



## GEO THERMAL ENERGY ASSOCIATION

---

209 Pennsylvania Avenue SE, Washington, D.C. 20003

Phone: (202) 454-5261 Fax: (202) 454-5265

Web Site: [www.geo-energy.org](http://www.geo-energy.org)

### GEA UPDATE February 1, 2008

<b>National News.....</b>	<b>2</b>
Senate Finance Committee Adds Renewable Tax Credit Extension to Its Stimulus Plan—Critical Vote Coming Monday or Tuesday! .....	2
Senators Urge DOE Secretary Bodman to Implement and Fund New Advanced Geothermal Research Initiative. ....	3
Geothermal Energy Growth Surge Continues But Tax Credit Extension Key to Sustaining Momentum, Industry Leader Warns .....	4
Renewable Energy Sector Issues Joint Statement .....	5
Energy Text of the State of the Union Address .....	6
DOE Assistant Secretary Announces Resignation .....	6
Droughts Threaten Nuclear Plants .....	7
<b>Company News.....</b>	<b>8</b>
Calpine Emerges from Chapter 11.....	8
Raser Secures Additional Geothermal Leases in Utah: Over 100,000 Acres Now Under Lease .....	10
GEA Las Vegas Workshop Sets New Record.....	10
<b>Renewable News.....</b>	<b>11</b>
Super Bowl XLII to Use Entirely Renewable Energy .....	11
Federal Support Could Facilitate Transmission Lines in Nevada .....	11
U.S. Renewable Energy: Record Year in 2007 .....	12
<b>Climate Change News.....</b>	<b>12</b>
Climate Change Status Report 2007 .....	12
Hawaii Hosts International Climate Change Conference.....	13
EU Adopts Climate Package .....	14
<b>State News.....</b>	<b>14</b>
Alaska: Chena Models Low-Temperature Geothermal Power Plant.....	14
Colorado and Utah: Public Radio Stations Talk about Geothermal Energy with GEA .....	15
Hawaii: Federal-State Energy Partnership Targets Natural Resources.....	15
Utah: Senator Introduces State’s First Renewable Energy Bill.....	15
Washington: Cascade Mountains Hold Geothermal Power Potential .....	16
<b>International News.....</b>	<b>16</b>
Australia: WA Selling Geothermal Land Plots .....	16
Australia: Hot Dry Rock Well Reaches Target Depth.....	17
Australia: Torrens Energy Reports Geothermal Hot Spots .....	17
Djibouti: Geothermal Project Will Replace Diesel-Generated Electricity.....	17
Indonesia: Reuters Reports Indonesia to Form New Firm to Tap Geothermal Energy .....	18

Northern Mariana Islands: Governor Expresses Geothermal Interest .....	19
Venezuela: Oil Minister Addresses ALBA Energy Projects.....	19
<b>Notices and Employment Opportunities .....</b>	<b>20</b>
GEA Surface and Subsurface Technology Reports Available .....	20
Employment Opportunities—Mighty River Power .....	20
Employment Opportunity—Geothermal Resource Exploration & Development Manager with Nevada Geothermal Power Inc.....	22
Employment Opportunity—NREL Management (Due March 5) .....	22
<b>Requests for Proposals (RFPs).....</b>	<b>23</b>
RFP Tribal Air and Energy—Region 7 (Due February 4) .....	23
RFP Alternative Energy Projects—Alaska (Due February 12).....	23
RFP Energy Cost Reduction Projects—Alaska (Due February 12) .....	23
CEC RFP for International Energy Fund (Due February 13).....	23
RFP for All-Source Generation—Washington (Due February 29) .....	24
SMUD to Release 2008 Renewable Energy RFO (Due April 2008).....	24
RFP Climate Change and Sustainability Conferences (Due June 5 and December 9 2008) .....	25
<b>Upcoming Events.....</b>	<b>25</b>
POWER-GEN Renewable Energy & Fuels 2008, February 19–21, Las Vegas, Nevada .....	25
WIREC International Renewable Energy Conference, March 4–6 Washington, DC ...	25
4th International Geothermal Conference, April 24, 2008, Freiburg, Germany .....	26
SMU Geothermal Conference, June 17–18.....	26

## **National News**

### **Senate Finance Committee Adds Renewable Tax Credit Extension to Its Stimulus Plan—Critical Vote Coming Monday or Tuesday!**

Senator Maria Cantwell (D-WA) led a successful effort to add a one year extension of renewable and energy efficiency tax credits to the economic stimulus package reported by the Senate Finance Committee. The Senate Finance proposal would not extend the production tax credit from December 31, 2008, its current expiration date, to December 31, 2009. Renewable energy, environmental, and public interests groups all supported the Cantwell amendment, and it was eventually adopted by Senate Finance Chair Max Baucus (D-MT) in his proposal.

The Finance Committee approved their stimulus package, including an extension of renewable energy tax credits, by a 14 to 7 vote. Action picks up Monday on the Senate floor. Republican Leadership in the Senate is opposing the Senate Finance Package because it includes measures like the renewable credit extension. The challenge will be to secure 60 votes for cloture on the Finance Committee package; otherwise, the Senate may be forced to simply pass the House bill.

## **Senators Urge DOE Secretary Bodman to Implement and Fund New Advanced Geothermal Research Initiative.**

A bipartisan letter from a dozen Senator was sent to Secretary of Energy Bodman February 1<sup>st</sup> urging DOE to move forward with the provisions of the “Advanced Geothermal Energy Research and Development Act of 2007,” which was included HR 6, the energy bill passed by Congress in December 2007. “We urge the Department to initiate a bold new geothermal program as authorized and directed by HR 6 to develop and deploy advanced technology across the spectrum of geothermal resources to achieve this potential,” the Senators told Bodman.

The Senators told Bodman they expected DOE to use the \$20 million appropriated for geothermal research in December to begin implementing this new program, and urged him to “re-evaluat[e] the FY 2009 request” in light of the new law. Further, they asked DOE “to consider reprogramming or requesting additional funds in FY 08 in order to implement the advanced geothermal research program.”

Senator Ron Wyden (D-OR) and Senator Lisa Murkowski (R-AK) led the bi-partisan effort. In addition, Senators Harry Reid (D-NV), Jeff Bingaman (D-NM), Ken Salazar (D-CO), Bernie Sanders (I-VT), Daniel Akaka (D-HI), Jon Tester (D-MT), Larry Craig (R-ID), Gordon Smith (R-OR), Mike Crapo (R-ID), and Orrin Hatch (R-UT) joined in signing the letter.

