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National News

House Committee Reportedly Votes for \$50 Million DOE Geothermal Program in FY 2009

While the final documents have not been publicly released, reports from several sources indicate that the House Appropriations Committee on June 25 voted to approve a FY 2009 Energy and Water Appropriations bill, which will provide \$50 million for the DOE Geothermal Research Program.

In FY 2008, the DOE program was funded at \$20 million, and the Administration had requested \$30 million from Congress in its FY 2009 budget proposal.

When Congress returns from the July 4 recess, the Energy and Water bill is expected to be considered by the full House and the Senate Appropriations Committee is expected to take action on its version of the bill.

More details on this legislation will be in future GEA Weekly Updates as they become available. You can also track the status of all FY 2009 appropriations bills by going to:

<http://thomas.loc.gov/home/approp/app09.html>.

California’s Scoping Plan Tackles Climate Change Impacts

After a year and half of work, the California Air Resources Board (CARB) released its [June 2008 Discussion Draft Climate Change Scoping Plan](#). Development of the Scoping Plan is a central requirement of [AB 32](#), the Global Warming Solutions Act of 2006 (Nuñez, Pavley), that calls on California to reduce its greenhouse gas (GHG) emissions to 1990 levels by 2020.

As the Governor’s [June 26, 2008 press release](#) states:

“The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California’s economy.”

The magic number that underlies AB 32’s unequivocal mandate is an estimation of 1990 emission levels: in December, 2007, the Board approved a **2020 statewide emission limit of 427 million metric tons** of carbon dioxide (CO₂) equivalents (MMTCO₂E) of greenhouse gases. What this equates to is **reducing emissions by 169 million metric tons by 2020**.

As the Scoping Plan says,

“Getting to the 2020 goal is not the end of the State’s effort. According to climate scientists, California and the rest of the developed world will have to cut emissions by 80 % from today’s levels to stabilize the amount of carbon dioxide in the atmosphere and prevent the most severe effects of climate change. This long range goal is reflected in Executive Order S-3-05 that requires **an 80 % reduction of greenhouse gases from 1990 levels by 2050.**”

So, how do CARB and the Governor’s [Climate Action Team](#) propose to do it? Reducing greenhouse gas emissions to 1990 levels means cutting approximately 30 % from business-as-usual emission levels projected for 2020, or about 10 % from today’s levels. On a per-capita basis, that means reducing “personal” emission from 10 to 14 tons of greenhouse gases for every person in California. The Plan’s proposed “Reduction Strategies” for compliance are based on a sector by sector analysis of the key contributors to GHG emissions, and suggestions for what each sector can do to contribute their fair share of reductions.

The key culprit is the **transportation sector**, who contributed approximately **38%** of GHG emissions based on 2002-2004 measurements. The second biggest contributor is the **electricity sector** with **23%** of the emissions portfolio. The third largest emissions category is the “**industrial**” sector with a **19%** share. A **catch all** of agricultural, residential and commercial, waste and high “gwp” gas releases account for the other **19%** of emissions.

The **proposed emission reduction strategies** are as follows:

- Expansion and strengthening of existing energy efficiency programs and building and appliance standards;
- Expansion of the Renewables Portfolio Standard to 33 %;
- Development of a California cap-and-trade program that links with the [Western Climate Initiative](#) to create a regional market system;
- Implementation of existing state laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard;
- Targeted fees to fund the State’s long-term commitment to AB 32 administration.

So what are the **big number targets** that will drive investment, regulation and creativity to reduce emissions by 169 million metric tons of CO₂ equivalent gases (MMT_{CO₂E})?

- the transportation sector must reduce its output by 60.2 MMT_{CO₂E}
- energy efficiency improvements will reduce emissions by 26.4 MMT_{CO₂E},
- meeting the state’s renewable portfolio standard for energy production will result in 21.2 MMT_{CO₂E}
- Preventing an increase in “high global warming potential” gases will save 16.2 MMT_{CO₂E}
- TBD “Additional Emissions Reduction from Capped Sectors” of 35.2 MMT_{CO₂E}. These capped sectors include transportation, electricity, industrial and commercial/residential use of natural gas.

Of particular interest to the energy sector is the assumption that California will mandate and invest in assuring compliance with a 33% renewable portfolio standard by 2020. As the press release states:

“The draft plan also proposes that utilities produce a third of their energy from renewable sources such as wind, solar and geothermal, and proposes to expand and strengthen existing energy efficiency programs and building and appliance standards that have already saved Californians more than \$50 billion over the past 30 years in reduced costs for energy.”

Release of the Draft Plan will be followed by further evaluation and economic modeling, and workshops are planned throughout the state to present the details to the general public and to allow CARB to hear

public comments. Public comments are requested by August 1, 2008 and the Board is scheduled to adopt the plan in November, 2008.

For additional questions on the AB 32 Scoping Plan, please contact John McCaull at john@geo-energy.org.

To view a draft of the AB 32 Scoping Plan, visit <http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.

New York Event to Show Bi-Partisan, International Support for Geothermal Energy in America

Press Release—June 25, [New York Event to Show Bi-Partisan, International Support for Geothermal Energy in America](#)

New York, NY – Demonstrating the widespread support for renewable, geothermal energy the President of Iceland as well as officials of the current Bush and former Clinton Administration are scheduled speak at a workshop in New York City, July 23rd. DOE Assistant Secretary Alexander Karsner, and former Assistant Secretary Dan Reicher (now Google.org Director for Climate Change and Energy Initiatives) are both on the agenda for the event. The keynote luncheon speaker will be the President of Iceland, Ólafur Ragnar Grímsson.

The Geothermal Energy Association (GEA) together with Ormat and Glitnir Bank will host a geothermal energy informational workshop at the Ritz-Carlton, Battery Park in New York City on Wednesday, July 23rd to introduce geothermal energy to the NYC finance community. The event will feature an all-star cast of expert presenters from leading companies in the geothermal industry.

The workshop entitled “Geothermal 101 – the Hottest Clean Energy Source” will include morning sessions in which leading professionals cover the basics of geothermal energy. In the afternoon, presentations will cover an overview of the world and US geothermal markets, an interactive finance panel with top geothermal financiers and developers, and a showcase of companies developing new projects and technologies. Among companies participating are: Glitnir Bank, Ormat, Google.org, MidAmerican Energy, EGS Inc., ThermaSource, US Renewables Group, Merrill Lynch, GeothermEx, UTC Power, Terra-Gen Power, Western Geo Power, Raser Technologies, Iceland America Energy, Geysir Green Energy, Vulcan Power, and Enel North America

Geothermal energy today provides power in California, Nevada, Hawaii, Utah, Idaho and Alaska. According to GEA, more than 80 new geothermal power projects are being built in 12 states. When completed these projects will represent an investment of over \$11 billion and more than double US geothermal power production. In 2006 the Massachusetts Institute of Technology and the National Renewable Energy Laboratory issued separate reports estimating that geothermal energy could potentially provide over 100,000 MW of electric power.

