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GEA Weekly Update June 23, 2009

National News.....	2
Senate Energy Committee Reports Energy Bill.....	2
Waxman, Democrats Discussing Details on House Climate Bill; Pelosi to Bring Bill to the Floor by Friday.....	6
House-Senate Renewable Energy Standards Draw Criticism.....	7
President Barack Obama and Key Cabinet Secretaries Promote Geothermal and Other Clean Energy Technology.....	7
Company News.....	9
Magma Energy Corp.: Preliminary Prospectus Filed for Initial Public Offering.....	9
Renewable and Climate Change News.....	10
Govs. Schweitzer, Otter Elected to Lead WGA; Priority on Energy, Climate Change.....	10
Seattle Mayor Nickels Sworn in as 67th President of U.S. Conference of Mayors.....	10
White House Releases Report on Climate Change.....	12
Western Governors, DOE Identify Areas for Large-Scale Renewable Development.....	12
<i>WSJ</i> Article Highlights Recent Progress in Geothermal Energy.....	13
National Research Council Reports on Renewable Energy Potential.....	13
Renewable Electrical Generation Sources Soar.....	15
State News.....	16
California and Nevada Release Comprehensive Draft Transmission Plans to Access Renewable Energy.....	16
New Mexico: NM Tech Explores Geothermal Direct Use.....	18
International News.....	18
Delegates Negotiate Post-2012 Climate Accord in Bonn, Switzerland.....	18
Australia: Panax Salamander-1 Well Receives \$7m Drilling Program Grant.....	19
Australia: Bligh Gov't Invests up to \$4.3m for Geothermal Station Upgrade.....	19
<i>Popular Science</i> Reports on Iceland's Geothermal Bailout.....	19
Montserrat: EGS Inc Signs Contract for Geothermal Phase 2 Exploration.....	20
Nevis: East Caribbean Geothermal Conference will be First of its Kind.....	20
New Zealand: High Renewable Energy Use Levels Reported.....	21
Philippines: Envent Signs Initial PPA for Energy Generated by Geothermal Plant.....	21
Notices.....	22
Submit Nominations Power Engineering Projects of the Year Award (by August 28).....	22
Call for Papers, Renewable Energy World North America (due August 7).....	22
SMU Geothermal Laboratory Promoting Networking for Geothermal Projects.....	22
TANC Transmission Project EIR/EIS Public Scoping Comment Period Extended to July 30.....	22
Airborne Hyperspectral Surveys of Geothermal Areas, Nevada, August 1-4.....	23
CEC Program Opportunity Notice for Matching Funds for ARRA Applications.....	23
DOE Announces New Geothermal Funding Opportunities.....	24
DOE Webcast Detailing Geothermal Funding Opportunities.....	24
USDA Announces REAP Grant/Loan Guarantee Funding (July 31).....	25
Resource Development Opportunity, Contact, Nevada.....	25
Hannon Armstrong Announces Advisory Services for DOE Loan Guarantees.....	25
Resource Development Opportunity, Rosebud Sioux Tribe, Rosebud, SD.....	25
Employment Opportunities.....	26
Green Jobs Network Adds Geothermal Job Board.....	26

Vice President of Engineering, Ram Power, Inc.....	26
Director of Development, California Operations, CalEnergy.....	27
Drilling Program Manager, Major Geothermal Power Company in CA.....	27
Senior Director, Business Development, Major Geothermal Company.....	27
Geothermal Project Supervisor, Central American Bank for Economic Integration, Costa Rica	28
Research Associate II, SMU Geothermal Laboratory.....	28
Geothermal Engineering Analyst, National Renewable Energy Laboratory	29
Requests for Proposals (RFPs).....	29
RFP for Smart Grid Demonstrations, DOE, American Recovery and Reinvestment Act	29
RFP for State Energy Program, DOE	30
RFP for Contribution of Cost Share for Transportation Related Recovery Act RFPs, CEC.....	30
RFP for Renewables Purchase in Southwest, U.S. Navy.....	30
RFP for Technology and National Research Priorities, American Recovery and Reinvestment Act.....	30
RFP for Energy Efficiency and Conservation Block Grants, DOE, American Recovery and Reinvestment Act (June 25).....	30
RFP for American Recovery Program, Department of Commerce (June 30).....	31
RFP for Green Jobs Training, DOL, American Recovery and Reinvestment Act (June 30).....	31
RFP for Environmental Implications of Emerging Technologies, NSF (September 15).....	31
RFP for Energy for Sustainability, National Science Foundation (September 15).....	32
RFP for Thermal Transport Processes, National Science Foundation (September 15).....	32
RFP for National Lab Partnerships for Energy Research, DOE (November 9).....	32
RFP for Renewable Energy Resources, Los Angeles (March 11, 2010).....	32
RFP for Smart Grid Investments, DOE, American Recovery and Reinvestment Act (March 31, 2010) .	33
Upcoming Events	33
Webcast on American Recovery and Reinvestment Act, Geothermal Technologies Program, DOE, Date TBA	33
1 st East Caribbean Geothermal Conference, June 30–July 2 (Nevis).....	33
Geothermal Lease Sale: California, Nevada, and Utah, July 14 (Reno, NV).....	33
GEA: Direct Use/Small Power Finance Workshop, Oregon Institute of Technology (OIT), August 12-13 (Klamath Falls, OR).....	34
GEA: Geothermal Energy Expo/GRC Annual Meeting, October 4-7 (Reno, NV).....	34
Renewable Energy Indonesia 2009 Trade Show, October 14–17 (Jakarta, Indonesia).....	34
SMU Geothermal Conference, November 3–4 (Dallas, TX).....	34
XVII Annual Congress and Annual Assembly, Mexican Geothermal Association, November 13 (Mexico).....	35

National News

Senate Energy Committee Reports Energy Bill

The Senate Energy Committee reported the American Clean Energy Leadership Act of 2009 by a vote of 15 to 8 on June 17th. The Committee released the following statements from Chairman Jeff Bingaman (D-NM) and Ranking Republican Lisa Murkowski (R-AK).

Chairman Jeff Bingaman: “Getting America running on clean energy has been a key goal of this mark-up. This bill will help shift our country to cleaner sources of energy, and more secure sources as well. The bipartisan, substantive and forward-looking approaches to energy found in this bill will move America toward the clean jobs and economic growth we need.”

Ranking Republican Lisa Murkowski: “Today, this committee reaches the end of a long and sometimes bumpy road toward reporting out energy legislation. Despite an uphill fight against Democrats’ three-vote majority, we were able to include a number of provisions that will lead to more domestic production of the conventional energy we need to drive this country. While I support this bill in its present form, we simply

must do more to increase our domestic production and use of nuclear energy. I will continue to press for those provisions on the Senate floor.”

The Committee press release said further:

"This balanced, comprehensive, bipartisan bill will:

- Accelerate the introduction of new clean energy technologies in the United States, creating new jobs and helping businesses grow through clean energy project financing, a renewable electricity standard and a robust and secure national electricity transmission highway;
- Increase energy efficiency in buildings, major equipment and appliances, saving consumers and businesses billions of dollars on their energy bills;
- Enhance America’s energy independence by increasing clean energy supplies and energy security, including new access to over 20 trillion cubic feet of clean natural gas resources;
- Strengthen America as the world leader in energy innovation, by doubling our national investment in energy research and technology;
- Build a new energy workforce for the future;
- Protect consumers by making energy markets more transparent and fair, and by providing new tools to fight market manipulation; and
- Tackle future energy and climate challenges with smarter, more integrated planning.

The American Clean Energy Leadership Act is based on six major bills -- all with bipartisan sponsorship -- and five other bills with either Republican or Democratic sponsorship that were introduced in this Congress. Key provisions were developed through 39 bipartisan staff briefings, 20 formal hearings and 11 open business meetings. During the process of writing this bill, 100 amendments were considered and adopted, most on a bipartisan basis and many unanimously."

Here are excerpts from the Committees' summary of the bill. The full summary is available on the Committee web site at: <http://energy.senate.gov/public/index.cfm?FuseAction=Home.Home>.

Clean Energy Technology Deployment

Creates Clean Energy Financing for the 21st Century

This legislation is a bipartisan effort to position the U.S. to lead the development of clean energy by ensuring that commercial financing for clean, new technologies is readily available for future energy use right here in America.

Implements a series of reforms to the existing Department of Energy loan guarantee program, including creating a new “Clean Energy Investment Fund” to allow collected costs to be used to support more technology deployment. The legislation also creates a new entity housed in DOE -- the Clean Energy Deployment Administration (CEDA) -- with strong financial expertise and with a specific purpose to create an attractive investment environment for the development and deployment of clean energy technologies.

CEDA would be an independent administration within DOE, like the Federal Energy Regulatory Commission. It would be governed by a board of directors and an administrator, all of whom would be appointed with the advice and consent of the Senate. CEDA will also have a permanent Technology Advisory Council to advise on the technical aspects of new technologies and to help set goals for the administration.

The agency would provide various types of credit to support deployment of clean energy technologies, including loans, loan guarantees and other credit enhancements as well as secondary market support, to develop products such as clean energy-backed bonds that would allow less expensive lending in the private sector. The agency would also seek to accommodate riskier debt and thus provide a mechanism for deployment of the most innovative technologies.

CEDA’s mission would be to encourage deployment of technologies that are perceived as too risky by commercial lenders; thus, the agency is encouraged to back riskier technologies with a higher potential to address our climate and energy security needs. The agency is to use a portfolio investment approach in order to mitigate risk and is to try and become self-sustaining over the long term by balancing riskier investments with revenues from other services and less risky investments.

CEDA would be an autonomous entity with strong guidance and aggressive goals for technology deployment set by an independent advisory council, in consultation with the Secretary of Energy. The bill sets out a process for goal-setting in the various areas and then mandates numerical targets for achieving the goals, against which the performance of CEDA may be judged. There would be various levels of financial oversight, including audits by the comptroller general and unfettered access to the books of CEDA by the Energy Secretary.

Makes the Promise of Renewables Come True

A strong renewable electricity standard (RES) is an essential component of any comprehensive national energy policy, not just an important part of such a strategy, but an essential component. A national RES also will reduce our greenhouse gas emissions, increase our energy security, and enhance the reliability of the electricity grid by creating more homegrown renewable energy.

Rapidly ramps up clean, domestic sources of electricity by requiring the gradual increase of the amount of renewable energy utilities produce.

Sellers of electricity must obtain the following percentages of their electricity from renewable energy resources or from energy efficiency improvements:

YEAR	%
2011-2013.....	3
2014-2016.....	6
2017-2018.....	9
2019-2020.....	12
2021-2039.....	15

Utilities selling less than 4 million megawatt hours per year are exempt.

Qualifying Renewables are: wind, solar, ocean, geothermal, biomass, landfill gas, incremental hydropower, hydrokinetic, new hydropower at existing dams with no generation.

Ways of meeting the standard are: Produce the specified amount of electricity or efficiency savings itself; purchase renewable energy or efficiency savings; Purchase renewable energy credits or energy efficiency credits from entities who have excess; Make alternative compliance payments to the Secretary at a rate of 2.1 cents per kilowatt hour. Payments are made directly to states whose utilities have paid into the fund, for development of renewable resources, or to offset increases in customer’s bills.

Will Link the Country with a Reliable Transmission Grid

With this legislation millions will benefit from the jobs that come to the states where the generation is located and from the electricity that is carried to customers throughout the country.

Establishes the policy that the transmission infrastructure should be guided by the following goals: support for development of renewable generation; opportunities for reduced emissions; cost savings resulting from reduced congestion, enhanced opportunities for trades, reduced line losses, generation sharing; enhanced fuel diversity; reliability benefits; diversification of risk; enhancement of competition and mitigation of market power; ability to collocate facilities on existing rights-of-way; competing land use priorities; the

needs of load-serving entities; and the contribution of demand response, energy efficiency and distributed generation.

