

**Meeting Minutes
Lignite Research Council
February 21, 1996**

MEMBERS (or their authorized delegates) PRESENT:

Steve Benson	Energy & Environmental Research Center
John Bluemle	North Dakota Geological Survey
Warren Candy	Minnesota Power
John Dwyer	Lignite Energy Council
Ed Englerth	North Dakota Public Service Commission
Rich Fockler	Basin Electric Power Cooperative
David Funston	State Board of Trades
Mick Grosz	North Dakota House of Representatives
Bruce Hagen	North Dakota Public Service Commission
Kent Janssen	Dakota Gasification Company (DGC)
Mike Hummel	BNI Coal, Ltd.
Marlowe Johnson	Otter Tail Power Company
Douglas C. Kane	MDU Resources Group Inc.
Merrill Lewis	Minnkota Power Cooperative
August Keller	North American Coal Corporation
Frank J. Mattern	Cooperative Power
Harvey M. Ness	Morgantown Energy Technology Center
Jeff Reinke	Dakota Resource Council
Charles E. Schmidt	U.S. Department of Energy/Pittsburgh Energy Tech Center
Francis Schwindt	North Dakota Health Department
Valdon Swanson	North Dakota Farm Bureau
Gordon Westerlind	United Power Association

OTHERS PRESENT:

Lyndon Anderson	Lignite Energy Council
Karlene Fine	Industrial Commission of North Dakota
Vicki Gilmore	Lignite Energy Council
Gary Halvorson	NDSU - Land Reclamation Research Center
Alfred (Fred) Kuhn	Dakota Gasification Company
Curt Melland	Basin Electric Power Cooperative (Leland Olds Station)
Clifford R. Porter	Director and Technical Advisor, Lignite Research Council
Lyle Witham	North Dakota Attorney General's Office

The February 21, 1996, meeting of the Lignite Research Council was called to order by John Dwyer, Chairman, at 1:00 p.m. February 21, 1996, at the Kelly Inn, Bismarck, ND. Dwyer said the LRC Executive Committee will meet on March 18, 1996, at Doublewood Inn, Bismarck, for the purpose of making recommendations on a regional lignite energy marketing plan and two mercury studies. He introduced Valdon Swanson of Underwood, ND, who will represent the North Dakota Farm Bureau on the LRC and the LRC Executive Committee, replacing Weston Johannes, who has submitted a letter of resignation.

Approval of Minutes

Bruce Hagen moved and Douglas Kane seconded a motion to approve the minutes of the August 22, 1995, meeting of the Lignite Research Council. The motion carried unanimously.

Financial Report

Karlene Fine presented the financial report:

Lignite Marketing Feasibility Studies. \$400,000 was appropriated for this biennium, and there is a commitment for \$10,000 to develop the RFP for the lignite marketing program. There is a carryover

commitment from the '93-'95 biennium for \$50,000 for the upgraded lignite stoker boiler testburn for the SynCoal project (LMFS 95-19).

Lignite Research Projects. \$758,267 is available for allocation for the small lignite research projects.

Lignite Demonstration Projects. There are commitments to the Transloading Facility and the DGC Application (Ammonia Project). Over \$2,000,000 remains available for lignite demonstration projects

Lignite Research Program Administrative Budget. As of the end of December 1995, expenditures to date are approximately \$161,000, which includes the Technical Advisor Agreement, funding for the Land Reclamation Research Center, the R&D Finance Plan and some expenses for the Lignite Research Council. As part of these expenses, some legal costs have been incurred for the Externality issue.

Lyle Witham from the North Dakota Attorney General's Office commented about the Minnesota public perception of lignite. In the last two months, a report issued by leading environmental organizations indicates that global surface temperatures last year were the highest ever. This was immediately reported in the Minneapolis Tribune. The Washington Post questioned the report's accuracy, based on satellite figures showing an unprecedented drop in global temperatures in the month of December. Witham said these figures received no media attention in Minnesota.

Witham presented an update about the externality case proceedings. Findings of fact are due in the Administrative Law Judge's office by February 23, 1996. The judge is expected to issue his ruling in the Minnesota externalities case by March 24, 1996. On the CO₂ values issue, Witham said political pressure on the judge and on the Minnesota Public Service Commission is going to be intense to come up with some kind of values.

Witham said the brief from CEED (Center for Energy and Economic Development) indicates that for North Dakota, studies show no evidence of transport of mercury into Minnesota.

On the criteria pollutants issue, Witham said our position is that there is no evidence in North Dakota that criteria pollutants are causing damage in Minnesota.