For more information, a current agenda, and registration materials go to www.geo-energy.org. Registration for the day, including lunch, is \$395. The morning program will be available by webcast. Registration is limited.

Credential press are offered complimentary admissions, but need to contact Kathy Kent in advance at kathy@geo-energy.org or by phone at 202-454-5263.

For press releases from GEA, visit <http://geo-energy.org/publications/pressReleases.asp>.

Environmental Issues Might Limit Geothermal Leasing Press Reports

The Bureau of Land Management and U.S. Forest Service hope to gather public opinion concerning a recently released environmental impact statement through 13 meetings set for July, according to seattlepi.com. Despite recent environmental concerns, the impact statement could potentially open up millions of acres to companies for geothermal leasing.

According to the article, the final document could take more than a year to be finalized and the leased acreage is still to be determined. Both BLM and U.S. Forest Service have a preferred amount of acres but recent concerns by environmental groups have brought forward a second option.

This alternative calls for approximately 61 million acres of BLM land and 31 million acres of Forest Service territory to be opened for geothermal leasing. About 155 million acres would be closed to leases, the article said.

"As with anything that's going to happen on public lands, it's important to consider all the resource impacts for any projects, whether it be geothermal or wind," Brad Brooks, with The Wilderness Society in Boise, told the press. "There are areas where we would be supportive of geothermal development. But there are other areas that should be off-limits, and that includes wilderness study areas and areas that are important for sage grouse."

For the complete article, visit http://seattlepi.nwsourc.com/local/6420ap_wst_geothermal_meetings.html.

For more information on the public meetings, visit

http://www.blm.gov/wo/st/en/info/newsroom/2008/june/NR_06132008.html.

For information on the PGEIS go to:

http://www.blm.gov/wo/st/en/prog/energy/geothermal/geothermal_nationwide.html.

Company News

Ormat Announces Contract for Geothermal Plant in Turkey

Press Release—June 26, [Ormat Technologies Secures a \\$16 Million Contract for a Geothermal Power Plant in Turkey](#)

Ormat Technologies, Inc. (NYSE: ORA) today announced that one of its subsidiaries entered into a supply contract for a new geothermal power plant to be constructed in Turkey. The contract is valued at approximately \$16 million and delivery of the equipment is expected to be completed within 16 months from the contract date.

The customer, MEGE- Menderes Geothermal Elektrik Uretim, A.S., a private developer and owner of the resource in Turkey, has one operating Geothermal Power Plant that was supplied by Ormat in 2004.

The new power plant significantly contributes to the local authorities' efforts to develop the base load needs of Turkey through dependable, indigenous and clean geothermal power, optimizing the energy utilization by converting both geothermal steam and brine from geothermal wells into electric power. The new plant will use air-cooled condensers and allow 100% geothermal fluid reinjection, which serves both to sustain the reservoir and to produce electrical power with virtually no environmental impact. Out of the four plants in Turkey, one uses water-cooled condensers and the rest are air-cooled. All utilize the hi-performance hi-efficiency organic turbine developed by Ormat for geothermal and recovered-energy applications. With this new development, Ormat technology maintains its leadership in the creation of electricity from geothermal resources in Turkey, both in MW and number of power plants.

Dita Bronicki, CEO of Ormat Technologies, said, "This marks our fourth order to supply equipment for

geothermal power in Turkey and continues our leadership position in creating clean energy both in MW and the number of power plants in the country. With the addition of this plant, Ormat will have increased the amount of MWs it supplies to 20 countries to over 950 MW. We view this milestone as a demonstration of the effectiveness and reliability of Ormat's solutions and it further reinforces the applicability of our renewable energy solutions to the world electricity markets."

For press releases from Ormat, visit <http://www.ormat.com/relation.php?did=84>.

Raser Technologies Receives 50 Power Generation Units

Press Release—June 25, Construction Update: Raser Receives First 50 Power Generation Units Units Designated for First Geothermal Power Plant

PROVO, Utah--(BUSINESS WIRE)--Raser Technologies, Inc. (NYSE Arca: RZ) today announced that it has taken delivery of the full 50 UTC Power geothermal power generating units ordered for the first geothermal power plant to be built in the state of Utah in over 20 years and provided an update on the Company's progress and strategic initiatives for its geothermal power projects.

UTC Power, a United Technologies company, has shipped to Raser the first 50 generating modular units that will generate electricity from Raser's geothermal resources. The geothermal plant is planned to have a gross generation capacity of 14 megawatts (MW) when configured under Raser's proprietary geothermal power plant design. Each 50 unit project is designed to produce net power generation between 10 and 11 MW that is sold to the purchasing utilities and is enough electricity to power approximately 9,000 homes. Net generation takes into account the station usage or parasitic load needed to pump the geothermal fluids throughout the plant. It is expected that generation during the cool months will exceed generation during the warmer months.

Raser recently announced that it had entered into a power purchasing agreement with the city of Anaheim, California to deliver up to 11 MW of the clean renewable energy from its Thermo plant in Beaver County, Utah. Raser anticipates that it will place its first entire plant in service in October 2008 by beginning delivery of the geothermal energy to Anaheim at that time. The generation units are scheduled to begin being connected starting in August and will be test operated until the final units are connected in October 2008.

Steve Brown, Raser's Executive Vice President of Construction and Engineering discussed the construction progress of the first Utah project saying, "We recently held a groundbreaking ceremony and are now placing concrete for the cooling towers and generation area. We finished drilling the second and third production wells and will continue drilling the re-injection wells. Once the production wells have been flow-tested and an independent third party analysis of the test data is completed, we will have fulfilled the final major conditions required prior to Merrill Lynch closing the construction funding for the plant. We greatly appreciate the nearly 100 drilling and construction professionals currently onsite helping us complete this project. We hope to have a link on our website soon that will give you a photographic update of our construction activities."

Steve and his team have done a terrific job in compressing the normal geothermal power plant construction timeline of 2-3 years into just a few months," stated Brent M. Cook, CEO of Raser Technologies. "It is not our intention to publicly detail the construction process for each of the eight projects in our pipeline. However, since this project represents a key milestone in Raser's development and we have had a number of queries and interest about the first project to be placed in service, we have decided that we will provide a few more details on the first project during the construction phase. We are excited about the progress to date on this first wave of projects and have a number projects being prepared for additional waves. We expect to start sending these first 50 generating units to the Thermo site in the August to September time frame so that the plant will be operational in October. We are nearing completion of all the conditions to close on the first construction funding from Merrill Lynch. We expect to be very busy over the next few months as we begin completing the first wave of projects."

For press releases from Raser Technologies, visit <http://www.rasertech.com/news.php>.