Requires FERC to coordinate development of an interconnection-wide plan that achieves the policy goals, from plans developed by current planning entities; FERC must promulgate a rule to embody the policy goals and develop a schedule to implement those policies within one year of enactment.

Transmission planning entities shall develop regional plans and submit them to FERC within 24 months. The Commission will encourage joint submissions and submission of interconnection-wide plans. FERC may require modification of submitted plans to ensure conformance to planning principles and to reconcile inconsistencies.

FERC shall periodically evaluate whether projects in the interconnection-wide plan are being developed, and if not take actions, in accordance with other provisions of law, to address identified obstacles.

Make recommendations to Congress for further actions or authority needed to ensure development of timely projects.

Update the plan every three years.

Allows States one year from time of filing of a proposal to site a high priority national transmission project.

Gives FERC jurisdiction over siting when states have either been unable to site the facility or have denied the application.

Jurisdiction is over facilities 345 kilovolts and above that are included in the transmission plan.

Gives the Department of the Interior lead agency status for development of records of decision on public lands.

FERC must establish, by rule, appropriate methodologies for allocation of costs of high priority national transmission projects.

Such methodologies derived from the cost allocation must be just and reasonable and not unduly discriminatory or preferential.

Balances Energy Efficiency with Water Efficiency

Ensures a better understanding of the interdependence of energy and water, and begins integrating decision-making related to both resources.

This legislation is intended to promote a better understanding of the interdependence of energy and water, and begin integrating decision-making related to both resources. Large amounts of water are consumed in generating electricity and producing fuels. Likewise, the delivery and treatment of water supplies consume massive amounts of energy. With the exception of certain renewable energy sources, building more power plants and creating new fuels will impact scarce water resources. Similarly, as water demands increase, more energy will be required to produce and treat the water. The interdependence between energy and water requires policies that rely on sound data to promote efficient use of both resources. This legislation contains the following elements relating to energy and water.

National Academy Energy-Water Study – requires the National Academy of Sciences to assess water use associated with developing fuels in the transportation sector, and the water consumed in different types of electricity-generation.

Power Plant Water Use Study – directs the Secretary of Energy to identify the best available technologies and develop other strategies to maximize water and energy use efficiencies in producing electricity.

Reclamation Water Conservation & Energy Savings Study – directs the Bureau of Reclamation (BOR) to evaluate energy use in storing and delivering water from Reclamation projects, and identify ways to reduce such use through conservation, improved operations, and renewable energy integration.

BOR Brackish Groundwater Desalination Facility (Alamogordo, NM) – establishes research priorities for the Facility, including a requirement to develop renewable energy technologies that will integrate with desalination technologies.

Energy Information Administration Energy for Water Use Assessment – requires the Energy Information Administration to analyze the energy consumption associated with the acquisition, treatment and delivery of water for a variety of uses.

Energy-Water Roadmap – directs the Secretary of Energy to develop an Energy-Water Research and Development Roadmap to define the future efforts necessary to address water-related challenges relating to sustainable energy generation and production.

Energy-Water Clean Technology Grant Program – establishes a grant program for development of technologies that reduce the consumption of, or conserve, energy supplies and promote water conservation activities.

Rural Water Utilities Energy and Water Efficiency Program -- requires the Secretary of Energy to provide technical assistance to rural water utilities relating to the development of alternative and renewable energy supplies and water conservation.

Comprehensive Water Use and Energy Savings Study – directs the Secretary of Energy to study the interrelated nature of water and energy use and identify opportunities to reduce energy consumption and associated costs through the use of water conservation and water management strategies such as water reuse and the development of nonpotable water sources.

Increases Production of Renewable Energy on Public Lands

The development of renewable energy on our public lands holds great promise. For example, the Bureau of Land Management (BLM) manages over 20 million acres of land with wind energy potential and over 30 million acres with solar potential, and there is an active geothermal program on public lands. The bill will enhance the efficient and appropriate use of our public lands for renewable energy development while addressing the need for a reasonable return to the taxpayer, as follows:

- Improves permit coordination by establishing permit processing offices;
- Requires BLM to undertake a programmatic environmental impact statement on solar development and the Forest Service to do the same for wind, solar and geothermal development; and
- Requires the Secretary to establish pilot projects and authorizes the establishment of a leasing program if warranted by the results of those projects for wind or solar energy on public lands.

Waxman, Democrats Discussing Details on House Climate Bill; Pelosi to Bring Bill to the Floor by Friday

House Democrats have been unable to form agreements on details of a global warming and energy bill, weakening chances that the measure will pass before the July Fourth recess, according to nytimes.com.

"I think it's less and less likely we'll go next week, but I don't want to say absolutely not," Energy and Commerce Chairman Henry Waxman (D-Calif.) told press following a two-hour, closed-door meeting with Agriculture Chairman Collin Peterson (D-Minn.) and several Obama officials.

"Everything is going great," House Speaker Nancy Pelosi (D-Calif.) told E&E on Friday. "It's the legislative process."

Pelosi will bring the climate change bill to the floor this week, according to politico.com, though authors Waxman (D-Calif.) and Massachusetts Rep. Ed Markey are still working out a deal with Agriculture Committee Chairman Collin Peterson.

"The bill has been filed tonight with the Rules Committee," Pelosi spokesman Drew Hammill told press. "There are some issues still under discussion, but we are confident we can resolve them by the time the bill goes to the floor on Friday."

Democrats remain short of the 218 required votes to pass. "We're getting there," Majority Whip James Clyburn (D-S.C.) told press. "It's a close vote."

See <http://www.nytimes.com/cwire/2009/06/22/22climatewire-house-climate-bill-remains-in-holding-patter-56278.html> and <http://www.politico.com/news/stories/0609/24068.html>.

House-Senate Renewable Energy Standards Draw Criticism

For years, renewable energy and environmental activists have promoted renewable energy standards, sometimes called renewable portfolio standards, as a means of expanding renewable power production. Successful campaigns in a majority of the states have resulted in state laws mandating expanded renewable power production. For geothermal, these standards have been driving a positive market growth and are a fundamental underpinning of geothermal growth.

Now, a national standard appears to be in reach, but the versions being reported in the House and Senate are drawing criticism. The Senate Energy and Natural Resources Committee passed energy legislation that includes a renewable electricity standard (RES) of 15% by 2021, with states allowed to fulfill up to 4% of the requirement through energy efficiency measures. A bill passed by the House of Representatives' Energy and Commerce Committee includes an RES of 20% by 2020 — but it permits states to meet up to 8% of the standard through energy efficiency improvements.

Marchant Wentworth, representative for the Union of Concerned Scientists (UCS), was quoted by SustainableBusiness.com saying the Senate RES "could actually inhibit the proliferation of renewable power in the U.S." Earlier, UCS had released a report critical of the Waxman-Markey Bill in the House. According to UCS "Bottom line: The Waxman-Markey RES does not ensure that any new renewable electricity will be developed beyond the renewables that are already projected to occur under the business as usual forecast by the U.S. Energy Information Administration (EIA)."

Even one of the strongest advocates of a national RES, the American Wind Energy Association, has joined the chorus of critics. An AWEA spokesman wrote in RenewableEnergyWorld.com, "in its current form the RES would not result in new wind energy development and that thousands of potential jobs would be left on the table."

Just a few months earlier, AWEA had led a coalition supporting a national RES. On March 24 they issued a press release endorsing "a national renewable electricity standard (RES) as a way to provide the long-term policy commitment that businesses need to invest tens of billions of dollars in clean energy, creating thousands of American jobs." That release was about a group letter to Congress signed by 226 companies and organizations, urging "Congress to adopt a national RES this year." "Legislation introduced in both the House and Senate would require all states to generate at least 25% of their electricity from renewable sources by 2025," the AWEA release noted.

Both now, as both the House and Senate prepare to take action on energy bills reported by their respective energy committees, supporters and opponents of the pending House-Senate legislation appear to be critical of the bills. Much of the opposition to a national RES has reportedly come from the Southeast US, where

some question whether the renewable resource base is adequate. Reuters reported that "Progress Energy Inc's (PGN.N) Chief Executive William Johnson said on Monday that it's unlikely any southeastern U.S. state can meet a goal of using renewable energy to supply 20 percent of its power supply by 2020."

For geothermal energy, the national renewable energy standard being proposed is less than the state standard already in place in nine of the states where GEA has identified new projects under development. In three states with new geothermal development -- Alaska, Florida and Idaho -- there is no state RPS.

States with Geothermal Power Under Development and State Renewable Standards*

<u>State</u>	<u>Renewable Standard Target</u>
Alaska	None
Arizona	15% by 2025
California	33% by 2020
Colorado	20% by 2020
Florida	None
Hawaii	20% by 2020
Idaho	None
Nevada	25% by 2025
New Mexico	20% by 2020
Oregon	25% by 2025
Texas	5,880 MW by 2015
Utah	20% by 2025
Washington	15% by 2020
Senate National RPS Proposal	15% by 2021 (4% can be efficiency)
House National RPS Proposal	20% by 2020 (8% can be efficiency)

*States based upon March 2009 GEA US Geothermal Power Production and Development Update, RPS data from <http://www.dsireusa.org/>

In addition, recent increase in national non-hydro renewable energy production would delay the date at which a national standard would effectively impact the market for new renewable production (See story later in this edition, "Renewable Electrical Generation Sources Soar"). Based upon current levels of renewable power production, the House bill may not require any new non-hydro development until 2014, and the Senate RES might not have an overall impact until 2017.

For more information on the UCS report and other information critical of the pending energy legislation visit: http://thebreakthrough.org/blog/2009/06/climate_bill_analysis_part_xi.shtml

For more information supporting a national renewable energy standard visit: http://www.renewableenergyworks.org/show_page.php?page=supporters

President Barack Obama and Key Cabinet Secretaries Promote Geothermal and Other Clean Energy Technology

President Barack Obama's News Conference June 23 began with opening remarks stressing the importance of pending energy legislation. The President said:

"This week, the House of Representatives is moving ahead on historic legislation that will transform the way we produce and use energy in America. It is legislation that will finally spark a clean energy transformation that will reduce our dependence on foreign oil and confront the carbon pollution that threatens our planet.

This energy bill will create a set of incentives that will spur the development of new sources of energy, including wind, solar, and geothermal power. It will also spur new energy savings, like efficient windows and other materials that reduce heating costs in the winter and cooling costs in the summer.

These incentives will finally make clean energy the profitable kind of energy. And that will lead to the development of new technologies that lead to new industries that could create millions of new jobs in America – jobs that cannot be shipped overseas.

At a time of great fiscal challenges, this legislation is paid for by the polluters who currently emit the dangerous carbon emissions that contaminate the water we drink and pollute the air we breathe. It also provides assistance to businesses and communities as they make the gradual transition to clean energy technologies.

This legislation is extraordinarily important for our country, and has taken a great effort on the part of many over the course of months. I want to thank the Chair of the Energy and Commerce Committee, Henry Waxman; his colleagues on that committee, Congressmen John Dingell, Ed Markey, and Rick Boucher. I also want to thank Charlie Rangel, the Chair of the Ways and Means Committee, and Collin Peterson, the Chair of the Agriculture Committee, for their many and ongoing contributions to this process. I also want to express my appreciation to Speaker Pelosi and Majority Leader Steny Hoyer.

We all know why this is so important. The nation that leads in the creation of a clean energy economy will be the nation that leads the 21st century global economy. That is what this legislation seeks to achieve – it is a bill that will open the door to a better future for this nation. And that is why I urge members of the House to come together and pass it."

Also, this week key Cabinet Secretaries will spread out across the country to host a series of Clean Energy Week events.

According to the White House, "Clean Energy Week events will highlight the President's commitment to passing comprehensive energy and climate legislation that will generate millions of jobs, break our dependence on foreign oil, reduce the threat of deadly pollution and restore America's role as a global leader in the clean energy industry."

