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National News

Tax Extension Package Passes by Landslide Vote, Measure Faces Serious Obstacles in House

After numerous failed attempts, the Senate has passed extensions of expiring tax credits for clean renewable energy and energy efficiency. The measure provides for a two year extension of the PTC for new geothermal plants, without a cap, and includes a 10% tax credit for geothermal heat pumps. The vote was an overwhelming 93-2. The energy tax credits are part of a larger tax extenders bill (H.R. 6049) which includes other business and personal tax credits and a one-year “patch” for the Alternative Minimum Tax.

The legislation will now travel to the House where it is facing problems. While the House Republican leadership has called for quick passage of the Senate bill, House Majority Leader Steny Hoyer (D-MD) has said the Senate bill is not acceptable. “...in keeping with our commitment to fiscal responsibility and pay-as-you-go budget rules, House Democrats will bring to the Floor a version of the tax extenders legislation that does not add to the national debt.” The House Democrats have split the bill into several pieces, with the AMT patch and mental health provisions already being passed as separate measures, reportedly because they are is considered the “must pass” part of the package.

At a press conference prior to the Senate’s consideration of the bill, GEA’s Executive Director, Karl Gawell, made the following statement. Senators Baucus, Bingaman, Salazar and Cantwell led-off the press event, with spokespersons from GEA, AWEA, and the Alliance to Save Energy participating.

“Renewable energy is one bright spot in the American economy. These young industries have seen dramatic growth in the past few years, but the incentives supporting new projects are about to expire. The tax extenders bill is vital to sustain their continued growth.

“Geothermal projects under development today would more than double current production, providing over 30 billion kilowatt hours of clean, domestic energy – enough electricity to power the homes of San Francisco, Denver, and Philadelphia combined. These new geothermal power projects will result in over ten billion dollars in new investment and create over 30,000 construction, manufacturing, and power plant jobs.

“Passing this legislation will stimulate the economy and sustain hope in the future. We urge Congress to pass, and the President to sign, this vital legislation.”

Senator Majority Leader Harry Reid voiced his pleasure that “Senate Republicans have finally recognized, after blocking nine Democratic efforts to invest in clean, renewable energy sources, the importance of making America more energy independent, strengthening our national security and creating good-paying jobs here at home. This bill will help us harness the power of the wind, the sun, geothermal and other sources of clean, renewable energy,” he said. “And by protecting millions of Americans from the AMT, we are also giving tax cuts to those who need it most, the middle class and private sector innovators, not multibillion-dollar oil companies.”

Republican Senator Domenici said he is hopeful that the House will leave the carefully negotiated agreement in place. “As a Senator that not only represents a leader in renewable energy technology, but also helps run the Energy and Natural Resources Committee, I am pleased that we have finally reached a compromise which will allow us to extend important tax credits for renewable energy,” he said. “At last, there appears to be a light at the end of the tunnel, if the House of Representatives doesn’t seek to politicize this issue once again. . . I urge my colleagues to support this agreement in its totality, and I sincerely hope that the House will take up this entire package and pass it so that these essential tax credits will once again not be allowed to expire.”

The White House issued its statement today urging "prompt passage" of the Senate tax extenders legislation. While the Administration statement raised a number of issues with the bill, it supported the bill and avoided the "veto" word. The White House statement can be found at <http://www.whitehouse.gov/omb/legislative/sap/110-2/saphr6049-s.pdf>.

Grouped By Vote Position:

YEAs ---93

Akaka (D-HI)	Dorgan (D-ND)	Menendez (D-NJ)
Alexander (R-TN)	Durbin (D-IL)	Mikulski (D-MD)
Allard (R-CO)	Ensign (R-NV)	Murkowski (R-AK)
Barrasso (R-WY)	Enzi (R-WY)	Murray (D-WA)
Baucus (D-MT)	Feingold (D-WI)	Nelson (D-FL)
Bayh (D-IN)	Feinstein (D-CA)	Nelson (D-NE)
Bennett (R-UT)	Graham (R-SC)	Pryor (D-AR)
Bingaman (D-NM)	Grassley (R-IA)	Reed (D-RI)
Bond (R-MO)	Gregg (R-NH)	Reid (D-NV)
Boxer (D-CA)	Hagel (R-NE)	Roberts (R-KS)
Brown (D-OH)	Harkin (D-IA)	Rockefeller (D-WV)
Brownback (R-KS)	Hatch (R-UT)	Salazar (D-CO)
Bunning (R-KY)	Hutchison (R-TX)	Sanders (I-VT)
Burr (R-NC)	Inhofe (R-OK)	Schumer (D-NY)
Byrd (D-WV)	Inouye (D-HI)	Sessions (R-AL)
Cantwell (D-WA)	Isakson (R-GA)	Shelby (R-AL)
Cardin (D-MD)	Johnson (D-SD)	Smith (R-OR)
Casey (D-PA)	Kerry (D-MA)	Snowe (R-ME)
Chambliss (R-GA)	Klobuchar (D-MN)	Specter (R-PA)
Clinton (D-NY)	Kohl (D-WI)	Stabenow (D-MI)
Coburn (R-OK)	Kyl (R-AZ)	Stevens (R-AK)
Cochran (R-MS)	Landrieu (D-LA)	Sununu (R-NH)
Coleman (R-MN)	Lautenberg (D-NJ)	Tester (D-MT)
Collins (R-ME)	Leahy (D-VT)	Thune (R-SD)
Corker (R-TN)	Levin (D-MI)	Vitter (R-LA)
Cornyn (R-TX)	Lieberman (ID-CT)	Voinovich (R-OH)
Craig (R-ID)	Lincoln (D-AR)	Warner (R-VA)
Crapo (R-ID)	Lugar (R-IN)	Webb (D-VA)

Dodd (D-CT)
Dole (R-NC)
Domenici (R-NM)

Martinez (R-FL)
McCaskill (D-MO)
McConnell (R-KY)

Whitehouse (D-RI)
Wicker (R-MS)
Wyden (D-OR)

NAYs ---2

Carper (D-DE)

Conrad (D-ND)

Not Voting—5

Biden (D-DE)
DeMint (R-SC)

Kennedy (D-MA)
McCain (R-AZ)

Obama (D-IL)

House Passes Continuing Resolution to Keep Government Funded

The House of Representatives late yesterday passed a Continuing Resolution to keep the federal government operating after the end of this month. Dave Obey (D-WI), Chairman of the House Appropriations Committee, released the details earlier in the day of the Continuing Resolution. It will keep the government funded and running through March 6, 2009 at whatever funding level they were at in FY 2008. Only priority programs were singled out for increases in the CR.

For the geothermal program, while the House and Senate had approved substantial increases in the DOE geothermal program, the CR would continue the program funded at only a \$20 million level and postpone any increase in program support until sometime next year when Congress reconvenes. The House approved \$40 million and the Senate \$30 million.

The bill is part of a package that also includes the FY 2009 Military Construction and Veterans Affairs, Defense, and Homeland Security Appropriations bills as well as a disaster relief package.

Highlights from the generic summary:

- Auto Efficiency Loans: \$7.5 billion to support \$25 billion in loans
- Nutrition for Women, Infants and Children (WIC): \$1 billion above 2008
- Commodity Supplemental Food Program: \$23.5 million above 2008
- Home Energy Assistance (LIHEAP): \$2.5 billion above 2008
- Offshore Drilling Ban: expires on September 30th, the White House rejected any language to provide for a responsible expansion of drilling in the OCS. All other laws and regulations concerning offshore leasing and development remain in place.
- Pell Grants: \$2.5 billion above 2008
- Census: \$2.9 billion
- Weatherization: \$250 million above 2008

See <http://appropriations.house.gov/>.

Google, GE Partner to Push Enhanced Geothermal Systems and “Smart Grid”

General Electric and Google have announced a partnership to focus on public policy on renewable energy technology, according to extremetech.com. Google and GE will push two new technologies: enhanced geothermal systems (EGS) and a “smart grid” for plug-in vehicles.

The collaboration will include "analysis and development of specific policy proposals, alliance building, advocacy, information programs and public relations," the two companies said, according to the article.

See <http://www.extremetech.com/article2/0,2845,2330607,00.asp>.

Workshop to Examine Outlook for State and Federal Policies to Promote Geothermal Energy in the West

Reno – Experts from around the country will discuss the outlook for state and federal policies to help expand geothermal energy at an all-day workshop scheduled for Reno, Nevada on October 4th. The program is being held in conjunction with the Geothermal Energy 2008 Conference and Expo sponsored jointly by the Geothermal Energy Association (GEA) and the Geothermal Resources Council (GRC) at the Peppermill Hotel.