U.S. Geothermal Joins the Russell 3000 Index

Press Release—June 26, [U.S. Geothermal Set to Join the Russell 3000 Index](#)

U.S. Geothermal Inc. (“U.S. Geothermal”), a renewable energy company focused on the production of clean, renewable electricity from geothermal energy, is pleased to announce today that it is set to join the broadmarket Russell 3000® Index when Russell Investments reconstitutes its comprehensive set of U.S. and global equity indexes on June 27, according to a preliminary list of additions posted on www.russell.com.

Annual reconstitution of Russell’s U.S. indexes captures the 4,000 largest U.S. stocks as of the end of May, ranking them by total market capitalization. Membership in the Russell 3000, which remains in place for one year, means automatic inclusion in the large-cap Russell 1000® Index or small-cap Russell 2000® Index as well as the appropriate growth and value style indexes. Russell determines membership for its equity indexes primarily by objective, market capitalization rankings and style attributes.

“As a clean, green, energy company working toward energy security, it is gratifying to both shareholders and employees that U.S. Geothermal become part of the Russell 3000 Index,” said John Walker, Chairman of the Board of U.S. Geothermal. He went on to say, “Geothermal power generation is a proven, sustainable form of energy that has little or no green house gas emissions, and provides power to the grid 24 hours a day. It is the most reliable form of renewable energy.”

The Russell 3000 also serves as the U.S. component to the Russell Global Index, which Russell launched last year.

Russell indexes are widely used by investment managers and institutional investors for index funds and as benchmarks for both passive and active investment strategies. An industry leading \$4.4 trillion in assets currently are benchmarked to them. These investment tools originated from Russell’s multi-manager investment business in the early 1980s when the company saw the need for a more objective, market-driven set of benchmarks in order to evaluate outside investment managers.

Real-time market analysis on the Russell 3000 and other Russell Indexes is available at http://www.russell.com/Indexes/performance/real_time_market_analysis.asp.

For press releases from U.S. Geothermal Inc., visit <http://www.usgeothermal.com/NewsReleases.aspx>.

Renewable News

Federal Government Puts Freeze on Proposed Solar Power Plants

The federal government placed a freeze on new solar projects on public land in response to a surge in the amount of proposed solar power plants, according to worldrenewables.com. The government made the decision last month for the freeze, which is expected to last about two years for a study on the environmental impact of the power plants.

The article said that the Bureau of Land Management oversees millions of acres in Arizona, California, Colorado, Nevada, New Mexico, and Utah and will conduct an extensive environmental study looking at the affect of large solar plants on those areas.

With the heightened demand for clean energy development, the Bureau of Land Management has received more than 130 proposals from solar companies since 2005. The proposed projects could power more than 20 million homes, the article said.

“The Bureau of Land Management land has some of the best solar resources in the world. This could completely stunt the growth of the industry,” vice president for legislative and regulatory affairs for Ausra, a solar thermal energy company, Holly Gordon told the press.

Yet the Bureau of Land Management is focusing more on the benefits of the study. C. Stephen Allred, assistant Interior Department secretary for land and minerals management, told the press that a benefit of the study will be a single set of environmental criteria to weigh future solar proposals, which will ultimately speed the application process.

For the complete article, visit

<http://www.worldofrenewables.com/index.php?do=viewarticle&artid=1958&title=us-freezes-solar-energy-projects>.

Renewable Energy Outlook Supports Alternative Energy Sources

Inexhaustible and nonpolluting energy sources are available in abundance to help reduce the affects of the dwindling supply of fossil fuels and high levels of greenhouse gas emissions, according to an article on uli.org. Challenging these resources is the ability to extract them in large quantities.

Specifically, geothermal, wind, and solar power are all alternative forms of power that need to be supported consistently by the federal government, stated the article. Countries that have seen the best results with renewable energies are those that made a long term commitment to the industries.

Geothermal energy has a great potential in energy supply but is held back by the costs of finding reservoirs, drilling, and constructing geothermal power stations, the article said. However, there has been a substantial increase in the number of geothermal projects.

According to the article, in 12 states, 86 new geothermal power projects are underway, showing an increase of 35 projects since the end of 2006.

For the complete article, visit

http://www.uli.org/Content/NavigationMenu/DiscoverULI/LeadersinOurField/Publications/UrbanLand/CurentIssue/Urban_Land_Current_I1.htm.

World Energy Consumption to Increase Substantially by 2030

Highlights from Press Release—June 25, [World Energy Use Projected to Grow 50 Percent Between 2005 and 2030](#)

World marketed energy consumption is projected to grow by 50 % between 2005 and 2030, driven by robust economic growth and expanding populations in the world’s developing countries, according to the reference case projection from the International Energy Outlook 2008 (IEO2008) released today by the Energy Information Administration (EIA).

Average world oil prices in every year since 2003 have been higher than the average for the previous year and prices in 2007 were nearly double the 2003 prices in real terms. The IEO2008 uses oil price cases originally developed in the summer of 2007 for use in the Annual Energy Outlook 2008, which focuses on the U.S. energy outlook. These prices do not reflect the substantial run-up in prices that has occurred since that time. Nonetheless, although liquid fuels are expected to remain the largest single source of energy through 2030, the liquids share of marketed world energy consumption declines from 37 % in 2005 to 33 % in 2030 in the IEO2008 reference case.

High oil prices lead many consumers to switch to other fuels when feasible; fuel-switching and efficiency gains, for instance, slow the growth of oil use in the industrial sector. Those trends are even stronger in the

IEO2008 high price case, which reflects oil prices that are closer to those being paid in mid-2008, as this report is being issued.

Other report highlights include:

- Coal's share of world energy use has increased sharply over the past few years, and without significant changes in existing laws and policies, particularly those related to greenhouse gas emissions, robust growth is likely to continue. Coal accounted for 24 % of total world energy use in 2002 and 27 % in 2005, largely as a result of rapid increases in coal use in China. In the IEO2008 reference case, coal use expands by 2 % per year between 2005 and 2030, and coal's share of total world energy consumption reaches 29 % in 2030.
- Concerns about rising fossil fuel prices, energy security, and greenhouse gas emissions support the development of new nuclear generating capacity. World nuclear capacity is projected to rise from 374 GW in 2005 to 498 GW in 2030.
- Sustained high prices for oil and natural gas encourage expanded use of renewable fuels. Renewable energy sources are attractive for environmental reasons, especially in countries where reducing greenhouse gas emissions is of particular concern. Government policies and incentives to increase renewable energy sources for electricity generation are expected to encourage the development of renewable energy even when it cannot compete economically with fossil fuels. Worldwide, the consumption of hydroelectricity and other renewable energy sources increases by 2.1 % per year in the IEO2008 reference case between 2005 and 2030.

For press releases from EIA, visit <http://www.eia.doe.gov/press.html>.

For the full report, visit <http://www.eia.doe.gov/oiaf/ieo/index.html>.

