

Task 7.1 - Strategic Planning

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**By
Daniel J. Daly**

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For
U.S. Department of Energy
Office of Fossil Energy
Morgantown Energy Technology Center
P.O. Box 880
Morgantown, West Virginia 26507-0880

By
Energy and Environmental Research Center
University of North Dakota
P. O. Box 9018
Grand Forks, North Dakota 58202-9018

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TASK 7.1 – STRATEGIC PLANNING

Assessment of Alaskan opportunities for demonstrating new technologies for resource development and remote power generation was continued. The design and cost estimates for a demonstration plant to produce coal-water fuel (CWF) from low-sulfur Alaskan subbituminous coal were further reviewed to resolve issues of budget and plant capability. A preliminary evaluation was performed of potential cost and performance benefits to be derived from integrating the CWF plant with the demonstration of the AD Little/Cooper Bessimer CWF-fired diesel engine under the DOE Clean Coal Technology demonstration program. Tests on the Cooper Bessemer engine using Alaskan CWF prepared by the Energy & Environmental Research Center (EERC) were recommended to determine engine performance at two levels of coal cleaning: physical cleaning to about 3%–4% ash or additional chemical cleaning to under 2% ash (dry basis).

Assistance was provided to graduate students in the Energy Engineering doctoral program at the University of North Dakota in reference to policy papers prepared by them on advanced power options, repowering strategies, and waste management. The information developed in these papers will be used by the EERC in its ongoing assessment of energy and environmental policy issues relating to its research and development program.

A presentation was prepared for the 1995 Community Economic Development and Infrastructure Conference in Mandan, North Dakota on May 11. The conference focused on opportunities for community-based economic development, including opportunities for by-products from regional energy production. Information was provided on by-products from the North Dakota lignite and gas industries, including coal ash, secondary products from the Great Plains coal gasification plant, sulfur from natural gas plants, advanced char products, and leonardite-(naturally occurring oxidized lignite) derived products.

Liaison was maintained with energy activities in East Central Europe following the meetings organized by the EERC in Prague, November, 1995, which included two DOE-sponsored workshops on least-cost power and ecological fuels and the following conference. Technical information was exchanged through Mr. Jiří Gavor of the Prague-based ENA Ltd. Under a consultancy agreement with the EERC, Mr. Gavor provided design information on the Czech Vresova Integrated Gas Combined Cycle (IGCC) project and in turn was kept informed on DOE Clean Coal Technology projects of interest in the Czech Republic.

No work was undertaken under Activity 2

Activities for the next quarter will be determined through discussions with EERC senior research staff.

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