The event will feature expert presentations and panel discussions examining the status, outlook and issues specific to geothermal energy raised by both federal and state policy initiatives. “With national and state attention focused on energy and environmental issues, there are numerous federal and state laws and policies that will impact the geothermal industry,” noted Karl Gawell, Executive Director of GEA. “This workshop will give those interested a unique chance to understand how these policies might shape the future of this industry.”

Topics to be examined include: climate change, state and regional transmission initiatives and policies, federal tax incentives, federal and state leasing and permitting, geothermal resource assessment, research and technology development, and RPS laws and regulations. In addition, there will be presentations from different western states about their state-level efforts on geothermal energy. Representatives from Nevada, California, Texas, Montana, Utah, Idaho, Arizona and other states are expected to participate.

Workshop speakers include: Ric O'Connell of Black and Veatch, John McCaull, GEA Western States Representative, Dan Schochet, Chairman of the Nevada Governor's Renewable Energy Transmission Access Advisory Committee, Jonathan Weisgall, MidAmerican Energy, Matt Ferguson, Principal & Practice Leader of National Renewable Energy, Reznick Group, P.C., Bob Epstein, Environmental Entrepreneurs (climate change legislation, ETAAC member), Ann Notthoff, Natural Resources Defense Council (invited), Sheridan J. Pauker, Wilson, Sonsini, Goodrich and Rosati, V. John White, Californian's for Energy Efficiency and Renewable Technologies (invited), Jan-Smutney Jones, Independent Energy Producers, John A. McKinsey, Stoel Rives LLP, Layne Ashton, Raser Technologies, Robert King, Good Company Associates, Dr. Colin Williams, U.S. Geologic Survey, Ed Wall, U.S. Department of Energy, William Glassley, California Geothermal Energy Collaborative and formerly California Energy Commission, Lisa Shevenell, UNR Great Basin Center, Kermit Witherbee, BLM, Tracy Parker, U.S. Forest Service, Paula Blaydes, Western GeoPower, Doug Glaspey or Roy Mink, U.S. Geothermal, and Jerry Fish and Chris Heaps, Stoel Rives LLP and Karl Gawell, GEA's Executive Director.

There is a \$150 registration fee, which is reduced to \$75 for GEA or GRC members, state or federal government employees, and non-profit organization employees (fee includes refreshments, light breakfast and lunch).

For more information or to register for the workshop, go to http://www.geo-energy.org/2008_ts/workshops.html. Interested press should contact Leslie Blodgett at 202-454-5261 or by email at leslie@geo-energy.org.

Company News

Ormat: President Accepts Cleantech Group Award in Washington, D.C.

The Cleantech Group, LLC, founders of the cleantech investment category, awarded its Emerging Enterprise Award to Ormat Technologies at the Cleantech Forum® XVIII in Washington, D.C., according to businesswire.com. Yoram Bronicki, president Ormat, accepted the award on behalf of Ormat.

Two other companies—the design firm Arup and Polyflow Corporation—received similar awards: Cleantech Pioneer for energy efficient building design and Most Promising Technology for innovative recycling technology, respectively.

See

http://www.businesswire.com/portal/site/google/?ndmViewId=news_view&newsId=20080917006457&newsLang=en.

Renewable and Climate Change News

EGS Applications: Present and Future, Discussed in *Ask the Experts* Column

How Long Will It Take to Apply Enhanced Geothermal Systems? ~ by Karl Gawell, Geothermal Energy Association

Q: I understand that enhanced geothermal systems (EGS) projects are still in experimental stages, and it may take decades before we can use it to produce energy. Is this correct? -- Devino R., Houston, TX

A:

While reaching the full potential of EGS may take a decade or more to realize, there are many aspects of EGS that are already being applied and that will provide expanded geothermal energy in the years immediately ahead.

Let's set down some basics. Geothermal energy production requires heat, water and fractured rock. Since heat is available anywhere under the surface of the Earth, water and fractured rock are what geothermal explorers look for in a potential "natural" geothermal site.

EGS involves developing tools and techniques that will allow geothermal production by artificially creating permeability in hot rock and introducing water (or another working fluid) to extract the heat. The widely publicized MIT report on EGS, *The Future of Geothermal Energy*, estimates that for EGS power plants there could be "performance verification at a commercial scale within a 10-15-year period nationwide." But that doesn't mean we will have to wait decades to see results from an investment in EGS research and technology development.

As the MIT study points out, "in a manner similar to the technologies developed for oil and gas and mineral extraction, the investments made in research to develop extractive technology for EGS would follow a natural learning curve that lowers development costs and increases reserves along a continuum of geothermal resource grades."

The processes of adding water or fracturing rock to improve geothermal production are currently applied in many geothermal operations. In California at The Geysers field — the oldest geothermal field in the United States and the largest geothermal venture in the world — operators have expanded the capacity of wells by injecting millions of gallons of reclaimed wastewater into the geothermal reservoir. Some experts call the Geysers wastewater project the first large-scale EGS project. Fracturing wells to increase their productivity, which is a common practice in oil and gas fields, is becoming more common in geothermal reservoirs albeit at a smaller scale.

EGS production ultimately would involve the extensive resource base of hot rocks that do not have any other significant geothermal characteristics and production will be made possible almost entirely by engineering techniques. This, as well, is not necessarily decades away. There are several EGS projects that are already, or will soon, produce power:

- The Soultz project, in France, a 1.5-MW EGS plant already in operation
- The Landau project, in Germany, a 2.5-MW operational plant

- Paralana, in Australia, a 7-30-MW plant in drilling stages
- Cooper Basin, in Australia, a 1-MW showcase plant will be operational in 2008 and a 250 - 500-MW plant in drilling stages, expected to have the first 50 MW EGS plant operating as early as 2011-2012
- Desert Peak, in the U.S. (Nevada), in planning stages, the expansion of an existing natural geothermal field

These early projects show the potential for EGS to contribute to national energy needs in years instead of decades.

So, to return to your question, the assumption that deriving power from EGS technology is decades away is simply incorrect. Developing EGS technologies will provide expanded power production both in the near-term and even more in the long run. It may take time to expand commercial use of EGS technologies to the point where they are making a significant contribution to national energy needs, but assuming there is a sustained and substantial commitment to supporting the development of EGS technologies — which is still an open question — ramping up production very quickly should be a feasible option to help meet our need for clean energy.

Renewable Energy Standards Create Fast-Growing Job Market, Worker Shortages

From Sustainable Energy Coalition/SUN DAY Campaign— [Renewable Sectors Facing Worker Shortages](#)

Thanks largely to the requirements of new state renewable energy standards, demand for geothermal and wind power is growing faster than the industries can find enough skilled workers to fill the gap. Geothermal power plants are also having a hard time finding plant operators and operating staff with experience operating large, heavy equipment. Such a challenge delayed the start-up of the 55-MW Bottle Rock electric plant at the California Geysers Facility by three months. There's an immediate need for at least 300 wind technicians, and in the next five years, the wind industry will probably need 500 to 600 wind technicians, just in eastern Oregon, eastern Washington and in parts of Idaho.

See http://www.energyprospects.com/cgi-bin/package_display.pl?packageID=2702.

Study Says Reducing Coal Emissions is #1 Climate Concern

From EESI Climate Change News—[Curbing Coal Emissions Alone Might Avert Climate Danger, Say Researchers](#)

In the August 5 issue of *Global Biogeochemical Cycles*, climatologists Pushker Kharecha and James Hansen of NASA Goddard Institute for Space Studies published a study that points to burning coal as the primary culprit behind greenhouse gas emissions. "This is the first paper that explicitly melds the two vital issues of global peak oil production and human-induced climate change," said Kharecha. "We found that because coal is much more plentiful than oil or gas, reducing coal emissions is absolutely essential to avoid dangerous climate change." Hansen's previous research suggests that disintegration of the West Antarctic ice sheet and Arctic sea ice could reach tipping points if CO₂ exceeds a concentration of about 450 parts per million, which is only 17% more than the current level. Feedback mechanisms could also be triggered that could lead to an even faster rate of melting.

