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GEA Weekly Update March 11, 2008

National News.....	2
Senate Budget Proposal Would Make Room for Renewable Tax Extensions.....	2
President Bush Addresses World Renewable Congress, Praises Nuclear Efforts, Silent on Renewable Tax Credit Extension	2
Clyburn Urges Bush to Support Renewable Energy Legislation	3
WIREC: Geothermal Energy Heats Up Trade Show, Business Conference	3
Senator Domenici Introduces Clean Energy Investment Bank Legislation.....	6
House Appropriations Subcommittee on Energy and Water Development Announces Instructions for Providing Written Public Testimony for Fiscal Year 2009	7
Company News	7
Drilling Underway at The Geysers	7
Raser Technologies Adds Two Geothermal Projects.....	8
Renewable and Climate Change News	8
Simbol Mining Introduces Geothermal “Lemonade” Plan for Lithium	8
Governor Schwarzenegger Supports Sunrise Powerlink.....	8
B&D Consulting Expands Energy and Climate Change Practice.....	9
State News	9
New York: Rockland County Seeks Geothermal Tax Exemption	9
Oregon: U.S. Geothermal to Drill at Neal Hot Springs.....	9
Utah: Raser Completes Drilling with Positive Results.....	10
International News.....	10
Indonesia: Sarulla Project to Begin Construction in 2009.....	10
U.S. Virgin Islands: Delegation Visits Geothermal Operations in Nevis	10
New Zealand: Mighty River to Build Geothermal Plant.....	11
Philippines: Tiwi-Makban Geothermal Assets on Auction; PNOC-EDC to Bid.....	11
Turkey: Zorlu Energy Wins Bid to Privatize Plants.....	12
Turkey: Power Engineers Inc. to Support Geothermal Plant.....	12
Notices and Employment Opportunities	12
Correction to Last Week’s Update.....	12
Employment Opportunity—Terra-Gen Operating Company	12
Employment Opportunities—Mighty River Power	13
Employment Opportunity—Nevada Geothermal Power Inc.	14
Requests for Proposals (RFPs).....	15
RFP Enhanced Geothermal Systems—U.S. Department of Energy	15
RFP Renewable Energy Certificates—U.S. Air Force (Due March 13)	15
RFI for Geothermal Development— Colorado (Due March 14).....	15
SMUD to Release 2008 Renewable Energy RFO (Due April).....	15
RFO for Supply of Renewable Energy Resources—California (Due April 30)	16
RFP Climate Change and Sustainability Conferences (Due June 5 and December 9).....	16
Upcoming Events	17
Geothermal Working Group Meeting, April 8, Denver, CO	17
MIT Energy Conference, April 11–12, Cambridge, MA	17
Geothermal Working Group Meeting, April 22–23, Cedar City, UT	17

4th International Geothermal Conference, April 24, Freiburg, Germany.....	17
SMU Geothermal Conference, June 17–18.....	18
GEA Trade Show/GRC Annual Meeting, October 5–8, Reno, Nevada.....	18

National News

Senate Budget Proposal Would Make Room for Renewable Tax Extensions

This week the House and Senate are focusing on their annual budget resolutions. S. Con. Res. 70, the Senate’s Concurrent Resolution on the Budget, includes a specific provision to allow for an extension of the renewable tax credits. According to the opening statement on the legislation by Senator Kent Conrad (D-ND), “to address the continuing problem of energy dependence, we are proposing in this budget to invest in energy, to create green jobs, to reduce our dependence on foreign energy, to strengthen our economy and to help with high home heating costs. We have to do that a package of energy tax incentives of over \$13 billion, \$3.5 billion over the President’s budget...”

While the Senate debates S. Con. Res. 70 this week, the House is expected to debate its budget resolution, H. Con. Res. 312.

You can obtain more information about the House and Senate budget resolutions from the respective Committee websites: <http://budget.senate.gov/> and <http://budget.house.gov/>.

President Bush Addresses World Renewable Congress, Praises Nuclear Efforts, Silent on Renewable Tax Credit Extension

A highlight of the World International Renewable Energy Conference was the address of U.S. President George Bush on Wednesday, April 5. The President spoke to the conference of international governmental and industry representatives, and took a private tour of the associated trade show.

His speech repeated familiar themes. The President highlighted the “twofold” strategy on energy he is pursuing: *(Following are excerpts from the President’s speech)*

Our strategy is twofold: One, we're going to change the way we drive our cars; and two, we'll change the way we power our businesses and homes. In other words, the two most vulnerable areas to economic disruption happens to be automobile use and electric power. The two biggest opportunities to help change the environment is through how we drive our cars and how we power our country. So first let me talk about automobiles.

I laid out a goal for the United States to reduce gasoline consumption by 20% over the next 10 years—that's called 20–10 [sic]. By the way, that's in the face of a growing economy—to reduce gasoline usage by 20% over 10 years.

And we'll work with Congress. For those of you who watch the American legislative process, you think it's probably impossible for the American President to work with Congress these days. Well, it's not true. I was able to sign a good piece of legislation called the Energy Independence and Security Act of 2007. This legislation specifies a national mandatory fuel economy standard of 35 miles per gallon by 2020, which will save billions of gallons of gasoline.

Secondly, the legislation requires fuel producers to supply at least 36 billion gallons of renewable fuel in the year 2022. In other words, these just aren't goals, these are mandatory requirements. I'm confident the United States can meet those goals, and I know we must, for the sake of economic security, national security, and for the sake of being good stewards of the environment.

Secondly, we've got to reduce our dependence on oil and fossil fuels, and replace them with alternative energy sources to power our homes and our work places. Look, you can't have a vibrant economy unless you've got reliable electricity. For those of you in the developing world, you know what I'm talking about. As a matter of fact, the issue is not reliable electricity; the issue is getting electricity to people in the first place. Well, here in the United States, we've overcome those issues. And now we've got to make sure that we have enough of it that enables us to continue to grow.