Company News

Magma Energy Corp.: Preliminary Prospectus Filed for Initial Public Offering

Press Release—June 15, [Magma Energy Corp. Files Preliminary Prospectus for Initial Public Offering](#)

Ross J. Beaty, the Chairman and CEO of Magma Energy Corp., announced today that Magma has filed a preliminary prospectus with the securities regulatory authorities in each of the provinces and territories of Canada, other than the Province of Quebec, in connection with an initial public offering of its common shares.

A syndicate of underwriters, co-led by Raymond James Ltd. and Cormark Securities Inc., has been formed to manage the offering. The other members of the syndicate are Canaccord Capital Corporation, National Bank Financial Inc., Dundee Securities Corporation, Jacob & Company Securities Inc., and Wellington West Capital Markets Inc.

The preliminary prospectus is still subject to completion or amendment. Copies of the preliminary prospectus may be obtained from:

Raymond James Ltd., #5300, Scotia Plaza, 40 King St. West, P.O. Box 415, Toronto, Ontario M5H 3Y2, Attention: Sarah Greer, Phone No.: (416) 777-7197; Fax (416)-777-7129; email: ecm@raymondjames.ca,

or: Cormark Securities Inc., #2800, South Tower, Royal Bank Plaza, Toronto, Ontario, M5J 2J2, Attention: Ashley Filzer, Phone No.: (416) 943-6414; Fax (416) 943-6496; email: afilzer@cormark.com.

The prospectus is available at www.sedar.com. There will not be any sale or any acceptance of an offer to buy the securities until a receipt for the final prospectus has been issued.

Renewable and Climate Change News

Govs. Schweitzer, Otter Elected to Lead WGA; Priority on Energy, Climate Change

Press Release—June 16, Govs. Schweitzer, Otter Elected to Lead WGA, Energy and Climate Change High Priorities

Park City, Utah -- Gov. Brian Schweitzer of Montana, newly elected chairman of the Western Governors' Association, said energy and climate change will continue to be top priorities for the association over the next year.

Schweitzer officially took over as chair today at the close of the WGA Annual Meeting here. Gov. C.L. "Butch" Otter of Idaho is the new vice chairman.

"Western states are at the very center of our country's energy future, and Western governors will take the lead in building the bridge to a new energy economy," Schweitzer said.

Today's closing plenary session focused on fostering international cooperation on energy and the environment. On Monday the governors adopted a policy resolution that called for several actions to foster development of clean energy resources and reduce greenhouse gas emissions.

Among the recommendations was the need for a substantial, long-term national investment of tens of billions of dollars annually to support research and deployment of clean energy technologies and infrastructure that would result in:

- near-zero gas emissions from new coal-fired electricity generation in 10 years and from existing generation no later than 2030;
- increased energy from wind, solar, geothermal, hydro and biomass resources;
- expansion and upgrade of the electricity transmission grid and storage capabilities;
- advanced vehicle and battery technologies and alternative transportation fuels; and
- next generation energy efficiency technologies and practices.

All of the policy resolutions adopted are available on the WGA Web site at www.westgov.org. Also available from the Web site is archived video of the plenary sessions.

Seattle Mayor Nickels Sworn in as 67th President of U.S. Conference of Mayors

Press Release—June 15, Seattle Mayor Greg Nickels is Sworn in as the 67th President of the U.S. Conference of Mayors

Providence, RI – Seattle Mayor Greg Nickels today was sworn in as the 67th President of the United States Conference of Mayors (USCM) during the final session of the group's 77th Annual Meeting. Local leaders came together for four days at the Rhode Island Convention Center to discuss and debate policy issues that impact urban America and metropolitan areas.

As the President of the Conference, Mayor Nickels will set the Conference's agenda, appoint committee and task force chairs and serve as the national spokesperson for the organization.

Nickels was already a leader among the mayors' organization. In February of 2005, he introduced the U.S. Mayors' Climate Protection Agreement, whereby mayors have pledged to meet Kyoto Protocol goals and significantly curb greenhouse gas emissions by 2012. Over 950 mayors have already signed the agreement and are working to make their cities energy efficient.

Mayor Nickels was also instrumental in getting an Energy Efficiency and Conservation Block Grant – conceived by the Conference and a top priority of the mayors – to be included in the Federal Recovery Bill. This grant funds an unprecedented \$2.8 billion to support mayoral efforts to meet the goals of the Mayors' Climate Protection agreement.

In his inaugural remarks Mayor Nickels said, "Now more than ever, we need clear communication between the federal government and the cities. ... Today facing this Great Recession, I submit that we must forge with the federal government a New Deal with America's Cities. ... For too long, we've been trapped in a structure that put the federal government at the top of the chart, followed by the states. It doesn't work today. ... We need a New Deal with America's cities that views the diversity of our metro areas as a strength instead of a burden."

In the midst of the economic crisis that is forcing many mayors to make major budget cuts, much of the discussion at the meeting was focused on stimulus implementation and impediments. Mayor Nickels pledged that, "The first thing I intend to do is to critically review every aspect of the American Recovery and Reinvestment Act. We need to see the stimulus as an opportunity to highlight what worked and what didn't to make a case for a New Deal with America's cities."

Nickels continued, "Here in the Conference of Mayors, we know that our nation's urban areas provide more than just the foundation of building a new prosperity. When you look at the numbers, our strength becomes clear. We are the top foundation, pillars and roof of our national economy – the nation's top 100 metro[politan] areas generate 75% of gross domestic product."

At their concluding business session today, the nation's mayors debated and voted on policy recommendations to forward to Congress and the Obama Administration. Among the measures passed were a resolution on cap-and-trade policy, a resolution to make the assault weapons ban permanent, a resolution to support marriage equality for same-sex couples, a resolution to support the Administration's health care reform principles and a resolution to make high speed rail as priority in this country. The entire list and text of passed resolutions, thus new policy of the organization, can be found on the USCM Web site at www.usmayors.org.

During the meeting, the mayors also elected new leadership: Vice President Burnsville, MN Mayor Elizabeth Kautz, Second Vice President Los Angeles, CA Mayor Antonio Villaraigosa; Trustees Honolulu, HI Mayor Mufi Hannemann, Southfield, MI Mayor Brenda Lawrence, Dallas, TX Mayor Tom Leppert, Philadelphia PA Mayor Michael Nutter and Bowling Green, KY Mayor Elaine Walker; Advisory Board Members Salt Lake City, UT Mayor Ralph Becker, Arlington, TX Mayor Robert Cluck, Rochester, NY Mayor Robert Duffy, Bridgeport, CT Mayor Bill Finch, Long Beach, CA Mayor Bob Foster, Redondo Beach, CA Michael Gin, Chattanooga, TN Mayor Ron Littlefield, Laredo, TX Mayor Raul Salinas, St. Louis, MO Mayor Francis Slay, Mesa, AZ Mayor Scott Smith and Piscataway, NJ Mayor Brian Wahler.

The U.S. Conference of Mayors is the official nonpartisan organization of cities with populations of 30,000 or more. There are 1,139 such cities in the country today, each represented in the Conference by its chief elected official, the Mayor.

See

http://news.prnewswire.com/DisplayReleaseContent.aspx?ACCT=ind_focus.story&STORY=/www/story/06-15-2009/0005044233&EDATE=.

White House Releases Report on Climate Change

Press Release—June 17, [White House Releases Report on Climate Change](#)

Washington — Climate change is already having detrimental effects in the United States, and those effects are probably going to get worse, a new federal study suggests.

The U.S. Global Change Research Program released the report, titled “Global Climate Change Impacts in the United States,” June 16 during a White House-hosted press conference.

John P. Holdren, director of the White House Office of Science and Technology Policy, said the report includes the most up-to-date scientific findings on the impacts of climate change. “It is clear that climate change is happening now,” he said.

The nation’s average annual temperature has risen about 1.5 degrees Fahrenheit (0.83 degrees Celsius) over the past 50 years, said Thomas Karl, director of the National Climatic Data Center in Asheville, N.C., and lead author of the report. During that time, extreme episodes of rainfall also increased; the amount of water falling in the heaviest 1 percent of downpours in 2007 was almost 20 percent more than it was in 1958.

Climate models hint that this trend will continue, with the heaviest downpours late this century containing about 40 percent more precipitation than they do now. Those heavier downpours will lead to more flooding and waterborne diseases and will increasingly disrupt transportation, the report notes.

Transportation could especially suffer in low-lying coastal areas vulnerable to increasing sea level, the report suggests. Along the Gulf Coast alone, more than 3,860 kilometers (2,400 miles) of major roadways will be permanently inundated if sea level rises about 1.2 meters (4 feet), as some studies estimate, Holdren said.

No part of the country will be spared, authors of the report say. In the Northwest, shrinking snowpacks will reduce summertime stream flow, straining water resources. In Alaska, summers will be hotter and drier, and as a result the number of wildfires and insect infestations will increase. In the Southeast, hurricanes and sea level rise will conspire to boost damages from storm surges. A large number of ecosystems, from trout-filled streams of the Northwest to coral reefs off the Florida coasts, will suffer, as will the tourism and recreation that they support, the report suggests.

“This report stresses that climate change has immediate and local impacts,” said Jane Lubchenco, administrator of the National Oceanic and Atmospheric Administration. “It literally affects people in their backyards.”

See <http://www.usnews.com/articles/science/2009/06/17/white-house-releases-report-on-climate-change.html>.

Western Governors, DOE Identify Areas for Large-Scale Renewable Development

Press Release—June 15, [Western Governors, U.S. Department of Energy Report Identifies Promising Areas for Large-Scale Renewable Development](#)

Park City, Utah -- The Western Governors’ Association and the U.S. Department of Energy today released a joint report that takes the first steps toward identifying those areas in the Western Interconnection that have both the potential for large-scale development of renewable resources and low environmental impacts.

“We set and achieved an aggressive goal of bringing together in less than one year a large number of stakeholders to identify areas that have the most promising renewable energy resources,” said Gov. Jon M. Huntsman, Jr., WGA Chairman. “Their efforts are an important first step in developing cost-attractive

renewable energy resources across the West and the high voltage transmission that will ensure this electricity can be delivered to demand centers.”

The results of this work and a map that shows the most promising areas are summarized in the report, Western Renewable Energy Zones – Phase 1 Report released today at the WGA’s Annual Meeting. Secretary of Energy Steven Chu joined the governors today to discuss the report’s findings and future work.

“To harness the incredible renewable energy potential of the West, we need to know where that energy can be generated and how to move it to where people live,” Secretary Chu said. “The Department of Energy was proud to partner with the Western Governors’ Association on this study, which is a necessary step for creating a clean energy economy.”

The U.S. Departments of Interior and Agriculture and the Federal Energy Regulatory Commission were also involved in the initiative. Secretary of Interior Ken Salazar, Secretary of Agriculture Tom Vilsack and FERC Chairman Jon Wellinghoff also participated in today’s discussion.

Participants in the WREZ process included renewable energy developers, tribal interests, utility planners, environmental groups and government policymakers. The WGA will continue to work with stakeholders during three future phases of the initiative.

The governors will partner with utilities and the Western Electricity Coordinating Council to evaluate transmission needs to move power from preferred renewable energy zones. They will work to improve the integration of wildlife and environmental values in decisions on the development of generation and transmission associated with these renewable energy zones. Stakeholders have agreed to work with WGA to coordinate purchasing from the desirable renewable energy zones to demand centers and to coordinate interstate cooperation for renewable energy generation and transmission.

***WSJ* Article Highlights Recent Progress in Geothermal Energy**

An article on the Wall Street Journal Blogs describes how the American Recovery and Reinvestment Act has allowed the Department of Energy to pursue technologies such as geothermal energy, which as recently as 2007 had its funding cut completely by the Bush administration. But now, DOE is receiving \$400 million for various geothermal technologies, mostly in R&D.