The following is the test of the letter to Secretary Bodman:

*Dear Mr. Secretary,*

*An important part of the Energy Independence and Security Act, HR 6, are the provisions that authorize and direct the Department of Energy to undertake a broad, new advanced geothermal energy research program. These provisions were based upon legislation that had strong, bi-partisan support in both the House and Senate, were developed after hearings in the House and Senate Committees of jurisdiction, and were passed with large bi-partisan majorities.*

*The Congress also has appropriated in the Consolidated Appropriations bill \$20 million for the geothermal research program in FY 2008. It is our expectation that these funds will be spent to begin the immediate implementation of the new advanced research and for other geothermal programs that Congress has authorized and the President has signed into law.*

*Further, while we understand that the process for preparing the Administration’s FY 2009 budget is well underway, we expect the Department to re-evaluate its budget request for the geothermal program in light of this new authorization. In addition to re-evaluating the FY 2009 request, we would urge the Department to consider reprogramming or requesting additional funds in FY 08 in order to implement the advanced geothermal research program that has just been authorized. The new law*

*authorizes \$95 million annually to conduct a broad-ranging program of advanced technology development, and we urge the Department's to embark upon a program that embraces this new vision of geothermal energy's potential and to request funding that can support this level of effort.*

*According to reports by the Massachusetts Institute of Technology and the National Renewable Energy Laboratory geothermal resources have the potential to provide tens of thousands of megawatts of new renewable power and heat energy to meet our energy needs. We urge the Department to initiate a bold new geothermal program as authorized and directed by HR 6 to develop and deploy advanced technology across the spectrum of geothermal resources to achieve this potential.*

### **Geothermal Energy Growth Surge Continues But Tax Credit Extension Key to Sustaining Momentum, Industry Leader Warns**

A survey released by the Geothermal Energy Association (GEA) shows that a surge in new geothermal projects continues to gain momentum, but an industry leader warned today that without an extension of federal tax credits the industry's accelerating expansion could be in jeopardy.

“The surge in new geothermal power development continues in the U.S.,” said Karl Gawell, GEA's Executive Director. According to the new GEA report 86 new geothermal power projects were underway in 12 states as of January 2008 that would provide 3,368MW of electric power. This is a 40% increase in new projects compared to a survey completed just about one year earlier.

Development of these new projects will provide significant economic and environmental benefits, according to GEA. “New projects will result in the infusion of \$11 billion in new capital investment, create 5,600 permanent jobs, and stimulate 21,000 person-years of construction and manufacturing employment,” Gawell stated. “New projects will offset 25 million metric tons of carbon dioxide compared to coal-fired power plants, which is equivalent to removing over 5 million cars off the road,” he added.

“State renewable standards coupled with the federal production tax credit are creating a renaissance in US geothermal power production,” he added. But, the federal production tax credit is about to expire at the end of 2008. In December, the Senate failed by one vote to keep a multi-year extension of the renewable tax credits in the energy bill. According to the industry, it is now facing a serious dilemma.

“If we can build and sustain this momentum, geothermal energy can become a major US energy source,” according to Gawell. “But, Congress and the Administration must work together to extend the renewable energy tax credits before they expire. Without an extended credit, the resulting tax hike will undercut one of the fastest growing segments of the US economy – renewable energy,” he warned.

GEA today joined the solar, wind, and hydropower industry associations in issuing a joint statement calling upon Congress and the Administration to “move quickly to extend the renewable energy tax credits slated to expire at the end of this year...” “With the nation facing a possible recession, it is difficult to imagine a worse time to destabilize America’s rapidly growing renewable energy sector,” the renewable leaders stated. They urged Congress to include an extension of the renewable credits in the economic stimulus bill. *The full text of the Geothermal Production and Development Update January 16 2008 is available on the GEA web site at <http://www.geo-energy.org/>.*

## **Renewable Energy Sector Issues Joint Statement**

Following the release of the renewable energy stimulus package, the National Hydropower Association, Geothermal Energy Association, Solar Energy Industries Association, and American Wind Energy Association issued a statement as follows:

### **Joint Statement Reporting Record Growth of Renewable Energy Sector, Calling for Extension of Renewable Tax Credits for Economic Stimulus**

“2007 was a record year for renewable energy in the U.S. Almost 6,000 megawatts of new renewable energy came on line in 2007, infusing over \$20 billion of investment into our economy. And along with this investment came jobs. In 2007, the renewable energy industries put Americans back to work, creating tens of thousands of high quality jobs in all 50 states. Jobs like electricians and plumbers, line workers, roofers, engineers, and high-paying manufacturing jobs. These jobs are the backbone of our economy in the U.S.

“But already these jobs and many more are at risk. The 2007 energy bill was passed in December with much fanfare, but without an extension of the renewable energy tax credits. Already we are seeing sales and new project announcements drop off. Large scale solar and wind projects take longer than a year to site, permit and construct. And with only 11 months to go before the credits expire, these projects have started drying up. Even larger concentrating solar, geothermal and hydro projects take many years to construct and will not get built without a long-term extension of the tax credits. If the renewable energy tax credits are allowed to expire, we will lose hundreds of thousands of jobs here in the U.S.

“In the absence of immediate legislative action, Congress will be raising taxes on clean, domestic, renewable energy sources and will undercut one of the fastest growing segments of the U.S. economy. With the nation facing a possible recession, it is difficult to imagine a worse time to destabilize America's rapidly growing renewable energy sector.

“As leaders of four major renewable energy trade associations, we respectfully urge bipartisan Congressional Leadership and the President to work together to include renewable energy tax provisions in any economic stimulus legislation currently being developed. Renewable energy will put Americans back to work, provide reliable and domestic energy for homes and businesses, and spur billions of dollars of economic investment but only if Congress and the Administration take immediate action to extend

the renewable energy tax credits.” Available at [http://www.awea.org/newsroom/releases/joint\\_statement\\_renewable\\_energy\\_012208.html](http://www.awea.org/newsroom/releases/joint_statement_renewable_energy_012208.html)

### **Energy Text of the State of the Union Address**

Following are the comments on energy included by President Bush in the State of the Union Address.