To understand the trajectory of CO₂, Kharecha and Hansen studied five emissions scenarios from 1850 to 2100, each of which assumes a different estimate for the global peak production of fossil fuels. The results led the researchers to conclude emissions from coal must be reduced. "We're illustrating the types of action needed to get to target carbon dioxide levels," Kharecha said. "The most important mitigation strategy we recommend—a phase-out of carbon dioxide emissions from coal within the next few decades—is feasible using current or near-term technologies."

For additional information, see <http://www.sciencedaily.com/releases/2008/09/080910160757.htm>.

State News

Arizona: Plans Considered for First Geothermal Plant in the State

Navopache Electric Cooperative is looking at building a 50-MW geothermal power plant in east central Arizona, according to the blog of the State Geologist of Arizona. This would be the first geothermal power plant in Arizona. Dennis Hughes, the company's CEO described the plans at an Arizona Geothermal Working Group meeting. Geothermal consultants are reviewing the area and the Co-op has leased 6 sections, the article said.

See <http://arizonageology.blogspot.com/2008/09/geothermal-power-plant-being-considered.html>.

Nevada: Geothermal Water Transfer Project Under Assessment

The Bureau of Reclamation will put out an Environmental Assessment (EA) on the impact of transferring water from Homestretch Energy's geothermal plant, located near Wabuska, to Walker Lake, according to news.rgj.com. There will be an opportunity for the public to comment on the draft EA, according to the article.

About 35,000 acre-feet of water would be transferred to Walker Lake over the next five years. If the geothermal water is considered a viable source of water for the lake, it could be purchased under the Walker River Basin Acquisition Program, currently being analyzed in a separate Environmental Impact Statement.

See <http://news.rgj.com/apps/pbcs.dll/article?AID=/20080919/MVN01/809180403/1305/BIZ01>.

New Mexico: UTC Operating First Geothermal Power System in State

Press Release—September 25, [UTC Power System at New Mexico Greenhouse is First Geothermal Plant Operating in State](#)

UTC Power, a United Technologies Corp. (NYSE:UTX) company, today announced that the first two production units of its PureCycle® geothermal power system installed in July and early August at the Burgett Greenhouse in Animas, New Mexico, are exceeding performance expectations.

The PureCycle® system produces no emissions in generating electricity, and its fuel – geothermal hot water – is a renewable resource. The power from the units is used to displace grid electricity required to support the 32 acres of greenhouse operations at the site.

“UTC Power’s New Mexico initiative offers further proof that our state is fast becoming a center for renewable technology,” said Sen. Jeff Bingaman of New Mexico, chairman of the U.S. Senate Energy and Natural Resources Committee. “We are clearly positioned to create good jobs as our nation shifts to a cleaner economy. I congratulate UTC Power for opening up new avenues of energy production and putting its cutting-edge geothermal technology to work in New Mexico.”

Sen. Pete Domenici of New Mexico, ranking member on the Senate Energy and Natural Resources Committee, said, “I am glad the UTC Power geothermal plant in Hidalgo County is proving to be a success in producing power from a renewable energy source. The U.S. must begin to harness all of its available energy sources to support itself. As we see in Animas, taking on this challenge can work to produce more American energy, create jobs and strengthen a local economy.”

“It's exciting to see the first geothermal power plant come on-line in New Mexico,” said Karl Gawell, Executive Director of the Geothermal Energy Association (www.geo-energy.org). “I believe there's tremendous potential for small-scale, distributed geothermal power generation. Implementing modular

technology utilizing low-temperature resources opens up opportunities for hundreds of similar applications in the U.S. and abroad."

A survey recently released by the Geothermal Energy Association showed continued growth in the number of new geothermal power projects being developed in the U.S., with a 20% increase since January of this year.

UTC Power's geothermal system can operate at temperatures – from 200 to 300 degrees Fahrenheit – that were previously thought to be uneconomical for commercial power production. The system resulted from more than six years of research and development work involving UTC Power, United Technologies Research Center and the U.S. Department of Energy.

Dale Burgett, greenhouse owner, said, "The UTC Power team made a commitment to deliver PureCycle® systems and have them operational in two months and they delivered on time and the performance exceeds my expectations."

Similar systems have been in operation since 2006 at Chena Hot Springs Resort in Alaska as a U.S. Department of Energy Geothermal Technologies demonstration project. Raser Technologies of Provo, Utah, has ordered 200 PureCycle® systems for various projects it is developing in states throughout the Western U.S.

"We're pleased that these units are performing better than our predictions in the challenging climate conditions of New Mexico," said John Fox, general manager of the PureCycle® business at UTC Power. "This installation will provide valuable temperature and operational information and assist with our upcoming deployment of 50 units at the adjacent Lightning Dock geothermal site under development by Raser Technologies (NYSE Arca:RZ).

"Our innovative low-temperature technology is tapping previously uneconomical geothermal energy resources around the globe for a cleaner, more secure energy future today," Fox said.

UTC Power, a United Technologies Corp. company, is a full-service provider of environmentally responsible power solutions. With 50 years of experience, UTC Power is the world leader in developing and producing fuel cells for on-site power, transportation, space and defense applications, as well as a leader in innovative, renewable energy solutions and combined cooling, heating and power solutions for the distributed energy market.

Oregon: Public Meeting Held on Newberry Geothermal Project

The Oregon Department of Energy held a public informational meeting last week to answer questions about the Newberry Geothermal Project, according to kohd.com. Davenport Power is applying for a state site certificate to build a 120-MW geothermal power plant. A controversy has arisen regarding building the plant at the hot springs, and benefits of the project are being discussed.

Oregon would receive up to 30 million dollars in royalties; Deschutes County would receive an additional 15 million over 20 years. The Oregon Department of Energy will hold public hearings and conduct an environmental impact study before any decisions are made, the article said.

See <http://kohd.com/news/local/46121>.

International News

Australia: Geothermal Resources Limited Begins Frome 12 Drilling

Press Release Highlights—September 19, [Deep Drillhole Commences on Frome Project](#)

Geothermal Resources Limited (Geothermal Resources - ASX : GHT) is pleased to advise that it has commenced drilling of Frome 12, which has a planned depth of 1800 m. This will be the deepest hole that Geothermal Resources has drilled on its Frome project area to date. It is expected that the bottom of hole temperature in Frome 12 will give a clear indication of whether a viable geothermal energy resource is likely to exist in the interpreted granitic heat source at depth. It will be on the basis of temperature data recorded from Frome 12, that a decision will subsequently be made whether to drill a large diameter production hole into the potential geothermal reservoir at 3–4 km depth.

For news releases from Geothermal Resources Limited, see <http://www.geothermal-resources.com.au/announcements.html>.

Canada: Geophysical Survey Completed at Canoe Reach Hot Springs, BC

Press Release—September 23, Christopher James Gold Corp.: Geophysical Survey Completed at Canoe Reach Hot Springs Geothermal Project, British Columbia

Christopher James Gold Corp. (TSX VENTURE: CJG - News; "the Company"), together with its wholly-owned subsidiary, DeepRock Geothermal Inc., is pleased to report the completion of a preliminary geophysical survey at the Canoe Reach geothermal project in British Columbia. The Canoe Reach Geothermal Project is located approximately 32 km southeast of the Town of Valemount, B.C., along the banks of the Canoe River (between the Malton Range of the Monashee Mountains and the Canoe Range of the Rocky Mountains). Surface manifestations of the geothermal system, consisting of a series of high-temperature hot-springs and mud-pools, extend over a 1,500 meter strike length. The geothermal permit area is 550 hectares and the Project is covered by Permit # 55274, consisting of 7 PNG grid units. The hot springs are accessible via the local forestry service road, a journey of approximately 21.8 km from Valemount, and can also be accessed via Kinbasket Lake. The project is approximately 7 km away from a substation on the BC Hydro Power grid.

The Company contracted Quantec Geoscience Ltd. to conduct a Titan-24 magnetotelluric ("MT") resistivity survey, which was completed in August 2008. The purpose of this geophysics survey is to determine the likely extent and depth of the geothermal reservoir. The final report is pending; however, a preliminary assessment of the data shows a series of resistivity lows under the hot spring zones which are interpreted as potential reservoirs. The data will aid significantly in delineating the boundaries of the geothermal reservoir and for planning follow up exploration work expected to take place in late 2008.

Company President Dr. E. Max Baker commented: "The preliminary results from the Titan 24 MT survey conducted over the Canoe Reach Geothermal project are encouraging, and the Company will be conducting several additional lines of Titan 24 in October, to better define the extent of the resistivity lows already identified. In addition, several shallow thermal-gradient drill holes (3 - 4 DDH) and down-hole geophysical soundings are planned for late 2008, subject to regulatory approvals."

