Offering Business Development Opportunities for U.S. Companies (through February 11)

January 10 – February 11, 2011

www.indonesiageothermal.govtools.us

The United States Trade & Development Agency (USTDA) is sponsoring an in-country Indonesia Geothermal Power Development Training Program from January 10 to February 11, 2011, followed by a Reverse Trade Mission of Indonesian delegates to the U.S. in March 2011. The Indonesian government is seeking to expand its current geothermal power generation capacity of 1,100 MW to 9,500 MW by 2025 and has vested all responsibilities for geothermal resource development with the provincial authorities and local tendering committees. The USTDA-sponsored program is aiming to train these decision-makers in geothermal resource development and transparent tendering processes, while promoting U.S. geothermal business interests in Indonesia.

The Training Program will be delivered by U.S. technical experts at six different locations in Indonesia, identified with the greatest potential for business development. USTDA is offering a unique opportunity for U.S. companies to visit these training sessions and present on their company's products / services and successful projects – to an exclusive audience of decision-makers.

This is a chance to build a relationship and highlight your company to the local authorities! For more information on participation and/or sponsorships, please contact Andrew Graves at agraves@bcs-hq.com or 410.997.7778 ext. 234.

Note: Participation at and/or sponsorship of all USTDA events is limited to U.S. Firms, U.S. individuals or U.S. companies, each as defined under (www.ustda.gov).

Sensors and Sensing Systems (February 15)

Responses due 2/15/11. For more info, contact Shih Liu at sliu@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13349. Refer to Sol# PD-10-1639. (Grants.gov 10/22/10)

Control Systems, NSF (February 15)

Responses due 2/15/11. For more info, contact Eduardo Misawa at emisawa@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13575. Refer to Sol# PD-10-1632. (Grants.10/18/10)

Manufacturing Enterprise Systems (February 15)

Responses due 2/15/11. For more info, contact Russell Barton at rbarton@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13342. Refer to Sol# PD-10-1786. (Grants.gov 10/25/10)

Materials and Surface Engineering (February 15)

Responses due 2/15/11. For more info, contact Clark Cooper at ccooper@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13356. Refer to Sol# PD-10-1633. (Grants.gov 10/18/10)

Structural Materials and Mechanics (February 15)

Responses due 2/15/11. For more info, contact Clark Cooper at ccooper@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13357. Refer to Sol# PD-10-1635. (Grants.gov 10/18/10)

Mechanics of Materials (February 15)

Responses due 2/15/11. For more info, contact Glaucio Paulino at gpaulino@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13355. Refer to Sol# PD-10-1630. (Grants.gov 10/18/10)

Materials Processing and Manufacturing (February 15)

Responses due 2/15/11. For more info, contact Mary Toney at mtoney@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13344. Refer to Sol# PD-10-1467. (Grants.gov 10/18/10)

Manufacturing and Construction Machines and Equipment (February 15)

Responses due 2/15/11. For more info, contact George Hazelrigg at ghazelri@nsf.gov or go to:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13346. Refer to Sol# PD-10-1468. (Grants.gov 10/18/10)

Development of 400-MW Geothermal Power Plants, Kenya (February 21)

1. Introduction — GDC, a 100% state-owned corporation, tasked with accelerating the development of geothermal energy in Kenya, is undertaking steam field development at Menengai Prospect. Detailed surface studies comprising of geology, geophysics, surface heat measurement, baseline environmental and social economic assessment estimates the field potential to be about 1250 MW. The long term plan is to develop 1000 MW within this prospect. However, the current project aims to realize about 400 MW by year 2014, 600 MW by 2016 and 1000 MW by 2018.

2. Project Development Plan — The estimated 400 MW Menengai Phase I Geothermal Project including four power plant construction is projected to be completed by 2014. GDC will map the first four development blocks, drill exploration, appraisal and production wells and offer the steam to competitively selected investors who will construct the power plants and generate power with the fuel mined from these blocks. A total of 120 wells will be drilled for this Phase.