"To build a future of energy security, we must trust in the creative genius of American researchers and entrepreneurs and empower them to pioneer a new generation of clean energy technology. Our security, our prosperity, and our environment all require reducing our dependence on oil. Last year, I asked you to pass legislation to reduce oil consumption over the next decade, and you responded. Together we should take the next steps: Let us fund new technologies that can generate coal power while capturing carbon emissions. Let us increase the use of renewable power and emissions-free nuclear power. Let us continue investing in advanced battery technology and renewable fuels to power the cars and trucks of the future. Let us create a new international clean technology fund, which will help developing nations like India and China make greater use of clean energy sources. And let us complete an international agreement that has the potential to slow, stop, and eventually reverse the growth of greenhouse gases. This agreement will be effective only if it includes commitments by every major economy and gives none a free ride. The United States is committed to strengthening our energy security and confronting global climate change. And the best way to meet these goals is for America to continue leading the way toward the development of cleaner and more efficient technology." Available at <http://www.whitehouse.gov/news/releases/2008/01/20080128-13.html>.

### **DOE Assistant Secretary Announces Resignation**

U.S. Department of Energy (DOE) Assistant Secretary for Policy and International Affairs Karen Alderman Harbert today announced that she will resign her position in late February, according to DOE.

As Assistant Secretary, Harbert has served as the primary policy advisor to U.S. Secretary of Energy Samuel W. Bodman and the Department of Energy on domestic and international energy issues, new policy initiatives, climate change programs and regulatory concerns since December 2004. She is leaving DOE to join the U.S. Chamber of Commerce’s Institute for 21st Century Energy as the Executive Vice President and Managing Director.

Assistant Secretary Harbert’s resignation will be effective February 22, 2008. Harbert has held senior positions in several Administrations as well as in multilateral international organizations and the private sector. She also currently serves as Vice-Chairman of the International Energy Agency, which advises its 27 member nations on energy policy issues and orchestrates international responses to energy supply disruptions. *For more information, visit <http://www.energy.gov/news/5870.htm>.*

## **Droughts Threaten Nuclear Plants**

Heavy droughts throughout the Southeast over the past year may force nuclear plants to temporarily shut down, according to aol.com.

Water levels on several lakes and rivers are getting close to the minimums set by the Nuclear Regulatory Commission. Over the next several months, the water could drop below the intake pipes altogether, or the shallow water could become too hot under the sun to use as coolant.

Extending or lowering the intake pipes is not as simple as it sounds and wouldn't necessarily solve the problem. The pipes are usually made of concrete, can be up to 18 feet in diameter and can extend up to a mile. Modifications to the pipes and pump systems, and their required backups, can cost millions and take several months. If the changes are extensive, they require an NRC review that itself can take months or longer.

"Water is the nuclear industry's Achilles' heel," Jim Warren, executive director of N.C. Waste Awareness and Reduction Network, told reporters. "You need a lot of water to operate nuclear plants." He added: "This is becoming a crisis."

Twenty-four of the nation's 104 nuclear reactors are in areas experiencing the most severe levels of drought, revealed an Associated Press analysis. One drought-related shutdown over the summer was already reported at a reactor in Alabama.

Others that may be affected include Progress Energy Inc., whose reactor near Raleigh is at Harris Lake, where the water stands at 218.5 feet — just 3.5 feet above the limit set in the plant's license. Lake Norman near Charlotte is down to 93.7 feet — less than a foot above the minimum set in the license.

At a nuclear plant, water is also used to cool the reactor core and to create the steam that drives the electricity-generating turbines. But those are comparatively small amounts of water, circulating in what are known as closed systems — that is, the water is constantly reused. Water for those two purposes is not threatened by the drought.

Instead, the drought could choke off the billions of gallons of water that pass through the region's reactors every day to cool used steam. Water sucked from lakes and rivers passes through pipes, which act as a condenser, turning the steam back into water. The outside water never comes into direct contact with the steam or any nuclear material.

This is not the first time droughts have caused this type of catastrophe. During Europe's brutal 2006 heat wave, French, Spanish, and German utilities were forced to shut down some of their nuclear plants and reduce power at others because of low water levels — some for as long as a week. Both the industry and NRC spokesman Scott Burnell said plants can shut down and restart without problems. *For more information, visit <http://news.aol.com/story/a/drought-could-shut-down-nuclear-plants/20080123164209990001>.*

## Company News

### **Calpine Emerges from Chapter 11**

Calpine Corporation (Pink Sheets: CPNLQ; NYSE: CPN) announced today that it has successfully emerged from Chapter 11 bankruptcy protection. The company officially concluded its Chapter 11 reorganization after meeting all statutory requirements of the company's Sixth Amended Joint Plan of Reorganization, including successfully closing its \$7.3 billion exit financing facility that includes a one-year, \$300 million bridge facility that is expected to be paid by the end of the first quarter. Calpine's Plan was confirmed by the United States Bankruptcy Court for the Southern District of New York in an order entered on December 19, 2007.

Calpine's stock is expected to begin "regular way" trading on the New York Stock Exchange on or about February 5, 2008 under the ticker symbol CPN.

"This is a wonderful day for all of us at the new Calpine," said Robert P. May, Calpine's Chief Executive Officer. "We are very proud of what we have been able to accomplish over the past two years. Calpine is now a stronger, more competitive power company poised for growth in the energy industry. We are well positioned for future success, with a healthy balance sheet and a \$7.3 billion exit financing facility. On behalf of the Board and management team, we would like to thank the nearly 2,200 Calpine employees for their hard work, perseverance and dedication over the past two years. We'd also like to thank our customers, business partners and the communities we serve for their support throughout this process."

Gregory L. Doody, Calpine's General Counsel, who has also served as the company's Chief Restructuring Officer, said, "Calpine's restructuring was truly remarkable. In just over two years Calpine dramatically improved its capital structure, reducing approximately \$7.2 billion in debt while generating a significant recovery for our creditors as a whole. In addition, we enhanced and streamlined our core power generation business. Together, these financial and operating improvements have laid a strong foundation for the future success of Calpine, its stakeholders, customers and employees."

The Court approved Calpine's new nine-member Board of Directors, on November, 20, 2007. The Directors are:

- William J. Patterson—Chairman of the Board.
- Frank Cassidy—Member, Compensation Committee.
- Kenneth Derr—Chair, Compensation Committee.
- Robert C. Hinckley—Member, Audit Committee and Member, Nominating and Governance Committee.
- Robert P. May—Chief Executive Officer
- David Merritt—Chair, Audit Committee.
- W. Benjamin Moreland—Member, Audit Committee.