Climate Change News

Climate Scientist Calls for Immediate Action to Curb Climate Change

Climate scientist James Hansen voiced his concern about global warming during a briefing to a House committee on June 23, according to a [guardian.co.uk](http://www.guardian.co.uk) article. Hansen said that urgent action is needed to cut green house gases before it is too late to curb global warming.

Hansen, the director of NASA's Goddard Institute for Space Studies, recommended that a carbon tax would be the most efficient way to cut global warming emissions and encouraged using more renewable energy sources. He also suggested that proceeds from the carbon tax be refunded to taxpayers in order to help them pay for more fuel efficient technologies, the article said.

"We have to level with the public that there has to be a price on carbon emissions," Hansen told the press. "That is the only way we are going to begin to move toward a carbon free economy."

Hansen added that world leaders had only one or two years to act before the planet reaches a "tipping point" with major consequences to the global climate and species survival.

The hearing before the House Select Committee on Energy Independence and Global Warming came 20 years after a previous hearing given by Hansen to Congress when he first warned that the greenhouse affect was warming the Earth's climate, the article stated.

For the complete article, visit <http://www.guardian.co.uk/business/feedarticle/7604750>.

National Intelligence Agencies Link Climate Change to National Security

Intelligence agencies predict that climate change could worsen problems like poverty, disease, migration and hunger, which might create conditions that could destabilize already vulnerable areas, said nytimes.com article. Tom Fingar, deputy director of national intelligence for analysis, voiced the agencies' prediction on Wednesday to a joint hearing of a special House committee on global warming and a House Intelligence subcommittee.

The intelligence report predicts that the United States and many of its allies should have the means to face climate change economically but specifies other areas that might not have that capability, the article said. Further, the vulnerable areas could become breeding grounds for extremism and terrorism.

Although the assessment of global climate change through 2030 correlates global warming to national security, Fingar told the press that the finding might be hampered by the fact that climate data tend not to focus on specific countries but on broad global changes.

For the complete article, visit http://www.nytimes.com/aponline/washington/AP-Global-Warming-Security.html?_r=2&scp=3&sq=climate+change&st=nyt&oref=slogin&oref=slogin.

Scientists Predict North Pole Will Melt This Summer

For the first time in history, the North Pole could be ice free this summer, according to nationalgeographic.com. Scientists report that firsthand observations and satellite images show that the immediate area around the North Pole is now primarily first-year ice, which is prone to melting during the summer months.

The article stated that the ice forecast serves as a warning of how quickly the Polar Regions are being affected by global warming. Further, the North and South poles are expected to show the most dramatic effects of climate change.

"We lost 65 percent of the ice cover in the Northern Hemisphere all in one year," David Barber, of the University of Manitoba, told the press. "So it was a whopping decrease. We didn't even think it was possible for the system to lose so much ice all at once."

Models predict that the North and South poles will see temperature increases approximately three times as quickly as the rest of the world because of an effect known as ice albedo feedback, which occurs when highly reflective ice gives way to dark water, the article said. It is also predicted that the Arctic will be completely ice free by summer 2100.

For the complete article, visit <http://news.nationalgeographic.com/news/2008/06/080620-north-pole.html>.

Tony Blair Calls for G8 to Bridge Gap on Climate Change

Tony Blair recently released a new report, *Breaking the Climate Deadlock*, and now he is looking toward the leaders of the G8 nations to agree on realistic solutions to global warming, according to guardian.co.uk. The former prime minister told reporters that the report is "designed to be a practical way through; not yet another campaigning polemic to wake the world up to the challenges of global warming."

Blair acknowledged that the G8 leaders would not agree on a mid-term reductions target for 2020 at next month's Hokkaido summit in Japan but that they should set out a realistic path toward future targets to discuss at the United Nation's climate change conference in Copenhagen next year, the article said.

According to the article, Blair further suggested that some practical issues for leaders to discuss are funding, the possible auctioning of carbon credits and access to carbon markets for developing countries. But any solution "must be radical. It must put the world on a path away from carbon dependence to a new and green economy," Blair told the press.

For the complete article, visit <http://www.guardian.co.uk/environment/2008/jun/27/climatechange.g8>.

State News

Alaska: Naknek Looks to Geothermal Energy

The Southwest Alaska community of Naknek is looking toward geothermal energy to help lighten the affects of decreasing salmon prices and escalating energy bills, said an article on petroleumnews.com. Naknek Electric Association (NEA) aims to find a geothermal energy source with the potential of supplying electricity to 30 communities in the area.

Geothermal resources have been identified in the area but have gone untouched because they fall inside a national park. According to the article, new technological advances in deep geothermal drilling now present opportunities for geothermal exploration in the area.

NEA has identified three possible geothermal sites and will conduct 3D seismic surveys to determine a target for deep drilling. "That's where we're at now," NEA's general manager Donna Vukich told the press. "We're hoping to get our seismic testing and modeling done this summer, so that we might be ready this winter to actually do a deep well drill."

Primary motivation for geothermal energy development in Naknek is that reduced electricity prices could lead to a revival of the commercial fishing industry in the region, the article stated.

For the complete article, visit <http://www.petroleumnews.com/pntruncate/881351375.shtml>.

Alaska: Plans to Begin Geothermal Leasing at Volcano

Alaska is home to volcanoes and hot springs and the state's Division of Oil and Gas is now looking to tap those resources by beginning a lease sale that would allow companies to explore geothermal resources in those areas, stated an article on reuters.com. Specifically, the focus is on Mount Spurr, where geothermal energy could possibly power thousands of homes east of Anchorage.

According to the article, officials hope to have the lease sale in August, offering 36,000 acres on the south side of the volcano. The division is also considering offering a separate exploration license that would allow geothermal investigations at Augustine Volcano, located 171 miles southwest of Anchorage.

However, drawbacks will still need to be addressed before the resources can be tapped. This includes geological positioning of Mount Spurr and Augustine, which results in heat sources being deep within the volcano and safety issues due to the consistent volcano activity.

Many hope that these drawbacks will be overcome and more activity will be seen at the sites with more economic interest in harnessing geothermal heat at the volcanoes.

For the complete article, visit <http://www.reuters.com/article/email/idUSN2441780920080624>.

Illinois: Sherman Hospital Ready to be Powered by Geothermal Energy

Sherman Hospital, located in Elgin, Illinois, is one step closer to being powered by geothermal energy, according to an article in [suburbanchicagonews.com](http://www.suburbanchicagonews.com). On June 18, the hospital's geothermal lake gained 185 miles of pipes that will be used to heat and cool the hospital.

Aimed to open in late 2009, Sherman Hospital is located on 154 acres and seemed to be an ideal place to incorporate geothermal energy, the article said. "The geothermal idea certainly resonated in this community, where people are concerned with the environment," Sherman Chief Executive Officer, Rick Floyd, told the press.