Geothermal is seeing an upward trend, the article stated. Companies are able to apply for loan guarantees, Google’s philanthropic arm is providing support, and a U.S. Geological Survey study last fall estimated 30,000 MW of conventional untapped geothermal resources in just the western third of the U.S.

See <http://blogs.wsj.com/environmentalcapital/2009/06/12/energy-department-brings-geothermal-to-a-boil/>.

National Research Council Reports on Renewable Energy Potential

Press Release—June 15, [Renewable Energy Could Contribute to U.S. Electricity Needs, Yet Challenges Remain](#)

Washington -- Renewable energy resources in the U.S. are sufficient to meet a significant portion of the nation's electricity needs, says a new report from the National Research Council. Fully taking advantage of these potential low CO₂-emitting sources for generating electricity will call for enhanced technologies, increased deployment, financial investments, and implementation of policies to drive increased adoption of renewable electricity. If the use of renewable electricity is to grow significantly, large increases will be required in the manufacture and installation of these technologies, offering significant employment and economic opportunities.

Hydroelectric power is the largest source of renewable electricity in the U.S., generating 7% of all U.S. electric power in 2007. Non-hydroelectric renewable resources -- solar, wind, geothermal, and biomass -- account for only 2.5% of U.S. electricity, although they have the potential to contribute far more, the report says. Nationally, solar and wind resources, in particular, could offer significant amounts of electrical power.

Technological advancements will continue to be needed to reduce costs and make renewable electricity technologies more efficient, the report says, but even with current technologies, renewable resources could contribute more than they do now. With accelerated deployment, increases in transmission capacity, and other electric-grid improvements, non-hydroelectric renewables could technically contribute up to 10% of U.S. electricity by 2020, and 20% or more by 2035. However, major scientific advances, and changes to the way we generate, transmit, and use electricity, will be needed before renewables can contribute the majority of U.S. electricity. Necessary improvements include the development of intelligent, two-way electric grids; large-scale and distributed electricity storage; and significantly enhanced, yet cost-effective, long-distance electricity transmission.

Renewable-energy use can have numerous environmental and local impacts. Many of these impacts are positive: Using renewable energy lessens emissions of CO₂, sulfur dioxide, nitrogen oxides, and mercury; consumes less water; and causes less water contamination compared with fossil fuel electricity. However, issues of land use and other local impacts (e.g., noise from wind turbines or potential effects on local weather) will become increasingly important as deployment of renewable technologies grows, the report says.

For renewable electricity to make a significant contribution to U.S. electricity generation, it is critical that there is an understanding of the scale of deployment that will be required. Large increases will be needed over current levels of manufacturing, employment, investment, and installation. The U.S. Department of Energy recently stated that for wind energy to contribute 20% of U.S. electricity it would require 100,000 wind turbines, \$100 billion of additional capital investments and transmission upgrades, and employees to fill 140,000 jobs. The result would be the elimination of more than 800 million metric tons of CO₂ emissions from the U.S. electricity sector. According to the committee that wrote the report, the U.S. could feasibly meet this goal by 2030, but the challenge will be great.

Achieving widespread adoption of renewable energy will also require long-term and consistent policies that encourage the generation of renewable electricity, the report adds. In most cases, electricity from renewables is more expensive to produce than electricity from fossil fuels. In the near term, policy incentives, such as the renewable production tax credit, would boost the use of renewable electricity. Continued research and development into renewable electricity generation could lead to more cost-effective technologies. Overall, technological developments and consistent policy will need to be coordinated with manufacturing capacity and access to capital in order to accelerate deployment of renewable electricity.

This is the second in a series of reports from the National Academies' America's Energy Future project, which was undertaken to stimulate and inform a constructive national dialogue about the nation's energy future. Upcoming reports are Realistic Prospects for Energy Efficiency in the United States and an overarching final report titled America's Energy Future: Technology and Transformation.

The America's Energy Future project is sponsored by the U.S. Department of Energy, BP America, Dow Chemical Company Foundation, Fred Kavli and the Kavli Foundation, GE Energy, General Motors Corp., Intel Corp., and the W.M. Keck Foundation. Support was also provided by the National Academies through the following endowed funds created to perpetually support the work of the National Research Council: Thomas Lincoln Casey Fund, Arthur L. Day Fund, W.K. Kellogg Foundation Fund, George and Cynthia Mitchell Endowment for Sustainability Science, and Frank Press Fund for Dissemination and Outreach. The National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council make up the National Academies. They are private, nonprofit institutions that provide science, technology, and health policy advice under a congressional charter. The Research Council is the principal operating agency of the National Academy of Sciences and the National Academy of Engineering.

See <http://www.docuticker.com/?p=26463>.

Renewable Electrical Generation Sources Soar

Press Release – June 17, Renewable Electrical Generation Sources Soar - Non-Hydro Renewables Grow By Over 12% In 2009 As Fossil-Based Electricity Generation Plummets And Nuclear Remains Stagnant

Washington DC – According to the latest figures published by the U.S. Energy Information Administration (EIA) in its "Electric Power Monthly" report released on June 15, 2009, non-hydro renewable sources of electricity continued to enjoy double-digit growth during the past year. By comparison, coal and natural gas use has plummeted while nuclear power has remained essentially stagnant.

Specifically, EIA reports that for the first quarter of 2009 compared to the first quarter of 2008, renewable energy sources used for electrical production increased by 7.2 percent and accounted for 10 percent of the nation's electrical generation. Conventional hydroelectric power increased by 4.6 percent while all other renewables combined (biomass, wind, geothermal, and solar) increased by 12.4 percent.

The numbers for the month of March 2009 alone are even more dramatic with renewables accounting for nearly 10.9 percent of net U.S. electrical generation. Conventional hydroelectric power provided more than 6.9 percent of total U.S. electrical generation while other renewables generated almost four percent of electric power. Most notably, net generation from wind sources was 38.5 percent higher in March 2009 than it had been in March 2008.

Net electrical generation from renewable energy sources has been on a steady uphill trajectory for some time now. Comparing the 12-month period ending March 31, 2009 with the 12-month period ending March 31, 2008, renewable energy sources (including hydropower) have increased by 8.5 percent with non-hydro renewables growing by 15.8 percent. More specifically, wind has expanded by 44.7 percent, solar by 26.7 percent, conventional hydropower by 5.1 percent, and geothermal by 3.4 percent. Only biomass experienced a small decline of 1.3 percent.

By comparison, net electrical generation from all sources in the United States dropped by 4.3 percent in March 2009 compared to March 2008. This was the eighth consecutive month that net generation was down compared to the same calendar month in the prior year. Coal-fired generation alone dropped by 15.3 percent.

Looking at the 12-month period ending March 31, 2009 compared to that ending March 31, 2008, coal use has dropped by almost five percent and natural gas use has declined by four percent; nuclear power showed just an anemic increase of less than one percent.

“Apologists for the nuclear and fossil fuel industries persist in trying to mislead the public by repeatedly spreading the myth that renewables account for only a tiny fraction of U.S. electricity production,” according to Ken Bossong, Executive Director of the SUN DAY Campaign. “However, the hard numbers document the continuing dramatic growth in renewable energy’s already-significant contribution to the nation’s electricity supply – a contribution that will eventually leave coal and nuclear behind in the dust.”

State News

California and Nevada Release Comprehensive Draft Transmission Plans to Access Renewable Energy

By John McCaull, GEA Western States Representative

June 23, 2009. After more than a year of work, both California and Nevada have released detailed transmission plans designed to create roadmaps for how each state will meet various requirements and objectives to substantially increase the generation of electricity from renewable energy resources.

The [California Renewable Energy Transmission Initiative \(RETI\)](#) was launched in January 2008 as a statewide initiative to:

- Help identify the transmission projects needed to accommodate California's renewable energy goals.
- Facilitate transmission corridor designation.
- Facilitate transmission and generation siting permitting.
- Support future energy policy.

Nevada's [Renewable Energy Transmission Access Advisory Committee \(RETAAC\)](#) was created by Executive Order in June 2007 to:

- Identify commercially developable locations for renewable energy, ranking them based on size and
- viability and comparing them to Nevada's energy needs and demand.
- Assess existing and planned transmission access to these resources.
- Make recommendations for additional transmission lines.

Although these two neighboring states kicked off their transmission planning efforts six months apart, they have converged at a critical point: After identifying renewable energy "zones" in Phase 1 reports that showed significant promise for energy production, both states have now produced Phase 2 reports that show various transmission options for actually accessing the zones.

California's [RETI Phase 2A Draft Report](#) was written "to provide a recommendation as to which potential transmission projects should be considered priorities for future study, based upon information available today regarding the potential for renewable development." Similarly, Nevada's [RETAAC Phase 2 Report](#) was drafted "to define the environmental and physical feasibility issues, costs and potential financing mechanisms associated with the recommended 14 transmission routes."

California released its RETI Phase 2A Draft Report in early June and Nevada released its Phase II Report last week. RETI initially set a public comment deadline of June 26, 2009 on the Report, but just in the last few days has decided to extend the comment period through mid-July. Nevada's approach does not appear to have a formal public comment period, although the RETAAC Committee itself is made up of 19 members representing a broad cross-section of interests and stakeholders.

Neither Report pulls any punches. They both make very specific recommendations regarding which renewable energy zones appear to be the most cost-effective, which zones appear to have the least environmental impact and what type of transmission upgrades or system expansions make the most economic and environmental sense. RETAAC's Phase II Report has produced a map showing what are believed to be the state's most economically viable renewable energy zones and the transmission necessary to access the electricity believed to be contained within those zones (see page 6 of the RETAAC Report). The methodology developed resulted in a matrix which employed four evaluation criteria: (i) renewable energy potential; (ii) cost of transmission construction; (iii) transmission environmental impact; and (iv) other system benefits from transmission.

After re-ranking the “competitive renewable energy zones” (CREZ’s), the RETI Phase 2A Report produces a revised economic and environmental “score” for each CREZ based on “on-the-ground evaluation of permitting and project development issues” (see page 2-29 of the RETI Report).

California’s approach to transmission planning through RETI was groundbreaking. As the RETI Report states, “Conceptual planning is normally done by experts who have detailed knowledge of the operational characteristics of individual transmission systems. One goal of RETI, however, is precisely to involve stakeholders in conceptualizing how large amounts of renewable energy can best be delivered to customers, in order to ensure that transmission expansion plans fully consider the interests of all those constituencies who may be affected by, and whose support will be needed to support the approval of new infrastructure.”

California’s conceptual planning revolves around analyzing electrical connections between substations to determine whether existing connections can accommodate injections of power from new resources, whether they must be expanded, or whether new connections must be built. Because it focuses on electrical flows, conceptual planning generally does not identify geographic routes. The important exception is that this early-stage planning does consider whether existing transmission facilities can be upgraded or whether new lines can be added in or adjacent to existing corridors. California categorized various transmission segments into three basic categories:

1. *Renewable Foundation* lines increase the capacity of the California transmission network between Palm Springs and Sacramento, allowing energy to flow north or south as needed. There are 14 key line segments in the Foundation Group. The capacity these lines provide is likely to be essential to be able deliver renewable energy from any CREZ to consumers in all major load centers. The usefulness of the Foundation Group is not limited to renewable energy. The increased capacity these lines provide is likely to be needed to meet growing energy demand regardless of generation source.

2. *Renewable Delivery* lines move energy from Foundation lines to major load centers. The increased capacity provided by the lines of this group is likely to be needed to meet growing energy demand regardless of generation source. There are 13 major line segments in the Renewable Delivery Group.

3. *Renewable Collector* lines carry power from CREZ to Foundation and Delivery lines. These line segments are grouped geographically into projects capable of accessing adjacent CREZ. There are 12 groupings of collector lines. Several of these lines form portions of or connect to major inter-tie lines connecting California to the western regional grid, and therefore provide access to out of state resources.