- Denise M. O'Leary—Chair, Nominating and Governance Committee.
- J. Stuart Ryan—Member, Compensation Committee.

Under the Plan, Calpine intends to issue a total of 485 million shares of reorganized Calpine common stock to holders of allowed claims. The reorganized Calpine common stock will trade on the New York Stock Exchange under the ticker symbol CPN. Calpine anticipates that it will make initial distributions under the Plan to holders of allowed claims and interests on or before February 10, 2008. In addition to the 485 million shares, Calpine will reserve 15 million shares for distribution pursuant to the terms of Calpine's Management and Director Equity Incentive Programs, which will be implemented pursuant to the terms of the Plan.

In its first distribution, Calpine currently anticipates distributing on account of allowed unsecured claims approximately 423 million shares of reorganized Calpine common stock, each with an imputed value of \$17.36 based upon a \$8.7 billion reorganized equity value and the face value of the exit financing.

Calpine currently estimates in connection with its first distribution that: (1) general unsecured creditors will receive approximately 84.8% of their allowed claims for principal and pre-petition interest; (2) holders of the 7.625% Senior Notes Due 2006, 7.75% Senior Notes Due 2009, 7.875% Senior Notes Due 2008, 8.75% Senior Notes Due 2007, and 10.5% Senior Notes Due 2006 (the "Senior Notes") will receive approximately 100% of their allowed claims for principal and pre-petition interest; and (3) holders of the 7.75% Contingent Convertible Notes Due 2015 (the "Subordinated Notes") will receive approximately 42% of their allowed claims for principal and pre-petition interest.

In connection with its first distribution, Calpine also intends to set aside 62 million shares of reorganized Calpine common stock on account of disputed unsecured claims. As claims are resolved, Calpine will make further distributions of reorganized Calpine common stock on a periodic basis in accordance with the terms of the Plan. Based upon the \$18.95 billion total enterprise value of Calpine set forth in the Plan and Calpine's current litigation-risk assessment of allowed claims, Calpine currently estimates that: (1) general unsecured creditors will ultimately recover approximately 99.9% of their allowed claims for principal and pre-petition interest; (2) holders of the Senior Notes will ultimately recover approximately 100% of their allowed claims for principal and pre-petition interest; and (3) holders of the Subordinated Notes will ultimately recover approximately 75% of their allowed claims for principal and pre-petition interest.

In accordance with the Plan, post-petition interest on the Senior Notes and certain related claims will be held in escrow pending the resolution of the Intercreditor Subordination Dispute between the holders of the Senior Notes and holders of the Subordinated Notes described in detail in the Plan. The recoveries for the holders of the Senior Notes and holders of the Subordinated Notes under the Plan depend, in part, on the resolution of the Intercreditor Subordination Dispute. Calpine's estimates regarding the ultimate recoveries under the Plan for the holders of the Subordinated Notes set forth above assume that the

holders of the Senior Notes will prevail in the Intercreditor Subordination Dispute, although Calpine currently has not yet taken any position with respect to such dispute.

As part of the Plan, Calpine's old common stock will be cancelled and holders of the old common stock will receive warrants to purchase new Calpine common stock. These warrants will be for an aggregate of approximately 48.5 million shares of new Calpine common stock and will have an exercise price of \$23.88 per share. Cashless exercises will not be permitted. The warrants will expire on August 25, 2008. The warrants will be distributed to the holders of the old Calpine common stock pro rata based on the number of shares of old Calpine common stock held at the time of cancellation. Fractional warrants will not be issued.

### **Raser Secures Additional Geothermal Leases in Utah: Over 100,000 Acres Now Under Lease**

Raser Technologies, Inc. (NYSE Arca: RZ) announced today that it has more than 100,000 acres of property in Utah for geothermal development under lease agreements. The signing of additional leases in Southern Utah last week surpassed the 100,000 acre mark. Raser secured the rights in the most recent lease agreements to the geothermal resources on more than 7,100 acres located in two counties in Southern Utah. The lease terms are for 10 years and are renewable for additional periods based on development activity or upon the payment of minimum rental payments. The financial terms of the leases are undisclosed.

Brent M. Cook, Raser's CEO stated, "We continue to see increasing demand for renewable, green electric power, and with this addition to our land holdings, we continue to position ourselves to take advantage of these favorable market dynamics. With the recently announced monetization agreement with Merrill Lynch to fund the construction of our plants, the soon to be announced power purchase agreement to buy the electricity produced, continued land acquisitions and ongoing well field development, we continue to fill our pipeline and make progress along our expected timeline for putting a number of our power plants into production in 2008. Those plants will be the first of meeting our goal to initiate of the development of approximately 100 megawatts of geothermal power for each of the first three years and 150 megawatts per year thereafter." *For more information, visit <http://new.quote.com/news/story.action?id=BIZ032b8243>.*

### **GEA Las Vegas Workshop Sets New Record**

Over 240 people attended a day-long workshop on geothermal energy January 16 in Las Vegas, Nevada. The GEA "Geothermal Development and Finance Workshop" was sponsored by Nevada Power, Ormat Nevada, Glitnir Bank and Enel North America. It brought together researchers, policy makers, developers, trade unions, financiers, and others interested in geothermal energy.

"Everyone was optimistic for geothermal energy in Nevada and the West," noted Kathy Kent, GEA's Marketing and Events Manager. "It was a great event, and for me a wonderful way to start off in the geothermal community."

This was the third workshop GEA has held and the turn-out exceeded all previous events. Planning is just being formulated for an event this summer, and suggestions for the best location are invited. So far, both Los Angeles and New York City have been suggested as sites. You should contact Kathy Kent at GEA with your ideas or if you are interested in sponsoring the next workshop. You can email her at: [kathy@geo-energy.org](mailto:kathy@geo-energy.org).

## **Renewable News**

### **Super Bowl XLII to Use Entirely Renewable Energy**

This year's Super Bowl stadium will use 100% renewable energy, according to *Green Tech Gazette*. The stadium, local celebrations, and some of the hotels in Phoenix hosting Super Bowl guests will be powered by a mix of solar, wind, and geothermal energy sources.

To add to the green initiative in Arizona, the National Football League and the Arizona Super Bowl XLII Host Committee also announced that they are working with local, state and national partners to plant trees on 96 acres of land devastated by recent wild fires and on local school campuses. *For more information, visit* <http://www.greentechgazette.com/index.php/renewable-energy/super-bowl-xlii-goes-green-with-renewable-energy/>.