The article stated that it is estimated that the geothermal system will pay for itself within four and a half years by saving the hospital \$1 million a year in renewable energy.

For the complete article, visit

http://www.suburbanchicagonews.com/couriernews/news/1011295.3_1_EL18_A1SHERMAN_S1.article.

International News

Australia: Geothermal to Aid the Mining Industry

South Australia Premier Mike Rann wants the federal government to allocate more funds to the renewable energy sector in order to power mining sites, according to an article on news.com. The mining industry is expected to need an additional 1000 MW every year to keep up with the mining expansion.

Rann told the press that he wanted the federal government to use some of its \$20 billion Building Australia fund to help connect mining sites directly to renewable energy sources, such as geothermal projects in South Australia's outback and the state's rapidly expanding wind farm sector.

Rann also hopes that the commitment from the federal government would encourage more private investments in geothermal and wind power, the article said.

For the complete article, visit <http://www.news.com.au/adelaidenow/story/0,22606,23920848-2682,00.html>.

Iceland: Capital of Iceland Gains Five Geothermal Power Plants

Mitsubishi Heavy Industries and Balcke-Dürr, a German engineering company, will build five 45 MW geothermal power plants in Reykjavik, Iceland, according to engineer.co.uk. Reykjavik Energy commissioned the companies to build the plants in order to supply electricity to new aluminum refineries that will be built in the area.

This new project adds to several additional orders that Mitsubishi Heavy Industries previously received for geothermal plants in Iceland, bringing the total number of geothermal plants to 15. Collectively, the plants will provide 565MW of power once they are completed, the article said.

The new plants are expected to be completed by February 2012.

For the complete article, visit <http://www.theengineer.co.uk/Articles/306838/Geothermal+power.htm>.

Kenya: Country to Use Renewable Energy to Counter Future Power Shortages

Kenya's largest power producer, Kenya Electricity Generating Company (KenGen), has warned that within two years the country will face major power shortages if the government does not increase power generation capacity, said an article on eastandard.net

The Electricity Regulatory Commission already increased tariffs to raise the necessary funds to confront the energy crises in the country, which calls for current generation capacity to triple in the next 10 years, the article stated.

According to the article, KenGen wants to install 1,260 MW of geothermal power and 200 MW of hydro power in the next 10 years, with wind and solar power also an option. Current projects, including a 35 MW geothermal plant by OrPower, are expected to add 600 MW to the national grid.

For the complete article, visit <http://www.eastandard.net/news/?id=1143989379&cid=14>.

Nevis: Drilling Begins on Second Geothermal Development Well

West Indies Power Ltd. began drilling a second geothermal development well in Nevis on Tuesday, according to caribbeannetnews.com. The drilling at Nevis 2 is meant to expand the projected capacity of the geothermal reservoir at Nevis 1.

With the completion of Nevis 2 expected by the end of July, West Indies Power will then drill a third geothermal development well at Nevis 3. Projected capacity of the geothermal resources in Nevis is estimated in the range of 200-500 MW, the article said.

The article also stated that West Indies Power hopes to move into production drilling after September.

For the complete article, visit <http://www.caribbeannetnews.com/news-8748--35-35--.html>.

Southeast Asia: Indonesia and the Philippines Try to Tap Geothermal Resources

The escalating energy crises and high power demand has led Indonesia and the Philippines to find it more urgent to exploit their geothermal resources, according to a reuters.com article. Both countries are located in the Pacific Ring of Fire, with numerous volcanoes and the world's biggest reservoir of geothermal power.

The article stated that Indonesia and the Philippines are trying to overcome challenges in order to use their resources. In Indonesia, the Bedugul project could provide up to 175 MW of power but is on hold because nearby residents are worried that it could damage a sacred area and affect water supplies from the nearby lakes.

The Philippines, currently the world's second-biggest geothermal producer behind the United States, is facing obstacles developing geothermal reserves due to high acidity associated with active volcanoes, which can corrode the pipes, the article said.

According to the article, the Philippines is trying to achieve its goal of raising geothermal capacity from an existing 1,931 MW to 3,131 MW by 2013, while Indonesia is trying to expand geothermal power from its current supply of just 850 MW out of an estimated 27,000 MW potential.

Despite the obstacles and stalled projects, high energy prices are providing the spur for energy firms to look at geothermal energy again and several are keen to expanding their existing operations or bidding for new projects, the article said.

For the complete article, visit

<http://www.reuters.com/article/rbssEnergyNews/idUSJAK14417520080629?sp=true>.

Notices and Employment Opportunities

Financial Assistance Funding Opportunity Announcement, U. S. Department of Energy National Energy Technology Laboratory (Applications Due July 10)

Funding Opportunity Number: DE-PS26-08NT00319

Where to Submit

Applications must be submitted through Grants.gov to be considered for award. You cannot submit an application through Grants.gov unless you are registered. Please read the registration requirements carefully and start the process immediately. Remember you have to update your CCR registration annually. If you have any questions about your registration, you should contact the Grants.gov Helpdesk at 1-800-518-4726 to verify that you are still registered in Grants.gov.

Registration Requirements

There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). See <http://www.grants.gov/GetStarted>. Use the Grants.gov Organization Registration Checklist at <http://www.grants.gov/assets/OrganizationRegCheck.pdf> to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants who are not registered with CCR and Grants.gov should allow at least 21 days to complete these requirements. It is suggested that the process be started as soon as possible. **IMPORTANT NOTICE TO POTENTIAL APPLICANTS:** When you have completed the process, you should call the Grants.gov Helpdesk at 1-800-518-4726 to verify that you have completed the final step (i.e. Grants.gov registration).

Microsoft Vista and Office 2007 Compatibility

Grants.gov is currently incompatible with both the new Microsoft (MS) Vista Operating System and the new Microsoft (MS) Office 2007 versions of Word, Excel, and Power Point. In order to create and submit your application to Grants.gov, you must find a computer with a previous version Microsoft Operating System, such as Windows XP. If you attach a file created using MS Office 2007, you will not get an error message when you submit the application, HOWEVER, your entire application will not be able to be processed or accepted at Grants.gov and will not reach DOE. Grants.gov can accept applications with attachments created in MS Office 2007 if the attachments are saved in the prior format. See the http://www.grants.gov/assets/Vista_and_office_07_Compatibility.pdf for detailed instructions on how to do this. A file created in MS Office 2007 can be identified by the "x" at the end of the file extension, for example "sample.docx" for a Word file. Contact Grants.gov at 1-800-518-4726 with any questions.

Questions

Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov. Part VII of this announcement explains how to submit other questions to the U.S. Department of Energy (DOE).

Application Receipt Notices

After an application is submitted, the Authorized Organization Representative (AOR) will receive a series of five e-mails. It is extremely important that the AOR watch for and save each of the emails. It may take up to two (2) business days from application submission to receipt of email Number 2.