Nevada identified 15 transmission interconnections, and analyzed these lines based on (i) how much does a transmission line developer need to charge for the use of the transmission line to recover the construction costs and operating and maintenance expenses including a sufficient return on the investment; (ii) how much are the resource developers willing to pay for the use of the transmission line; and (iii) are the renewable resource providers still competitive after recovering the cost of delivering their energy to load centers. In contrast to RETI, Nevada’s “centerline and constraint analysis” included *transmission lines only* and the renewable energy zones were not screened or modified based on potential constraints for renewable energy development. Therefore, RETAAC cautions that “this report should be used for the identification of potential transmission line constraints only, and not for potential constraints to generation development which must be examined on a project specific basis. “

Finally, each Report looked at import/export potential, and how to address transmission needs to create inter-state connections between load centers and renewable energy zones. In essence, California has been waiting on Nevada to inform RETI’s analysis of how much potential exists for importing renewable energy from out of state “zones.” The RETAAC Phase II Report begins to answer California’s questions that have been delayed by access to official data. Nevada’s existing transmission facilities and proposed transmission projects could be used to export energy from Nevada renewable resources to adjacent states.

Proposed transmission projects include those that originate in Nevada as well as regional transmission projects that pass through the state. Existing transmission facilities include those owned by NV Energy as well as transmission owned by others. Table 16 in the RETAAC Report (page 54) and the “New Export

Alternatives Map” (page 55) illustrate the proposed transmission projects that would directly or indirectly allow export of renewable energy from Nevada to adjacent states.

In the next few weeks, the Geothermal Energy Association (GEA) will produce comments on these reports, and an analysis of how each Report furthers the goals of the geothermal industry. Geothermal energy is viewed as a critical component by both California and Nevada to meeting each state’s renewable energy goals. Whether it’s about bringing geothermal energy out of the Imperial Valley to Southern California load centers, or creating a more integrated grid between California and Nevada, these two Reports will shape the future of renewable energy development for years to come.

New Mexico: NM Tech Explores Geothermal Direct Use

New Mexico Tech has announced plans for a geothermal plant, according to csemag.com. The university will use a direct-use space heating approach and a heat exchanger. The U.S. Department of Energy has awarded \$473,000 to drill a 1,500-ft geothermal test well. The project is expected to cost \$11 million and will save the university \$800,000 in natural gas bills annually, according to the article.

See http://www.csemag.com/article/295444-New_Mexico_Tech_tests_the_waters_of_geothermal_heat.php.

International News

Delegates Negotiate Post-2012 Climate Accord in Bonn, Switzerland

By Dan Jennejohn, GEA Research Associate

An ad hoc group of 183 countries set up by the UN Framework Convention on Climate Change (UNFCCC) met in Bonn, Switzerland in early June to negotiate the development of a post-2012 global climate change accord. Bonn is one of many meetings being held in the lead up to Copenhagen, and progress in negotiations has been slow.

The pace of negotiations has been mired in disagreements over burden sharing. The average planned cuts of “rich” nations participating in negotiations amounts to a 24% cut in emissions below 1990 levels. This excludes the U.S. plans to cut emissions back to 1990 levels by 2020, a cut of about 14% from 2007. Including the U.S. cuts would roughly halve the average planned cuts of other nations. Developing nations are calling for rich nations to increase their planned emissions cuts to at least 40% below 1990 levels by 2020.

U.S. planned emissions cuts have not been included in the average planned cuts of developed nations because the country currently lacks hard proposals for curbing emissions. While the Waxman-Markey Bill, a climate change package built around a cap-and-trade program, passed first hurdle in the House Energy Committee it still needs to go to the full House. Prospects for the Waxman-Markey Bill would improve should other major emitters, especially China, make strong indications that they too will commit to cutting emissions. However, China recently stated that it will not accept binding cuts in its greenhouse gas emissions.

Considering the obstacles ahead, the UNFCCC has indicated that it is very unlikely that negotiations in Copenhagen will result in commitment to a new set of numbers for global emission reductions. The UNFCCC plans to leave Copenhagen with the framework for a post-2012 global climate change accord, the details of which would be fleshed out in the coming year or two.

For more information on the Bonn Climate Talks please see the following url’s:

<http://www.irishtimes.com/newspaper/world/2009/0610/1224248534624.html>

<http://www.reuters.com/article/latestCrisis/idUSL667942>

<http://www.google.com/hostednews/afp/article/ALeqM5glOuTZdaVLxwq820ZEBjxjwov4zA>

<http://www.google.com/hostednews/afp/article/ALeqM5gcKWD6TKOaM0JoHR55GjjosHw5NQ>

Australia: Panax Salamander-1 Well Receives \$7m Drilling Program Grant

Panax has been awarded a \$7 million grant for the drilling of Panax's Salamander-1 production well, according to their press release. The well is on schedule to spud in September 2009. Under the Geothermal Drilling Program Grant, 60% is expected to be received prior to the spud date. Panax and MNGI Pty Ltd were the two companies to receive round 1 funding grants.

See <http://www.proactiveinvestors.com.au/companies/news/1730/panax-signs-7m-grant-documents-to-ready-for-spudding-salamander-1-well-1730.html>.

Australia: Bligh Gov't Invests up to \$4.3m for Geothermal Station Upgrade

The Bligh Government is investing up to \$4.3 million to upgrade the Ergon Energy-owned and operated geothermal plant in Birdsville, Queensland, according to Australia.to. The funding will provide a 50% subsidy for the project.

"The Birdsville geothermal power station is the only one of its kind in Australia to tap into this clean renewable energy source to provide emission-free power," Mines and Energy Minister Stephen Robertson told press.

"At any given moment the present plant produces 80 kilowatts of geothermal power. Depending on what geothermal technology is selected, the upgrade could increase the output from a minimum of 90 kilowatts up to 340 kilowatts," Member for Mount Isa Betty Kiernan told press. "This would provide at least 724,000 kWh (kilowatt hours) of clean renewable energy a year compared to the 522,600 kWh produced in 2007. The new power station could also save up to 1,575 tonnes of greenhouse gas emissions per year and reduce fuel consumption by at least 181,000 liters per year," she added.

See http://www.australia.to/index.php?option=com_content&view=article&id=11258:bligh-invests-up-to-43-million-in-new-geothermal-power-station-for-birdsville&catid=148:australian-regional-news&Itemid=271.

Popular Science Reports on Iceland's Geothermal Bailout

Drillers in Iceland are working on a two-mile-deep hole into Krafla, an active volcanic crater, according to popsci.com. The well could not only save Iceland's economy but serve as a model for geothermal projects around the world, according to the article.

The article provides a history of the testing that led up to where the project is today. After nearly a decade and \$22 million, drillers should next month hit supercritical water, which in most coal and nuclear power plants must be made as a step before generating electricity. The project's risk assessor gives it a 50-50 shot at succeeding.

Wilfred Elders, a professor emeritus of geology at the University of California at Riverside, who was recruited from retirement to co-lead the IDDP said: "We're probably a dozen years away from a pilot plant. I might not live to see it."

See <http://www.popsci.com/environment/article/2009-06/icelands-power-down-below> and <http://www.dailykos.com/storyonly/2009/6/21/745150/-Does-Geothermal-Power-Promote-Mathematical-Illiteracy>.

Montserrat: EGS Inc Signs Contract for Geothermal Phase 2 Exploration

The government of Montserrat has signed a contract with EGS, Inc for phase 2 geothermal exploration on the island, according to caribbeannetnews.com. According to the article, the Department for International Development (DFID) approved a budget of up to approximately £800,000 for a three-phase evaluation process. Phase two consists of geophysical, geological, and geochemical investigations that will determine recommendations for location, size, and depth of drilling.

See <http://www.caribbeannetnews.com/news-17066--22-22--.html>.

Nevis: East Caribbean Geothermal Conference will be First of its Kind

Press Release—June 16, Nevis to Host Landmark East Caribbean Geothermal Conference

Nevis will play host to a geothermal conference in two weeks at the Mount Nevis Hotel from June 30-July 2, the first of its kind to be held in the Eastern Caribbean.

Permanent Secretary in the Ministry of Natural Resources and the Environment Mr. Ernie Stapleton, told the Department of Information in a recent interview that the event was a united effort between the Nevis Island Administration (NIA), the United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), the Organization of American States (OAS) and the Caribbean Renewable Energy Programme (CREP) – German Technical Corporation (GTZ).

He said the Conference would attract key players in the area of geothermal energy and would come at a time when the world's focus was on renewable energy due to rising cost of oil and increasing concerns of the effects of climate change.

Mr. Stapleton was of the view that Nevis' leadership role in the area of geothermal development in the Eastern Caribbean was the reason behind the island's selection as the venue for the landmark event.

The conference will involve two days of intense sessions and a workshop on geothermal by experts from the Auckland University in New Zealand on day three.

The first session will be on the topic "State of the art of Geothermal Exploration and Exploitation". It will be moderated by Chief of the Energy Unit at ECLAC's headquarters Mr. Anlio F. Coviello with presentations from Dr. Peter Malin of the University of Auckland; Engineer in the Comision Nacional de Energia (CNE, Mexico and General Director of the BRGM/EDF' agency "Geothermie Bouillante" Mr Francois Le Lann.

An "Overview of Geothermal Development Conditions in the Eastern Caribbean", will be the topic for the second session. It will be moderated by Chief Energy and Climate Change Mitigation Division, OAS Mr. Mark Lambridges with presentations by Dr. Paul Brophy on Geothermal resources and Mr. A. John Armstrong on Policy and legal framework.

Session three will deal with the topic "Situation and Perspectives of Geothermal Development in Eastern Caribbean Countries". The moderator will be Minister of Public Utilities, NIA Hon. Carlisle Powell, with presentations from the governments of Montserrat and Dominica.

Later in the session the second moderator will be CRED/GTZ representative Mr. Thomas Scheutzlich and presentations will come from the Governments of St. Lucia, Grenada and St. Vincent and the Grenadines.

Following after a break participants will be given the opportunity to learn from Gisli Palsson of the Icelandic International Development Agency (ICEDA) of the training opportunities available at the UN University of Iceland.

A round table discussion on the topic “Challenges and Opportunities for Geothermal Development in the Eastern Caribbean: Proposals for a New Agenda” will be moderated by Mr. Manlio Coviello and will be opened to delegates and participants.

The second day of the Conference will be dominated by the geothermal development in Nevis through the eyes of the private sector partners.

Session four “Geothermal Exploration and Development on Nevis: A Private Sector/Investor Perspective” will be moderated by General Manager of the Nevis Electricity Company Mr. Cartwright Farrell. Presentations will be made by Mr. Greg. DeGannes on the “Effects of Geothermal on Nevis and the Caribbean” and another by Mr. Joe LaFleur, Dr. Peter Malin and Mr. Bobby Tinsley on “Geothermal Exploration: The Nevis Case”.

A third on “Nevis Geothermal Plant” by Mr. Tom Ettinger, Mr. Jim Beverly, Mr. David Mendive and Mr. John Roos while another on “Nevis and St. Kitts and Caribbean Interconnection by Cable will be presented by Mr. Domencio Gerace.

“Financing the Project” will be presented by Financial Controller of West Indies Power Nevis Ltd. Mr. Dima Apockinas while the Company’s Chief Executive Officer Mr. Kerry Mc Donald and General Manager Mr. Rawlinson Isaac will speak about the company.

See <http://www.caribbeanpressreleases.com/articles/5213/1/Nevis-to-host-landmark-East-Caribbean-Geothermal-Conference/Page1.html>.

New Zealand: High Renewable Energy Use Levels Reported

The Ministry of Economic Development released statistics showing nearly three quarters of New Zealand's electricity was generated from renewable sources in March, the highest level for a March quarter since 2005, according to stuff.co.nz.

Geothermal and wind generation have both increase; for the third consecutive quarter geothermal generation topped 1000 GWh, the article said. If current levels continue, geothermal generation will meet over 10% of annual electricity supply.

See <http://www.stuff.co.nz/business/industries/2509157/NZ-has-high-level-of-renewable-energy>.