### **Federal Support Could Facilitate Transmission Lines in Nevada**

Nevada is taking steps to develop transmission lines for alternative energy use, reported the *Las Vegas Review Journal*.

On January 24, Gov. Jim Gibbons welcomed a report that calls for Nevada to develop its vast renewable energy resources for in-state use and for export to other states, said Dan Schochet, chairman of the Renewable Energy Access Advisory Committee. In effect, the lines would allow geothermal, wind, and solar energy to be shipped from remote areas of the state to cities.

The report shows zones with the best geothermal, wind, and solar power resources. Senate Majority Leader Harry Reid, D-Nev. last year introduced federal legislation that would establish zones for transmission lines and would provide federal money to build them.

If a transmission line connected Nevada's northern and southern electric grids, Southern Nevada could use geothermal energy, which comes from hot underground water found mostly in northern Nevada, analysts say. Alternatively, northern Nevada could draw on solar power generated more efficiently in the hot southern end of the state.

The state can take two basic approaches. It can use government money, possibly through a transmission authority like those created in some Western states, or it can encourage

utilities Nevada Power Company and Sierra Pacific Power Company to build green power transmission lines.

Advisory committee chairman Schochet said he expects Gibbons to direct the committee to study ways to finance renewable power transmission. *For more information, visit <http://www.lvrj.com/business/14309572.html>.*

### **U.S. Renewable Energy: Record Year in 2007**

Last year was a record year for the renewable energy industry in the United States, reported *Voice of America*. The development and sale of power from wind, solar, geothermal, biomass and other renewable sources in 2007 infused \$20 billion into the U.S. economy and created tens of thousands of jobs.

New wind projects accounted for 30% of all new energy generating capacity in 2007.

Solar energy increased by 125% over 2006, with 314 megawatts installed.

Geothermal showed a 40% gain in new projects.

Hydropower from dams and other water driven systems saw increases in investments, jobs, and resources in every region of the country.

In addition, the rising price of oil and natural gas helped boost the prospects for renewables, according to Chris Flavin, President of Worldwatch Institute, a research group that follows global energy and environmental trends.

Recent state policies have added renewables as requirements in their energy plans, pushing the rapid development of the industry.

Federal tax credits have been a huge contribution, helping to lower the costs of renewable energy enterprises. But the U.S. Congress cut renewable energy tax credits from the recent 2007 Energy Bill. Solar Energy Industries Association president Rhone Resch says if the investment tax credit for solar energy is not extended and expanded early in 2008, solar could face a net job loss of over 40,000 by 2009. *For more information, visit <http://www.voanews.com/english/Science/2008-01-25-voa12.cfm>.*

### **Climate Change News**

#### **Climate Change Status Report 2007**

The Senate Environment and Public Works Committee approved a climate change bill in December, and Democratic leaders have promised a floor vote in 2008, reported *CQ Politics*. Legislators expect the House Energy and Commerce Committee to introduce a companion bill this year.

The Senate bill would set up a market-based program for companies to trade emissions credits. A company that is unable to meet its emissions targets could purchase allowances on the open market. Some of the initial credits would be handed out by the government; others would be sold through an auction. An analysis by the World Resources Institute and the Natural Resources Defense Council said total emissions would be reduced by 62–66% from 2005 levels by 2050.

The Environment and Public Works vote on the bill, sponsored by Senator Lieberman and Senator Warner fell largely along party lines, with Warner the only Republican voting in favor. Supporters need 60 votes.

Republicans pointed out problems, saying the bill would hurt the economy and do little to help the environment if countries such as China and India do not also reduce their emissions. Many also want more explicit language to promote the construction of nuclear power plants, which do not emit greenhouse gases. Other Republicans want the bill to pre-empt states from enacting their own limits on emissions.

Some Democrats supported an amendment to require 80% reductions from 1990 levels by 2050. The amendment was defeated, since it would make the bill much more difficult to pass.

The House is expected to take up its own legislation in 2008. Early in 2007, House Speaker Nancy Pelosi, D-Calif., set up a House Select Committee on Energy Independence and Global Warming. The panel has no authority to take up legislation, but Chairman Ed Markey, D-Mass., is holding regular hearings to keep up the pressure for Congress to pass a bill. *For more information, visit <http://www.cqpolitics.com/wmspage.cfm?parm1=5&docID=news-000002655028>.*

### **Hawaii Hosts International Climate Change Conference**

Several nations convened for climate change talks in Hawaii on January 30–31, reported *All Headline News*. The conference was convened by President Bush and discussed voluntary measures for helping developing nations use technology that lessens global warming and greenhouse gas pollution.

Australia, Brazil, Britain, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, South Africa, South Korea and the United Nations were expected to attend.

This is the second round of talks, following those held in September 2007, which focused on a long-term goal for decreasing carbon emissions blamed for trapping the Sun's heat in the atmosphere and slowly warming Earth. *For more information, visit <http://www.allheadlinenews.com/articles/7009737026>.*

## **EU Adopts Climate Package**

European Commission President Jose Manuel Barroso announced the adoption of a climate action and renewable energy plan on January 23, reported [bbc.co.uk](http://bbc.co.uk).

Goals are to reduce greenhouse gas emissions and address climate change. It includes a 20% reduction in emissions below 1990 levels by 2020. Barroso also included a greenhouse gas reduction target of 50% below 1990 levels by 2050. Additionally, the member states will increase the share of renewable energy to 20% by 2020, up from the current level of 8.5%.

The plan must be approved by the members of the European Parliament and member states. It could pass by the end of 2009. *For more information, visit <http://news.bbc.co.uk/2/hi/science/nature/7203514.stm>.*

## **State News**

### **Alaska: Chena Models Low-Temperature Geothermal Power Plant**

Chena Hot Spring Resort has partnered with United Technologies Corporation to produce electricity using geothermal energy from water at lower temperatures than any other plant in the world, according to Popular Mechanics.

The water under Chena is only 165°F, whereas most geothermal plants in the United States come from reservoirs that are over 300°F. Although experts thought the temperatures were too low to produce enough power, incentive to make it work came from the fact that the nearest electrical grid is 32 miles away, and generators at Chena burn through \$1000 worth of diesel fuel daily.