And the truth of the matter is, you've got to be—have a growing economy to be able to afford these technologies in the first place. So here are some ways that we're dealing with the issue of electricity. One, I strongly believe the United States must promote nuclear power here in the United States. Nuclear power—(applause)—if you're interested in economic growth and environmental stewardship, there's no better way to achieve both of them than through the promotion of nuclear power. Nuclear power is limitless. It's one existing source that generates a massive amount of electricity without causing air pollution or any greenhouse gases.

Press reports noted that the President “did not announce any new energy policies” at the event. But, reportedly, during his tour of the trade show hall the President became aware that the key renewable tax credits, the PTC and ITC, were about to expire and that his FY 09 Budget did not include an extension of either tax credit—unlike previous years. “The President was not aware that the PTC and ITC were due to expire—he simply was not aware of it,” commented one participant in the tour.

There was no mention of geothermal energy in the President’s speech, or in the “Fact Sheet” released by the White House to accompany the address. The speech largely focused on renewable fuels, nuclear energy, wind and solar.

The full text of the President’s address, and the accompanying fact sheet, are available at <http://www.whitehouse.gov/infocus/energy>. For U.S. Energy Secretary Bodman’s remarks at WIREC, visit <http://www.energy.gov/news/6037.htm>.

Clyburn Urges Bush to Support Renewable Energy Legislation

House Majority Whip James E. Clyburn today released the following statement on March 5 in response to comments made by President Bush at the International Renewable Energy Conference.

“Today, the President proclaimed that he wants America to be energy independent and combat global climate change, yet he has consistently threatened to veto legislation recently passed in the House that would make landmark investments in renewable energy technologies and decrease America’s dependence on foreign oil.

“The President has an opportunity to show true leadership by working with Congress to support meaningful legislation that will move our nation’s energy policies in a New Direction, end our dependence on foreign oil and bring relief to the millions of Americans immobilized by our nation’s rising prices at the gas pump. The time has come for this President to end his rhetoric and support the Renewable Energy and Energy Conservation Tax Act of 2008 to aid working American families who are reeling from high energy costs.”

WIREC: Geothermal Energy Heats Up Trade Show, Business Conference

~Leslie Blodgett, GEA, Director of Outreach and Senior Editor

As the newest member of the GEA office staff, WIREC 2008 was an opportunity for me to meet members and learn about geothermal development under the tutelage of the hottest names in the industry. My background is in editing, and every day I march up the steps to GEA Headquarters ready to read, research, live, breath, and think geothermal, all so I might edit with flourish the newsletter you see before you now.

With each full day of study and work my knowledge of the topic has skyrocketed, but I knew WIREC would be my own personal chance to put meaning behind the headlines I publish.

Lisa Brodey (State Department), Idi Nadhoim (VP of the Comoros Islands), and Tom Sperl (DOE) discuss geothermal activities in the East African Rift Valley.



With this in mind, I worked to set up the GEA booth with Kathy Kent (GEA) and Marilyn Nemzer (GEO). We were prepared with instruction from Karl Gawell, our fearless executive director; information on geothermal energy and our Trade Show coming up in October; GEA's recent reports on CD; and all manner of geothermal pictures and handouts. We gave out glass hand boilers to demonstrate the process of a binary power plant. We also raffled off sweatshirts, hats, bags, and DVDs. We directed visitors to our GEA member booths and to the excellent geothermal side events and business conference sessions.

I was excited to meet the GEA members I recognized from emails and articles, but much to my surprise, some of them even recognized my name from the newsletter emails.

The first geothermal event was Tuesday morning's panel, "Building Effective Government-Industry Collaboration." The discussion included barriers to geothermal and what types of federal policy could help. Afterward I met Tal C. Finney from Dongell Lawrence Finney LLP who chaired the event. He shook my hand and said, "Oh, you're Leslie Blodgett! You do the GEA newsletter, don't you? When I see your last name I think 'blog' because you're the GEA blogger."

We may have to rename our newsletter the GEA Weekly Blog.

At the "African Rift Valley Geothermal Initiative" side event I was introduced to Idi Nadhoim, Vice President of the Comoros Islands. It was an honor to meet him and hear him speak about his country's needs and plans. He explained how petroleum import is a drain on his economy. I heard him detail the many ways geothermal would help his country. The other panel members echoed his words as they discussed other countries in that region.

Steve Hirsch from Geothermal Development Associates was also on that panel. I had previously corresponded with him when he sent a story to the GEA Weekly Update about GDA's involvement with a plant in Kenya. Meeting him and listening to his presentation, which also discussed the Oserian plant in Kenya, I could see that it was a success story and that other countries could model its accomplishment.

As I attended each geothermal session I realized how deeply the research is set back due to lack of funding. Almost without fail, each professional who presented his or her findings referenced the need for more backing. The projected models of worldwide geothermal capacity all indicated impressive potential, but I recognized that each of them lacked the capital to achieve their goals as quickly as they wanted.

The panel members represented companies who were interested in expanding geothermal, and not simply for the sake of getting ahead in the business world. If that was the case they would probably enter another

sector that has drawn more government support financially. I could only draw the conclusion that these people really believe geothermal is the answer to the needs of communities both domestically and abroad.

But I also felt that they had rational reasons for their optimistic view of geothermal's future. "Many times in the past, achievements have exceeded projections," said Pierre Ungemach of GPC Instrumentation-Paris in the session on "New Developments and Outlook for Geothermal Research."

Back on the trade show floor at the GEA booth, I was pleased to see that there was a constant flow of visitors to our booth. It seemed there was never a down time, and visitors were often waiting in line to talk to us! It was remarkable to see the excitement that people have for geothermal energy. From the things I learned from the panels, and from the turnout at our booth, I knew that what was printed on our sweatshirts was true: Geo-Energy is Hot!

Lou Capuano and
Caity Johnson
(ThermaSource)
talking business at
their booth.