When the AOR receives e-mail Number 5, it is their responsibility to follow the instructions in the e-mail to log on to IIPS and verify that their application was received by DOE. The titles of the five e-mails are:

- Number 1 – Grants.gov Submission Receipt Number
- Number 2 – Grants.gov Submission Validation Receipt for Application Number

- Number 3 – Grants.gov Grantor Agency Retrieval Receipt for Application Number
- Number 4 – Grants.gov Agency Tracking Number Assignment for Application Number
- Number 5 – DOE e-Center Grant Application Received

The last email will contain instructions for the AOR to register with the DOE e-Center. If the AOR is already registered with the DOE e-Center, the title of the last email changes to:

- Number 5 – DOE e-Center Grant Application Received and Matched

This email will contain the direct link to the application in IIPS. The AOR will need to enter their DOE e-Center user id and password to access the application.

Nicaraguan Energy Ministry Seeks Offers to Develop San Cristobal Volcano (Bids Due July 31)

The Nicaraguan government is considering offers of at least \$30,000 made before July 31 to develop at the San Cristobal Volcano.

Nicaragua's Energy Ministry posted a statement on their Web site at <http://www.mem.gob.ni/media/file/ADQUISICIONES/CONVOCATORIA%20LICITACION%20CASITA.pdf>.

The documents, in Spanish, can be obtained from:

MINISTERIO DE ENERGIA Y MINAS

Del Portón del Hospital Bautista 1 c. Abajo, 125 vrs. al lago. Apartado postal CJ-159.

Managua, Nicaragua

PBX: (505) 222-5576 Fax: (505) 222-4629

For more information, contact:

- Lic. Iván Cortés, Dirección General de Electricidad y Recursos Renovables, correo electrónico: ivan.cortez@mem.gob.ni
- Ing. Magdalena Pérez, correo electrónico: magdalena.perez@mem.gob.ni
- Lic. Aura María González correo electrónico: aura.gonzalez@mem.gob.ni. Pagina web: www.mem.gob.ni

FOA, U.S. DOE, Enhanced Geothermal Systems Research, Development, and Demonstration (Applications Due August 12)

Announcement Number: DE-PS36-08GO98008

Initial estimated total funding for this award is listed at \$10,500,000 in FY'2008; with additional anticipated funds of \$79,000,000 in FY'2009 and FY'2010, subject to change and Congressional appropriations. There are also distinctions between funding for two topic areas covered in this FOA. Please see the FOA for detailed funding information.

Geothermal energy is an abundant, reliable, ubiquitous, base load, indigenous renewable energy source. Only the hydrothermal portion of the geothermal resource has been developed commercially around the world. There are a significant number of hydrothermal systems that do not have adequate productivity for economic production. To address the development of Enhanced Geothermal Systems (EGS), DOE recognizes that there will be challenges requiring new technology development in the form of R&D, field testing, and verification in order for EGS to enter the marketplace. DOE is seeking to partner with geothermal stakeholders to alleviate some of the risks of EGS development through this Funding Opportunity Announcement (FOA) covering two key topic areas. This integrated FOA will allow DOE to develop new sensors, down-hole tools, and mapping capabilities in order to operate at greater depths and higher reservoir temperatures, and to partner with geothermal stakeholders to increase the knowledge and understanding necessary for EGS to advance to a state of commercial readiness. Brief descriptions of both topic areas are as follows:

Topic Area 1: Component Areas R&D

This topic area seeks projects that address key aspects of engineered reservoir creation, management, and utilization by developing tools and techniques useful to temperatures up to 300°C and depths as great as 10,000 m. Areas of interest include: zonal isolation; down hole pumps; fracture characterization; image fluid flow; tracers and tracer interpretation; high temperature logging tools and sensors; and stimulation prediction models. These technology improvements are discussed in greater detail in the report, An Evaluation of Enhanced Geothermal Systems Technology, posted on the DOE website:

http://www1.eere.energy.gov/geothermal/pdfs/evaluation_egs_Tech_2008.pdf.

Topic Area 2: System Demonstrations

This topic area seeks projects that will successfully characterize a geothermal system with low natural productivity, develop a plan to stimulate the productivity of the system, stimulate a well in the system and monitor the productivity or injectivity of the well in relation to other wells available in the system. The projects will allow testing and validation of stimulation techniques for improving productivity of wells or increasing inter-well connectivity at existing geothermal fields. Use of available or experimental technologies from geothermal, petroleum or other relevant industries will be considered.

Applications for this Funding Opportunity Announcement must be accessed, completed, and submitted through Grants.gov at <http://www.grants.gov> to be considered for award. Questions regarding the content of the announcement should be submitted through the “Submit Question” feature of the DOE Industry Interactive Procurement System (IIPS) at <http://e-center.doe.gov>.

VERY IMPORTANT: To complete and submit applications through Grants.gov, there are several actions you must complete (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), install the PureEdge Viewer, register with the credential provider, and register with Grants.gov). Applicants are highly encouraged to register as soon as possible and should allow at least 21 days to complete the registration process. When done, call the Grants.gov Helpdesk at 1-800-518-4726 to verify successful registration. Registration Instructions are found on the Grants.gov web site at <http://www.grants.gov> and in the Funding Opportunity Announcement.

Should you have questions regarding the operation of Grants.gov, please contact the Grants.gov Contact Center at support@grants.gov or 1-800-518-4726. Contact Center hours of operation are Monday–Friday from 7:00 am to 9:00 pm Eastern Standard Time.

Visit <https://e-center.doe.gov/iips/faopor.nsf/3b3cff0a4a1f243485256ec100490e1a/c6ac09127a4b508b8525746c005f950d?OpenDocument> for information and instructions. The full announcement can be found at [Announcement DE PS36-08GO98008.pdf](#). Additional information is available at [Document; Enhanced Geothermal Systems Research, Development, and Demonst...: 06/19/2008](#).

Rio Tinto Alcan and the International Business Leaders Forum, Prize for Sustainability (Responses Due September 12)

Rio Tinto Alcan and the International Business Leaders Forum seek nominations for the Rio Tinto Alcan Prize for Sustainability. The prize recognizes organizations demonstrating a comprehensive approach to addressing, achieving and further advancing economic, environmental and/or social sustainability. First prize is \$1 million. Responses due 9/12/08.

For more info, go to: <http://www.alcanprizeforsustainability.com/intro.php>.

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 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 Partnerships for a Clean and Sustainable China, U.S. DOE (July 11)

The U.S. Department of State requests proposals for China Request for Assistance. Through this initiative, DOS seeks proposals from U.S. and Chinese organizations to assist in areas including reducing greenhouse gas emissions; advancing sustainable economic growth; reducing poverty; creating new investment opportunities; building local capacity; and improving economic and energy security. \$6.79 million expected to be available, up to 15 awards anticipated. Responses due 7/11/08.