Chena Hot Spring Resort owner partnered with United Technologies Corporation to create a binary system, where 165°F water can produce electricity if the air or surface water temperature is 100° lower. Now, its tepid water not only generates electricity, it heats the resort's buildings, maintains a greenhouse, and keeps an ice museum frozen year-round. There are thousands of such low- to moderate-temperature geothermal systems scattered throughout Alaska and the rest of the country. Power plants like the one at Chena could tap them to produce tens of thousands of megawatts of electricity.

The pilot project is an air-conditioning unit that had been reverse-engineered to run off geothermal water. Instead of putting in electric power to create areas of high and low temperature, Chena provides the heat differential and the plant puts out electric power.

The technology has the added benefit of solving two remaining hurdles to low-temperature power generation. First, air-conditioning refrigerant operates more efficiently at low temperatures than isopentane and other fluids typically used in power plants.

Second, the components are already mass produced, which cuts the cost of a small, modular plant in half.

This works in the cold Alaskan temperatures, whereas it would be more difficult in, say, the deserts of Nevada. *For more information, visit <http://www.popularmechanics.com/science/earth/4245896.html>.*

### **Colorado and Utah: Public Radio Stations Talk about Geothermal Energy with GEA**

Blair Feulner of KCPW radio in Salt Lake interviewed Karl Gawell, GEA's Executive Director, about geothermal energy in Utah, and its potential to meet a greater part of the states energy needs. The interview aired on January 22.

Dan Myers of KCFR/Colorado Public Radio also interview Karl in a program which was broadcast at different times on January 30. *The KCFR interview is available through the web-site's archives of programs at [www.kcfr.org](http://www.kcfr.org).*

### **Hawaii: Federal-State Energy Partnership Targets Natural Resources**

The U.S. Department of Energy targets Hawaii as a testing ground for renewable energy sources projects, the *Star Bulletin* reported.

On January 28, Gov. Linda Lingle announced the Hawaii Clean Energy Initiative, a unique federal-state energy partnership which will explore Hawaii's abundant natural resources. With Hawaii serving as a model for the rest of the nation, the plan is that renewable energy sources such as wind, wave, solar, and thermal will provide 70% of all energy in Hawaii within one generation. *For more information, visit <http://starbulletin.com/2008/01/26/news/story01.html>.*

### **Utah: Senator Introduces State's First Renewable Energy Bill**

On January 30, Utah legislators introduced a bill that would encourage broader development of clean, renewable energy sources in Utah, reported *Deseret News*. Sen. Scott McCoy addressed a small crowd of supporters to introduce SB173, which he tentatively titled the "Utah Renewable Energy and Economic Development Act of 2008."

"I'm extremely excited that we are actually having the discussion about the need to move our state to a time and a place where a significant portion of our energy needs are coming from clean, renewable sources," said McCoy, D-Salt Lake, adding how it would help create an even competitive playing field for businesses trying to get into the business of providing energy for Utahns through solar, wind, geothermal and hydroelectric sources.

McCoy said Utah is in the minority of states in the West because it does not have a requirement or promise that a certain percent of its energy needs will be coming from renewable sources.

McCoy set a date of 2025 for 25% of electricity consumed in Utah to be coming from renewable sources. His bill would establish a task force to oversee zones within the state where certain types of clean, renewable sources of energy would be harvested.

SB173 may run into competition with legislation being proposed by Senate Majority Leader Curt Bramble, R-Provo. McCoy said a few differences between his bill and Bramble's will be in how much of a "monopoly" Rocky Mountain Power could end up having over renewable energy sources in Utah, the strength of either bill to guarantee reaching renewable energy goals, and how much cost will be passed on to consumers.

*For more information, visit*

<http://deseretnews.com/article/1%2C5143%2C695248699%2C00.html>

### **Washington: Cascade Mountains Hold Geothermal Power Potential**

Scientists are gauging the potential of geothermal energy in the Cascades, where there has as yet been little exploration and no deep test holes drilled, according to the *Seattle Times*.

Reports say magma is closer to the surface in the Cascades, and the energy could be easier to tap. A Department of Energy report explained that the Cascades contain "potentially significant" geothermal resources.

For example, Vulcan Power Company of Oregon has applied to lease 10,000 acres of land in the Mount Baker-Snoqualmie National Forest. Vulcan wants to build a geothermal energy plant at Mount Baker that could generate electricity for 100,000 people, reported the Skagit Valley Herald.

Vulcan expects federal agencies to release an environmental impact study of the application, filed eight years ago, sometime this spring. If approved, the proposed plant would use the volcano's underground heat to turn turbines, and test wells could be drilled by 2009.

This is just one example of the potential in the Cascades. On the Cascades' eastern slopes, energy firms are considering geothermal projects in Yakima and Kittitas counties. *For more information, visit*

[http://seattletimes.nwsources.com/html/opinion/2004143773\\_guestedit25.html](http://seattletimes.nwsources.com/html/opinion/2004143773_guestedit25.html) and

[http://www.goskagit.com/index.php/news/article/potential\\_energy\\_in\\_mount\\_baker/](http://www.goskagit.com/index.php/news/article/potential_energy_in_mount_baker/).

### **International News**

#### **Australia: WA Selling Geothermal Land Plots**

The Western Australia government is supporting the growth of the geothermal industry by selling acreage to geothermal energy explorers, reported *The Australian*.

"Perth is built on sedimentary basins which provide exploitable heat right where it can be used, providing an ideal source of clean power for WA," geothermal expert Professor Klaus Regenauer-Lieb told reporters.

The land is located from Kalbarri in the midwest to Dunsborough in the southwest and stretches 250 km inland. It is divided into 495 320 km<sup>2</sup> lots and will be available at \$3900 each. Later this year, a second area, in the Carnarvon basin region, will be added to the market. Bids for the permits will close on April 24. *For more information, visit <http://www.theaustralian.news.com.au/story/0,25197,23090761-5006789,00.html>.*

### **Australia: Hot Dry Rock Well Reaches Target Depth**

Geodynamics Limited reached a milestone in the development of a commercial hot dry rock geothermal power plant in the Australian outback, reported *Technology News Daily*.

The company, which has been attempting to establish a reservoir there for several years, successfully reached its target depth of 13,850 feet on January 22.

The company completed its first well in the Australian outback in 2003 but experienced complications, eventually abandoning its first production well. This new well is set for completion by the end of January, and the company will then be able to perform flow testing to confirm that it can sustain a geothermal power plant. *For more information, visit <http://www.technologynewsdaily.com/node/9071>.*

### **Australia: Torrens Energy Reports Geothermal Hot Spots**

Torrens Energy announced preliminary temperature results at its geothermal project area in South Australia, calling the findings "outstanding," according to *CleanTech*.