3. 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 Management and the Brine Reinjection System.

The main access road and drilling water reticulation system have been constructed. Two GDC rigs are already on project site and are scheduled to commence drilling by mid-December, 2010. Plans are underway to deploy four additional rigs to the project at a later stage.

4. Investors — The Investors role will include financing, design, construction, operation and maintenance of the power plants. In addition, GDC will require the selected investors to partner in financing the steam development.

For more information, please contact Martin Kabaki via email at martin1980june@yahoo.com

Geothermal Resources Development Account, California Energy Commission (February 24)

The Geothermal Program is opening a new funding opportunity through its Geothermal Resources Development Account (GRDA) Program. The overall purpose of the Geothermal Solicitation is to cost share and promote the development of geothermal resources and technologies.

Funding up to \$6.8 million total is available to fund GRDA grant projects. There are no minimum or maximum funding levels.

Match share contributions are required. Private For-Profit Entities must provide a match contribution of at least 50 percent of the overall project cost. Local Jurisdictions must provide a match contribution of at least 20 percent of the overall project cost.

Private entities and local jurisdictions may apply for cost share funding. Eligible private entities include individuals and organizations engaged in the exploration and development of geothermal energy for profit.

Local jurisdictions include cities, counties, any unit of Indian government, school districts and special districts including, but not limited to, regional planning agencies and public utility districts, or any combination thereof formed for the joint exercise of any power.

Other entities, such as universities, national laboratories, state and federal agencies, and not-for-profit organizations, may participate in this program only in partnership with an eligible local jurisdiction or eligible private for-profit entity.

California business entities as well as non-California business entities conducting intrastate business in California are required to register and be in good standing with the California Secretary of State to enter into an Agreement with the Energy Commission. For more information contact the Secretary of State at www.ss.ca.gov.

Project durations cannot exceed 36 months from date of funding.

All projects must be located in California.

Applicants are required to submit both a Pre-Application and Final Application to be eligible for funding. The Application due dates are: Pre-Application: February 24, 2011, 4:00 p.m., Final Application: April 6, 2011, 4:00 p.m.

Electronic copies of documents and forms related to this solicitation can be accessed at www.energy.ca.gov/contracts.

International Young Eco-Hero Awards (February 28)

Responses due 2/28/11. For more info, go to: <http://www.actionfornature.org/>. (Foundation Center RFP Bulletin 10/1/10)

Climate Change and Health, HHS (May 24)

For more info, including funding and program contacts, go to: <http://grants.nih.gov/grants/guide/pa-files/PAR-10-235.html>. Refer to Sol# PAR-10-235. (Grants.gov 7/21/10)

U.S. DOE Office of Science (September 30)

Proposals accepted through 9/30/11. For more info on new grants, go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000411&agency=DOE>. Refer to Sol# DE-FOA-0000411. For more info on Renewal-Supplemental grants, go to: <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000412&agency=DOE>. Refer to Sol# DE-FOA-0000412. (Grants.gov 9/30/10)

U.S. Navy Energy Conservation Projects (October 31, 2012)

Responses accepted to 10/31/12. The selection of one or more sources for full proposals and potential contract award will be based on responses to the BAA and the peer review process. For more info, contact Jamie Mattern at james.g.mattern1@navy.mil or go to: https://www.fbo.gov/?s=opportunity&mode=form&id=f4ea9da536f0413f20b80d9f02707b7e&tab=core&_cview=0. Refer to BAA# N00167-11-BAA-01. (FBO 11/3/10)

Coordination of the Colorado Geothermal Working Group

The Governor's Energy Office (GEO) seeks quotes from independent contractors providing professional consulting services to assist the GEO in the coordination of the Colorado geothermal working group. Activities include: event and meeting logistic support (drafting and sending invitations, finding meeting space, contract catering services when appropriate, etc.), develop and distribute background and support material, and others.