While there was significant attention to the sponsor of the event, the renewable trade associations and their company members, including GEA, put significant work into the events that needs to be recognized. GEA, SEIA, AWEA, and NHA were all original sponsors of the event and put substantial effort into their trade show displays, side events, and business session panels.

GEA wishes to thank all of the companies and individuals who contributed to making geothermal energy a significant part of WIREC 2008, including the following panelists:

Geothermal Panels:

"Status of Technology," Moderator: Paul Thomsen—Ormat, Speakers: Jefferson Tester—Massachusetts Institute of Technology, Susan Petty—AltaRock Energy, Pierre Ungemach—GPC Instrumentation-Paris, Frank Monastero—U.S. Navy, Arnar Hjartson—Glitnir Bank, Ann Robertson-Tait—GeothermEx

"Finance," Moderator: Lucien Bronicki—Ormat, Speakers, Thomas King—U.S. Renewables, Domenic Falcone—Falcone Associates, Charles Arrigo—Glitnir Capital Corporation, Subir Sanyal—GeothermEx, Robert Banack—Dundee Securities

"Global Markets and Policy Drivers," Moderator: Karl Gawell—GEA, Speakers: Arni Magnusson—Glitnir Bank, Stephen Hirsch—Geothermal Development Associates, Subir Sanyal—GeothermEx, Ruggero Bertani—Enel, Larus Eliasson—Enex

"U.S. Markets and Policy Drivers," Moderator: Dennis Gilles—Calpine Corporation, Speakers: Daniel Ellis—Climate Masters, Karl Gawell—GEA, Steve Munson—Vulcan Power, Dan Fleischmann—Ormat Nevada, Halley Dickey—UTC Power

Geothermal Side Events:

“Building Effective Government-Industry Collaboration,” Hosted by: Geysir Green Energy and GEA, Tal Finney, chairperson, Össur Skarphéðinsson, Icelandic Minister of Industry, Kermit Witherbee, Bureau of Land Management, Steve Chalk, Department of Energy, Brian Carey, GNS Science New Zealand Robert Banack, Dundee Securities, Lárus Eliásson, CEO Enx, Magnús Jóhannesson, CEO Iceland America Energy, Charles Arrigo, Jr., Glitnir Bank

“African Rift Valley Geothermal Initiative,” Hosted by: Department of Energy and GEA, Karl Gawell, moderator, Vice President for Comoros, Dr. Idi Nadhoim, Lisa Brodey, Regional Environment Officer for East Africa, State Department, Steve Hirsch, Geothermal Development Associates, Paul Marin, U.S. Trade and Development Agency, and Erik Fernstrom, World Bank Group.



Lucien Bronicki
(CEO, Ormat) gives
geothermal energy
the thumbs up!

Senator Domenici Introduces Clean Energy Investment Bank Legislation

Press Release, March 6th, 2008, Washington – U.S. Senator Pete Domenici, ranking member of the Senate Energy and Natural Resources Committee, today introduced legislation that will establish a government corporation specifically dedicated to facilitate investment in clean energy projects.

Domenici’s Clean Energy Investment Bank of the United States will operate in a fashion similar to the U.S. Export-Import Bank and the Overseas Private Investment Corporation, but will focus on domestic investment activities to encourage financing for clean energy projects. The goal of the bank will be to reduce the overall cost of clean energy projects in order to facilitate their commercialization.

“I have long advocated for a balanced approach toward meeting our energy challenges. If we have any hope of reducing our dependence on foreign oil and meeting the growing challenge of global climate change, we must develop strong clean energy technologies in the United States. The legislation I introduced puts those words into action by establishing a government-backed Clean Energy Bank to bring these technologies to market. The time to act is now,” Domenici said.

The Clean Energy Investment Bank will operate by taking responsibility for management of the Department of Energy’s loan guarantee program, and will have authority to issue loans, loan guarantees, equity investments, and insurance products. The Bank is modeled after the Import-Export bank and will require similar funding authorization.

“It seems to me that we should provide a level of financial support toward domestic energy diversification that is at a minimum equal to what we provide to U.S. companies that invest overseas. Since traditional approaches have fallen short of what is needed to meet increasing demands for energy, this innovative approach involving both government and private markets is a terrific solution,” Domenici said.

“The reality is that Congress is likely to have a debate on climate change that will fall largely on partisan grounds this year. The legislation I’m introducing today breaks through that divide and would ensure that we are able to pass a bill that will help us make progress on reducing carbon emissions,” he continued.

Among the cosponsors of the Clean Energy Investment Bank legislation are Senators Mary Landrieu (D-La.), Lisa Murkowski (R-Alaska), Senator Mel Martinez (R-Fla.), Senator Jim Bunning (R-Ky.), Senator Larry Craig (R-Idaho), Senator Lamar Alexander (R-Tenn.) and Senator Elizabeth Dole (R-N.C.).

House Appropriations Subcommittee on Energy and Water Development Announces Instructions for Providing Written Public Testimony for Fiscal Year 2009

The House Subcommittee on Energy and Water Development oversees funding for the US Department of Energy, including its geothermal research program. The Subcommittee accepts statements from the public.

From their website: *The Subcommittee on Energy and Water Development will not be scheduling an outside witness hearing on the fiscal year 2009 budget. As in the past, interested parties may submit written testimony for the record. Written testimony must be received by Wednesday, March 19, 2008. Please do not send your statement via fax or U.S. Postal mail.*

All written testimony must comply with the following requirements:

- *Send the original as an electronic mail attachment to: EW.Approp@mail.house.gov with the following subject line: Public Witness Testimony for the Record.*
- *Do not exceed five pages;*
- *Type on standard 8.5 by 11 inch letter size paper;*
- *Single-space type in 12 point font and have one inch margins;*
- *Clearly indicate your name, title, and institutional affiliation (if any) at the top of the first page; in the request;*
- *Clearly state in the first paragraph the agency, program, and amount of money involved*
- *Do not include color and detailed photos since the hearing volume will be photographically reproduced. However, use of charts and tables and the use of appropriate bold type and bullets are acceptable, as long as they are within the five page maximum length.*

If you have any questions please contact Lori Maes at the Energy and Water subcommittee (202) 225-3421.