The Company can acquire up to a 90% interest in the Canoe Reach Geothermal Project by making a final payment of \$1,000,000 by December 15, 2008. Candorado will retain a 10% free-carried interest, which can be bought out by the Company at any time over the next 5 years for \$2.5 million.

This news release was prepared by Dr. Max Baker, President and CEO of the Company. The P.Geo for the project is Timothy L. Sadlier-Brown, a geothermal consultant based in Vancouver.

Indonesia: Ngebel Holds Second Largest Geothermal Source in Indonesia

Ngebel, Ponorogo in East Java has emerged as Indonesia's second largest geothermal energy source, according to tempinteractive.com. The East Java provincial government hopes to arrange regulation in order to explore and develop the resource, the article said.

See <http://www.tempointeractive.com/hg/nasional/2008/09/24/brk.20080924-137242.uk.html>.

Indonesia: President to Kick Off Lahendong Geothermal Plant in December

The 40-MW Lahendong geothermal power plant is scheduled to go on-line in December, according to antara.co.id, with President Susilo Bambang Yudhoyono attending the event. The power plant will aid the power crisis in the province, and North Sulawesi is expected to experience a power surplus in 2009, the article said.

See <http://www.antara.co.id/en/arc/2008/9/24/yudhoyono-to-inaugurate-lahendong-geothermal-power-plant/>.

Japan: Geothermal Has Economic Benefits But Could Influence Spa Industry

An article in the Taipei Times discusses Japan's geothermal potential. Japan currently has 19 geothermal power plants and has the potential to produce 20,540 MW—which would put it third after Indonesia and the U.S., according to the article. Geothermal production has economic benefits for the country, since Japan imports 99% of its oil.

The article explains that Japan's hot springs are an important part of its culture, which causes some concern over how geothermal development would influence that industry. "Bathing in a hot spring is one type of medical treatment from the old ages," said Joji Noda, the president of Ibusuki Phoenix Hotel. "There is no safety net if a spa near a geothermal power plant dries up."

Others support increased production. "Geothermal energy is abundant in our volcanic country and can produce power with less greenhouse gas emissions," said Nobuyoshi Soma, chairman of the Japan Mining Industry Association.

See <http://www.taipeitimes.com/News/world/archives/2008/09/21/2003423777>.

Kenya: Government to Fund Geothermal Development Company

The Energy Ministry plans to aid in development of two new companies to increase electricity generation and transmission, according to kbc.co.ke. The Geothermal Development Company and the Electricity Transmission Company of Kenya will be established this financial year. This will double the number of people connected to the grid within four years, said Energy Minister Kiraitu Murungi, according to the article.

The government will own 70% stake in the Geothermal Development Company. The move will be funded by taxpayers, the article said.

See <http://www.kbc.co.ke/story.asp?ID=52569>.

Philippines: Geothermal Exploration to Begin in Kalinga

Aragorn Power and Energy Corp., in partnership with Guidance Management Corp., will sign a \$3.7-million geothermal service contract with the Department of Energy, according to the *Philippine Star*. A five-year exploration in the province of Kalinga is expected to yield 60 MW.

"The benefits are clear. As we increase our ability to source energy supply locally, we reduce dependence on imports and ensure our energy security. Through the PECR, we are encouraging the private sector to participate in the government's energy independence program," Energy Secretary Angelo T. Reyes told press.

See <http://www.philstar.com/index.php?Business&p=49&type=2&sec=27&aid=200809238>.

Philippines: Lopez Group to Expand BacMan Geothermal Field

The Lopez Group has a P20 billion expansion in the works for the BacMan geothermal field, according to energy.souceguides.com. BacMan, now producing 150 MW, will be expanded in anticipation of deterioration of plants, EDC-BacMan spokesman Gerry Bunao told press.

Three geothermal steam production and power plant construction and operation projects will have a combined target of 120 MW, or 40 MW each. The first, Kayabon at the Manito side, will start next month and be partially operational by 2010.

See <http://energy.souceguides.com/news.shtml>.

Philippines: Freedom from Debt Coalition Opposes Mt. Kanlaon Project

The Freedom from Debt Coalition (FDC) has added its voice to other groups in opposition of plans to expand geothermal development in the Mt. Kanlaon National Park, according to gmanews.tv. The FDC put out a statement detailing laws that it says are violated by the project. The expansion violates Republic Act 7586 of 1992, or the National Integrated Protected Areas System, and RA 9154, the "Mt. Kanlaon Natural Park Act," the FDC said.

See <http://www.gmanews.tv/story/121397/FDC-joins-opposition-to-geothermal-project-in-Kanlaon>.

Uganda: President Interested in Geothermal Aid from Iceland

President Yoweri Museveni of Uganda expressed appreciation for assistance from Iceland in the geothermal sector, as well as education, fisheries, and agro-processing, through the Iceland International Development Agency (ICEIDA), according to newvision.co.ug. On a trip to Iceland, he also asked scientists to come to Uganda for the purposes of medicine manufacture.

While in Uganda, Museveni visited the Blue Lagoon to learn from the development of the steam bath for application in developing hot springs in Uganda.

See <http://www.newvision.co.ug/D/8/220/650902>.

Notices and Employment Opportunities

Forseo Investor's Guide to Geothermal Energy is Now Released

From Forseo:

The number of those recognizing the huge geothermal potential to be tapped is ever increasing. Yet, there are many risks and barriers associated with geothermal energy development and exploiting geothermal resources requires in-depth expert know-how.

Our new publication "The Investor's Guide to Geothermal Energy" provides you with a comprehensive and market driven insight into all important aspects of geothermal business and project development.

It serves as a practical reference tool for the growing geothermal community, covering geothermal development and opportunities on a world wide scale. Each project stage, from site identification to operation and maintenance is looked at from an investor's point of view, providing a close and diversified look at the art of geothermal:

- capital costs & cost affecting factors
- financing instruments & incentives
- associated risks & risk mitigation tools
- geoscientific & technology barriers and solutions

Distinguished experts share their insight and many industry stakeholders give an account of their geothermal experience.

The publication is endorsed by the IGA (International Geothermal Association), EGEC (European Geothermal Energy Council) and UNEPs Sustainable Energy Finance Initiative (SEFI).

The Investor's Guide to Geothermal, Sept. 2008, 104 pages, 280 EUR

Further information and orders: <http://www.forseo.eu/english/publications/the-investor-s-guide-to-geothermal.html>.

Employment: Research Associate II, SMU Geothermal Laboratory

Position: The SMU Geothermal Laboratory, Dallas, Texas, has an opening for a Research Associate II for an appointment of 2 years. The research is supported in part by a grant from GOOGLE.org to SMU. The activities associated with the position relate to the temperature field of the U.S. lithosphere. The outcome is the ability to make sound resource related renewable energy decisions. This research will build on the extensive thermal data sets used to produce the 2004 Geothermal Map of North America by collecting new data and modeling the regional thermal structure.

Qualifications: A PhD in geosciences is strongly preferred or an MS in geophysics and 3 years of work experience. Candidates must demonstrate strong analytical/critical thinking skills to identify issues and information requirements, apply appropriate research and analytical procedures, and review data with a strong focus on attention to detail and accuracy.

Apply online at <http://smu.edu/hr/recruit/> search for “geothermal”
Contact: Dr. David Blackwell, blackwel@smu.edu 214-768-2745

Employment: Renewable Energy Employment Opportunities, Ram Power, Inc.

Exciting Renewable Energy Employment Opportunities with New Geothermal/Solar Thermal Energy Project Company

Ram Power, Inc., a recently formed renewable geothermal and solar thermal project development company, with offices in Reno, Nevada and Los Angeles, California has openings for professionals with a minimum of five years experience in the following fields:

Mechanical Engineer – renewable energy power generation
Geologist/Geophysicist/Geochemist – geothermal or mining
Environmental/Permitting – federal and state regulations
On-site Drilling Supervisor – well field operations

These positions will be based in either Reno or Los Angeles and include a full employment benefits package with salaries based on experience. Send resume to Attn: Human Resources, Ram Power, Inc. 691 Sierra Rose Drive, Suite B, Reno Nevada, 89511 or email to info@ram-power.com.