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>

Partner Sought for Hot Oil and Gas Wells, Mississippi

Rich McAdoo (rlmcadoo@continentalenergy.com) is seeking local operators or parties with access to properties with hot oil or gas wells (shut-in or production) located in Mississippi. If you are looking for a financial and technical partner to develop coproduction of geothermal fluids with oil and gas in Mississippi, send him an email.

Events

New This Week

An Overview of Geothermal Energy, AAPG 2011 Annual Convention & Exhibition, Houston, Texas (April 10)

This year the Energy & Minerals Division of the American Association Petroleum Geologists will hold a Pre-Convention Short Course on geothermal energy at the AAPG 2011 Annual Convention & Exhibition. The course is focused on geothermal in the oil/gas producing states and the O&G industry in general.

Date: Sunday, 10 April

Time: 8:00 a.m. –5:00 p.m.

Fee: Professionals \$200, students \$100 (limited)

Information and updates at: www.AAPG.org/Houston2011



Instructors: Richard Erdlac (Calnetix, Inc., Midland, TX / Yorba Linda, CA); Andrew Braff(Wilson SonsineGoodrich & Rosati, P.C., Seattle, WA); Timothy Reinhardt (US DOE, Washington, DC); Tom Anderson (Rocky Mountain Oilfield Testing Center, Casper, WY); Will Gosnold (University of North Dakota, Grand Forks, ND); Hal Macartney(Pioneer Natural Resources USA, Inc., Denver, CO); Hala Ballouz (Electric Power Engineers, Inc., Austin, TX); Ian Duncan (Bureau of Economic Geology, Austin, TX)

GEA Events

Calendar of 2011 GEA and GEA-Sponsored Events

Look for more information on these upcoming events at <http://geo-energy.org/events.aspx>.

For sponsorship and speaking opportunities, or if you have other questions, contact Kathy Kent at Kathy@geo-energy.org.

- February 9: GEA Geothermal Energy Finance Forum, New York, NY
- March 7-10: Renewable Energy World North America Conference and Expo, Tampa, FL
- March 8: REW-NA Conference Workshop, Geothermal Energy 201 and Geothermal in the Southeastern U.S., Tampa, FL
- April 7: California Geothermal Energy Collaborative Geothermal Education and Outreach Workshop, Davis, CA
- May 4-5: GEA Geothermal New Technologies and Applications Showcase and Forum and Member's Meeting, Washington, DC
- May 26-27: California Geothermal Energy Collaborative Summit, Mammoth Lakes, CA
- July 20: GEA Geothermal Energy Finance Forum, San Francisco, CA
- October 23-26: GEA Geothermal Energy Expo® and GRC Annual Meeting 2011, San Diego, CA

Geothermal Energy Finance Forum 2011, NYC, NY (February 9)

Back by popular demand, and featuring the Honorable President Ólafur Ragnar Grímsson, President of Iceland: Geothermal Energy Finance Forum 2011 will be held at the Ritz-Carlton, Battery Park in New York City on February 9. Registration is now available at http://geo-energy.org/events/finance_forum_2011.aspx

The Geothermal Energy Association (GEA) and Gold Level Sponsor, Islandsbanki, will be holding a one-day Geothermal Energy Finance Forum on Wednesday, February 9, 2011 at the Ritz-Carlton, Battery Park in New York City. This program will bring the finance and investment community of New York City together and provide a tutorial on geothermal energy investment with top experts and major players in geothermal development and finance. The day's agenda includes presentations and panel discussion on; geothermal technology, geothermal project development, financing and investment, risk mitigation, employment, government finance and incentives, legal and regulatory issues, and case studies from developers and financiers with recent success stories. In

addition to bringing together the geothermal community with the finance and investment communities, this event will highlight the global growth in geothermal production and use.

