NATIONAL ENERGY TECHNOLOGY LABORATORY
Albany, OR • Morgantown, WV • Pittsburgh, PA
U.S. DEPARTMENT OF ENERGY

July 26, 2011

Dear Reader:

The enclosed draft environmental assessment (EA) for the RTI International Scale-up of High Temperature Syngas Cleanup and Carbon Capture and Sequestration Technologies, Polk County, Florida (Draft EA; DOE/EA-1867D) was prepared by the U.S. Department of Energy (DOE) in accordance with the Council on Environmental Quality's National Environmental Policy Act (NEPA) implementing regulations (40 CFR Parts 1500 to 1508) and DOE NEPA implementing procedures (10 CFR Part 1021). The draft EA evaluates the potential environmental consequences of providing a grant to RTI International (RTI) to facilitate construction and operation of its project demonstrating RTI's high-temperature syngas cleanup and carbon capture and sequestration (CCS) technologies. The project would be located at Tampa Electric Company's existing Polk Power Station in southwestern Polk County, Florida.

DOE's proposed action would provide RTI with a $171.8 million grant under a cost-sharing arrangement. The proposed project would treat a slipstream, equivalent to as much as 66 megawatts of electricity generation, of coal-derived syngas from the existing Polk Unit 1 to remove 99.9 percent of the sulfur, reduce trace contaminants (arsenic, selenium, and mercury), and convert the removed sulfur compounds to commercial-grade elemental sulfur. Also, up to 300,000 tons per year, or 90 percent, of the carbon dioxide in the cleaned syngas would be captured and sequestered via a deep injection well in a saline geologic formation below the site.

This draft EA evaluates the potential impacts of the proposed project in 13 environmental resource areas. Based on initial screening evaluations, DOE determined that no or negligible impacts would occur in six of these resource areas. Additional impact evaluations for air quality, geology and soils, water resources, socioeconomics, transportation, waste management, and human health and safety identified negligible or minimal impacts from the proposed project's construction and operation. In this draft EA, potential cumulative impacts of the proposed project with other past, present, or future actions are also evaluated, and no adverse cumulative impacts are identified. The proposed project would have the beneficial impact of creating jobs during construction and operation.

Invitation to Comment

DOE invites interested parties to comment on this draft EA during a 15-day public comment period that begins on July 31, 2011, and ends August 15, 2011. Submit comments to:

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Envelopes and the subject line of emails and faxes should be labeled "RTI Draft EA Comments." Comments received after the close of the comment period will be considered to the extent practicable.

Individual names and addresses, including e-mail addresses, received as part of the comment documents normally are considered part of the public record. Persons wishing to withhold his or her name, address, or other identifying information from the public record must state this request prominently at the beginning of the comment document. DOE will honor this request to the extent allowable by law. All submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses will be included in the public record and open to public inspection in their entirety.

Thank you for your interest in the CCS from Industrial Sources Program and this draft EA. For further information on the draft EA or to request additional copies, please contact Mr. Mark W. Lusk as noted above. The draft EA can also be accessed from DOE's National Energy Technology Laboratory website at http://www.netl.doe.gov/publications/others/nepa/ea.html.

Sincerely,

Mark W. Lusk
NEPA Document Manager