Exploration drilling returned averages of 240°C at depths of 5,000 m using temperature modeling, which Torrens said is higher than temperatures currently being used in Europe.

"One of the most exciting aspects of these results is that they are from drillholes that are adjacent to each other, indicating that the results may be highlighting a continuous region, and delineate a larger heat anomaly than anticipated," Chris Matthews, CEO of Torrens, told reporters.

The company has completed drilling four holes and started on further three drillholes over 2,000 km deep. The hot rock site, north of Port Augusta, covers over 2,000 km<sup>2</sup>. *For more information, visit <http://media.cleantech.com/2375/torrens-energy-reports-hot-geothermal-prospects>.*

### **Djibouti: Geothermal Project Will Replace Diesel-Generated Electricity**

Iceland and the Republic of Djibouti announced two energy-related agreements at the World Energy Summit held in Abu Dhabi, reported *ABN Newswire*.

First, Iceland's Minister of Industry HE Ossur Skarphedinsson and HE Mohamed Ali Mohamed signed an agreement share expertise related to Djibouti's course towards energy sustainability.

Second, the CEO of Reykjavik Energy Invest (REI) Mr. Gudmundur Thoroddson, Djibouti's Minister of Energy HE Mohamed Ali Mohamed, and the CEO of the Djibouti Energy Company Mr Djama Ali Guelleh announced the signing of an agreement on the financing structure for the Djibouti Asal Rift Geothermal Project.

As part of the Asal Project, REI will begin production on a geothermal power plant in 2012, which will eventually supply Djibouti with green electricity. This follows the company's US\$150 million commitment to investments in geothermal energy in Africa as announced by Bill Clinton and President Grimson at the Clinton Global Initiative in New York in 2007.

At the World Energy Summit, the President of Iceland, HE Olafur Ragnar Grimsson, discussed the global impact of climate change and how geothermal energy can be one of the solutions to global warming. *For more information, visit <http://www.abnnewswire.net/press/en/47361/Reykjavik's.html>.*

### **Indonesia: Reuters Reports Indonesia to Form New Firm to Tap Geothermal Energy**

Reuters reports that Indonesia plans to form a new state geothermal company. According to Pertamina sources it would “take over geothermal energy activities in the Southeast Asian country.”

According to the Reuters report, Pertamina upstream director Sukusen Soemarinda said the government had decided Pertamina should hand over its geothermal energy activities to the new company.”

### **Kenya: Oserian Farms Commissions New Geothermal Power Plant**



Oserian Development Company (ODC) of Naivasha, Kenya, recently completed the construction and commissioning of its second geothermal power station. The new plant is a 1,750 kW steam turbine generator set designed and manufactured by Geothermal Development Associates (GDA) of Reno, Nevada. ODC managed the construction using its own labor and equipment for most of the work.

The new plant includes a rugged and reliable Elliott 4-stage GYR steam turbine, Kato generator, and Lufkin gearbox, all packaged by GDA in Reno, together with inlet steam control valves, lube oil system, remote control panel, motor control center, switchgear, transformer, batteries and chargers.

The plant uses 4.5 bar steam from KenGen Well 202. Originally drilled for exploration purposes, the well had been idle since 1999. It is now a production well with KenGen selling steam to ODC.

The wellhead separator and auxiliary equipment, along with the steam supply and brine injection pipelines, were designed by Sinclair Knight Merz (SKM) of Auckland, New Zealand.

In operation since late November 2007, the new steam plant operates in parallel with the existing binary plant constructed in 2003. Together the two geothermal power plants supply most of the electrical load for Oserian's flower growing operation near Lake Naivasha in Kenya's Rift Valley region. *For further information, contact Steve Hirsch, Geothermal Development Associates, Reno, Nevada, USA, [shirsch@gdareno.com](mailto:shirsch@gdareno.com), 775-826-0647.*

### **Northern Mariana Islands: Governor Expresses Geothermal Interest**

Gov. Benigno R. Fitial of the Northern Mariana Islands visited the Philippines with his special assistant for alternative energy, conducting research on geothermal power, according to the *Saipan Tribune*.

James Quick, a former scientist with the U.S. Geological Survey, is traveling with the governor and is studying the possibility of using the volcanic islands in the north of Saipan to produce geothermal energy. *For more information, visit <http://www.saipantribune.com/newsstory.aspx?newsID=76250&cat=1>.*

### **Venezuela: Oil Minister Addresses ALBA Energy Projects**

Venezuelan Oil Minister Rafael Ramirez expressed satisfaction with energy projects in the Bolivarian Alternative for the Americas (ALBA), reported *Prensa Latina*.

Regarding the Sixth ALBA Summit, Ramirez, also president of state-run oil firm Petroleos de Venezuela (PDVSA), referred to bilateral meetings with delegations to review ongoing initiatives.

He revealed the existence of at least 18 initiatives to be submitted for feasibility assessment, including implementation options for joint geothermal energy projects with Nicaragua and Dominica. *For more information, visit <http://www.plenglish.com.mx/article.asp?ID=%7B790D0F41-5045-4314-AC85-865CD8CA8828%7D&language=EN>.*

## **Notices and Employment Opportunities**

### **GEA Surface and Subsurface Technology Reports Available**

The Geothermal Energy Association released two new reports assessing the state of geothermal technology. The reports look at the technology used to find and develop geothermal energy underground, and those used to utilize geothermal resources above ground. The first report, entitled *The State of Geothermal Technology, Part I: Subsurface Technology*, examines how companies today are trying to find and exploit geothermal heat under the ground. It follows and explains the series of steps that a geothermal project takes from exploration to resource confirmation. *The State of Geothermal Technology, Part II: Surface Technology*, examines the power plant technology used to convert geothermal resources into electricity. The report includes information about promising new surface technologies based on research and expert interviews. *Both reports are available from the GEA website at <http://www.geo-energy.org/publications/reports.asp>.*

### **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 behaviour using sophisticated computer modelling 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 totalling 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 website at [www.mightyriver.co.nz](http://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](mailto:careers@mightyriver.co.nz), or phone +64 9 5803612, or post your application to Human Resources, Private Bag 92008, Auckland Mail Centre.*

### **Employment Opportunity—Geothermal Resource Exploration & Development Manager with 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](mailto:careers@nevadageothermal.com).*

### **Employment Opportunity—NREL Management (Due March 5)**

The U.S. Department of Energy requests proposals for the selection of a Management and Operating prime contractor to lead the National Renewable Energy Laboratory (NREL), a premier renewable energy and energy efficiency research, development, demonstration, and deployment institution. Responses due 3/5/08. *For more info, contact Mary Hartford at [Mary.Hartford@go.doe.gov](mailto:Mary.Hartford@go.doe.gov) or go to:*

<https://e-center.doe.gov/iips/busopor.nsf/UNID/761A911053622FE3852572F20078F2CE?OpenDocument>.