Who's attending: Confirmed representatives from A Personal Touch, Abatis Advisors, ACORE, Arya Geo Energy, Australian Trade Commission, Avondale, Baseload Energy LLC, Bloomberg New Energy Finance, Bodell Construction, CanGEA/ThinkGeoEnergy, Cesare Boneti, Chadbourne & Parke LLP, Chevron, Consul General of Chile, Consulate of Iceland, Cooper Union, Davenport Newberry, Denham Capital, Dow Jones Newswires, DZ Bank, EIG Global Energy Partners, Empire State Development, Enel North America, Excelerate Advisors, LLC, Fagen, Inc., GC Andersen Partners, GEA, GeothermEx, Inc., Glacier, Good Energies, Google.org, Hannon Armstrong, Hydrolian, Iceland, ING Capital LLC, International Finance Corporation, Islandsbanki, Jacobs Securities Inc., John Hancock Financial Services, JP Morgan Capital Corporation, Magma Energy Corporation, Meursen, MidAmerican Energy Holdings Company, Montgomery Street Financial Services, Naknek Electric Association, Inc., Neurodynamics, Nevada Geothermal Power, Ormat, Overseas Private Investment Corporation, POWER Engineers, Inc., Pratt & Whitney Power Systems, Ram Power, Raser Technologies, Raymond James, SNL Financial, SPX Heat Transfer Inc., St Lucia, Star Energy, Stoel Rives, LLP, TAS Energy, Technikon, The Rosen Group, ThermaSource, Total Green Power Corp., U.S. Department of Commerce, U.S. Department of Energy Geothermal Technologies Program, U.S. Treasury, UN UGO Sustainability, US Geothermal, USAID Africa Bureau, Wilson Sonsini Goodrich & Rosati, and more.

Confirmed speakers to date include:

The Honorable President Olafur Grimsson, President of Iceland

Jonathan Weisgall, Vice President of Legislative and Regulatory Affairs, MidAmerican Energy Holdings Company

Dita Bronicki, CEO, Ormat Technologies

Toni Volpe, President and CEO, Enel North America, a Division of Enel Green Power

Louis Capuano Jr, CEO, ThermaSource

Nick Goodman, CEO, Raser Technologies

Eddie Sadan, VP of Business Development, Ram Power Corporation

Jonathan Zurkoff, VP of Finance, U.S. Geothermal

Mike Ronzello, Sales and Business Development Manager, Pratt & Whitney Power Systems

Brian Fairbank, President and CEO, Nevada Geothermal Power Inc.

Asgeir Margeirsson, Chairman of Magma Energy's HS Orka operations in Iceland

Halley Dickey, Director of Geothermal Business Development, TAS

Arni Magnusson, Executive Director- International Industries, Islandsbanki

Recep C. Kendircioglu, Senior Managing Director, John Hancock Financial Services

John McIlveen, Research Director, Jacob Securities, Inc.

Rick Rodgers, Montgomery Street Financial, LLC

Brian Harenza, Hannon Armstrong

Fuphan Chou, Investment Officer, International Finance Corporation
Mark Taylor, Lead Analyst, CCS & Geothermal, Bloomberg New Energy Finance
Subir Sanyal, President and Manager of Reservoir Engineering, GeothermEx, a Schlumberger Company
Saurabh Anand, Vice President, Denham Capital
Vicky McDowell, Deputy Administrator, US Treasury UNDP
Chris Demos, Senior Investment Officer, Overseas Private Investment Corporation
Angela Crooks, Program Specialist, U.S. Department of Energy, Geothermal Technologies Program
Jen Derstine, Geothermal Sector Analyst, U.S. Department of Commerce
Jeffrey Humber, Director, Africa Infrastructure Program, USAID Africa Bureau AFR/SD/EGEA
Keith Martin, Partner, Chadbourne & Parke LLP
John McKinsey, Partner, Stoel Rives LLP
John Pierce, Partner, Wilson Sonsini Goodrich & Rosati
Karl Gawell, Executive Director, GEA

Agenda:

7:30 am Registration
8:30 am –12:30 pm Morning Session
12:30 – 1:15 pm Luncheon
1:15 – 5:00 pm Afternoon Session
5:00 – 6:00 pm Networking Reception

How much? (includes light breakfast, lunch, snack, workshop proceedings, and networking reception):

General Attendee Rate	\$695
GEA/GRC Member Rate	\$495
Government/Non-Profit Rate	\$595
Student Rate	\$100

The Ritz-Carlton, Battery Park is located at Two West Street, New York City. For more information, including the full agenda, visit: http://geo-energy.org/events/finance_forum_2011.aspx.

