



CCS Alliance Update — March 8, 2011

1. FutureGen Storage Site Selected

- ◆ The FutureGen Alliance has chosen a geologic storage site for the revamped carbon capture and storage (“CCS”) project. Morgan County, IL will be used as the sequestration site for the underground injection of CO₂ captured at the retrofitted Ameren Energy Resources power plant in Meredosia, IL. The county sits atop the Mt. Simon sandstone formation, a deep saline reservoir more than three-quarters of a mile below the surface that is 850 feet thick and is overlain by multiple layers of impermeable shale. The storage site is a rural region approximately 230 miles southwest of Chicago, and the Alliance has stated that there is strong support for the project from landowners and local businesses in Morgan County.
- ◆ A 32-mile pipeline will carry the CO₂ from the Meredosia plant to the storage site. The Morgan County site was chosen in part for its close proximity to the power plant, which helps to simplify the right of way and routing issues associated with the construction of the pipeline.
- ◆ The U.S. Department of Energy must now perform an environmental impact assessment at the storage site before construction can begin in 2012, although test wells may be drilled as early as Summer 2011. The project also will need to obtain a permit from the U.S. Environmental Protection Agency in order to begin injecting CO₂ underground. The FutureGen Alliance also is backing a bill currently under consideration by the Illinois Legislature that would amend state law regarding liability for injected CO₂. Should the project run into difficulties or hurdles at the Morgan County site, the Alliance has identified alternate storage sites in Christian and Douglas counties.

2. AEP CCS Plant Wins Funding; Construction on Schedule

- ◆ Previous statements by Charles Patton, the president of American Electric Power’s (“AEP”) subsidiary Appalachian Power, have hinted that the future of the company’s CCS project at its Mountaineer plant in West Virginia may be in jeopardy; however, the project was recently awarded \$4 million by the Australian Global CCS Institute. The influx of new funding will allow the Mountaineer plant to reach its projected commencement of commercial operation by 2015. Construction of the plant will begin in 2013. The Mountaineer project will use a chilled ammonia scrubbing process to capture up to 90 percent of the CO₂ produced from 235-megawatts of the plant’s total 1,300-megawatt generating capacity. The captured CO₂ will be compressed and injected into geologic formations. DOE is also funding 50 percent of the project costs, up to a maximum limit of \$334 million.

3. Italian Company Plans CCS Retrofit

- ♦ Italian energy company Enel is planning to retrofit one of its existing coal-fired power plants with a new CCS system in order to comply with new CO₂ emissions regulations. The company will build a new \$1.38 billion CCS facility at its Porto Tolle power plant next to the Adriatic Sea. The power plant is located in the south of the country near the city of Brindisi. The project will use a post-combustion liquid solvent method to scrub CO₂ from the plant's exhaust stream. Enel is also examining the possibility of building a CCS system for a 600-megawatt power plant in China.

4. Carbon Traders Press for CDM Credits for CCS

- ♦ The International Emissions Trading Association ("IETA") is asking the United Nations to offer credits for CCS projects under the Kyoto Protocol's Clean Development Mechanism ("CDM"). In a filing in late February to the secretariat of the U.N. Framework Convention on Climate Change, the group urged consideration of CCS as another alternative, along with renewable energy resources, to reduce CO₂ emissions. IETA believes that allowing CCS projects to earn CDM credits will lower the costs of CCS systems, thereby encouraging wider deployment in U.S., Europe, and the developing world. IETA also argues that allowing participation in the CDM could foster technical know-how and knowledge-sharing among international partners. Critics of the proposal argue that allowing CCS projects to earn CDM credits could result in large nations like China receiving a majority of the finite amount of credits, making it more difficult for developing nations to construct renewable energy projects.