



Coal News and Trends

April 2009

Upcoming Web-Based Seminars:

- **Clean Coal Technology Webinars**

The International Trade Administration will host a series of web-based seminars throughout 2009 highlighting opportunities for U.S. clean coal technology, mining, and coal-fired power generation companies in overseas markets. The seminars will provide country-specific market overviews for U.S. companies interested in establishing or expanding exports in the clean energy sector. The series will be led by U.S. & Foreign Commercial Service energy/trade specialists in the targeted market. The dates and times for the upcoming webinars are as follows:

- *Opportunities for U.S. Companies in the Coal and Mining Sectors of Australia and Philippines, April 7, 2009*
- *Opportunities for U.S. Companies in the Coal, Mining, and Power Generation Sectors of Vietnam, June 10, 2009*

To register for the events or for additional information please refer to:

<http://www.buyusa.gov/pittsburgh/coalwebinars2009.html>, or contact

Shannon.Fraser@mail.doc.gov, 202-482-3609, or Steve.Murray@mail.doc.gov, 412-644-2819.

Coal Industry Bid Announcements and Trade Leads:

- **Coal Preparation Facility in India, Central Coalfields Limited**

A 10 million ton capacity coal prep plant project has recently been announced by Central Coalfields Ltd. The bid notice and bid documents are available at:

<http://ccl.cmpdi.co.in/tenders/tenderdownload/Ashok-Washery.pdf>

Bids will be received until April 27, 2009. U.S. companies with requests for additional information on this project are encouraged to contact the Commercial Service Trade Specialist in Kolkata, India: Arup.Mitra@mail.doc.gov

- **Coal-Fired Power Plant in Kenya, Kenya Electricity Generating Company**

The Kenya Electricity Generating Company (KenGen) completed a feasibility study for the construction of a 300 MW coal-fired power plant in the Mombassa region. The study advances the implementation of a coal fired power plant to be comprised of two units of 150 MW each and estimated to cost U.S. \$700 million. KenGen recently put forward a notice for Expression of Interest for a joint venture partner who will take on 60 percent equity, with KenGen owning the remaining 40 percent. Information on the EOI is available at:

<http://www.kengen.co.ke/Tenders.aspx?TenderId=0>

U.S. companies interested in this project are encouraged to contact Mary Masyuko, Commercial Specialist at the U.S. Embassy in Nairobi, at Mary.Masyuko@mail.doc.gov.

Upcoming Industry Events:

- **ITA Export Seminar at the Coal Prep Conference, Lexington, KY, April 27-30, 2009**

The International Trade Administration will host an ITA Export Seminar from 10:00-11:00am on April 29, 2009 as part of the Coal Prep Conference. This complimentary session will highlight the Department of Commerce programs, services, and resources available to U.S. coal industry companies aiming to expand opportunities in overseas markets. Export-Import Bank representatives will also provide an overview of financing programs available to U.S. companies. For additional information on this session, please contact Sara.Moreno@mail.doc.gov, 859-225-7001.

The Coal Prep Conference is the exclusive gathering place where the world's leading industry professionals come together to share new ideas and discuss proven techniques for coal preparation plant technologies. More than 200 quality suppliers attend the event and display the most updated equipment, products, and services, while serving as an excellent forum to create new working relationships and renew important professional acquaintances.

Coal Prep also offers the most comprehensive educational program on coal preparation technology, led by coal preparation industry experts, including plant managers, superintendents, engineers, maintenance professionals, and quality control professionals. To see the complete conference program, including registration details visit: www.coalprepshow.com

To see a complete list of Coal Prep Conference exhibitors, visit <http://coalaggprepshow.com/CoalPrep2009/Public/ExhibitorList.aspx>

- **British Columbia Mining Opportunity Event, Vancouver, May 5-6, 2009**

Canada presents U.S. manufacturers of mining equipment and technology with some of the best export prospects in the world. Canada's mining industry continues to persevere during this changing global environment. U.S. small and medium-sized firms with equipment, services or technology for this sector will not want to miss this opportunity to participate in this event. This event will provide participants with an efficient and cost-effective opportunity to gain valuable market exposure, establish business contacts, promote their products, services and technologies, and advance their business objectives with the full support of the U.S. Commercial Service in Vancouver, Canada.