With any questions, please feel free to email Kathy Kent at kathy@geo-energy.org.

For media credentials, please contact Garret Drexler at 646-695-7042 or garret@rosengrouppr.com.

CGEC Events Announced for Spring 2011

April 7, 2011: California Geothermal Energy Collaborative, Education and Outreach Workshop for the public, Davis, CA

May 26-27, 2011: California Geothermal Energy Collaborative Summit, Mammoth Lakes, CA

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

Renewable Energy World North America 2011, Tampa, FL (March 8–10)

Renewable Energy World Conference & Expo North America has been the event leading the way for the renewable industry for eight years.

Three sessions for the Geothermal Track will be chaired by the Geothermal Energy Association:

Session: MARKET TRENDS, POLICIES & FINANCE – PANEL DISCUSSION

Date: March 9, 2011

Time: 9:30 – 11:30 AM

Chair: Karl Gawell, Geothermal Energy Association

Co-chair: Behrooz Ershaghi, Ph.D., Atlas Copco Mafi-Trench Co.

Session description: Key players in the geothermal industry discuss market trends in the geothermal industry and how new standards, government policies and the current financial markets are affecting project developments in North America.

- Sasha Jacob, Jacob Securities
- John Pierce, WSGR
- Johua Haacker, US Renewables
- Charles J. Arrigio II, Glacier Partners
- Karl Gawell, Geothermal Energy Association

Session: LOW TEMPERATURE APPLICATIONS & ADVANCEMENTS

Date: March 9, 2011

Time: 3:30 – 5:00 PM

Chair: Halley Dickey, TAS

Co-chair: Leslie Blodgett, Geothermal Energy Association

Session description: Current low temperature geothermal technologies combine power generation with other revenue-producing scenarios integrated in new and exciting ways to expand geothermal power project development and smaller scale development possibilities

The Potential of Oil and Gas/Geothermal Co-Production in Florida, Robert Hunt, Linear Power Ltd.

Using Binary Power Generation in the Oil Field Makes “Cents,” Robert Klenner, Dr. Will Gosnold, Kirtipal Barse and Mark McDonald, University of North Dakota

Geothermal Air Conditioning: Closed Loop or Open Loop?, Theron Jay Egg, EggGeothermal

Modeling a Direct Expansion Geothermal Heat Pump Using Carbon Dioxide in a Transcritical Cycle, Brian Austin, North Dakota State University; Dr. K. Sumathy

Powerverde Gas Expansion and Gas Pressure Motors, Stephen McKnight, PowerVerde Inc.

Session: POWER INNOVATIONS AND NEW DEVELOPMENTS

Date: March 10, 2011

Time: 9:00 – 10:30 AM

Chair: Behrooz Ershaghi, Ph.D., Atlas Copco Mafi-Trench Co.

Co-chair: Halley Dickey, TAS

Session description: Geothermal energy's benefit as a baseload renewable resource as well as a geologically-derived resource means it offers innovative opportunities for applications that expand baseload utility-scale power development, increase resources conversion efficiency and offer more dynamic load support to the utilities.