Employment: Geothermal Engineering Analyst, National Renewable Energy Laboratory

Geothermal Engineering Analyst—Requisition #114BR or 115BR—Washington, D.C.

Job/Research Summary: This position performs technology, market and economic analysis, with an emphasis on geothermal energy technology, systems, and infrastructure. Work carried out will support R&D and decision-maker support activities within the Geothermal program through the use of analysis methodologies such as economic feasibility, market transformation, risk, portfolio balance, and cost-versus-benefit. Design novel approaches for systems and infrastructure analysis. Deliver quality products that synthesize the inputs of team members, researchers, market players, and other analysts. Innovate new methods, tools, and approaches that enable greater understanding of geothermal systems.

Job Duties: Combines broad, in-depth knowledge of chemical and/or mechanical engineering with an emphasis on process, heat transfer, and fluids engineering with strong economic analysis capabilities. Performs engineering/economic analyses of geothermal systems and electric transmission in cooperation with research community to gather and understand field data. Documents work in detailed technical memos and internal milestone reports; publishes and presents key results in peer-reviewed journals and at regional, national, and international scientific meetings and conferences. Supports the development of annual operating plans and assists with strategic planning efforts. Works with Department of Energy on technology goals and opportunities.

Minimum Qualifications: Bachelor's Degree in science and/or engineering, or equivalent/relevant education/experience. 3 years of relevant R&D experience.

Preferred Qualifications: Multidisciplinary research exposure to both chemical and mechanical engineering systems, especially those related to the development of cost-effective geothermal systems for utility-scale applications. Familiarity with value chain analysis, risk analysis, and dynamic modeling. Experience in the development and evaluation of applied technology aimed at entering the marketplace. Previous industry experience in renewable energy and geothermal technologies, with experience in related analysis. Established base of contacts with individuals and institutions relevant to energy analysis. Experience working with the federal government. Some experience with computer modeling of energy markets.

Pre-employment drug testing required.

Please visit our website for more information and to apply online: www.nrel.gov/employment/
NREL is an equal opportunity employer committed to diversity and a drug-free workplace.

Employment: Senior Geologist, VP Exploration, Sierra Geothermal

Responsibilities: design and manage exploration programs, lead new project generation, prepare and manage budgets, develop geological and resource models, site exploration and production/injection wells, manage and build the geological team

Requirements: M.Sc. Geology professional certification status, over 10 years proven experience in exploration & development of geothermal resources preferred, oil & gas or mining background will be considered, strong structural understanding, strong geophysical and geological interpretive skills, strong computer skills and familiarity with 3D software, good multitask management and reporting skills

Location: Vancouver, BC with expected travel to the U.S. and project sites

Please send resumes to Chris@redfishtech.com.

Employment: Vice President of Business Development, Ormat Technologies

Ormat Technologies has an immediate opening for a full time Vice President of Business Development located in Reno, NV. The ideal candidate will 10+ years in sales, marketing and business development in the energy/renewables industry.

Position Title: Vice President, Business Development; Department: Business Development; Location: Corporate Office; Reports to: President/COO; Position Summary: The Vice President of Business Development is responsible for overseeing the Business Development function in North America.

Essential Functions: Direct and execute the business development strategy to achieve company goals and objectives, Identify and develop key strategic partnerships, both internally and externally, Responsible for negotiating PPAs and contract changes, Evaluate and analyze market expansion opportunities, Ability to build and lead a business development team that will assist the company towards completion of company goals, Build relationships with internal departments so that all areas of the company are ready to execute when necessary.

Other Responsibilities: Provide ongoing training and development to business development team to obtain a high level of performance

Education, Experience and Skills Required: Bachelor degree, ideally in business or engineering disciplines; 10–15 years experience in Sales, Marketing, Business Development or Operations roles (preferably a mix of sales and operations in energy industry); Willingness to travel up to 60% nationally and internationally; Ability to negotiate contracts with potential business affiliates; Experience in the renewable energy field a strong plus; Proven track record maintaining confidentiality and dealing with company proprietary information

Physical Requirements: In office walking and standing 20% of the time, seated 75% of the time; Ability to stand, walk and sit for varied degrees of time associated with travel

To apply for the position please send a resume to Chris@redfishtech.com.

Employment: Sales Manager, Ormat Technologies

Ormat Technologies has an immediate opening for a full time Sales Manager located in our Reno, NV. The ideal candidate will 10+ years in related Sales experience in the energy/renewables industry.

Position Title: Manager of Sales, Geothermal Development; Department: Business Development; Location: Corporate Office Reno, NV; Reports to: Director, Geothermal Development; Position Summary: The Manager of Sales, Geothermal Business Development, will be responsible for the sales and marketing of renewable energy products. The selected candidate will help lead the commercialization and sales efforts for Ormat's latest geothermal supply of geothermal plant equipment, electrical power generation projects, as well as the supply of engineering and construction services for 3rd Party power projects.

Essential Functions: Develop detailed sales and marketing strategies to grow sales within the power generation industry; Conduct market segmentation research, identify lead databases and determine sales channels to establish customer opportunities and spearhead direct sales efforts; Manage customer relationship from initial feasibility trials through to field deployment.

Other Responsibilities: Work flexibly within a dynamic, multidisciplinary team.

Education, Experience and Skills Required: Minimum of 10 years experience in a similar position; Bachelor's degree in Marketing or related field or equivalent experience and/or technical qualifications relevant to the geothermal applications, as well as Engineering and Construction; Experience in marketing

or application engineering; Experience working directly with customers in a sales organization with strong communication and interpersonal skills.

Physical Requirements: Must be able to travel regularly

To apply for the position please send a resume to Chris@redfishtech.com.

Employment: Engineer V, Geothermal Experience Preferred, Northern California Power Agency

Performs engineering tasks relating to plant reliability/ performance efficiency, primary technical resource for CMMS, supervises implementation of system/equipment repairs/upgrades, PM for plant efficiency upgrade/retrofit projects, construction mgr for public works projects, supervises plant chemical lab & environ, health/safety staff. First 4–6 months, position assigned to NCPA HQ office/Roseville, then GEO Plant, Middletown, CA thereafter. During initial period in Roseville, temp housing provided if required.

Requires BA in electrical/mechanical engineering; MA preferred; and min 10 yrs exp plant/production engineering, preferably within geothermal industry; 2 yrs experience plant reliability/ maintenance engineering & 2 yrs mgmt. exp preferred. Requires knowledge/experience in industry codes/standards; CMMS, Root Cause Failure Analysis, Reliability Centered Condition Based/Mntc, CBM equip; steam turbine plant monitoring & power plant electrical sys; writing, analyzing/interpreting scientific/tech info.; making presentations and some travel in CA. Starting salary: \$96 to \$121K plus exc employer benefits inc CalPERs retirement/medical.

Application at www.ncpa.com, submit to NCPA HR, 651 Commerce Dr., Roseville, CA 95678. Open until filled.

Employment: Engineering Manager, Western GeoPower, Inc.

Western GeoPower, Inc. (WGPI) has an immediate opening for a full time Engineering Manager to be located in our Healdsburg, CA office. WGPI is looking for a flexible and entrepreneurial person who can assist in a variety of tasks to grow WGPI into world class renewable power developer/operator. The ideal candidate will possess 5+ years of technical design, project engineering and operational support in the geothermal power industry. Must have geothermal power and experience working in the Geysers and Salton Sea or similar geothermal field. H2S abatement strategies, steam quality, production/injection systems and plant operations are all a plus.

The Engineering Manager will be report to the Operations Manager and be responsible for the following key tasks: Technical support for Project Permitting; Technical oversight of the Detailed Engineering Contract (power plant and gathering system); Evaluation of Value Engineering and Technical Betterment Projects; Technical support for Project Construction issues (technical support for WGP's Construction Manager); Technical support for New Development Projects; Technical support for future Plant Operations, Reporting, Plant Optimization, Environmental; Compliance, Safety and Training

To apply for the position, please send a Word formatted resume to Redfish Technology Chris@redfishtech.com.

Requests for Proposals (RFPs)

RFP for Energy Frontier Research Centers, U.S. DOE (October 1)

The U.S. Department of Energy requests proposals for Energy Frontier Research Centers (EFRCs) to accelerate the rate of scientific breakthroughs needed to create advanced energy technologies for the 21st

century. The EFRCs will pursue the fundamental understanding necessary to meet the global need for abundant, clean, and economical energy. Through this initiative, DOE seeks to bring together the skills and talents of multiple investigators to enable fundamental research of a scope and complexity that would not be possible with the standard individual investigator or small group research project. \$500 million expected to be available, up to 50 awards anticipated.