### **Requests for Proposals (RFPs)**

#### **RFP Tribal Air and Energy—Region 7 (Due February 4)**

The U.S. Environmental Protection Agency requests proposals for the Tribal Air Grants, for projects designed to address ambient air quality issues throughout Indian Country in Region 7. Energy projects which support the reduction of greenhouse gas emissions are encouraged. Energy projects may include, but are not limited to, promoting Energy Star campaigns such as “Change a Light, Change the World” and looking for opportunities to integrate distributed renewable energy into the tribe’s energy supply. \$200K expected to be available, up to 4 awards anticipated. Responses due 2/4/08. *For more info, contact Robert Fenemore at Fenemore.Robert@epa.gov or go to:*

[http://www.epa.gov/region7/economics/r7\\_grant\\_opportunities.htm](http://www.epa.gov/region7/economics/r7_grant_opportunities.htm).

#### **RFP Alternative Energy Projects—Alaska (Due February 12)**

The Denali Commission, in concert with the Alaska Energy Authority, request proposals for Alaska Alternative Energy Projects, for cost effective alternative energy projects Alaska. Up to \$4 million expected to be available for projects that service rural Alaska, up to \$1 million for projects implemented anywhere in Alaska. Responses due 2/12/08. *For more info, contact Rebecca Garrett at (907) 771-3000 or go to:*

<http://notes5.state.ak.us/pn/pubnotic.nsf/cc52605f7c156e7a8925672a0060a91b/6f907a091d49359e892573aa007f0bd2?OpenDocument>.

#### **RFP Energy Cost Reduction Projects—Alaska (Due February 12)**

The Denali Commission, in concert with the Alaska Energy Authority, request proposals for Rural Alaska Energy Cost Reduction Projects. Areas of interest include: The upgrade of existing energy supply projects or systems for greater efficiency; energy conservation projects; heat recovery projects; and transmission lines that result in energy supply efficiency. \$4.4 million expected to be available. Responses due 2/12/08. *For more info, contact Rebecca Garrett at (907) 771-3000 or go to:*

<http://notes5.state.ak.us/pn/pubnotic.nsf/cc52605f7c156e7a8925672a0060a91b/36f30e1a1143d206892573aa007c5ccd?OpenDocument>.

#### **CEC RFP for International Energy Fund (Due February 13)**

The California Energy Commission requests proposals for the International Energy Fund, for projects that assist California firms in performing project development activities leading to exports of technology and services for power generation and energy-related

projects in foreign nations. Project development activities may include, but are not limited to: Foreign buyer orientation visits, formation of consortia, data collection, environmental and/or economic policy analyses, and recommendations regarding existing energy development. \$250K expected to be available, individual awards NTE \$25K. Responses due 2/13/08. *For more info, contact Brenda Sturdivant at [bsturdiv@energy.state.ca.us](mailto:bsturdiv@energy.state.ca.us) or go to: <http://www.energy.ca.gov/contracts/export.html>.*

### **RFP for All-Source Generation—Washington (Due February 29)**

Puget Sound Energy announces its intent to seek over 2,000 MW of all-source generation, including efficiency. Final RFP scheduled for release 1/12/08, with responses due 2/29/08. *For more info, contact Roger Garratt at [Roger.Garratt@pse.com](mailto:Roger.Garratt@pse.com) or go to: <http://www.pse.com/energyEnvironment/pse2008RFP.aspx>.*

### **SMUD to Release 2008 Renewable Energy RFO (Due April 2008)**

On January 4, 2008, 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 2008.

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](http://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](mailto:cbeltra@smud.org).*

## **RFP Climate Change and Sustainability Conferences (Due June 5 and December 9 2008)**

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

### **Upcoming Events**

#### **POWER-GEN Renewable Energy & Fuels 2008, February 19–21, Las Vegas, Nevada**

2008 marks the 5th year of this premier all-renewables conference and exhibition covering the most important trends and issues impacting the industry. Bringing the wind, solar, biomass and alternative fuels, hydro and geothermal sectors together for three days of information exchange and fast-track networking, POWER-GEN Renewable Energy & Fuels attracts the biggest names in renewables to discuss technical, strategic, regulatory, structural and economic issues. The event will take place at the Rio All-Suite Hotel & Casino Las Vegas, NV. *For more information, please visit <http://pgre08.events.pennnet.com/fl/content.cfm?NavId=6137&Language=Engl>.*

#### **WIREC International Renewable Energy Conference, March 4–6 Washington, DC**

The United States Government, in cooperation with the American Council on Renewable Energy (ACORE) and several leading renewable energy trade associations, will host the Washington International Renewable Energy Conference March 4-6, 2008, at the Washington Convention Center. GEA is a member of the Coordinating Committee and will be preparing a geothermal program track. *For more information about the Conference visit: <http://www.americanrenewables.org> or for information about the geothermal track and events contact Karl Gawell at [research@geo-energy.org](mailto:research@geo-energy.org), or 202-454-5261.*

#### **4th International Geothermal Conference, April 24, 2008, Freiburg, Germany**

The International Geothermal Conference takes place in Freiburg, Germany in April 2008 for the fourth time. The event provides information about Technology, Financing and Insurance of geothermal projects and ideal conditions to network with international business partners. *For application and more information please visit [www.geothermiekonferenz.de](http://www.geothermiekonferenz.de).*

#### **SMU Geothermal Conference, June 17–18**

Southern Methodist University will put on a Geothermal Conference covering geothermal oil and gas wells June 17–18, 2008. More information will be provided when it becomes available.



#### ***GEA Update***

A newsletter for GEA Members written by Leslie Blodgett and Karl Gawell. For more information contact GEA at: 209 Pennsylvania Avenue SE, Washington, D.C. 20003. Phone: 202-454-5261; Fax: 202-454-5265; E-

mail: [research@geo-energy.org](mailto:research@geo-energy.org)