A CO₂ Sequestering Geothermal Power Plant with a Negative Carbon Footprint, Martin Saar and Jimmy Randolph, University of Minnesota (invited)

Full Throttle in Nicaragua: The San Jacinto-Tizate Geothermal Project, Chun Chin, Kevin Wallace and Marshall Ralph, POWER Engineers Inc.; Mike Long, Ram Power; William Harvey, Reykjavik University

Acoustic Image Surveys of Naturally Fractured Resources in Extremely Hostile Downhole Environments (250C+) in Australia and New Zealand, Brennan Campbell and Peter Mercure, Tiger Energy Services

Deep Drilling for Geothermal in England and Germany and its Potential in the U.S., Robert Hunt, Linear Power Ltd.

Innovative Conversion Technology at Bald Mountain, California, Shuman Moore, Oski Energy

For full conference details and to register, visit <http://www.renewableenergyworld-events.com/index.html>.

Geothermal Preconference Workshop details: <http://geo-energy.org/events/REWConference.aspx>

REWNA/GEA Preconference Workshop: Geothermal Energy 201 and Geothermal in the Southeastern U.S., Tampa, FL (March 8)

As part of the preconference workshops at Renewable Energy World North America 2011, GEA along with the Geothermal Resource Group, POWER Engineers, Texas A&M University, and Gulf Coast Green Energy will hold a half-day workshop providing a basic overview of the geothermal industry and emerging technologies. The workshop will open with a 101 background including the elements of geothermal energy, market trends, and a status of the geothermal industry in the U.S. provided by the GEA. Our section on drilling is adapted from the Geothermal Resource Group's 3-day geothermal drilling course, which has been delivered to geothermal operating companies around the world and focuses on how geothermal drilling differs from oil and gas drilling. POWER Engineers will cover above-ground components of flash and binary cycles, including the steam gathering, two phase flow, separation systems, turbines, cooling systems, extraction, and electrical development. Texas A&M's GPRI Department of Petroleum Engineering will discuss the oil and gas well brine management, including potential for re-use and related reservoir issues. The course will conclude with instruction from Gulf Coast Green Energy on low-temperature technologies, including a case study of a geothermal coproduction project taking place in the southeastern U.S.

Instructors:

- Karl Gawell, Executive Director, Geothermal Energy Association
- Bill Rickard, President, Geothermal Resource Group
- Kevin Wallace Senior Project Manager and Renewables Market Manager, POWER Engineers
- David Burnett, Director, Global Petroleum Research Institute, Texas A&M University
- Loy Snearly, President/CEO, Gulf Coast Green Energy

Contact: Leslie Blodgett, leslie@geo-energy.org.

See <http://geo-energy.org/events/REWConference.aspx>

Why Should You Attend GEA Events?

As the national trade association for the geothermal industry, the Geothermal Energy Association (GEA) strives to create and deliver educational events involving the full range of the geothermal industry, reflecting the dynamic growth of the geothermal market, and communicating the benefits of geothermal energy to all. GEA events offer important opportunities to learn and network within the geothermal community, and to inform and educate companies and organizations outside today's industry that are interested in learning more about geothermal energy. The revenue generated from GEA events is used to advance the goal of the GEA, "to expand the production and use of geothermal energy in the United States and around the world." The revenue supports GEA's workshops and events, communications activities, outreach efforts, policy related activities and analysis, internet publications, and other initiatives designed to help achieve this goal. ONLY GEA puts your dollars to work in all of these ways to advance the future of the geothermal energy industry. And, GEA does not sell your email or postal address to junk mailers or spammers.

To keep track of new events and changes to this calendar go to: www.geo-energy.org.

Other Events

Geothermal Heat Pump Training (Various Dates)

Accredited Geothermal Installer Certification

Offered in partnership with the International Ground Source Heat Pump Association (IGSHPA). Those who pass the open book exam become IGSHPA Accredited Geothermal Installers. Course also includes a hands-on pipe fusion training and certificate.

For dates see: https://www.heatspring.com/?id=geothermal_training

BLM Announces Geothermal Lease Sale (March 22)

Next Lease Sale date: March 22, 2011

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

<http://smu.edu/geothermal/>

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

GEOHERMAL ENERGY WEEKLY

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

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