Philippines: Envent Signs Initial PPA for Energy Generated by Geothermal Plant

Envent has signed a power purchase agreement (PPA) with the Biliran Electric Cooperative for about 8,600 MWh per year of clean, renewable electricity at a levelized price of \$94 per MWh from their 50 MW Biliran Unit 1 geothermal power plant, according to a press release. The plant is scheduled to come on line in 2012. This agreement will use about 10% of the plant’s capability; the remaining capacity of 45 MW is expected to be sold under additional PPAs.

"The execution of this PPA reflects the good spirit of cooperation between Envent and the local electric cooperatives in the Leyte area," Mr. Gudmundur F. Sigurjonsson, Chief Executive Officer, Envent, told press. "This is a significant milestone in the development of our Biliran Unit 1 project and an important stepping stone as the corporation moves forward with its plans. Parallel to working on completing more PPAs we will be working on the financial structure of the project, which we expect will take between 6 and 12 months."

See <http://www.streetinsider.com/Press+Releases/Envent+Announces+the+Signing+of+an+Initial+PPA+With+USD+47+Million/4721501.html>.

Notices

Submit Nominations Power Engineering Projects of the Year Award (by August 28)

Nominate your outstanding project for Power Engineering magazine's Projects of the Year Awards. Nominations accepted for projects in the renewable energy, nuclear, coal and natural gas power sectors. Details at <http://poe-media.com/portal/wts/cgmcrBbvuaaqzjBajjBficjsE9u8>.

Call for Papers, Renewable Energy World North America (due August 7)

Renewable Energy World Conference & Expo is now accepting abstract submittals for the 2010 conference program. Submit your abstracts by August 7, 2009 and take advantage of the opportunity to share your insight with the renewable energy industry.

For more information including topics of interest and how to submit abstracts, visit <http://poe-media.com/portal/wts/cgmcrBbvuaaqzjBajjBrycjsE9u8a>.

SMU Geothermal Laboratory Promoting Networking for Geothermal Projects

The SMU Geothermal Laboratory is willing to continue to help network people/companies together for geothermal projects. If you have been thinking about a project, but only have one or two aspects of it, let me know and we'll help you find others to build a team. See the funding opportunities related to coproduction and geopressure (DE-FOA-0000109) and Geothermal Heat Pumps (DE-FOA-0000116).

- ***Geothermal Technologies - Recovery Act*** - The U.S. Department of Energy requests proposals for the Geothermal Technologies Program for geothermal systems research, exploration, demonstration, and development. Areas of interest include: 1) Validation of Innovative Exploration Technologies, 2) Geothermal Energy Production from Low Temperature Resources, Co-produced Fluids from Oil and Gas Wells, and Geopressured Resources, and 3) Geothermal Data Development, Collection, and Maintenance. \$170 million expected to be available, up to 60 awards anticipated. Responses due 7/22/09. For more info, contact Genevieve Wozniak at genevieve.wozniak@go.doe.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&opId=47584>. Refer to Sol# DE-FOA-0000109.
- ***Ground Source Heat Pumps – Recovery Act*** - The U.S. Department of Energy requests proposals for the Geothermal Technologies Program: Ground Source Heat Pumps. Through this RFP, DOE seeks to increase the deployment of ground source heat pumps through new commercialization strategies that incorporate: 1) Innovative commercial-scale or residential community technology demonstration projects; 2) Data gathering and analysis related to system costs, performance, and installation techniques; and 3) A national GHP certification standard. \$50 million expected to be available, up to 21 awards anticipated. Responses due 8/6/09. For more info, contact Genevieve Wozniak at genevieve.wozniak@go.doe.gov or go to: <http://www.grants.gov/search/search.do>.

TANC Transmission Project EIR/EIS Public Scoping Comment Period Extended to July 30

TANC and Western Area Power Administration have further extended the scoping comment period by 60 days. The public scoping comment period for the TTP Environmental Impact Report/Environmental Impact Statement (EIR/EIS) will now close on July 30, 2009.

The TTP is a proposal to build and upgrade approximately 600 miles of high-voltage electric transmission lines and substations in northern California to increase reliability, reduce congestion, and facilitate the development and transmission of renewable electricity in Northern California.

For the most current information about the proposed project, including project overview, maps, facts sheets and other documents visit www.tanc.us and www.wapa.gov/transmission/ttp.htm.

Written comments should be submitted to Mr. David Young, NEPA Document Manager at: Western Area Power Administration, Sierra Nevada Region, 114 Parkshore Dr., Folsom, CA 95630; fax 916-353-4772; or email tpeis@wapa.gov.

Questions/concerns call the project hotline, 916-353-4777 or email tpeis@wapa.gov.

Airborne Hyperspectral Surveys of Geothermal Areas, Nevada, August 1–4

The Aerospace Corporation, a non-profit company which operates a Federally Funded Research and Development Center (FFRDC), will be conducting airborne hyperspectral surveys in Nevada later this summer (early August). The survey will focus on several geothermal areas of interest -- particularly in Esmeralda and Churchill Counties, Nevada. Aerospace would like to collaborate with geothermal companies and apply R&D funds to conduct airborne surveys for geothermal resources. Two powerful state of the art hyperspectral sensors will be on board the aircraft: Aerospace's SEBASS hyperspectral sensor; combined with SpecTIR's ProspecTIR sensor. The airborne survey will also include a FLIR long wave bolometer.

SEBASS captures mid to long wave infrared spectral measurements within the thermal emissive range and SpecTIR's ProspecTIR captures the very near infrared to short wave infrared. The combined sensors provide an unrivaled full spectral hyperspectral capability. This co-locating of hyperspectral sensors can collect over 600 channels of spectral information from the visible to long-wave infrared.

With enough surveys in a general area, clients can share nonrecurring costs (e.g., deployment costs). The insight gained could be extremely valuable to companies that are exploring for geothermal resources in and around the state of Nevada.

Approach:

A - Fly over a known geothermal area of interest and create a "baseline" of the site -- using shortwave, and mid-long wave hyperspectral sensors.

B - Based upon discussions with a geothermal company, the Twin Otter aircraft (with the same combined sensor platform) subsequently flies over a prospective area of interest and map various epithermal spring deposits - such as sinter and note other mineralization features which could be indicative of a hydrothermal system.

C - Work with geologists to discuss and evaluate how hyperspectral airborne surveys can contribute to the conceptual model of a hydrothermal system.

To learn more about how the hyperspectral airborne survey can help with geothermal exploration - please contact: Karen L. Jones; 703 812-0623; karen.l.jones@aero.org.

CEC Program Opportunity Notice for Matching Funds for ARRA Applications

The Energy Commission is planning to release a solicitation (Program Opportunity Notice or PON) inviting applicants to request match funding from the Commission for projects proposed to USDOE under the ARRA funding programs. Applicants will be asked to submit a preliminary, brief application to the Commission describing their project and requesting match funding. The Commission will screen the applications and for those that pass, a letter of intent to provide match will be supplied. Applicants will then have to complete the application to the USDOE. If the applicants receive an award, then the applicants will be eligible for the match.

Below is the brief information The Energy Commission is sending out:

Energy Commission Announcement Document

The Commission will hold a workshop on June 19th, in Sacramento, for parties interested in this PON. The announcement for the PON will come out soon.

For more information, please contact:

Gail Wiggett, gwiggett@energy.state.ca.us
or Sandra Fromm, sfromm@energy.state.ca.us.

DOE Announces New Geothermal Funding Opportunities

From the Office of Geothermal Technologies, DOE:

The Geothermal Technologies Program (GTP) at the United States Department of Energy (DOE) would once again like to bring your attention to THREE funding opportunities announcements (FOA) for awards in geothermal technologies. On May 27, 2009, President Obama announced \$350 million of American Reinvestment and Recovery Act funding in support of geothermal technologies. GTP would like to encourage you to review the opportunities and to register at www.fedconnect.net as soon as possible. By registering, you will receive automatic notifications of amendments and modifications to the open FOAs. These are wonderful opportunities to explore projects that reflect the broad portfolio of geothermal technologies with the potential to exponentially advance deployment. Information on all three announcements can be found at:

https://www.fedconnect.net/Fedconnect/PublicPages/PublicSearch/Public_Opportunities.aspx

1. Recovery Act: Geothermal Technologies (attached) will close on July 22, 2009 at 11:59pm (EST). Application forms and instructions are available at:
https://www.fedconnect.net/Fedconnect/PublicPages/PublicSearch/Public_OpportunitySummary.aspx
2. Enhanced Geothermal Systems Component Research and Development/Analysis (attached) will close on July 17, 2009 at 11:59pm (EST). Application forms and instructions are available at
<https://e-center.doe.gov/iips/faopor.nsf/UNID/762FF27668B2EE82852575C30070422D?OpenDocument>.
3. Enhanced Geothermal Systems Demonstration (attached) will close on July 30, 2009 at 11:59pm (EST). Application forms and instructions are available at <https://e-center.doe.gov/iips/faopor.nsf/UNID/DFEA0DAF24386352852575C30077E428?OpenDocument>

Please forward this message widely to interested parties. The Geothermal Technologies Program looks forward to receiving your applications and growing our partnerships.

DOE Webcast Detailing Geothermal Funding Opportunities

The Department of Energy's Geothermal Technologies Program (GTP) has announced an upcoming webcast detailing funding opportunities under the American Recovery and Reinvestment Act, as recently announced by President Obama and Secretary Chu. This webcast will present the programmatic vision and goals of the GTP, the Funding Opportunity Announcement (FOA) application process, and technical facets of each FOA. Following the information session there will be an opportunity for questions and answers. The general public and geothermal communities are highly encouraged to submit pre-questions to GO.GEOTHERMAL@GO.DOE.GOV. The GTP hopes to use this Webcast as a platform to communicate their goals to heat up the future of geothermal technologies.

For an exact date and time of the webcast please monitor the GTP's Web site at www.eere.energy.gov/geothermal.

USDA Announces REAP Grant/Loan Guarantee Funding (July 31)

Today USDA announced the long-awaited availability of funding for the 2009 program year for the Rural Energy for America Program (REAP). The Department is now accepting REAP applications for grants and loan guarantees for renewable energy and energy efficiency systems, and also is including funding for feasibility studies. The deadline for applying for REAP funding is July 31. This year \$60 million is available for projects. USDA has made some changes to the application process for REAP, incorporating statutory changes from the 2008 Farm Bill. A summary of these changes and the full notice may be found here: <http://farmenergy.org/news/usda-announces-reap-funding-for-2009>.

Resource Development Opportunity, Contact, Nevada

Seeking someone to do a feasibility study and/or development of property to generate commercial electricity. The property is 30 acres of commercial property on highway 93, approximately 15 miles from the Idaho/Nevada border in Contact, Nevada. The property is in a hot water zone.

In the mid 1970's Phelps Dodge had many drilling sites for copper approximately three quarters of a mile from the property. Phelps Dodge was drilling and hit hot water that was too hot for them to continue drilling.

The property is also three quarters of a mile from high power transmission lines running north and south.

Please contact Ted Reddy, at 25653 S. Brentwood Dr. Sun Lakes, AZ 85248, by phone 480-707-2574, or by email, reddyteddy@hotmail.com.

Hannon Armstrong Announces Advisory Services for DOE Loan Guarantees

The American Recovery and Reinvestment Act expanded DOE Loan Guarantees and U.S. Treasury Tax Grants, providing renewable energy project developers a path for project funding, according to the Hannon Armstrong Web site. The company has launched an advisory service offering for industry members seeking to apply.

Vice President of Analytics and Structuring Nate Rose told press, "The outcomes vary rather substantially from existing project finance models, and vary between solar, wind, geothermal and biomass projects."

"Given our team's experience with DOE and OPIC loan guarantees, and our appreciation of how challenging this process is, we decided it makes sense to expand our Federal finance offer to include not just the application and its negotiation, but also the monetization of the capital required with this new structure," said Jeffrey Eckel, President and CEO.