Correction for 2/21/96 LRC Meeting Book, Page II E 1

Clifford Porter said that the correct date for the next LRC Executive Committee meeting should be March 18, 1996, not March 19 (as shown on page II E 1 of this LRC meeting's black book).

Grant Round XXIII Proposals

LRC-XXIII-A - "Investigation of Techniques for Obtaining NO_x Reductions by Modifying the Combustion Inside a Cyclone Barrel Burning Lignite"; North Dakota Cyclone Users Group; Principal Investigator - Curt Melland; Request for \$88,938; Total Project Costs \$177,876.

Porter presented his Technical Advisor's Recommendation for proposal LRC-XXIII-A. Because cyclone burners must comply with proposed NO_x emissions standards by January 1, 2000, Porter recommended the LRC vote to fund this project. The three Technical Reviewers gave it an average weighted score of 193 (250 is the maximum score possible). All three reviewers recommended funding for this project.

Curt Melland, the project's principal investigator, presented background information about the project, which is to be completed by July 1996. Funding is to be split 50-50 between the Industrial Commission of North Dakota and the members of the North Dakota Cyclone Users Group.

LRC-XXIII-B - "Development of Anode Binder & Asphalt Substitute Materials from DGC's Tar Oil Pitch"; Dakota Gasification Company; Principal Investigator - Alfred Kuhn; Request for \$60,000; Total Project Costs \$150,250.

Porter presented his Technical Advisor's Recommendation for proposal LRC-XXIII-B, recommending the LRC fund this project. The technical peer reviewers gave the project an average weighted score of 153.5 out of a possible 250. This is the only project for which Porter had requested four independent technical peer reviews, to assure a broad cross-section of reviewers. Two recommended funding the project, one said funding may be considered, and one said do not fund. There are two conflict-of-interest parties: Dakota Gasification Company and The Coteau Properties Company.

Alfred (Fred) Kuhn, the project's principal investigator, said there is also a potential for other products to be developed through this project, including roof and driveway sealing compounds.

LRC-XX-B – “Multiple Pollutant Removal Using the Condensing Heat Exchanger”; Babcock & Wilcox; Principal Investigator - Ralph T. Bailey; Request for \$150,000; Total Project Costs \$1,955,438.

Babcock & Wilcox had requested a delay in consideration of this proposal from Grant Round XX. Porter recommended a Do Not Fund for this proposal. The Technical Reviewers' average weighted score for this proposal was 166.7. One Technical Reviewer recommended funding and two did not.

Before ballots were distributed for LRC voting on the proposals, Dwyer asked that any other potential conflict-of-interest parties identify themselves. Karlene Fine indicated that two LRC members still needed to sign code of ethics disclosure forms prior to voting.

Dwyer asked for feedback from the LRC concerning future meetings to be held on the same day and place as the Lignite Energy Council Executive Committee meeting. Most LRC members said they would prefer to meet jointly, as was done today.

Dwyer asked Harvey Ness and Charles Schmidt, the two DOE representatives present, to give an update about DOE activities, including the reorganization of the fossil fuel department. Charles Schmidt of the Pittsburgh Energy Tech Center (PETC) said reorganization will combine offices under a new name: Federal Energy Institute, with one director. PETC and Morgantown Energy Tech Center (METC) are to merge by mid-summer to become the Federal Energy Institute. Harvey Ness of METC said that downsizing is being considered because of the merger.

Balloting for Funding of Proposals

LRC members voted to either Fund or Do Not Fund the two projects from Grant Round XXIII and the project from Grant Round XX. The following results of the LRC balloting will be presented to the Industrial Commission of North Dakota for consideration when reviewing these projects:

LRC-XXIII-A – “Investigation of Techniques for Obtaining NO_x Reductions by Modifying the Combustion Inside a Cyclone Barrel Burning Lignite”: 22 yes, 0 no.

LRC-XXIII-B – “Development of Anode Binder & Asphalt Substitute Materials from DGC's Tar Oil Pitch”: 20 yes, 2 no.

LRC-XX-B – “Multiple Pollutant Removal Using the Condensing Heat Exchanger”: 0 yes, 22 no.

The next **Lignite Research Council** meeting is scheduled for **June 20, 1996** at Doublewood Inn, Bismarck, ND. The next **Lignite Research Council Executive Committee** meeting is scheduled for **March 18, 1996** at Doublewood Inn, Bismarck, ND.

Adjournment

There being no additional matters to discuss, the meeting was adjourned.

Vicki Gilmore, Recording Secretary