Company News

Drilling Underway at The Geysers

Western GeoPower Corp. has begun work on drilling the Western GeoPower Unit 1 project at The Geysers Geothermal Field in California, they announced on March 11.

According to their news release, drilling and testing of the first well is expected to take up to 90 days. The drilling program will involve the drilling of a minimum of eight production wells and at least one injector well.

The news release states that independent consultant GeothermEx, Inc. of Richmond, California has designed the drilling program and is providing strategic management throughout the drilling phase. The wells will be directionally drilled from existing drill pads to intersect target zones where commercial steam productivity was encountered by previous production wells. The average total vertical depth per well is anticipated to be 8,000–9,000 ft (2,500–2,800 m) with the maximum total measured depth expected to be approximately 11,000 feet (3,400 m).

ThermaSource, Inc. has been engaged as the principal drilling contractor for the drilling program.

For more information, visit <http://www.geopower.ca/news%202008/11mar2008.htm>.

Raser Technologies Adds Two Geothermal Projects

Raser Technologies, Inc. has added two geothermal projects, bringing their total number of current development projects to seven, according to their Web site.

The company has added two 10-MW plants, one in Utah and the other in Oregon. This will be their first project in Oregon.

The announcement included several other updates to Raser's geothermal projects. They announced that they had signed leases in Oregon, had been notified by a Southern California utility for a 10-MW power purchase agreement, and is in negotiations with several other utilities for projects totaling 140 MW.

"We are pleased with the progress that we are making on several fronts of our geothermal power program," Brent M. Cook, Raser's CEO, told the press. "Our rapid deployment strategy is gaining momentum as we progress with well field developments, receive power plant units from UTC and finalize PPA discussions with a number of utilities. The two additional projects we announced today embody the great work that our geothermal team is accomplishing behind the scenes."

Raser has initiated 70–75 MW of power projects since April 2007, when they announced a plan to initiate 100 MW per year for three years, then increase to 150 MW per year.

For more information, visit <http://www.rasertech.com/news/scripts/full-news.php?1204723800>.

Renewable and Climate Change News

Simbol Mining Introduces Geothermal "Lemonade" Plan for Lithium

Simbol Mining has a plan to provide lithium without creating waste or pollution, according to news.com.

Lithium is increasingly in demand for use in batteries of hybrid and electric cars. Simbol Mining has a plan to mine more than 100,000 tons of lithium carbonate each year using geothermal sources, thus providing one-fourth of the world's demand within a decade.

They would use nanofilters to extract minerals from resources at geothermal power plants.

Simbol Mining presented the technology at the Cleantech Forum in San Francisco, where they were voted the most promising. They seek \$5 million to get started.

Luka Erceg, Simbol Mining's president and cofounder, compared the process to a glass of lemonade, according to the article. Geothermal plants bring materials like silica, lithium, zinc, and manganese to the Earth's surface and then send them back down. Erceg said it was similar to how lemonade powder mix dissolves in water but can then be separated if dried out.

For more information, visit http://www.news.com/8301-11128_3-9881869-54.html.

Governor Schwarzenegger Supports Sunrise Powerlink

Governor Arnold Schwarzenegger has endorsed San Diego Gas & Electric's proposed Sunrise Powerlink transmission line, according to supportsunrise.com.

Governor Schwarzenegger wrote a letter to the California Public Utilities Commission saying that Sunrise Powelink would help bring electricity to the area, connect San Diego to green power from the Imperial Valley region, and help San Diego benefit from clean, renewable power.

“The Sunrise Powerlink stands to take that relationship one step further by providing direct access to clean, renewable energy sources ranging from wind to geothermal, plus connecting the San Diego region to what could become the largest solar energy facility in the world,” Governor Schwarzenegger wrote.

More than 75 state, local, and federal elected officials throughout California and energy experts support Sunrise Powerlink. The California Public Utilities Commission will make a final decision on the power line later this summer.

To read the letter from Governor Schwarzenegger, visit http://www.supportsunrise.com/Schwarzenegger_Powerlink.pdf?cid=37541.

B&D Consulting Expands Energy and Climate Change Practice

B&D Consulting has hired Richard Campbell as a senior adviser in the firm’s energy and climate change consulting practice, according to their Web site.

Richard Campbell is a nationally recognized energy policy expert, and was previously director of federal government relations for PPL Corporation.

Campbell’s profile on B&D Consulting’s Web site calls him “an authority on issues of energy policy and regulatory affairs as they relate to power generation technologies and environmental policy. Richard employs a practical, knowledge-based approach to the challenges of climate change. His expertise includes strategic planning, federal appropriations, federal marketing and the evaluation of novel technologies.”

Campbell has 30 years of experience in the industry.

Visit <http://www.bakerdconsulting.com/newsandevents/news/newsdetail.aspx?news=215>.

State News

New York: Rockland County Seeks Geothermal Tax Exemption

The County Legislature of Rockland County, N.Y., voted on March 4 to seek state permission to exempt geothermal systems from county sales tax, according to aer-online.com.

Solar power in Rockland County is currently exempt from county sales tax. The request to add geothermal will now go to the state for approval.

Legislators Alden Wolfe, D-Suffern, and Connie Coker, D-South Nyack sponsored the request. The request to seek approval was approved by a vote of 13 to 3.

Visit http://www.aer-online.com/e107_plugins/content/content.php?content.1342.

Oregon: U.S. Geothermal to Drill at Neal Hot Springs

U.S. Geothermal has received a drilling permit for the Neal Hot Springs project in Oregon, according to their news release. The company received the permit from the Oregon Department of Geology and Mineral Industries.

