

Transportation Fuels from Coal

CCTR Advisory Panel Meeting

Terre Haute, Indiana

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Coal Transformation Laboratory
Energy Center at Discovery Park

June 1, 2006

History

- August 2005: Formation of The Energy Center at Discovery Park announced; coal transformation laboratory (CTL) a key activity.
- August 2005: Energy Policy Act of 2005 passed with Obama/Lugar Amendment authorizing \$85 million to “evaluate the commercial and technical viability of advanced technologies for the production of Fischer-Tropsch [F-T] transportation fuels ... manufactured from Illinois Basin Coal.” (Section 417)
- October 2005: Coal Fuel Alliance (CFA) formed by Purdue, Southern Illinois University, and University of Kentucky to “carry out the purpose of the Act.”

- February 2006: CCTR Advisory Panel approves allocating \$150K for 4 scoping studies to plan the CFA response to the Obama/Lugar Amendment with the expectation of Federal funding in CY 2006; like amounts given by Illinois and Kentucky to their CFA universities; proposal sent to CCTR March 2006; approval from state to proceed May 2006.
- March/April 2006: CFA testifies before House and Senate committees as to the need for a \$14.5 million appropriation (see handout) in FY 2007; conclusion is appropriations funding delayed until mid/late CY 2007.
- June 2006: As a result of delay, and need to maintain momentum, CFA asked CCTR to issue RFP for additional F-T work (see handout).

- Additional funds to be used to initiate a program aimed at identifying the mix of F-T fuel characteristics and engine modifications that minimizes total user cost: Mechanical Engineering, Chemical Engineering, Chemistry involved.
- Proposed program will be designed to have a state payoff regardless of Obama/Lugar appropriations timing.
- Negotiations now underway to obtain test amounts of existing F-T fuels to prove the concept of joint engine/fuel optimization.
- Likely involvement of Department of Defense, industrial partners in both fuel design and engine design.

Presentations that follow will focus on plans being made by:

- F-T Production Group (Chemical Engineering, Chemistry)
- F-T Engine Testing (GT, Diesel, SI) (Mechanical Engineering group)
- F-T Environmental Group (Center for the Environment at Discovery Park)
- F-T Policy Group (Agricultural Economics)