

# **Coal News and Trends**

## Upcoming Events:

• International Mining, Exploration, Mineral Processing & Technology Exhibition (IME) Show, January 17-20, Kolkata, India

The IME 2008 in India will run concurrently with the 2<sup>nd</sup> Asian Mining Congress. Both events offer unparalleled opportunities for companies in the coal and mining industry. The four-day international exhibition will be held at Netaji Stadium & Khudiram Hall Complex in Kolkata, from January 17 to January 20, 2008. There will be a number of exhibits of mining machinery, safety and rescue equipment, and communication and logistical equipment. This event will provide an ideal forum for minerals and coal producers, manufacturers of mining machinery and equipment, and mining professionals and experts to discuss business and productivity goals while creating new partnerships and addressing important sustainability issues. The U.S. Commercial Service is managing a U.S. Pavilion of U.S. coal and mining companies as part of the IME event. U.S. companies that would like to take part in the event and meet with Commercial Service trade specialists to discuss export opportunities to India are encouraged to contact Ms. Aileen Nandi at Aileen.Nandi@mail.doc.gov.

• International Conference on Clean Technologies for the World Mining Industry, April 13-16, Santiago, Chile

The Eighth Annual International Conference on Clean Technologies for the World Mining Industry will take place from April 13-16, 2008 in Santiago. This event has been attended by foreign and Chilean professionals from the mining and metallurgical sectors. The 2008 event will highlight new technological processes to reduce mining contaminants worldwide. Participants from the mining sector, universities and research centers are encouraged to attend the event. Additional information can be found at http://www.ctwmi.com/, or contact Carlos Capurro at 56-2-330-3307 or Carlos.Capurro@mail.doc.gov for additional information regarding the International Trade Administration schedule at the event.

Coal Prep 2008, April 28-May 1, Lexington, KY

The annual Coal Prep event attracts over 200 exhibiting companies and more than 1,200 attendees. Attendees come to see the latest coal preparation products and technologies and to gain up-to-date industry information. Attendees include plant managers, superintendents, engineers, maintenance professionals, quality control professionals and coal industry experts. Topics to be highlighted at the 2008 event include Loading and Transportation of Coal and Operator Guidelines for Coal Preparation. Please refer to http://coalaggprepshow.com/CoalPrep2008/Public/MainHall.aspx?ID=1676 for additional information on the event, or contact Sara Moreno at (859) 225-7001 or Sara.Moreno@mail.doc.gov regarding the International Trade Administration program at the Coal Prep event.

### • Electric Power, May 6-8, Baltimore, MD and ITA Exporting Seminar, May 5

The Tenth Annual Electric Power event, to be held from May 6-8 in Baltimore, will highlight power generation trends, with sessions on fuel strategies, fleet optimization, coal-fired power plants, nuclear power, renewable power, and environmental issues. As part of the Electric Power event, the International Trade Administration will provide a seminar on 'Exporting U.S. Power Technologies and Equipment' on

May 5 from 2:00-5:00pm. For additional information on the Electric Power event, please refer to http://www.electricpowerexpo.com/index.asp, or contact Shannon Fraser at (202) 482-3609 or Shannon.Fraser@mail.doc.gov for information on the exporting seminar.

### **Policy Analysis:**

### Massive Federal Omnibus Spending Bill Boosts Funding for Key Coal, Mineral and Safety Programs

www.nma.org/newsroom/miningweek/miningweekarchive/pdf2007/mw122107.pdf December 21, 2007

During the week of December 17, Congress gave final approval to a \$516 billion omnibus spending bill (H.R. 2764) to fund federal departments and agencies for fiscal year (FY) 2008. The bill cleared the Senate on Dec. 18 by a vote of 70-25 and passed the House the following day on a vote of 274-141. Included in the bill are funding increases for key coal research programs at the Department of Energy (DOE), mineral programs at the Department of the Interior (DOI) and increased mine safety funds, including new funding to support safety technology development. In addition, the bill also calls for the development of rules regarding the use of mine rescue chambers in underground coal mines.

<u>Department of Energy</u>: The bill gives DOE's loan guarantee program \$38.5 billion, of which \$6 billion must be allocated for coal-based generation and industrial gasification activities and \$2 billion for advanced gasification. The bill provides \$353 million for base coal research and development programs, marking an increase of \$107.5 million over the administration's FY 2008 budget request. This amount includes \$120 million for underground carbon storage research, which is \$40.9 million more than the administration's request. However, the \$75 million in funding for the FutureGen project contained in the bill is a decrease of \$33 million from the president's budget request. The \$70 million allocated for the Clean Coal Power Initiative is a \$3 million decrease from the administration's budget request.