The exploration well is permitted for 3,500 ft. The surface discharge shows a potential source temperature of 311–347°F. A water supply well was completed in December 2007, and drilling operations will start within 30–60 days.

"Neal Hot Springs provides an excellent target for us, and is consistent with our corporate focus of reducing risk by taking on projects that have a discovery," Daniel Kunz, President and CEO, told the press. "We anticipate drilling the well during the second quarter of the year, once a drill is contracted and site preparation is complete."

Geothermal resources were discovered in the area by Chevron Resources in 1979.

For more information, visit <http://www.usgeothermal.com/NewsReleases/Feb-28-2008.pdf>.

Utah: Raser Completes Drilling with Positive Results

Raser Technologies, Inc. has completed drilling on a geothermal production well in southern Utah, according to *Energy Current*.

Well 21-34 provides evidence of geothermal resources with temperatures over 260°F. Raser is now performing more detailed tests.

"We are pleased with the preliminary results of this drilling program and look forward to executing on our business plan," Brent M. Cook, Raser's CEO, told the press. "Our initial review of the information from this well is encouraging, however, precise data will not be available until further flow testing and verification can be conducted.

For more information, visit <http://www.energycurrent.com/index.php?id=3&storyid=9208>.

International News

Indonesia: Sarulla Project to Begin Construction in 2009

Indonesia's Sarulla geothermal power plant project is set to begin construction in 2009, according to tradingmarkets.com.

Medci Energi Internasional, Itochu Corp., Kyushu Electric Power Inc., and Ormat International Inc. jointly own plans for the 340-MW geothermal power plant.

The project is in North Sumatra, Indonesia. Construction will take about three years.

Visit <http://www.tradingmarkets.com/.site/news/Stock%20News/1156918/?hcode=relatednews>.

U.S. Virgin Islands: Delegation Visits Geothermal Operations in Nevis

The government of the U.S. Virgin Islands is interested in incorporating geothermal resources into energy plans, according to aer-online.com.

U.S. Virgin Islands' Lt. Gov. Greg Francis led a delegation, accompanied by a group from the Dutch territory of Saba, to study the current drilling at the nearby island of Nevis.

"I am glad we are here today and I am very impressed in terms of what is taking place and it's something we are going to look into from the Virgin Islands," Director of the Virgin Islands Energy Office Bevan Smith Jr. told the Department of Information, according to the article.

"We are looking at a 20-percent renewable portfolio standard to include what we thought was wind and solar energy. But we are really thinking that geothermal could form a great part of this portfolio standard, and I am very excited about it. The fact [is] that we can get renewable power at a cost that beats any renewable or oil and diesel power generation we have in the territory. I am really very impressed, and I really hope we can make this happen," Francis said in a press conference.

For more information, visit http://www.aer-online.com/e107_plugins/content/content.php?content.1332andhttp://www.caribbeannetnews.com/news-6412--35-35--.html.

New Zealand: Mighty River to Build Geothermal Plant

Mighty River Power, a state-owned electricity generator and retailer, will build a geothermal plant at Rotokawa on the North Island, according to stuff.co.nz.

The company will spend \$450 million on the station, which will generate 132 MW of electricity. "In providing 132 MW of generation capacity, it will be the second-largest geothermal station in New Zealand," Mighty River chairman Carole Durbin said in a statement.

The plans are near the existing 37-MW plant. It will connect to 220-kilovolt transmission lines that run over the field.

Nga Awa Purua is a joint venture with the Tauhara North No2 Trust. It will take about 2.5 years to build. The company plans to have the geothermal plant producing electricity by 2011, according to the article.

Mighty River also has plans this year to commission its \$300 million 90-MW geothermal station at Kawerau.

For more information, visit <http://www.stuff.co.nz/4428759a13.html?source=email>.

Philippines: Tiwi-Makban Geothermal Assets on Auction; PNOC-EDC to Bid

The Power Sector Assets and Liabilities Management Corporation (PSALM) of the Philippines opened the auction for the 289-MW Tiwi and 458.53-MW Makban geothermal power plant complex on February 27, according to their Web site. They are accepting Letters of Interest until March 12. The sale will take place in June.

With investor interest remaining high in the government's power privatization program, today opened this year's sale schedule for the generating assets of the National Power Corporation with the auction of.

The bid includes generating assets, structures and improvements, spare parts, and general plant equipment, as well as steam field facilities and the contract between PSALM and Philippine Geothermal, the steam supplier.

PNOC-Energy Development Corp. of the Philippines told the Philippine Stock Exchange it plans to bid for two geothermal plants, according to abs-cbnnews.com.

The plants are on the island of Luzon. The Tiwi plant is a 289-MW plant in Albay province, and the Makban plant is a 458.5-MW plant in Laguna and Batangas provinces.

PNOC-EDC will bid for geothermal plants with a total capacity of 1,155 MW this year, according to the article.

For more information, visit <http://www.psal.gov.ph/news/NewsItem20080014.htm> and <http://www.abs-cbnnews.com/storypage.aspx?StoryId=111167>.

Turkey: Zorlu Energy Wins Bid to Privatize Plants

Zorlu Energy Corp. in Turkey bid \$510 million USD to privatize seven hydroelectric power plants, a gas turbine plant, and one geothermal plant, according to *Sabah*.

This was the first privatization of energy power plants in Turkey. The hydroelectric plants and the geothermal plant included 30 years operating rights, while the gas turbine plant was privatized using the sales method of privatization.

The plants involved were Tercan, Kuzgun, Mercan, Ikizdere, Cildir, Beykoy, and Atakoy hydroelectric power plants, Denizli geothermal power plant, and Engil Gas Turbines.

Twenty-seven companies participated at the auction.

Visit <http://english.sabah.com.tr/C338D74F6F8D4BBBB5AF1BDAF52C614C.html>.