Responses due 10/1/08. For more info, contact Emiela Bradford at emiela.bradford@ch.doe.gov or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/933104E42D0185E58525742100694C78?OpenDocument>. Refer to Sol# DE-PS02-08ER15944. (Grants.gov 4/4/08)

RFP for Early Stage Clean Energy, New York State Energy Research and Development (October 1)

The New York State Energy Research and Development Authority requests proposals for Early Stage Support for Developers of Renewable and Clean Energy Technologies. Through this initiative, NYSERDA seeks to create sustainable support networks and infrastructure for early stage renewable and clean energy technology companies and entrepreneurs and provide them with critical opportunities to facilitate partnerships and develop or market products. \$5.77 million expected to be available, individual awards NTE \$1.5 million. Responses due 10/1/08.

For more info, contact Judy Jarnefeld at jj1@nysesda.org or go to: <http://www.nysesda.org/Funding/1216pon.asp>. Refer to PON# 1216.

RFP for Renewable Energy Resources, Public Service Company of New Mexico (October 15)

The RFP is seeking multiple proposals for wind, solar, geothermal and biofuel energy resources. PNM is seeking renewable energy sources that can be available beginning in 2009 and no later than 2011. A prebid conference will be held at the PNM downtown office in Albuquerque and via teleconference on July 30, 2008. RFP Responses due October 15. All inquiries and other communications relating in any manner to this RFP must be directed in writing, by mail, facsimile or email, to the PNM RFP administrator. The questions and corresponding answers (without identification of the party asking the questions) will be emailed to all parties that have provided a Notification of Intent to Respond (“Notification”) to this RFP.

Contact RFP Administrator: Public Service Company of New Mexico, Alvarado Square MS 1006, Albuquerque, N.M., 87158-0001 Phone: 505-241-4700; Fax: 505-241-2202; Email: renewableRFP@pnm.com The entire RFP can be found at http://www.pnm.com/rfp/renewables/docs/rfp_renewables.pdf.

RFP for Industrial Energy Efficiency Programs, U.S. DOE (October 16)

The U.S. Department of Energy requests proposals for Save Energy Now: State, Regional and Local Delivery. This initiative will support the development and delivery of industrial energy efficiency programs implemented at the local, state and/or regional level. \$9.5 million expected to be available, up to 16 awards anticipated. State and Territorial Energy Offices must be the lead applicant. A Letter of Intent is requested but not required and is due 9/15/08.

Final proposals due 10/16/08. For more info, contact Margo Gorin at ITP_State@go.doe.gov or go to <https://e-center.doe.gov/iips/faopor.nsf/UNID/6033DD40BB42CF468525749600668DC3?OpenDocument>. Refer to Sol# DE-PS36-08GO98033. (Grants.gov 7/30/08)

RFP for Global Climate Change Modeling and Early Career Projects, U.S. EPA (October 21)

The U.S. Environmental Protection Agency requests proposals, under a joint solicitation, for 1) Adaptation for Future Air Quality Analysis and Decision Support Tools in Light of Global Change Impacts and Mitigation, and 2) Early Career Projects. Through this initiative, EPA seeks the development of modeling capability to provide: Insights to the air quality planning community; a capability to account for uncertainty and variability in the projections of a future world that includes global change and; an evaluation of the robustness of predictions made with improved tools when applied to relevant scientific and policy questions. This research must link from local to the global scale and back for predictions out to 40 years into the future. Additionally, this initiative includes the opportunity for early career projects. \$5 million expected to be available, up to 7 awards anticipated. Responses due 10/21/08.

For more info, contact Bryan Bloomer at bloomer.bryan@epa.gov or go to http://es.epa.gov/ncer/rfa/2008/2008_star_adaptation.html. Refer to Sol# EPA-G2008-STAR-J1 and EPA-G2008-STAR-J2. (Grants.gov 7/22/08)

RFP for Global Climate Change Education, NASA (October 24)

The National Aeronautics and Space Administration (NASA) requests proposals for the Global Climate Change Education (GCCE) project. The GCCE is designed to improve the quality of global climate change and Earth system science education at the elementary, secondary, and undergraduate levels. Funded projects are expected to take advantage of NASA's contributions in climate science to enhance students' academic experiences and/or to improve educators' abilities to engage and stimulate their students. Up to 24 awards anticipated, award range \$150K to \$500K. A Notice of Intent is required and is due 8/29/08, final proposals due 10/24/08.

For more info, contact Diane Clayton at diane.clayton-1@nasa.gov or go to <http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId=%7bA0A2FB8B-E96B-7579-5530-2709EE450F3F%7d&path=open>. Refer to Sol# NNH08ZNE005N. (Grants.gov 7/18/08)

Request for Renewable Energy, Massachusetts (December 1)

Taunton Municipal Lighting Plant seeks up to 260,000MWh per year of energy and dependable capacity starting in the calendar year 2009 from eligible renewable resources to meet the Massachusetts RPS requirements. Responses due 12/1/08.

For more info, contact Scott Whittemore at Renewables@TMLP.com or go to <http://personal.tmlp.com/tmlpesp/RFP08-01-renewable-resource/>. (Green Power Network 7/28/08)

RFP for Climate Change and Sustainability Conferences, EPA (December 9)

The U.S. Environmental Protection Agency has issued a Broad Agency Announcement for Conferences, Workshops, and/or Meetings. EPA seeks applicants for the planning, arranging, administering and/or conducting of conferences and workshops in areas including, but not limited to: Economics and sustainability; air and global climate change; and technology. \$500K expected to be available, up to 15 awards anticipated. Proposals due 12/9/08.

For more information, contact Bernice Smith at smith.bernicel@epa.gov or go to http://es.epa.gov/ncer/rfa/2008/2008_baa.html. Refer to Sol# EPA-C2008-BAA. (Grants.gov 12/6/07)

RFP for Energy Efficiency, Renewable Energy, and Transmission Technologies, DOE (December 31)

This solicitation announcement (DE-PS01-08LG00001) invites the submission of applications for loan guarantees under Title XVII of the Energy Policy Act of 2005, 22 U.S.C. 16511-16514 (“Title XVII”), from the U.S. Department of Energy in support of debt financing for projects in the U.S. that employ energy efficiency, renewable energy, and advanced transmission and distribution technologies that constitute New or Significantly Improved Technologies. Copies of related regulations may be found at <http://www.lgprogram.energy.gov/>.

DOE is actively promoting projects that fall within the following three general but distinct project type categories: (1) manufacturing projects, (2) stand-alone projects, and (3) large-scale integration projects that may combine multiple eligible renewable energy, energy efficiency and transmission technologies in accordance with a staged development scheme.

The applicant is requested to specify which, if any, of the following project types and technology categories most accurately represents its project: (1) Alternative Fuel Vehicles, (2) Biomass, (3) Efficient Electricity Transmission, Distribution and Storage, (4) Energy Efficient Building Technologies and Applications, (5) Geothermal, (6) Hydrogen and Fuel Cell Technologies, (7) Energy Efficiency Projects, (8) Solar, and (9) Wind and Hydropower.

With questions, email the LGPO at lgprogram@hq.doe.gov. Please include in the subject line “RETDEE Solicitation Question.” Completed applications must be submitted no later than 11:59 pm (ET) on Wednesday, December 31, 2008. Full announcement can be found at <http://www.lgprogram.energy.gov/keydocs.html>.

Upcoming Events

Featured Event: GEA Geothermal Issues and Outlook Workshop, October 4 (Reno, NV)

A day-long series of expert presentations and panel discussions examining the status, outlook and issues specific to geothermal energy raised by both federal and state initiatives in each of these topic areas:

- 2009 Federal Outlook for Climate Change, Renewable Energy and Geothermal
- State and Regional Transmission Initiatives and Policies
- Federal Tax Incentives: extensions and emerging proposals
- Federal and State Leasing and Permitting
- Geothermal Resource Assessment, Research and Technology Development
- RPS Legislation and Regulations

Presentations and Panels on these critical subjects will be made by leading state and national experts.