<u>Department of the Interior</u>: Under the bill, DOI's Bureau of Land Management's Mining Law Administration Program receives a \$2 million funding increase over FY 2007 levels, with the bill providing \$34.7 million in funding for FY 2008. The increased funding will help the program more expeditiously process mining claims. The bill reverses a massive proposed budget cut to the Minerals Resources Program (MRP), providing MRP with \$50.8 million instead of the \$25.6 the administration requested. The bill also reversed a \$5.1 million funding cut proposed by the administration for the Minerals Information Team (MIT), giving MIT \$15.4 million. For DOI's Office of Surface Mining (OSM), the bill provides the agency's regulation and technology programs with \$120.3 million, marking an almost \$5 million increase over the funding requested by the administration. The bill also includes language that directs OSM and the Army Corps of Engineers to develop a more efficient process for expediting permit decisions associated with surface coal mining operations.

National Institute for Occupational Safety and Health/Mine Safety and Health Administration: The omnibus bill contains \$50 million to support mine safety technology research at the National Institute for Occupational Safety and Health (NIOSH), the largest amount of funding Congress has ever approved to support NIOSH's vital mine safety research efforts. This funding comes on top of an additional \$13 million approved earlier this year in a FY 2007 supplemental appropriations bill. The omnibus bill also directs NIOSH to collaborate with the University of Utah and West Virginia University on a study on the recovery of coal pillars through retreat room and pillar mining practices in underground coal mines at depths greater than 1,500 feet. The bill requires the study be provided to the House and Senate Appropriations Committees two years after the enactment of the omnibus bill. The bill provides the Mine Safety and Health Administration (MSHA) with \$339.8 million, representing an increase of \$46 million above the administration's request. The increased funding is targeted at ensuring MSHA can complete all required mine inspections, with MSHA directed to submit a detailed operating plan describing how the increased funds will be utilized and the specific outcomes the agency expects the new funds will yield. In addition, the bill requires the secretary of labor to propose regulations requiring the use of mine rescue chambers "or facilities that afford at least the same measure of protection" in underground coal mines. The bill set a deadline of Dec. 31, 2008, for the secretary to issue these rules.

<u>Army Corps of Engineers</u>: The bill provides the Corps with \$180 million to administer the Clean Water Act Section 404 permit program and a memorandum of understanding between the Corps, OSM, the U.S. Environmental Protection Agency (EPA) and the U.S. Fish and Wildlife Service, which encourages a coordinated review of 404 permits. The Corps is also directed to dedicate sufficient personnel and the financial resources needed to support a consistent program for permit review and issuance.

Environmental Protection Agency: The bill provides a \$7.6 billion budget for EPA that includes funding for several global climate change programs including \$20 million for Global Change Research intended to support future rulemaking efforts on greenhouse gases; \$1 million for research on the human health effects and environmental impacts of carbon capture and storage to better inform regulatory decision making; \$4.4 million for the Methane to Market program; and \$3.5 million within the Federal Support Air Quality Management program for EPA to use its existing authority under the Clean Air Act to develop and publish a rule requiring mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy. The bill directs EPA to publish a draft rule requiring mandatory reporting of greenhouse gas emissions no later than nine months after the date of enactment of the bill, with a final rule due no later than 18 months after the date of enactment. In the rule, EPA must report on emissions resulting from upstream production and downstream sources, to the extent the EPA administrator deems it appropriate. In addition, the EPA administrator is tasked with determining appropriate thresholds of emissions above which reporting is required and to determine how frequently reports shall be submitted to EPA. The bill retains a sense of Congress climate change finding, originated in the House, stating that greenhouse gas emissions are increasing the frequency and severity of floods and droughts, requiring mandatory market-based limits and incentives that will not significantly harm the U.S. economy and comparable action by other nations. An attempt to remove this item from a previous version of the bill in June by Rep. Joe Barton (R-Texas) was defeated by a vote of 153-274.