For more info, go to:

<http://www07.grants.gov/search/search.do?&mode=VIEW&flag2006=false&oppId=41879>.

Refer to Sol# S-OES-08-RFA-003. (Grants.gov 6/2/08)

RFP for U.S. and China Clean Energy Partnership, U.S. Agency for International Development (July 17)

The U.S. Agency for International Development requests proposals for the U.S. and China Clean Energy Partnership. This program will support public-private partnership activities that assist China in achieving its national energy efficiency goals and reduce its growing contributions to greenhouse gas emissions, while at the same time addressing China's local and regional air pollution and unsustainable energy consumption patterns. \$2 million expected to be available, 1 award anticipated. Responses due 7/17/08.

For more info, contact Praveena ViraSingh at pvirasingh@usaid.gov or go to:

<http://www07.grants.gov/search/search.do?oppId=41898&flag2006=false&mode=VIEW>.

Refer to Sol# USAID-RDMA-CHINA-486-08-008-RFA. (Grants.gov 6/4/08)

RFP for Renewable Energy, Arizona Public Service (August 13)

The Arizona Public Service seeks at least 35,000 MWh and up to 1,000,000 MWh from renewable energy resources. Notice of Intent to Bid is due 7/11/08, final proposals due 8/13/08.

For more info, contact Gordon Samuel at RenewableRFP@aps.com or go to:

<http://www.aps.com/aps/rfp/renewable2008/default.html>.

RFP for Renewable Energy, Tucson Electric Power Co. and UNS Electric (September 5)

Tucson Electric Power Company and UNS Electric RFP seek up to 150,000 MWh from eligible renewable energy resources and associated credits to meet Arizona's RPS requirements. Responses due 9/5/08.

For more info, contact Carmine Tilghman at ctilghman@tep.com or go to: <http://www.uesaz.com/Wholesale/>. (Green Power Network 6/7/08)

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 Climate Change and Sustainability Conferences, U.S. 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)

Upcoming Events

2008 Reznick Group Renewable Energy Business Symposium—The Crossroads of Technology and Finance in Renewable Energy, July 14–16 (Denver, CO)

Reznick Group is pleased to announce the first in a series of business symposiums created for key decision makers in renewable energy business and technology.

The Crossroads of Technology and Finance in Renewable Energy will explore the critical relationship between technology and finance in the successful development of renewable energy projects and infrastructure. It is designed for leaders looking to improve their understanding of renewable energy technologies, transactions, valuations and business issues and capital structures. It will provide a unique opportunity for developers, investors, power producers, technology firms and others to come together and learn important new information in the rapidly changing renewable energy industry.

Speakers include:

- Congressman Mark Udall (D-CO)
- John Geesman—American Council on Renewable Energy
- Matt Ringer—National Renewable Energy Laboratory
- Ted Schultz—Duke Energy
- John Eber—JP Morgan
- Saf Dhillon—U.S. Geothermal Inc.
- Jigar Shah—SunEdison
- Patty Hargreaves—Mondial Energy Inc.

For more information or to register, please visit the website at http://www.reznickgroup.com/sub_main.php?document_id=92&ion_id=5&subpage=14.

GEA “Geothermal 101” Workshop, July 23 (Ritz-Carlton @ Battery Park, New York City)

The Geothermal Energy 101- Finance and Development Workshop will consider geothermal energy from a variety of viewpoints, including a Geothermal Basics Tutorial, US and World Market Review, Financial Issues and Perspectives and a Geothermal project showcase that will span projects in development and new technologies. (See Story under National News above.)

Come hear leading experts discuss a fast growing renewable energy industry considered to have massive untapped energy potential. Space is limited, reserve your spot today!

To view the full agenda, or to register, go to http://geo-energy.org/financeWorkshop/work_shop.asp. Or for more information contact Kathy Kent at: kathy@geo-energy.org.

Oregon/Washington Geothermal Lease Sale July 24, 2008, Proposed Sale Postponed

The Bureau of Land Management’s Oregon/Washington State Office had proposed to hold a geothermal resources lease sale on July 24, 2008.

The proposed sale was for parcels located in the Glass Butte area (Lake County). Upon review of the current planning documents, the District has determined that further studies must be done to be compliant with National Environmental Policy Act (NEPA) requirements. Therefore, the sale has been postponed until further notice.

We are still accepting nominations for future sales. Nominations are not automatically placed on a sale when received, and BLM cannot guarantee that the nominated lands will always be included on a particular sale notice. The parcels must be reviewed for availability and for environmental and cultural concerns prior to being placed on a sale. Sale parcels will normally be configured as requested; however, BLM reserves the right to adjust the parcel size and configuration as needed.

Each nomination must be submitted with a nonrefundable filing fee of \$100 per nomination plus \$0.10 per acre of lands nominated. If a land parcel consists of fractional acreage, please round the land acres up to the nearest whole acre.

*Sale notices, results lists, and Form 32031 will be posted on our Web site at:
<http://www.blm.gov/or/energy/geothermal/index.php>*

If you have questions regarding this notice, please call Donna Kauffman at 5038086162; write to the attention of OR936.2 at the address on this letterhead; or send electronic mail to Donna_Kauffman@or.blm.gov.

California Geothermal Summit, California Geothermal Energy Collaborative, July 30 (Sacramento, CA)

The California Geothermal Summit will be held on Wednesday, July 30, 2008 at the Embassy Suites Hotel, 100 Capitol Mall, Sacramento, CA.

The renewable energy landscape in California is changing.

Your input at this Geothermal Summit is important on issues of research, state and federal policies, RPS goals, climate change impact, and transmission decisions.

Meeting the approaching RPS goals will be a daunting challenge for the state. Also, the AB32 greenhouse gas reduction mandate provides additional opportunities and issues for all renewables. The 2008 California Geothermal Summit will focus on what the future holds for the geothermal community, and how we can more effectively partner with other renewable technologies

Registration Fee - \$85.00
Late Registration Fee after July 21 - \$160
(Limited seating available)

Registration fee is payable by check to the Geothermal Education Office or a Visa or MasterCard credit card. Please note: your credit card statement will show a charge from California Study.

Registration Processing is being handled by Marilyn Nemzer at the Geothermal Education Office. The registration form can be found at <http://ciee.ucop.edu/geothermal/documents/2008CGECSummitFlyer.pdf>. To request a registration form in Word format, send an email to the address listed below. Please return the attached registration form and payment to the Geothermal Education Office using one of the following:

Email: GEO.nemzer@gmail.com
Fax: (415) 435-7737
Mail: 664 Hilary Drive, Tiburon, CA 94920

For general questions concerning the workshop, contact CGEC Administrative Manager Judy Fischette at fischette@sbcglobal.net.

Hotel information and directions will be provided after you register.