Turkey: Power Engineers Inc. to Support Geothermal Plant

Power Engineers Inc. will develop a new power plant in Turkey, according to *Idaho Statesman*.

The company, located in Idaho, is an engineering consulting firm. It will send \$4.86 million of procurement, design, and engineering services. Power Engineers will be backed by a loan guarantee from Export-Import Bank. The bank has a special initiative to support exports of renewable energy.

The plant is a 45-MW geothermal project in Germencik in western Turkey.

Visit <http://www.idahostatesman.com/business/story/314920.html>.

Notices and Employment Opportunities

Correction to Last Week's Update

Last week, we printed news about a new geothermal plant on the Big Island of Hawai'i. Pacific Business News printed a correction.

“Correction: The proposed 30-MW biomass plant in Hamakua on the Big Island is not a geothermal plant. The headline and story incorrectly referred to the type of plant that will be built.”

Thanks to our many GEA Weekly Update subscribers who alerted us to the correction.

Visit <http://pacific.bizjournals.com/pacific/stories/2008/03/03/story8.html>.

Employment Opportunity—Terra-Gen Operating Company

Terra-Gen Operating Company is a newly formed independent power producer operating clean and reliable energy projects located in several western states. Current renewable projects include wind, geothermal, and solar. Terra-Gen is currently seeking...

Geothermal Resource Manager:

Manage/develop the geothermal resource company wide. Maintain departmental budget. Direct/support geological/resource needs i.e., on-going geologic model, temperature model, reservoir and well

performance evaluation. Evaluate geothermal reservoirs, provides recommendations for well field operations. Target drilling for production and injection wells. Provide technical support for well maintenance i.e., workovers, acid jobs, caustic jobs, surveys, etc. Desired qualification: Relevant BS from 4 yr college or university; or 10 yrs related exp and/or training; or equal education and experience. Geological and temperature modeling knowledge.

Environmental Manager:

Supervise the Environmental Compliance Dept personnel. Oversee departmental budget integrated into plant budgets. Document, review and track department activities, reports, compliance documents, audits, and investigations. Ensure company operations comply with environmental permit requirements and federal, state and county/district regulations. Maintain an effective relationship with regulatory agencies. Prepare and update company programs, policies, and procedures for safety and environmental compliance. Organize, develop, implement and administer the company's safety program. Desired qualifications: Bachelor's Degree from a 4-yr college or university; and 8+ yrs related experience and/or training; or equal education and experience. Environmental and safety regulation knowledge.

To apply for either position, send a resume to Terra-Gen Operating Company, Attn: Human Resources, P.O. Box 1690, Inyokern, CA 93527, fax to 760-764-1318, or email to djackson@tgpny.com. Terra-Gen Operating Company is an Equal Opportunity Employer.

Employment Opportunities—Mighty River Power

Mighty River Power's diverse generation portfolio helps New Zealand ensure its ability to meet future energy needs. Mighty River Power is an integrated energy generation and retail business with a diverse and expanding portfolio of generation assets throughout the North Island of New Zealand. That portfolio includes rapidly growing geothermal interests including those at Mokai, Rotokawa, Kawerau, and throughout the Taupo Volcanic Region. Mighty River Power's geothermal team performs to world class standards and is focused on implementing cutting-edge technology to the development of these renewable and greenhouse friendly energy resources. Rapid growth in our geothermal business has increased their need for engineers to join the geothermal team. They're looking for motivated engineers with good written and verbal English skill. They offer a stimulating environment for those who want to apply their geothermal expertise, whilst enjoying New Zealand's extensive lifestyle opportunities.

Reservoir Engineer:

As a reservoir engineer you will:

- Design and supervise well tests, and collect and interpret results
- Propose and oversee field monitoring projects
- Characterize resource behavior using sophisticated computer modeling software.
- Provide valuable technical support to high-dollar energy resource projects.

An engineering, hydrology or applied maths degree are relevant qualifications. An interest in real-world applications in a mixed office and outdoor environment is essential, as well as interests in geology, civil engineering, hydrology and computer modeling. Specialized knowledge and skills in geothermal field management, resource monitoring and well testing will be developed over time. This position reports to the Geoscience Manager and is located in Hamilton.

Senior Mechanical Engineer:

As a senior mechanical engineer you will:

- provide vital strategic support to both operations and new generation development
- provide engineering and economic evaluation for enhancement opportunities of existing assets and new developments
- oversee and provide leadership for a multi-disciplined team of engineers.
- ensure that the company's strategic goals are achieved through assurance of plant performance in consideration of life cycle costs

The ideal person for this role will hold a relevant engineering qualification and have more than ten years experience in geothermal projects. This position reports to the Geothermal Engineering Manager and is located in Hamilton.

Plant Chemical Engineer:

As plant chemical engineer you will:

- be responsible for determining appropriate treatment processes throughout the different geothermal power generation cycles
- oversee various specialist service providers
- review industry trends to ensure best practice principles are being applied
- specify and review the design of new installations
- supervise investigations

The ideal person for this role will hold a relevant engineering qualification and have more than five years experience in geothermal power plant operation. This position reports to the Operations Manager and is located in Taupo.

Maintenance Manager:

As maintenance manager, responsible for a portfolio of power generation plant currently totaling 150MW and expanding to 500MW in the near future, you will:

- proactively improve and implement systems to enhance plant availability
- oversee and provide leadership for a multi-disciplined team of engineers.
- remain aware and trained on all technical advancements in the area of responsibility
- manage plant level capital projects in conjunction with the engineering team

This role will require a relevant engineering qualification and have more than ten years experience in geothermal power plant operation, including demonstrated line management skills. This position reports to the Operations Manager and is located in Taupo.

Drilling Engineer:

As a drilling engineer you will:

- Write drilling programs and monitor drilling progress
- Assist the onsite drilling supervisor with implementation of high profile drilling operations
- Review operations for process improvements
- Provide technical support to field managers and reservoir groups for well maintenance.