### President Bush Signs Energy Bill To Improve Fuel Economy and Reduce Oil Dependence

Energy Independence and Security Act of 2007 http://www.whitehouse.gov/infocus/energy/ December 19, 2007

On December 18, 2007, President Bush signed the Energy Independence and Security Act of 2007, which will improve vehicle fuel economy and help reduce U.S. dependence on oil. The bill the President signed today responds to the challenge of his bold "Twenty in Ten" initiative, which President Bush announced in January. It represents a major step forward in expanding the production of renewable fuels, reducing our dependence on oil, and confronting global climate change. It will increase our energy security, expand the production of renewable fuels, and make America stronger, safer, and cleaner for future generations.

The Energy Independence and Security Act of 2007 will help reduce America's dependence on oil by:

- 1. Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022. Although the President proposed a more ambitious alternative fuels standard in his State of the Union Address, the RFS in the bill he signed today represents a nearly five-fold increase over current levels.
- 2. Reducing U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020 which will increase fuel economy standards by 40 percent and save billions of gallons of fuel. Last January, the President called for the first statutory increase in fuel economy standards for automobiles since they were enacted in 1975, and the bill he signed today delivers on that request. The bill also includes an important reform the President has called for that allows the Transportation Department to issue "attribute-based standards," which will ensure that increased fuel efficiency does not come at the expense of automotive safety.

By addressing renewable fuels and CAFE standards, this bill will build on progress made by the Energy Policy Act of 2005 in setting out a comprehensive energy strategy for the 21st century. The Energy Policy Act signed by the President in August 2005 represented the first major energy security legislation in more than a decade. The Act encourages energy conservation and efficiency by promoting residential efficiency, increasing the efficiency of appliances and commercial products, reducing Federal government energy usage, modernizing domestic energy

infrastructure, diversifying the Nation's energy supply with renewable sources, and supporting a new generation of energy-efficient vehicles.

# The Bill Signed Today Will Add To The President's Ongoing Efforts To Enhance Energy Conservation And Efficiency:

The bill includes provisions to improve energy efficiency in lighting and appliances, as well as requirements for Federal agency efficiency and renewable energy use that will help reduce greenhouse gas emissions. For example:

- The bill will require all general purpose lighting in Federal buildings to use Energy Star® products or products designated under the Energy Department's Federal Energy Management Program (FEMP) by the end of Fiscal Year 2013.
- The bill will update the Energy Policy and Conservation Act to set new appliance efficiency standards that will save Americans money and energy. The Act amends the Energy Policy and Conservation Act (EPCA) to prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- The bill will establish an Office of High-Performance Green Buildings (OHPGB) in the U.S. General Services Administration. This office will promote green building technology implementation in Federal buildings.

The Bill Responds To The President's "Twenty In Ten" Vision And Will Produce Some Of The Largest CO2 Emission Cuts In Our Nation's History:

Taken together, all of these measures could reduce projected CO2 emissions by billions of metric tons.

• These results help advance the U.S. commitment at the UN climate change meeting in Bali last week to pursue quantifiable actions to reduce carbon emissions.

#### The President Urges Congress To Act On The Remaining Proposals From His Energy Security Agenda:

We must continue changing the way America generates electric power through even greater use of cleaner coal technology, solar and wind energy, and clean, safe nuclear power.

We must increase our domestic supply of oil in a prudent and environmentally sensitive way. The President again urges Congress to pass legislation that opens access to domestic energy sources such as the Outer Continental Shelf and the Arctic National Wildlife Refuge. He also asks Congress to double the current capacity of the Strategic Petroleum Reserve to protect America against disruptions to our oil supply.

### <u>FutureGen Alliance Selects Mattoon, Illinois as the Final Site for the First-of-a-Kind,</u> Near-Zero Emissions Coal-fueled Power Plant

http://www.futuregenalliance.org/news/releases/pr\_12-18-07.stm December 18, 2007

Washington, D.C. - The FutureGen Alliance announced on December 18, 2007 that Mattoon, Illinois has been chosen as the final site to host the FutureGen power plant.

"The Alliance would like to congratulate Mattoon, Illinois for being chosen as the final site to host the FutureGen facility," said Mike Mudd, Chief Executive Officer of the FutureGen Alliance. "Officials from Mattoon should be commended for their determination and dedication to the FutureGen program."

The site evaluation process has been rigorous, transparent, and held to the highest level of scrutiny. The U.S. DOE's environmental review was thorough and resulted in finding all four candidate sites worthy of being

selected. The selection of Mattoon, will be finalized upon the Department of Energy's (DOE) issuance of the National Environmental Policy Act Record of Decision and other DOE contractual formalities. Completing this massive effort in such a short time is a testament to the teamwork by the DOE, its contractors, the states and the Alliance. The Alliance used over 120 different factors in the general areas of cost, risks to cost and schedule, and benefits in making the final selection.