Participants will benefit from an export seminar on the B.C. mining market and a "Doing Business in Canada" presentation; a schedule of one-on-one appointments with pre-screened potential business partners; a networking reception hosted by the U.S. Consul General with key contacts from the British Columbia business community in attendance; and logistical support, including special U.S. Commercial Service hotel rates in Canada. The participation fee for small companies with less than 500 employees is US\$1,600, and for large companies with more than 500 employees the participation cost is US\$3,650. Please note that registration is limited to 8 qualified U.S. firms and is available on a first come, first served basis. To view the market research reports, "Canada: Mining Equipment Industry" and "Mining Industry in Canada Snapshot," please refer to: <http://www.buyusa.gov/canada/en/bcminingopportunities2009.html> Please contact Judy Simonite, Commercial Service Trade Specialist in Vancouver, at Judy.Simonite@mail.doc.gov, or 604-642-6678 for additional information on this event.

- **ITA Export Seminar at the Electric Power Conference, Chicago, May 11-15, 2009**

The International Trade Administration will hold a complimentary Export Seminar on 'Advancing U.S. Exports of Power Technologies and Equipment' on May 11 from 1:00-5:00pm in Room 13 of the Stephens Convention Center in Chicago. The session will highlight:

- An Overview of World Markets for U.S. Power Technologies and Equipment
- U.S. Exporting Programs and Breaking into International Markets
- Financing and Ensuring Payment for Energy Projects
- Intellectual Property Rights and Exporting
- U.S. Company Export Experiences in Overseas markets
- Electric Power Country Market Overview: Algeria

To register for the Exporting Seminar, please mark box PC14 on the registration form and fax/email the document to the listed contact information. Registration information is available at: http://www.electricpowerexpo.com/pdf/EP09_Registration.pdf

For additional information on the ITA Program of Events at the Electric Power Conference, please contact Shannon Fraser at (202) 482-3609 or Shannon.Fraser@mail.doc.gov. For additional information on the Electric Power Conference, please refer to: <http://www.electricpowerexpo.com/index.asp>, or contact Carrie Shapiro at 832-242-1969.

Policy Analysis:

DOE Releases Report on Techniques to Ensure Safe, Effective Geologic Carbon Sequestration

Comprehensive Report Describes New and Emerging Methods to Monitor, Verify, and Account for CO2 Stored in Geologic Formations

http://fossil.energy.gov/news/techlines/2009/09016-DOE_Releases_MVA_Report.html

Washington, D.C. – The Office of Fossil Energy's National Energy Technology Laboratory (NETL) has created a comprehensive new document that examines existing and emerging techniques to monitor, verify, and account for carbon dioxide (CO₂) stored in geologic formations. The report, titled *Monitoring, Verification, and Accounting of CO₂ Stored in Deep Geologic Formations*, should prove to be an invaluable tool in reducing greenhouse gas emissions to the atmosphere through geologic sequestration. The report was prepared by NETL with input from the seven Regional Carbon Sequestration Partnerships. Its main goals are to:

- Provide an overview of monitoring, verification, and accounting (MVA) techniques that are currently in use or are being developed;
- Summarize the Energy Department's MVA research and development program; and
- Present information that can be used by regulatory organizations, project developers, and national and state policymakers to ensure the safety and efficacy of carbon storage projects.

Emissions of CO₂ have increased from an insignificant level two centuries ago to more than 30 billion tons worldwide today. As a result, atmospheric levels of CO₂ have risen from preindustrial levels of 280 parts per million (ppm) to more than 380 ppm today. If no effort is made to reduce CO₂ emissions, yearly release from the United States could increase by one third from 2005 to 2030.

