

# COAL UTILIZATION RESEARCH COUNCIL<sup>SM</sup>

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December 16, 2008

Rachel Bleshman  
Legislative Clerk  
House Committee on Energy and Commerce  
2322-B Rayburn House Office Building  
Washington, DC 20515

CC:

The Honorable Joe Barton, Ranking Member  
Committee on Energy and Commerce

The Honorable Gene Green, Chairman  
Subcommittee on Environment and Hazardous Materials

The Honorable John Shadegg, Ranking Member  
Subcommittee on Environment and Hazardous Materials

Dear Ms. Bleshman:

Enclosed are my responses to Ranking Member Shadegg's questions from the July 24, 2008 Subcommittee on Environment and Hazardous Materials hearing entitled, "Carbon Sequestration: Risks, Opportunities, and Protection of Drinking Water".

Thank you for allowing me the opportunity to further clarify and answer the questions posed. Should you have any further questions, please do not hesitate to contact me at [bnym@vnf.com](mailto:bnym@vnf.com) or (202) 298 – 1825.

Sincerely,



Ben Yamagata  
Executive Director  
Coal Utilization Research Council

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**1. You suggest that early adopters of sequestration should have the long-term liability of their CO<sub>2</sub> storage transferred to and accepted by the government. Will the private sector be willing to engage in CO<sub>2</sub> if the liability issues are not addressed?**

Long-term liability for CO<sub>2</sub> injected into a geologic formation for long-term, permanent storage remains a deterrent to CO<sub>2</sub> sequestration. It is presumed, and accepted, that CO<sub>2</sub> sequestration operators/owners will assume the risks associated with storage during the operating phase and for some time post-closure, but they will be unable to take the risk associated with the potential release of sequestered CO<sub>2</sub> in perpetuity. We agree with the recommendation of the IOGCC that for a period of ten years after closure the owner/operator should remain liable.

Also, the Coal Utilization Research Council (CURC) proposes an interim program that is predicated upon an assurance to “first adopters” that the long-term liability of stored CO<sub>2</sub> would be transferred to and accepted by government. This interim program needs to be developed in order for carbon capture and sequestration (CCS) projects to proceed prior to the establishment of a permanent program. Initially, a CCS project would be responsible for the storage of CO<sub>2</sub> during operation of the project and for a period of time (e.g. ten years) after cessation of project activities during which the owner or operator would remain responsible for monitoring and verification post-storage shutdown. Without such assurances through some form of interim program, it is difficult to foresee how any initial CCS project, not knowing the “rules of the road” can proceed.

**2. In testimony before our Energy and Air Quality Subcommittee, the NRDC said that we shouldn't move forward on legislation to help finance CCS deployment projects unless it's part of a comprehensive cap-and-trade bill. Do you agree with that statement, or do you think it's essential for us to move forward on developing carbon capture and sequestration technology before any efforts to cap CO<sub>2</sub>?**

CURC supports aggressive development of clean coal and carbon capture and storage technologies to ensure that coal will be converted into useful energy as efficiently and cost effectively as possible, with the least impact upon the environment and at a reasonable cost to the consumer. CURC believes that technology and technology innovation are critical to provide options for meeting the challenges to using coal and that CCS will be a primary enabler to reducing greenhouse gas emissions while providing low cost and carbon friendly electricity from coal. Technology also will enable the use of coal in providing needed energy to all sectors of the economy. This technology development must take place now. It can be done separate and apart from enactment of a cap and trade bill. If we are to rely upon CCS to resolve the question of CO<sub>2</sub> from coal then we need to know whether CCS technology is an answer and this need not, indeed cannot, wait for resolution about a cap and trade program.

**3. I find the prospect of possible electricity blackouts in 2009 alarming. Should we move forward on building new coal-fired plants now and worry about trying to retrofit them later? Can we truly afford to halt the construction of coal plants altogether until the technology has matured?**

During 2007, over 30 proposed coal-based power plants were postponed or cancelled. The need for increased electric generation to meet growth and replace older, smaller power plants will undoubtedly arise despite the economic turndown. However, new coal power plants are nearly

impossible to build today because of opposition to new coal-fired power plants. The general response has been to propose the construction of natural gas-based power plants that are less costly to construct, easier and quicker to obtain necessary permits, and emit about one-half the CO<sub>2</sub> of a coal-based power plant. But these generating plants will use a fuel that currently costs much more than coal. Furthermore, while natural gas generation could be built, natural gas supplies will be stressed and we will end up relying upon a high-priced fuel much of which will be imported from abroad. This will only aggravate the economic stresses to consumers, heavy industry, and chemical/fertilizer manufacturing.

Currently, the technologies to capture and sequester CO<sub>2</sub> from coal power plants are under development, but are not ready for widespread adoption. More time and development is needed. In the interim new, highly efficient, environmentally superior coal-based power plants should be constructed to meet growing demand or to replace older, less efficient coal power plants. Consideration might also be given, at that time, to determining when and how such plants – or other agreed upon actions to be taken – can be later retrofitted to reduce CO<sub>2</sub> emissions.