The Alliance and Illinois will now work together to move FutureGen forward at a continued fast pace to develop this much-needed, first-of-a-kind research and development program. With the issue of climate change at the top of Congress' agenda and on the minds of many policy-makers around the globe, FutureGen and its continued progress toward advancing new technologies such as carbon capture and storage is more important than ever.

Over the course of the program, the Alliance has maintained an aggressive schedule and today's announcement marks another milestone by the FutureGen Alliance in developing this technology solution. The FutureGen Alliance greatly appreciates the support from Mattoon and the other three candidate sites over the past two years, and looks forward to making the project a reality.

The FutureGen Alliance is a non-profit organization that represents some of the world's largest coal companies and electric utilities including: American Electric Power Service Corporation, Anglo American Services (UK) Limited, BHP Billiton Energy Coal, Inc., China Huaneng Group, CONSOL Energy Inc., E.ON U.S. LLC, Foundation Coal Corporation, Luminant, PPL Energy Services Group, LLC, Peabody Energy Corporation, Rio Tinto Energy America Services, Southern Company Services, Inc., and Xstrata Coal Pty Limited. The Alliance is partnering with the U.S. Department of Energy to design and build the facility.

### Statement Regarding FutureGen from DOE's Acting Principal Deputy Assistant Secretary for Fossil Energy James Slutz

http://fossil.energy.gov/news/techlines/2007/07085-FE\_Statement\_on\_FutureGen.html December 18, 2007

Washington, D.C.-"Clean coal technology is a vital component of the Bush Administration's vision for a cleaner, more secure energy future. FutureGen, which seeks to demonstrate integrated clean coal technologies with carbon capture and sequestration, remains a cornerstone of this vision," noted Acting Principal Deputy Assistant Secretary for Fossil Energy, James Slutz.

"As the Department of Energy (DOE) has discussed with the FutureGen Alliance for the past several months, projected cost overruns require a reassessment of FutureGen's design. Today the Alliance announced its preferred site for FutureGen. DOE has not yet issued the Record of Decision (RoD), which is required to enable a final siting determination. DOE believes that the public interest mandates that FutureGen deliver the greatest possible technological benefits in the most cost-efficient manner. This will require restructuring FutureGen to maximize the role of private sector innovation, facilitate the most productive public-private partnership, and prevent further cost escalation. DOE looks forward to continued work with the private sector and its international partners to ensure the success of FutureGen, and to advance the use of carbon capture, storage and sequestration in the coal-fired power plants of the future. Further details on the structure of FutureGen will be provided next month."

### Energy Department Awards \$66.7 Million for Large-Scale Carbon Sequestration Project

Regional Partner to Demonstrate Safe and Permanent Storage of One Million Tons of CO2 at Illinois Site http://fossil.energy.gov/news/techlines/2007/07084-Illinois\_Basin\_Sequestration\_Proje.html December 18, 2007

Washington, DC - Following closely on the heels of three recent awards through the Department of Energy's (DOE) Regional Carbon Sequestration Partnership Program, DOE recently awarded \$66.7 million to the Midwest Geological Sequestration Consortium (MGSC) for the Department's fourth large-scale carbon sequestration project. The Partnership, led by the Illinois State Geological Survey, will conduct large volume tests in the Illinois Basin to demonstrate the ability of a geologic formation to safely, permanently, and economically store more than one million tons of carbon dioxide (CO2). Subject to annual appropriations from Congress, this project including the partnership's cost share is estimated to cost \$84.3 million. Advancing carbon sequestration is a key component of the Bush Administration's comprehensive efforts to pursue clean coal technology to meet current and future energy needs and meet President Bush's goal of reducing greenhouse gas emissions intensity 18 percent by 2012.

"These projects demonstrate the potential of carbon sequestration technology, which will play a crucial role in achieving President Bush's goal to harness advanced clean energy technologies to meet growing demand and reduce greenhouse gas emissions," Under Secretary of Energy Bud Albright said. "We continue to make robust investments aimed at moving carbon sequestration technology from the laboratory to actual large-scale field demonstrations and ultimately to the marketplace to with the help of our regional partners."