An engineering degree with computer skills and good written and spoken English communications skills are required. Specialized knowledge and skills in geothermal drilling are important and additional experienced can be developed over time where needed. This position reports to the Drilling Manager—Geothermal and is located in Hamilton.

If you would like more information about Mighty River Power please see the company Web site at www.mightyriver.co.nz. If you would like more information about any of these vacancies or wish to apply then email careers@mightyriver.co.nz, or phone +64 9 5803612, or post your application to Human Resources, Private Bag 92008, Auckland Mail Centre.

Employment Opportunity—Nevada Geothermal Power Inc.

Nevada Geothermal Power Inc. is seeking an experienced Geothermal Resource Exploration and Development Manager. Nevada Geothermal Power's 30 MW geothermal power development at Blue Mountain near Winnemucca is financed to production (\$120 million). This dynamic company seeks to significantly expand the resource base at Blue Mountain and is actively developing other geothermal power projects to meet the increasing demand for clean energy. The Company is well financed and expects significant growth through the next decade.

Geothermal Resource Exploration and Development Manager:

This is a senior management position that requires a MS in Geological Sciences, Geological Engineering or Hydrology with 10+ years experience with geothermal field development. The successful candidate will

plan and implement exploration and geothermal reservoir evaluation programs using a multi-disciplined approach involving geology, geochemistry, geophysics, and drilling up to and including large scale development wells, helping to achieve the Company's objective for growth. The position is based in Reno and/or Winnemucca and will involve supervision of resource technical staff and consultants. Excellent communication and interpersonal skills are required as is a familiarity with budgets and cost controls.

The Company offers excellent health benefits, competitive remuneration, opportunities for career advancement in an exciting field.

To apply, fax resumes to 604-688-5926 or email resumes to careers@nevadageothermal.com.

Requests for Proposals (RFPs)

RFP Enhanced Geothermal Systems—U.S. Department of Energy

The U.S. Department of Energy announces its intent to request proposals for Enhanced Geothermal Systems, to demonstrate reservoir stimulation techniques at existing geothermal fields; establish an EGS field validation site where DOE and its partners can perform high-risk experiments under actual field conditions; develop new sensors, down-hole tools, and mapping capabilities able to operate at greater depths and higher reservoir temperatures; and provide outreach to the geothermal community to convey the benefits and potential opportunities of EGS technologies.

Funding amount and number of awards anticipated was not posted at this time.

For more info, contact James Damm at james.damm@go.doe.gov or go to: <http://e-center.doe.gov/doebiz.nsf/UNID/5E8F90C7ED4B98848525740400568EF1?OpenDocument>.

RFP Renewable Energy Certificates—U.S. Air Force (Due March 13)

Request for Proposal SP0600-08-R-0410 Renewable Energy Certificates on behalf of various U.S. Air Force bases and Major Commands has been issued.

Please direct questions to:

Leslie Simpson—703-767-8536/ leslie.simpson@dla.mil

John Nelson—703-767-8523/ john.nelson@dla.mil

For more information, visit

<http://www.desc.dla.mil/DCM/DCMSolic.asp?SolicID=1337&SPos=0&DocID=9925>.

RFI for Geothermal Development— Colorado (Due March 14)

The Colorado Governor's Energy Office (GEO) has issued a Request for Information (RFI) to gain an understanding of the potential for geothermal projects in the state and the resources needed to assist developers of projects. The RFI covers geothermal for electricity, direct use applications, or for ground source heat pumps. There is a reference in the RFI for grant funding under the Clean Energy Fund.

Available at http://www.colorado.gov/energy/in/uploaded_pdf/GeothermalRFI_000.pdf.

SMUD to Release 2008 Renewable Energy RFO (Due April)

On January 4, The Sacramento Municipal Utility District (SMUD) will release a Request for Offers (RFO) of renewable energy for power purchase agreements (PPA). Proposals will be due early April.

SMUD has a goal to meet 23% of its retail electricity sales with renewable energy by 2011 and beyond. The utility's need for renewable energy continues to increase due to its commitment to expand the amount of power from renewable sources in its power mix and a need to replace current contracts that expire in the coming years.

The 2008 solicitation is for PPA offers of California RPS eligible conventional renewables, which include resources such as wind, geothermal, small hydroelectric, landfill gas, biomass and biodiesel. A separate RFO for emerging renewable technologies is planned for mid-2008.

Interested parties can download the RFO documents from SMUD's Electronic Bid Solicitation System (EBSS) Web site at www.bids.smud.org when it becomes available. Registration to the EBSS site is required to access the documents.

SMUD recommends that those interested in this and future solicitations list their company name in the "Renewable Power" category as well as in one or more of the following Renewable Power subcategories: Generation Energy, Geothermal Power, Landfill Gas Power, Renewable Power-Other, Small Hydro Power, and Wind Power.

Registered individuals will also receive updated information regarding this RFO and will also receive notification of future solicitations for purchase of renewable energy resources.

For additional information, contact Cesar J. Beltran at (916) 732-6925 or cbeltra@smud.org.

RFO for Supply of Renewable Energy Resources—California (Due April 30)

San Diego Gas & Electric (SDG&E) today announced it has issued a competitive solicitation seeking supply of renewable-energy resources to help the utility meet California's mandate to derive 20% of its energy from renewable sources starting in 2010. This latest solicitation, also known as a "request for offers" (RFO), will help to further increase SDG&E's supplies of clean, renewable power for the region's energy portfolio.

"For the last five years, SDG&E has aggressively pursued renewable energy from developers whose projects deliver clean energy to our customers in San Diego and South Orange Counties," said Matt Burkhart, vice president electric and gas procurement for SDG&E. "For this year's solicitation, SDG&E seeks both long-term and short-term contracts that will build on our existing clean, 'green' energy resources and will aid us in our effort to secure 20% of our energy from renewables by 2010."