Revised Agenda:

8:30 am Light Breakfast/Coffee and Networking

9:00 Transmission: An overview of current initiatives in California and the West to expand transmission to geothermal and other renewable energy areas

- Ric O'Connell, Black and Veatch (RETI and WGA CREZ efforts)
- John McCaull, GEA Western States Representative
- Dan Schochet, Chairman of the Nevada Governor's Renewable Energy Transmission Access Advisory Committee
- Nevada Power Representative

10:00 Tax Incentives: A review of the status of federal and state tax initiatives for geothermal power, and a discussion of future proposals and prospects for further action in a new Congress

- Jonathan Weisgall, MidAmerican Energy
- Matt Ferguson, Principal & Practice Leader of National Renewable Energy, Reznick Group, P.C.

10:45 `Break

11:00 Climate Change: State and Federal climate change laws and legislation, and what they may mean for geothermal energy.

- Bob Epstein, Environmental Entrepreneurs (climate change legislation, ETAAC member)
- Ann Notthoff, NRDC*
- Sheridan J. Pauker, Wilson, Sonsini, Goodrich and Rosati
- Karl Gawell, GEA

12:00 noon: Lunch and Discussion: Brief presentations and discussion about the status of collaborative geothermal efforts at the state level – Robert King (Texas), William Glassley (California) Paul Thomsen (Nevada) Bob Blackett (Utah), Roy Mink (Idaho), Paul Morgan (Arizona), Kathi Montgomery (Montana) Curt Robinson (GRC Chapters), others.

1:00 State and Federal RPS Initiatives: Prospects and proposals for federal and state renewable portfolio standards are reviewed, and their potential importance for and impact upon geothermal projects is discussed.

- V. John White, CEERT*
- Jan-Smutney Jones, IEP*
- Karl Gawell/John McCaull, GEA
- John A. McKinsey, Stoel Rives
- Layne Ashton, Raser Technologies
- Robert King, Good Company Associates

2:00 Resource Assessment and Research: Ongoing and proposed efforts to advance geothermal resource assessment and federal and state research programs are reviewed and discussed.

- Dr. Colin Williams, USGS
- Ed Wall, U.S. DOE
- William Glassley, CGEC, formerly CEC
- Lisa Shevenell, UNR Great Basin Center

3:00 Break

3:15 Federal and State Leasing and Permitting: An overview of the status of leasing on BLM and Forest Service lands, state and private land leasing issues, and a discussion of permitting and leasing issues, answers and new proposals.

- Part I: Kermit Witherbee, BLM; Tracy Parker, U.S. Forest Service; Additional BLM/FS Representatives
- Part II: Paula Blaydes, Western GeoPower; Doug Glaspey or Roy Mink, U.S. Geothermal; Jerry Fish (or Chris Heaps), Stoel Rives

4:30 pm Adjourn

(*invited)

Fee: \$150 non-members, \$75 GEA-GRC members or government/non-profit employees (fee includes refreshments, light breakfast and lunch.) Participation will be limited to 150 people.

For information or to register, go to www.geo-energy.org, or contact Daniela Stratulat at 202-454-5241 or email Daniela@geo-energy.org.

Featured Event: GRC Workshop, Introduction to Geothermal Energy, October 4 (Reno, NV)

Saturday, October 4, 10:00–1:00 p.m., Tuscany 11, Peppermill Resort, Reno, and visit to geothermal power plant, 1:30–5:00 p.m.

The Geothermal Resources Council (GRC) will sponsor an Introduction to Geothermal Energy Workshop, presented by the Geothermal Education Office in conjunction with the 2008 GRC Annual Meeting. This free and fun event will take place on Saturday, October 4, 2008, in the Tuscany 11 room, at the Peppermill

Resort in Reno. The workshop is designed for K-12 classroom teachers and other educators but is open to anyone interested in learning about geothermal energy.

This program will feature slide presentations by seasoned geothermal speakers who will cover geology, exploration, drilling, generation of electricity, low-temperature uses of geothermal energy, and other related topics. Free curricular materials will be given to teachers.

After the formal 3-hour program there will be a field trip to a local geothermal power plant (Ormat's Steamboat). Only a limited number can attend; priority for field trip participation will be given to classroom teachers. The bus for Steamboat will leave Peppermill at 1:30 p.m.

Pre-registration is required for the workshop and for the field trip.

REGISTRATION DEADLINE - Thursday, September 25. A registration form (pdf), is attached. Please fax completed registration form to 415-435-7737. The registration form will also be available soon at www.geothermal.marin.org. If you would like to bring a very small group of mature high school students to the workshop or have questions, please contact Marilyn Nemzer at the Geothermal Education Office, geo@marin.org.

Featured Event: GEA Annual Members Meeting, October 5 (Reno, NV)

All GEA Members are invited to The 2008 Annual Members Meeting of the Geothermal Energy Association. It will be held at Noon on Sunday, October 5, 2008 at the Peppermill Resort and Hotel in Reno, Nevada. The meeting will review GEA activities in the past year, elect members to the Board of Directors, and discuss priorities for the year ahead. For more information about the meeting, contact Karl Gawell by email at karl@geo-energy.org, or by phone at 202-454-5264.

Featured Event: Geothermal Energy 2008 Conference and Expo (formerly GEA Trade Show and GRC Annual Meetings), October 5–8 (Reno, NV)

GEA's annual Geothermal Energy Expo (formerly known as GEA Trade Show) brings out the geothermal community for a few days of everything geothermal. Come mingle with the geothermal community in one hall while viewing the world's largest gathering of vendors providing support for geothermal resource exploration, characterization, development, production, and management. Expo exhibitors have a unique opportunity to showcase their products, services, and state of the art technologies to the geothermal community. **Please note, booth space for the Expo is sold out.

For more information please visit our Expo website: http://www.geo-energy.org/2008_ts/index.htm To register to attend the Expo please fill out online application at http://www.geo-energy.org/2008_ts/visitors.html. The cost for visitors to the Expo Hall will be \$35 per person per day. Payment will be due on site.

Sponsorship Opportunities: http://www.geo-energy.org/2008_ts/spn_opprtn.html and http://www.geo-energy.org/2008_ts/spn_ts.html. Current Sponsorship List: http://www.geo-energy.org/2008_ts/spn_list.html

In tandem with the Geothermal Energy Expo is the Geothermal Energy Conferences hosted by the Geothermal Resources Council (GRC). GRC Conference participants interface with exhibitors to learn about innovative developments and applications, while exchanging valuable ideas. For more information about the Geothermal Energy Conferences, please visit GRC's website at: www.geothermal.org.

GEA's schedule of Geothermal Energy 2008 Conference and Expo Events is as follows:

Saturday, October 4

- Saturday, October 4, Issues and Policies Outlook Workshop, 9am-4:30pm, Naples Rooms 1-3

Sunday, October 5

- Sunday, October 5, Annual GEA Members Meeting, Noon-2pm, Tuscany Room 11
- Sunday, October 5, GEA Board of Directors Meeting, 2:30pm-4:30 pm, Tuscany Room 11
- Sunday, October 5, Geothermal Convention and Expo 2008 Opening Reception, 6:00pm-8:30pm, Expo Hall

Monday, October 6

- Monday October 6, Trade Show/Expo Opens, Noon-5pm
- Monday, October 6, Trade Show Presentations, noon in Expo Hall
- Monday, October 6, Trade Show Closes, 5pm

Tuesday, October 7

- Tuesday, October 7, Trade Show Opens, 8am-6pm
- Tuesday, October 7, Presentations in EXPO Hall, noon
- Tuesday, October 7, Poster Session in Expo Hall 4:00pm-6:00pm, Trade Show Closes at 6pm
- Tuesday, October 7, Texas Hold'Em Poker Tournament in Capri Rooms 2-4, 9:00pm-12pm

Wednesday, October 8

- Wednesday, October 8, Trade Show Opens, 8:00am-2:00pm
- Wednesday, October 8, Awards Presentation in Trade Show Hall, 10:00am
- Wednesday, October 8, Trade Show Closes, 2pm

With any questions, please contact Kathy Kent at 202.454.5263, email: kathy@geo-energy.org.

**GEA and sponsor Oski Energy, a U.S. Renewables Group Company, are holding a Texas Hold'Em Poker Tournament on Tuesday, October 7 as part of our Geothermal Energy 2008 Conference and Expo festivities!! Poker is America's most popular card game and we are bringing poker to our participants. With this Texas Hold'Em tournament, you will be playing against others in the geothermal community. Show your coworkers, other geothermal enthusiasts and even your company's competitors what your poker game is made of!! Everyone is welcome to join the game!! Entry fee will be \$120 which you will need to pay in cash, the day of the tournament to the Peppermill. \$100 of this entry fee will go into the prize pool, while the additional \$20 will cover dealer costs. A cash bar will be available. For more information on how the tournament will be played, feel free to visit our website at: http://www.geo-energy.org/2008_ts/events.html. If you are interested in joining this tournament, please send an email to Kathy Kent at kathy@geo-energy.org indicating the name and contact email and phone number that you can be reached at while in Reno for the interested player. Registration will be available on site. Payment will be due on site at the Peppermill.