Carbon capture and storage will help reduce this growth by capturing CO₂ before it is emitted into the atmosphere. Geologic sequestration—the storage of CO₂ in deep geologic formations such as depleted oil and gas reservoirs, unmineable coal seams, and saline formations—has emerged as an important and viable option in a wide-ranging portfolio of technologies.

Reliable and cost-effective MVA techniques are critical to making geologic storage a safe, effective, and acceptable method for reducing greenhouse gas emissions. Additionally, MVA provides data that can be used to:

- Verify national inventories of greenhouse gases;
- Assess reductions of greenhouse gas emissions at geologic sequestration sites; and
- Evaluate potential regional, national, and international greenhouse gas reduction goals.

The Office of Fossil Energy supports a number of carbon capture and storage initiatives including a vigorous MVA research and development program.

DOE Regional Partnership Initiates CO2 Injection in Lignite Coal Seam
Project Examining Carbon Storage in Low-Rank Coal Seams in the U.S. Great Plains Region
http://fossil.energy.gov/news/techlines/2009/09015-CO2_Injection_Begins.html

Washington, D.C. – A U.S. Department of Energy/National Energy Technology Laboratory (NETL) team of regional partners has begun injecting CO₂ into a deep lignite coal seam in Burke County, North Dakota, to demonstrate the economic and environmental viability of geologic CO₂ storage in the U.S. Great Plains region. Ultimately, geologic carbon sequestration is expected to play an important role in mitigating greenhouse gas emissions and combating climate change.

The Lignite Field Validation Test is being conducted by the Plains CO₂ Reduction (PCOR) Partnership, one of seven regional partnerships under DOE's Regional Carbon Sequestration Partnership Program. The seven partnerships form a national network that is investigating the best approaches for capturing and permanently storing CO₂. Nearly three dozen projects are underway under the validation phase of the partnerships program.

The PCOR Partnership plans to inject approximately 400 tons of CO₂ into a 10-foot thick lignite seam at a depth of approximately 1,100 feet. In collaboration with Eagle Operating Inc., a five-spot well configuration was drilled in the summer of 2007 consisting of a center injection well surrounded by four monitoring wells. In addition to evaluating the lignite seam's CO₂ storage potential, the enhancement to coalbed methane extraction will also be evaluated.

The results of the PCOR Partnership's Phase I characterization activities indicated that the region's low-rank coal seams have the capacity to store up to 8 billion tons of CO₂. Phase I results also suggested that more than 17 trillion cubic feet of methane could be incrementally produced from low-rank coal seams. To date, no field studies have been conducted on the ability of lignite coal seams to store CO₂. The field-based investigations conducted under this activity will provide previously unavailable insight regarding the sequestration of CO₂ in low-rank coals. This insight can be broadly applied both within the region and more broadly, as low-rank coal seams are known to occur throughout western North America.

The Regional Carbon Sequestration Partnership Program was created in 2003 to determine which of numerous sequestration approaches are best suited for different regions of the country. The partnership program is being implemented in three phases. The characterization phase (2003–2005), which defined opportunities for carbon capture and storage, has been completed. The validation phase (2005–2009) generally involves small-scale field tests and includes the PCOR Partnership lignite test. The final phase, the development phase (2007–2017), will conduct large-volume carbon storage tests. The long-term storage of CO₂ by injection in underground geologic reservoirs is expected to play a major role in addressing climate change concerns. NETL manages the partnership program for DOE's Office of Fossil Energy.

The PCOR Partnership is managed by the University of North Dakota Energy and Environmental Research Center and includes more than 80 public and private partners in all or part of nine states (North Dakota, South Dakota, Minnesota, Montana, Wyoming, Nebraska, Iowa, Missouri, and Wisconsin) as well as four Canadian provinces (British Columbia, Alberta, Saskatchewan, and Manitoba). The Lignite Field Validation Test is one of four tests the partnership is conducting under the validation phase of the regional partnerships program. These four tests, plus two large-volume sequestration tests that the PCOR Partnership is planning as part of the development phase of the partnerships program, have created more than 400 jobs that will continue through 2017.