11th Annual Congressional Renewable Energy, Energy Efficiency EXPO, and Forum, Sustainable Energy Coalition, July 31 (Washington, DC)

The 11th Annual Congressional Renewable Energy & Energy Efficiency EXPO + Forum will be hosted by the Sustainable Energy Coalition in cooperation with Members of the congressional Renewable Energy & Energy Efficiency Caucuses. The day-long event will be held in the Caucus Room of the Cannon House Office Building in Washington, DC on Thursday, July 31.

This year's EXPO will bring together more than three dozen businesses, sustainable energy industry trade associations, and energy policy research organizations to showcase the status and near-term potential of the cross-section of renewable energy and energy efficiency technologies.

As Congress, the Administration, the business community, and American voters search for options to address ever-higher energy prices, increased reliance on energy imports, and the potential threat posed by rising levels of greenhouse gas emissions, the EXPO will help address the role that sustainable energy technologies might play. This will include not only the technical aspects of renewable energy and energy-efficient technologies but also related issues such as economics, current and near-term market potential, model programs in the public and private sectors, institutional and legal barriers, etc.

Attendance is free and no RSVPs are required.

For more information and to register to exhibit, contact:

Ken Bossong

Sustainable Energy Coalition

6930 Carroll Avenue

Suite #340

Takoma Park, MD 20912

301-270-6477 x.23

Kbossong614@yahoo.com

<http://www.sustainableenergycoalition.org>

Geothermal Technologies Workshop, Western Area Power Administration, August 11-12 (Everett, WA)

Western Area Power Administration (Western) is hosting a Geothermal Technologies workshop. The theme is "Electric Utilities' Roles in Promoting Geothermal Energy Technologies." It is cosponsored by the American Public Power Association (APPA), the National Rural Electric Cooperative Association (NRECA), and the Utility Geothermal Working Group (UGWG).

The target audiences for the workshop are utility staff who are interested in learning about geothermal technologies—including geothermal heat pumps (GHP) and geothermal power production—who want to compare them with other resource options, or who want to learn how to improve on existing programs. Through class presentations, case histories, and demonstrations, attendees will learn about:

- Cost effectiveness tests of GHP from the utility and customer perspectives
- Case histories of GHP systems energy savings over conventional HVAC systems
- How GHP programs qualify as energy efficiency programs
- New drilling and installation techniques

- Cost comparisons of geothermal power and other resource options

Georg Shultz the Director, Electric Staff Division for the USDA's Rural Utility Services (RUS), will give an update on the RUS's work with cooperatives on promoting geothermal technologies in rural areas.

Workshop fees are \$90 for one day and \$125 for both days. Reduced fees for APPA, NRECA, NWPPA, and State Working Group members and Western Customers are \$60 and \$90. If you wish to attend, please fill out the registration form and send a check to made payable to Utility Forum Connection to:

Utility Forum Connection
PO Box 255
Lincoln City, OR 97367

Questions? Contact Guy Nelson, energyguy@utilityforum.com or (541) 994-4670.

Renewable Energy Philippines 2008, August 28–30 (Manila, Philippines)

This is the First International Exhibition & Conference on Renewable Energy in the Philippines.

Renewable energy is getting more and more attention because of global warming. Renewable Energy Philippines 2008 is a link to enable the U.S. Renewable Energy providers, manufacturers, and researchers to go overseas and encourage other countries to invest in environment friendly energy sources.

Asian Development Bank & World Bank will speak on Future Carbon Fund, Carbon Finance Program, and support of CDM Projects.

August 28–30, Hall 3, SMX Convention Center
Metro Manila, Philippines

The exhibition provide a one-stop B2B and technology exchange platform for equipment manufacturers and suppliers, project operators, financing institutions, oil & gas producing companies, state-owned companies and relevant Government Agencies to meet and do business under one roof and venue. Exhibition profile includes all equipment, technology applications and projects available for investment to the following fields of interest:

- Alternative Fuels
- Gas Energy
- Geothermal Energy
- Hydro Energy
- Ocean Energy
- Solar Energy
- Wind Energy
- Others—Battery, Energy Bank, Energy Saving Products, etc.

*For more information, contact: TDC EVENTS INTERNATIONAL INC., 1504 FRANCISCO STREET
BERKELEY, CA 94703*

*USA Contact: Maria Gomez, Tel: +1 305 4365751, Fax: +1 305 4365352, Cel: +1 305 7722549, e-mail:
maria@andinalink.com*

*Latin America Contact: Andrea Valencia, Tel: +571 4821717, Fax: +571 3128782, e-mail:
andrea@andinalink.com*

Web site: www.dp-link.com

GEA Trade Show/GRC Annual Meeting, October 5–8 (Reno, NV)

The GEA Trade Show and GRC Annual Meeting will take place October 5-8 Peppermill in Reno, Nevada. Annually, Geothermal Energy Association hosts a wide range of companies working in the U.S. and abroad within the geothermal power industry at its Trade Show. Last year in Reno/Sparks, Nevada, 71 booths were visited by over 1000 visitors. With dramatic growth underway in geothermal power projects in the U.S. and internationally, we expect the 2008 trade show in Reno to be our largest event yet!

*For more information about the GEA Trade Show, visit http://www.geo-energy.org/2008_ts/index.htm.
For information about the GRC Annual Meeting, go to <http://www.geothermal.org>.*

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.

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.

Scientific Program

The Scientific Program of the conference consists of Plenary Lectures, Poster presentations, Workshop and Field Trips. The structure and the list of sessions below are preliminary.

A number of Keynote addresses will be given by eminent scientists, on subjects relevant to the main themes of the conference (as indicated in this circular). Lectures will be open to all participants and will take place in a large conference hall.

Sessions

The following will be the themes for oral and poster sessions:

- Session 1: Exploration: Geology, Geophysics, Geochemistry, and Hydrology
- Session 2: Drilling and well design: Shallow and deep, Production and Injection
- Session 3: Field development, Production Technology, Power generation & Operation.
- Session 4: Reservoir Engineering: Well Testing, Injection, and Modeling
- Session 5: Case Histories
- Session 6: Economics and Financing
- Session 7: Environmental, Social, Legal and Institutional Aspects

· Session 8: Direct Use: Agri- and aquaculture, Mineral extraction, Manufacturing, Air conditioning etc.

Contributions

The organizers of ARGeoC2 welcome submission of titles/extended abstracts for oral and poster presentations from all geoscientists, engineers and others involved in geothermal resources exploration and development. Authors may submit papers for publication only, or for presentation and publication in “The Conference Proceedings.” Papers may be selected for presentation in a technical session, or poster session. Selection of papers for presentation will be based on subject material suitability, professional standards of writing, and quality of the illustrations. Time allotted for oral presentations will be 15 minutes each, with an additional 5 minutes for discussion. Oral presentations will be illustrated with LCD Projector in PowerPoint.

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.



GEA Update

A newsletter for GEA Members written by Kara Slack and Karl Gawell.

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