See http://www.hannonarmstrong.com/index.php?option=com_content&task=view&id=28.

Resource Development Opportunity, Rosebud Sioux Tribe, Rosebud, SD

The Native American Tribe near Mission SD has a deposit of geothermal energy under their large Rosebud Reservation in South Dakota. See U.S. News & World Report, November 7, 2007, DOE map of U.S. Geothermal Hotspots, p. 52, reference to deposit p. 50.

Leigh Bryant-Zarse, the architect, engineer, and consultant in Wisconsin who is submitting this solicitation, attended a meeting of the Tribe Council on September 16, 2008. The Tribe presented him with a resolution to approach developers with free exploration rights on their reservation, and agreed to split 1/10 of 1% of

the energy profits for a period of 2 years, if found. These parties are looking for help to develop the resource. The reservation exists under a sole ownership, making it easy to deal with.

Contact: Leigh Bryant-Zarse, Architect-Engineer-Consultant, 1812 Mountain Ave., Wauwatosa, WI 53213-2336, phone and fax: 414-259-1812
Rosebud Sioux Tribe: Chief Rodney Bordeaux, PO Box 430, Rosebud, SD 57570, phone 605-747-2381

Employment Opportunities

Green Jobs Network Adds Geothermal Job Board

The Green Jobs network of alternative energy job boards has added a new site, Jobs in Geothermal, available at <http://www.jobsingeo.com/>.

Vice President of Engineering, Ram Power, Inc.

Ram Power, Inc., a recently formed renewable geothermal and solar thermal project development company, with offices in Nevada and California has an immediate opening for a Vice President of Engineering. The candidate will be responsible for managing all aspects of Engineering and Procurement as it pertains to the company's current and future Solar and Geothermal Projects. This position reports to the President and CEO and works closely with other functional leaders in the company, including those in finance, business development, and marketing.

Responsibilities:

- Assist in developing strategic planning for and direction and control of project development activities.
- Provide technical direction and guidance, as well as hands-on project management for all solar and geothermal project development.
- Ensure the optimal application of technology and engineering resources to meet project development requirements.
- Direct the definition and procurement of geothermal and solar thermal power plants, and provide oversight of power plant and surface facility construction.
- Hire and direct a team of engineers from different disciplines to acquire necessary resources and plan to meet scheduled commitments.
- Ensure implementation of formal processes to support project development, including interconnection and transmission agreements.

Requirements:

- Strong operational and project management skills to manage logistics and time, as well as people and materials for multiple projects.
- Solid understanding of engineering technical issues/needs, financial, sales, and marketing as related to project design and development.
- Successful candidate must have at least 10 years engineering experience in the energy/renewables industry with primary experience in power plant technologies. Prior work experience in the area of steam power plants and Organic Rankine Cycle is an advantage. Prior work experience in solar and geothermal is preferred.
- Strong Engineering experience in Design, Analysis and Development of Renewable Energy Projects, as well as Proposal Drafting.
- Excel software knowledge to create estimates and manage projects to improve project profitability. Fluency in AutoCAD is essential.
- Knowledge of PPA's (Power Purchase Agreements), related building codes and NEC, as well as permitting process and ability to manage specification, procurement and delivery of equipment and material.
- Minimum of Bachelors Degree in Electrical or Mechanical/Chemical or Civil Engineering and 10 years demonstrated project management experience. PE (Professional Engineer) certification is an advantage.

Email resumes to info@ram-power.com or fax to: (775) 828-0904

Director of Development, California Operations, CalEnergy

CalEnergy Operation Corporation is an international leader in the development and production of energy from diversified fuel sources including geothermal, natural gas and hydroelectric. CalEnergy is currently looking for a Director of Development for California-based operations.

This individual will direct, coordinate and exercise functional authority over all activities associated with the development of the new geothermal power plants and other platform development opportunities:

- Administers the project construction contract, manages the use of consultants, and has fiscal responsibility for all costs to build the new plants.
- Directs and oversees the integration of the new plants into the current Imperial Valley operations consistent with the organization's policies and objectives. Qualified candidates will have a bachelor's degree in engineering, business administration, or related field or equivalent work experience.
- Eight years experience in managing power plant development and installation projects or power plant operations including three years supervisory responsibilities.
- Excellent oral and written communication skills, including presentation skills.
- Effective interpersonal skills and leadership abilities.

To apply for this position and view a complete job description please visit www.calenergy.com.

Drilling Program Manager, Major Geothermal Power Company in CA

A Geothermal Energy Company in Northern California is seeking a Drilling Program Manager to oversee all drilling operations of an 800+ acre expansion project. Please send updated resume and salary requirements. Experience as follows:

1. Experience managing successful geothermal drilling programs.
2. Leadership experience and management of drilling and support personnel.
3. Experience managing compliance with safety and environmental regulations.
4. A successful track record of improving business performance and meeting and managing against operating goals and budgets.
5. Exposure to drilling technology, service providers, contracts and risks.
6. Relationships with relevant parties within the geothermal drilling industry including, but not limited to: rig providers, contractors, vendors, consultants and qualified company men.
7. Thorough understanding of the contracting and procurement processes required for cost effective drilling program management.

Contact: Mike Erney, Project Director – Alternative Energy, The Carmon Group:
(216) 328-9060 EXT 102
michaelerney@carmongroup.com
www.linkedin.com/in/michaelerney

Senior Director, Business Development, Major Geothermal Company

The Senior Director, Business Development is responsible for overseeing the Business Development function in North America for geothermal market. This role could quickly grow into a VP role and will oversee a sales team currently consisting of 8 sales reps and will grow it by 50%.

Essential Functions:

- Direct and execute the business development strategy to achieve company goals and objectives.
- Identify and develop key strategic partnerships, both internally and externally.

- Responsible for negotiating PPAs and contract changes.
- Evaluate and analyze market expansion opportunities
- Build and lead a business development team that will assist the company towards completion of company goals
- Build relationships with internal departments so that all areas of the company are ready to execute when necessary.

Education, Experience, and Skills Required:

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

Contact:

Paige Carratturo
 Executive Recruiter
 Richard Wayne & Roberts
 877-236-0899 (direct)
 206-855-9746 (fax)
paige@rwr.com
<http://www.linkedin.com/in/paigecarratturo>

Geothermal Project Supervisor, Central American Bank for Economic Integration, Costa Rica

The Central American Bank for Economic Integration (Banco Centroamericano de Integracion Economica, BCIE) is looking for an expert in geothermal energy to supervise a project in Costa Rica. It is called Las Pailas and it is financed through BCIE.

Contact:

Ana Karina Rubi de Reyes, Oficial de Consultorias, BCIE-Tegucigalpa, Honduras
 Tel. +504-240-2243, Ext. 5214
 Fax. +504-240-2228

Visit the BCIE Web site, www.bcie.org - www.cabei.org

Research Associate II, SMU Geothermal Laboratory

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

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

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

Geothermal Engineering Analyst, National Renewable Energy Laboratory

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

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

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

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

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

Pre-employment drug testing required.

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

Requests for Proposals (RFPs)

RFP for Smart Grid Demonstrations, DOE, American Recovery and Reinvestment Act

The U.S. Department of Energy announces its intent to request proposals for Smart Grid Demonstrations. Through this RFP, DOE seeks regionally unique demonstrations to verify smart grid technology viability, quantify smart grid costs and benefits, and validate new smart grid business models, at a scale that can be readily adapted and replicated around the country. Areas of interest include: Smart Grid Demonstrations, Synchrophasors, and Energy Storage. \$615 million expected to be available, up to 36 awards anticipated. Closing date to be announced with release of RFP. For more info, contact Keith Carrington at keith.carrington@netl.doe.gov or go to: <http://www07.grants.gov/search/search.do;jsessionid=9x3VJydGP2TfWHPRK9mfnpLqsWpm1TQmDJTzS6XLDp1QJKpb2SM!-1267850137?oppId=46836&flag2006=false&mode=VIEW>. Refer to Sol# DE-FOA-0000036. (Grants.gov 4/16/09)

RFP for State Energy Program, DOE

The U.S. Department of Energy requests proposals for the State Energy Program (SEP). This program provides formula grants to State and Territorial energy offices to design and carry out renewable energy and energy efficiency priorities. \$25 million expected to be available, up to 56 awards anticipated. Due dates based on state/territorial program years. For more info, contact Lisa Kuzniar at lkuzni@netl.doe.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46791>. Refer to Sol# DE-FOA-0000073. (Grants.gov 4/14/09)

RFP for Contribution of Cost Share for Transportation Related Recovery Act RFPs, CEC

The California Energy Commission requests proposals for the American Recovery and Reinvestment Act Cost Share: Alternative and Renewable Fuel and Vehicle Technology Program. Through this RFP, the CEC will contribute cost share to applicants who are submitting proposals to the Federal government in response to a transportation-related Recovery Act funding opportunity announcements. All projects must be based in California. Eligible Recovery Act solicitations include, but are not limited to: Transportation Electrification (Round 1), DOE, DE-FOA-0000028; Energy Efficiency and Renewable Energy Research – Electric Drive Battery and Component Manufacturing Initiative, DOE, DE-FOA-0000026; Clean Cities (Rounds 1 and 2), DOE, DE-PS26-09NT01236-04; and Transit Investments for Greenhouse Gas and Energy Reduction, DOT, FTA-09005-TIGGER-TRI. \$176 million expected to be available, due dates vary by solicitation. For more info, contact Sarah Williams at skawilli@energy.state.ca.us or go to: <http://www.energy.ca.gov/contracts/transportation.html#PON-08-010>. Refer to PON-08-010.

RFP for Renewables Purchase in Southwest, U.S. Navy

The U.S. Department of the Navy announces its intent to request proposals for the purchase of competitively priced renewable electrical power through power purchase agreements at Naval and Marine Corps installations in the Naval Facilities Engineering Command Southwest AOR. The Navy seeks systems that are constructed, owned, operated, maintained and repaired by the successful offeror(s) on Government property located within the installation boundaries. Up to 5 awards anticipated. The RFP will be issued “within the next month.” For more info, contact Russell Dominy at Russell.dominy@navy.mil or go to: https://www.fbo.gov/?s=opportunity&mode=form&id=2d9716078bff363ae320d7e111d4b2d0&tab=core&_cview=1. Refer to Sol# N6258309R0085. (FBO 4/17/09)

RFP for Technology and National Research Priorities, American Recovery and Reinvestment Act

The National Institute of Standards and Technology requests proposals for the Technology Innovation Recovery Act Measurement Science and Engineering Research Grants Program: Providing the Technology Infrastructure to Address National Priorities. Priority research areas include, but are not limited to: Energy, environment and climate change; manufacturing; and physical infrastructure. \$35 million expected to be available, up to 60 awards anticipated. Responses accepted on a continuous basis. For more info, contact Christopher Hunton at christopher.hunton@nist.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46063>. Refer to Sol# 2009-NIST-ARRA-MSE-RESEARCH-01. (Grants.gov 3/16/09)

RFP for Energy Efficiency and Conservation Block Grants, DOE, American Recovery and Reinvestment Act (June 25)

The U.S. Department of Energy request proposals for Energy Efficiency and Conservation Block Grants (EECBG). This program will provide financial assistance to eligible states, cities, counties and Indian

Tribes to create and implement strategies to reduce energy use and fossil fuel emissions, and improve efficiency in the building, transportation, and other appropriate sectors. Areas of interest include, are not limited to: Development of efficiency and conservation strategies and programs for buildings and transportation, technical consultant services; building energy audits; energy efficiency retrofits; building codes programs; reduction and capture of methane and greenhouse gases; traffic signals and street lighting; and renewable energy technologies on government buildings. \$3.1 billion expected to be available. Applications from States due 5/26/09. Applications from Local Governments and Tribes due 6/25/09. For more info, contact Lisa Kuzniar at lkuzni@netl.doe.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46340>. Refer to Sol# DE-FOA-0000013. (Grants.gov 3/26/09)