This partnership, led by Illinois State Geological Survey, will demonstrate CO2 storage in the Mount Simon Sandstone Formation, a prolific geologic formation throughout Illinois, Kentucky, Indiana, and portions of Ohio. This formation offers great potential to store more than 100 years of carbon dioxide emissions from major point sources in the region. The partnership will inject one million tons of CO2 into one of the thickest portions of the Mount Simon Formation testing how the heterogeneity of the formation can increase the effectiveness of storage and demonstrate that the massive seals can contain the CO2 for millennia. The results of this project will provide the foundation for the future development of CO2 capture and storage opportunities in the region.

Researchers and industry partners will characterize the injection sites and complete modeling, monitoring, and infrastructure assessments needed before CO2 can be injected. MGSC plans to drill a CO2 injection well and then inject about 1,000 tons per day of carbon dioxide into the Mt. Simon sandstone, which is approximately 5,500 feet below the surface. The project will inject CO2 for three years before closing the injection site and monitoring and modeling the injected carbon dioxide to determine the effectiveness of the storage reservoir.

The Midwest Geological Sequestration Consortium will work with the Archer Daniels Midland (ADM) Company to demonstrate the entire CO2 injection process (pre-injection characterization, injection process monitoring, and post-injection monitoring) at large volumes to determine the ability of different geologic settings to permanently store CO2. ADM's ethanol plant in Decatur, IL, will serve as the source of CO2 for the project. ADM will cost share the expense of the CO2, which will come from the company's ethanol production operation. DOE will fund the dehydration, compression, short pipeline, and related facility costs to deliver the CO2 to the wellhead.

The award to MGSC is the fourth of seven awards in the third phase of the Regional Carbon Sequestration Partnerships program. In October 2007, Deputy Secretary of Energy Clay Sell announced the first three large volume carbon sequestration projects that total \$318 million for Plains Carbon Dioxide Reduction Partnership, Southeast Regional Carbon Sequestration Partnership, and Southwest Regional Partnership for Carbon Sequestration.

This ten-year initiative, launched by DOE in 2003, forms the centerpiece of national efforts to develop the infrastructure and knowledge base needed to place carbon sequestration technologies on the path to commercialization. The seven regional partnerships include more than 350 state agencies, universities, and private companies within 41 states, two Indian nations, and four Canadian provinces. During the first phase of the program, seven partnerships characterized the potential for CO2 storage in deep oil-, gas-, coal-, and saline-bearing formations. When Phase I ended in 2005, the partnerships had identified more than 3,000 billion metric tons of potential storage capacity in promising sinks, which has the potential to represent more than 1,000 years of storage capacity from point sources in North America. In the program's second phase, the partnerships implemented a portfolio of small-scale geologic and terrestrial sequestration projects. The purpose of these tests was to validate that different geologic formations have the injectivity, containment, and storage effectiveness needed for long-term sequestration. As part of the third phase, large volume tests are designed to validate that the capture, transportation, injection, and long term storage of over one million tons of carbon dioxide can be done safely, permanently, and economically.

### Tax Credit Program Promotes Advanced Coal Power Generation and Gasification Technologies

DOE Will Assist Internal Revenue Service in Project Selection http://fossil.energy.gov/news/techlines/2007/07082-EPAct\_Tax\_Credit.html December 5, 2007

Washington, D.C. - The U.S. Department of Energy (DOE) is partnering with the Internal Revenue Service (IRS) to evaluate five projects that have recently applied for tax credits under the Energy Policy Act of 2005 (EPAct 2005). Accepted projects will help bring about rapid deployment of advanced coal-based power generation and gasification technologies and enable the clean and efficient use of coal, America's most abundant energy resource.

In June 2007, the Treasury Department and DOE released revised guidance on the procedures for awarding the tax credits authorized under EPAct 2005 for qualifying advanced coal projects and qualifying gasification projects. Under the revised guidance, applications for DOE certification received before October 31, 2007, will be acted on in 2008.

DOE received five applications for projects in five different states before the October 31 deadline. Two applications, requesting \$258 million in tax credits, were received for qualifying advanced coal projects costing \$4.1

billion, while three applications, requesting \$390 million in tax credits, were received for qualifying gasification projects costing \$5.0 billion.

The Office of Fossil Energy's National Energy Technology Laboratory and the IRS will be evaluating the proposed projects for technical and economic feasibility and will rank certified projects in accordance with the criteria set forth in the revised guidance. The IRS will accept or reject applications based on this ranking and will notify each applicant of its decision by April 30, 2008.

Last year, DOE and IRS awarded \$1 billion in tax credits to nine companies under the qualifying advanced coal project and qualifying gasification project programs.