Through the bidding process, or RFO, SDG&E is seeking energy that comes from solar, wind, geothermal, biomass and any other clean, renewable resource that qualifies under the state's Renewable Portfolio Standard program. The plants that produce the power can be inside or outside the SDG&E service territory. Bids are due April 30, 2008.

The evaluation and selection of offers includes active participation by SDG&E's Procurement Review Group, comprised of California Public Utilities Commission (CPUC) staff, consumer advocates and other non-market participants, as well as an independent evaluator. These entities are involved at all stages of the process, including the preparation of the RFO, bid evaluation and determination of the final "short list" of bidders. Once the evaluation process is completed, all proposed contracts are subject to CPUC review and approval.

More information about this latest RFO for renewable energy is available at <http://www.sdge.com/renewablerfo2008>.

RFP Climate Change and Sustainability Conferences (Due June 5 and 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 1/7/08, 6/5/08 and 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

Geothermal Working Group Meeting, April 8, Denver, CO

The Colorado Governor's Energy Office is sponsoring a Geothermal Working Group Meeting in Denver on April 8th. The agenda includes sessions on geothermal electricity development in Colorado and ground source heat pump applications.

Persons interested in this event are invited to contact John Gitchell at John@SustainableConferences.com.

MIT Energy Conference, April 11–12, Cambridge, MA

Registration is now open for the MIT Energy Conference, which brings together leaders in technology, policy, entrepreneurship, and finance to discuss multidisciplinary solutions to our global energy challenges. Based on the 2008 theme of "Solutions that Scale," panel sessions will cover: Nuclear Power, End-Use Efficiency, Carbon Capture and Sequestration, Geothermal Energy, Transmission Infrastructure, Vehicles, and the all-conference session Renewables at Scale. Many of these panels will be moderated by MIT faculty who are leading researchers in these fields.

For more information and to register, visit <http://mitenergyconference.com/>.

Geothermal Working Group Meeting, April 22–23, Cedar City, UT

The next Geothermal Working Group Meeting will be at Southern Utah University. The theme will be "Geothermal Activities and Potential in Southwestern Utah: Ground Source Heat-Pumps to Electrical Generation.

Day one will offer presentations from private geothermal developers, utilities, and other industry members.

Day two will consist of an all day field trip to Blundell Geothermal Power Plant and Milgro Nursery in Newcastle, Utah.

Further event details will be announced soon.

If you have any questions or comments, please contact Jason Berry at jasonberry@utah.gov or 801-538-5413.

4th International Geothermal Conference, April 24, Freiburg, Germany

The International Geothermal Conference is one of the leading event for geothermal developers, finance providers and policymakers in Germany. The conference provides profound information about geothermal projects and creates ideal conditions to network with international business

partners. The event will bring high level representatives such as Karl Gawell, director of the Geothermal Energy Association (GEA), who will report on the state of US geothermal activities. Michael Kraml, consultant at the Federal Institute of Geosciences and Natural Resources (BGR) will offer high-quality information about current developments in South America and East Africa. A speech on the political frameworks, especially the „Erneuerbare-Energie-Gesetz“ (Renewable Energy Sources Act) and its essential effect on market developments in Germany will be given by Cornelia Viertel, consultant at the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

Following the lectures four workshops will take place and provide opportunity to exchange information about technical demands, project financing instruments and the legal framework situation. After keynote speeches and the presentation of a case study, representatives of banks, public authorities, drilling and insurance companies will offer sufficient time to share experiences and informations during the following panel discussions. Speeches and workshops will be translated simultaneously into English and German in parts.

As last year, the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety (BMU) oversees the International Geothermal Conference 2008. We are also happy to present one of the leading magazines for renewable energy, Sun & Wind, and vdi-nachrichten as the new media partners of the conference. Cooperation partners are amongst others the German Energy Agency dena as well as the International Geothermal Association (IGA). The conference invites investors, insurers, insurance companies, project developers, technology experts, consultants, energy providers, local authorities, political stakeholders and associations. The application fee is 300 Euro plus VAT.

For further information please visit: www.geothermiekonferenz.de.

SMU Geothermal Conference, June 17–18

Southern Methodist University will put on a Geothermal Conference June 17–18. This international conference specializes in the enhancement of existing oil & gas wells for electrical production. According to SMU, “Geothermal energy can be extracted from the well fluids using newly designed compact turbines with binary fluids. These systems are now sized to fit single wells or multiple wells with an approximate fluid temperature differential of 120°F+ between produced and cooling temperatures. Thus, in the Gulf Coast temperatures of 225°F or higher are eligible. This electrical production (geothermal energy) is renewable and considered a baseload source and is capable of producing 24 hours a day. This capability gives new life to low yield producers with high water volume and a reason to keep them pumping. Undesirable high water flow geopressure wells become an immediate revenue path if converted to electrical production. With a system installed in Chena Hot Springs, Alaska and another installation going into the Wyoming Rocky Mountain Oil Field Testing Center, the ability to use low temperature fluids is no longer just a concept, rather it’s a reality. New technology, data, and economics will be presented to assist you in developing your company’s renewable energy portfolio using existing wells.

Topics Presented To Include: • Power Generation Technology Advancements, • Geothermal Resource Exploration and Assessment, • Reservoir Engineering, • Fracturing, • Geopressure Development, • Tight Gas Sands Development, • Well Longevity—Corrosion and Scaling Management, • Enhanced Geothermal Systems – International, • Green Power for Utilities (RECs), • Economics and Business Plan • Transmission needs, • Regulations and Leasing, • Financing, • Demonstration Sites

For more information and to read the Call for Papers, visit
http://smu.edu/geothermal/Oil&Gas/2008/Geothermal_Energy_Utilization.htm.

GEA Trade Show/GRC Annual Meeting, October 5–8, Reno, Nevada

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>.



GEA Update

A newsletter for GEA Members written by Leslie Blodgett and Karl Gawell.

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