RFP for American Recovery Program, Department of Commerce (June 30)

The U.S. Department of Commerce, Economic Development Administration (EDA) requests proposals for the EDA American Recovery Program, for projects that advance economic growth by assisting communities and regions experiencing chronic high unemployment and low per capita income to create an environment that fosters innovation, promotes entrepreneurship, and attracts increased private capital investment. Priority consideration will be given to regions that have experienced sudden and severe economic dislocation and job loss due to corporate restructuring. Applicants may apply for the following programs: 1) Public Works and Economic Development Facilities Program, and 2) Economic Adjustment Assistance Program. Responses due 6/30/10. For more info, including Region-specific contacts, go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=45786>. Refer to Sol# DA03102009RECOVERYACT. (Grants.gov 3/5/09)

RFP for Green Jobs Training, DOL, American Recovery and Reinvestment Act (June 30)

The U.S. Department of Labor announces its intent to request proposals for Recovery Act Competitive Grant Opportunities. DOL anticipates \$500 million will be targeted at research, labor exchange, and job training projects that prepare workers for careers in energy efficiency and renewable energy as defined in the Green Jobs Act: Energy efficient building, construction, and retrofitting; renewable electric power; energy efficient and advanced drive train vehicles; biofuels; deconstruction and materials use; energy efficiency assessment for residential, commercial, or industrial sector, and manufacturing of sustainable products using sustainable processes. \$250 million will be targeted at other high growth and emerging industry sectors. DOL intends to post the RFPs no later than 6/30/09. For more info, go to: <http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46337>. (Grants.gov 3/26/09)

RFP for Environmental Implications of Emerging Technologies, NSF (September 15)

The National Science Foundation requests proposals for Environmental Implications of Emerging Technologies, for research to develop and test the environmental effects of new technologies. Areas of interest include, but are not limited to: The development and refinement of sensors and sensor network technologies; innovative production processes, waste reduction, recycling, and industrial ecology technologies; and evaluation of the effect of increased usage of renewable resources on water supply and land use. Individuals awards generally NTE \$80K each. Responses due 9/15/09. For more info, contact Paul Bishop at pbishop@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030. Refer to Sol# PD-09-1179. (Grants.gov 3/23/09)

RFP for Energy for Sustainability, National Science Foundation (September 15)

The National Science Foundation requests proposals for the Energy for Sustainability Program. This program supports research and education in energy production, conversion, and storage, and is focused on energy sources that are environmentally friendly and renewable, including solar, wind and biomass. Average individual awards \$100K. Responses due 9/15/09. For more info, contact Trung Nguyen at tnguyen@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026. Refer to Sol# PD-09-7644. (Grants.gov 3/6/09)

RFP for Thermal Transport Processes, National Science Foundation (September 15)

The National Science Foundation requests proposals for the Thermal Transport Processes Program, for engineering research aimed at gaining a basic understanding of the microscopic and macroscopic levels of thermal transport phenomena (heat and mass transfer) underlying energy conversion and conservation, the synthesis and processing of materials, cooling and heating of infrastructure and equipment, and more. An active understanding of thermal transport in energy conversion and conservation processes is vital to reduce the nation's dependence on petroleum. Awards NTE \$100K. Responses due 9/15/09. For more info, contact Theodore Bergman at tbergman@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13367. Refer to Sol# PD-09-1406. (Grants.gov 3/9/09)

RFP for National Lab Partnerships for Energy Research, DOE (November 9)

The U.S. Department of Energy requests proposals for Experimental Program to Stimulate Competitive Research (EPSCoR); Building EPSCoR-State/National Laboratory Partnerships. This RFP will support collaborative partnerships between National Laboratories and academic or industrial researchers to conduct nationally competitive, energy-related research. \$1.7 million expected to be available, maximum awards generally \$600K. Pre-applications are required and are due 6/5/09, final proposals due 11/9/09. For more info, contact Marilyn Oyler at marilyn.oyler@science.doe.gov or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/33EE94649665FEA8852575A1006CCB0A?OpenDocument>. Refer to Sol# DE-PS02-09ER09-11. (Grants.gov 4/23/09)

RFP for Renewable Energy Resources, Los Angeles (March 11, 2010)

The Los Angeles Department of Water and Power (LADWP) has issued a rolling request for proposals (RFP) designed to seek renewable energy proposals on a continuous basis throughout the year. The rolling RFP calls for proposals for approximately 1,000 GWh per year of renewable energy resources such as solar, wind and geothermal power. This amount represents nearly 4% of LADWP's power sales.

LADWP is looking to acquire renewable energy resources through either immediate ownership of power generation facilities or through long-term power purchase agreements. Under the terms of the new RFP, green power providers can submit their proposal anytime throughout the year. LADWP will open and consider the proposals on a monthly basis, and could then begin evaluation and negotiation of a particular project right away.

LADWP says it will give preference to proposals that offer immediate facility ownership or to long-term PPAs that have an ownership option. Additionally, LADWP is targeting solar projects located in the high deserts of California, close to LADWP's existing transmission system. The application deadline is March 11, 2010.

RFP for Smart Grid Investments, DOE, American Recovery and Reinvestment Act (March 31, 2010)

The U.S. Department of Energy announces its intent to request proposals for the Smart Grid Investment Grant Program. Through this program, DOE seeks to stimulate the rapid deployment and integration of advanced digital technology that is needed to modernize the nation's electric delivery network for enhanced operational intelligence and connectivity. The program will support projects that promote deployment, including development of component technologies. Individual award range anticipated to be \$500K to \$5 million. The RFP will open on or about 6/17/09. Three due dates anticipated: 7/29/09, 12/2/09, and 3/31/10. For more info, contact Donna Williams at Smart-Grid.NOIComments@hq.doe.gov or go to: <https://e-center.doe.gov/iips/faopor.nsf/UNID/39C0D96768F2083F8525759A0068F216?OpenDocument> <http://www07.grants.gov/search/search.do;jsessionid=9x3VJydGP2TfWHPRK9mfnpLqsWpm1TQmDJTzS6XLDp1QJKpb2SM!-1267850137?oppId=46833&flag2006=false&mode=VIEW>. Refer to Sol# DE-FOA-0000058. (Grants.gov 4/16/09)

Upcoming Events

Webcast on American Recovery and Reinvestment Act, Geothermal Technologies Program, DOE, Date TBA

The Department of Energy's Geothermal Technologies Program (GTP) is excited to announce an upcoming webcast detailing funding opportunities under the American Recovery and Reinvestment Act, as recently announced by President Obama and Secretary Chu. This webcast will present the programmatic vision and goals of the GTP, the Funding Opportunity Announcement (FOA) application process, and technical facets of each FOA. Following the information session there will be an opportunity for questions and answers. The general public and geothermal communities are highly encouraged to submit pre-questions to GO.GEOTHERMAL@GO.DOE.GOV. For an exact date and time of the webcast please monitor the GTP's Web site at www.eere.energy.gov/geothermal. This is an exciting time for the geothermal community and the GTP hopes to use this Webcast as a platform to communicate our goals and heat up the future of geothermal technologies. We hope you will join us!

1st East Caribbean Geothermal Conference, June 30–July 2 (Nevis)

Nevis will play host to a geothermal conference in two weeks at the Mount Nevis Hotel from June 30-July 2, the first of its kind to be held in the Eastern Caribbean.

The conference will involve two days of intense sessions and a workshop on geothermal by experts from the Auckland University in New Zealand on day three.

Details and agenda at <http://www.caribbeanpressreleases.com/articles/5213/1/Nevis-to-host-landmark-East-Caribbean-Geothermal-Conference/Page1.html>.

Geothermal Lease Sale: California, Nevada, and Utah, July 14 (Reno, NV)

The U.S. Bureau of Land Management has announced new geothermal lease sales in California, Nevada, and Utah in July 2009. The "competitive oral sale of Federal lands for geothermal leasing" will take place on July 14, at the BLM Nevada State Office in Reno.

In Nevada, 112 parcels with a total of 337,000 acres are offered. See BLM Nevada: http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/geothermal0/ggeothermal_leasing.html.

In California, 19 parcels with a total of 11,390 acres are offered. Check for updates:
<http://www.blm.gov/ca/st/en/prog/energy/geothermal.html>.

In Utah, one parcel of 228 acres is for sale. See BLM Utah:
http://www.blm.gov/ut/st/en/prog/energy/geothermal0/july_2009_geothermal.html.

GEA: Direct Use/Small Power Finance Workshop, Oregon Institute of Technology (OIT), August 12-13 (Klamath Falls, OR)

GEA in cooperation with OIT will host a geothermal direct-use and small power workshop in Klamath Falls, Oregon in the summer of 2009. The format would be an all day workshop with a site tour the following day. Included in the workshop agenda will be the how-to's of financing a small power/direct use project, direct use technology, presentations of small projects and direct use projects today and information about drilling and exploration for such projects. For more information contact Kathy Kent at kathy@geo-energy.org.

GEA: Geothermal Energy Expo/GRC Annual Meeting, October 4-7 (Reno, NV)

The 2009 Geothermal Energy Expo and GRC Annual Meeting will be held October 4-7 at the Peppermill in Reno, Nevada. For more information about the Geothermal Energy Expo, visit: <http://www.geo-energy.org>.

Renewable Energy Indonesia 2009 Trade Show, October 14–17 (Jakarta, Indonesia)

Indonesia has 45% of the world's geothermal energy resources. Renewable Energy Indonesia 2009 is the 5th international exhibition for all renewable energy technologies. It will be held at the International Exhibition Centre at Kemayoran, October 14–17, 2009.

For more information: www.pamerindo.com.

SMU Geothermal Conference, November 3–4 (Dallas, TX)

SMU Geothermal Laboratory has announced new dates for this year's conference, Geothermal Energy Utilization Associated with Oil and Gas Development. From SMU: We postponed the June 18–19 conference to November to give more time for working with companies responding to the many requests for proposals, and to give new projects time for installation so they can report the progress. We apologize for any inconvenience by changing the dates. Looking forward to seeing you in November!

Topics Presented: Power Generation Technology Advancements, Geothermal Resource Exploration and Assessment, Reservoir Engineering, Fracturing, Geopressure Development, Tight Gas Sands Development, Enhanced Geothermal Systems – International, Green Power for Utilities, Renewable Energy Credits and Tax Incentives, Economics and Business Plan, Transmission Needs, Regulation Laws and Leasing, Financing, Demonstration Sites

Submit abstracts for consideration to: blackwel@smu.edu or call 214-768-2745 to discuss an idea. Deadline for submission is September 1, 2009.

More conference details online - <http://smu.edu/geothermal>.

XVII Annual Congress and Annual Assembly, Mexican Geothermal Association, November 13 (Mexico)

The Mexican Geothermal Association (AGM: Asociación Geotérmica Mexicana) will hold its XVII Annual Congress and Annual Assembly by November 13, 2009, at the CFE (Comisión Federal de Electricidad) offices in Morelia, Mich., Mexico.

Preliminary program:

9:00 – 10:00 hours: Registration

10:00 – 13:00 hours: Technical presentations

13:00 – 14:00 hours: Lunch

14:00 – 17:00 hours: Technical presentations

17:00 – 18:30 hours: Ordinary Assembly

Fees: AGM's members: 750 Mexican pesos (~55 USD). Non-members: 1,100 Mexican pesos (~85 USD). Students and retired: 50%. Fee includes lunch, transactions and coffee breaks.

Deadlines:

Submission of abstracts: July 24

Acceptation notification: August 7

Submission of extended papers: September 4

Pre-registration: November 3

Complete call for papers (in Spanish) at: <http://www.geotermia.org.mx> (See: Congreso 2009)

More information: Luis C.A. Gutiérrez-Negrín (AGM's secretary): l.g.negrin@gmail.com.



GEA Weekly Update

A newsletter for the geothermal industry 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