Fast Tracking Energy Projects on Federal Lands, October 7 (Reno, NV)

A one-day seminar on keys to fast tracking energy projects on federal lands featuring speakers from EMPSi and federal agencies. This seminar will provide tools and techniques to achieve environmental compliance on your schedule. There is a registration discount for GEA members and attendees (enter "geothermal" in the "Code" field on the first page to receive a \$100 discount). Additional information can be found at: www.EMPSi.com or contact John King, EMPSi (415-544-0440).

NZ Geothermal Workshop & NZGA Seminar 2008, November 11–13 (Taupo, New Zealand)

The NZ Geothermal Workshop will be held November 11–12 and the New Zealand Geothermal Association Seminar 2008 will be held on November 13. Both events will take place at the Great Lake Centre in Taupo, New Zealand. The events mark the 30th anniversary of the Geothermal Workshop, which is New Zealand's longest running energy conference. This year's workshop will celebrate New Zealand's people and past achievements as well as the exciting future of geothermal energy use around the world. Particular focus will be on New Zealand's contributions to the research, education, and development of geothermal energy.

NZ Geothermal is calling for papers related to the history of achievement and the future potential of geothermal energy as well as paper on all aspects on Wairakei. The paper deadline is August 25 and must be submitted via email to geothermal08@auckland.ac.nz.

Workshop registration began June 1 and online registration will continue until November 4. Discounted rates will be available until early registration closes on October 12. For more information or to register, please visit <http://www.nzgeothermal08.com/nzgeothermal/index.cfm>.

XVI Annual Congress of the Mexican Geothermal Association, November 14 (Morelia, Mexico)

The XVI Annual Congress of the Mexican Geothermal Association (AGM: Asociación Geotérmica Mexicana) will take place in the city of Morelia, Mexico, on November 14. The AGM is calling for papers related to geothermics. Please send abstracts to Luis Gutiérrez-Negrín (luis.gutierrez@geotermia.org.mx) before July 25. Ten to twelve papers will be selected for oral presentation during the congress. Papers and presentations can be in Spanish or English.

The AGM is the Mexican association affiliated to the International Geothermal Association (IGA) It holds an annual technical congress and a general assembly, restricted to its membership, usually in a city of Mexico related to geothermics. The events are cosponsored by the geothermal division of the Comisión Federal de Electricidad, whose headquarters is in Morelia.

For more information, please visit the AGM Web site (<http://www.geotermia.org.mx>), and/or send a message to Luis Gutiérrez-Negrín.

Geothermal Finance & Investment Summit, November 17–19 (Palm Springs, CA)

The U.S. Department of Energy's Edward J. Wall, of the DOE's Geothermal Technology Program Office, will keynote the Geothermal Finance & Investment Summit. The conference will look into geothermal developer perspectives, geothermal transmission, investment perspectives on geothermal energy and challenges faced in the geothermal energy community. This is a great opportunity to learn more about geothermal investment.

Many renewable energy project developers—and investors—are looking to the DOE for a range of issues. Mr. Wall is expected to provide answers and clarity to these market players. Interest in geothermal development has never been higher—evidenced by the record 400% increase in land lease prices garnered earlier this month at auction by the Bureau of Land Management—as everyone searches for the next big play in renewable energy. Mike Olson of the U.S. Department of Interior and Kermit Witherbee of the Department of Interior/Bureau of Land Management will also address the summit on issues of the backlog of land leases and the royalty framework. Both issues are considered critical to geothermal energy projects.

As an annual event, the Geothermal Finance & Investment Summit is one place where developers, investors, power purchasers, technology experts and other players are turning to find out where, when and what geothermal projects will happen in the coming year.

Also scheduled to appear:

- Mike Marelli, Manager of Contract Origination & Analysis, Renewable & Alternative Power Department, Southern California Edison, and David Lewis, Director—Competitive Solicitations, Pacific Gas & Electric;
- John C.S. Anderson, Senior Managing Director, John Hancock Financial Services, and Rohan Singh, Vice President, HSH Nordbank;
- John Eber, Managing Director—Energy Investments, JPMorgan Capital Corp.; and Martin Torres, Associate, Morgan Stanley Capital Markets
- Gary Thompson, President & CEO, Sierra Geothermal Power Corp.

Utah Geothermal Lease Sale, BLM, November 18

The Utah State Office has scheduled a proposed competitive geothermal lease sale. The proposed sale will be held in conjunction with the oil and gas lease sale on November 18, 2008.

If you have questions regarding this notice, please call Judy Nordstrom at 801-539-4108; facsimile at 801-539-4200; write to attention at the address on this letterhead; or send electronic mail to judy_nordstrom@blm.gov. More information available at <http://www.blm.gov/ut/st/en/prog/energy/geothermal0.html>.

2nd African Rift Geothermal Conference, November 25–29 (Entebbe, Uganda)

The second International Geothermal Conference on the African Rift will be held in Entebbe, Uganda. The conference is designed as a forum for the exchange of information on the African Rift Geothermal Resources and for discussion of the current state of scientific knowledge and understanding of all aspects of exploration and development of geothermal resources, including exploration, field and conversion technology, design and construction, environmental considerations, financial, marketing, and operational aspects.

The Scientific Program of the conference consists of Plenary Lectures, Poster presentations, Workshop and Field Trips. The following will be the themes for oral and poster sessions: (1) Exploration: Geology, Geophysics, Geochemistry, and Hydrology, (2) Drilling and well design: Shallow and deep, Production and Injection, (3) Field development, Production Technology, Power generation & Operation, (4) Reservoir Engineering: Well Testing, Injection, and Modeling, (5) Case Histories, (6) Economics and Financing, (7) Environmental, Social, Legal and Institutional Aspects, and (8) Direct Use: Agri- and aquaculture, Mineral extraction, Manufacturing, Air conditioning.

For more information and to register, contact Department of Geological Survey and Mines, Plot 21–29, Johnstone Road, P.O Box 9, Entebbe, Uganda. Phone: +256 712 812231, +256 712 835843, +256 773 129941. Fax: +256 414 320364. E-mail: argeoC2@minerals.go.ug or bahati@minerals.go.ug.

Featured Event: Renewable Energy World Conference and Expo North America 2009, March 10–12, 2009 (Las Vegas, NV)

North America's Premier Renewable Energy Conference & Expo Is Now in its 6th Year!

The Renewable Energy World Conference & Expo North America (formerly POWER-GEN Renewable Energy & Fuels) has a proven track record—now in its 6th year—as renewable energy's leading conference. It offers a worldwide audience who will hear papers, panel discussions and presentations during technical sessions related to technology, markets, business strategies and policy covering the wind, solar, biomass, hydro, geothermal, ocean/tidal/wave, bio-power, bio-fuels hydrogen and energy sectors. There has never been a better time to be a part of the exciting, ever-growing world of renewable energy!

Connecting 5,000 renewable energy power professionals with 300 exhibitors for three days of networking, new business negotiation, and the exchange of important ideas and information impacting the renewable energy industry today.

REenergize with new technologies, new companies, new strategies and new views!

The Geothermal Energy Association will be cosponsoring this event, with panels on geothermal energy soon to come. For more information and to register, visit <http://rewna09.events.pennnet.com/fl/>.

Canadian Geothermal Energy Association Conference and AGM, April 16–17, 2009, (Vancouver, B.C.)

The Canadian Geothermal Energy Association (CanGEA) announces their Conference and AGM on April 16–17, 2009 in Vancouver, B.C.

CanGEA's also announces its corporate members website is up and running. Corporate members have access to job postings, committee information (progress, research), presentations, and business opportunities (international JVs, work up for bid, or other geothermal prospects). Updated library of links and pdfs of Canadian geothermal research papers and documents (from multiple resources), reserves (geothermal energy potential, estimates for Canada), and online advertising opportunities will soon be available.

Visit the Web site for information: <http://www.cangea.ca/>.



GEA Update

A newsletter for GEA Members 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