

MEETING MINUTES
LIGNITE RESEARCH COUNCIL

October 25, 2000
Radisson Inn, Bismarck, ND

MEMBERS (or their authorized alternates) PRESENT:

Dick Bergstad, International Brotherhood of Electrical Workers
John Bluemle, North Dakota Geographical Survey
Jim Deutsch, North Dakota Public Service Commission
John Dwyer, Lignite Research Council
Stephen Hovey, BNI Coal, Ltd.
Marlowe Johnson, Otter Tail Power Company
Michael Jones, Energy & Environmental Research Center
Bruce J. Kopp, Xcel Energy
Vernon Laning, Basin Electric Power Cooperative
David Loer, Minnkota Power Cooperative
Al Lukes, Dakota Gasification Company
Harvey Ness, National Energy Technology Laboratory
Mark Nygaard, Coal Conversion Counties Association
John Pelerine, Great River Energy
Dean Peterson, The North American Coal Corporation
Martin Schock, North Dakota Department of Health
Stephen Sherner, Minnesota Power
Bob Wood, MDU Resources Group

OTHERS PRESENT:

David Allard, Lignite Energy Council
Bob Ambrose, Great River Energy
Bob Ashworth, ClearStack Combustion Corporation
Karlene Fine, North Dakota Industrial Commission
Vicki Gilmore, Lignite Energy Council
Carmen Miller, North Dakota Attorney General's Office
Russ Nelson, Great River Energy
Clifford Porter, Lignite Research Council
A. J. (Tony) Rude, Lignite Energy Council
Rich Voss, Lignite Energy Council
John Weeda, Great River Energy – Coal Creek Station
Gordy Westerlind, Great River Energy
Brian White, Associated Press

Lignite Research Council (LRC) chairman John Dwyer called the LRC meeting to order on October 25, 2000 at Radisson Inn, Bismarck, North Dakota. He asked Karlene Fine and Clifford Porter to present the financial summary.

Financial Summary

Clifford Porter presented a financial summary regarding the Lignite Research, Development and Marketing Program (Program).

Porter said that the budget for the Program areas for the 1999-2001 biennium is as follows: \$400,000 for administration, \$795,800 for lignite marketing feasibility studies (LMFS), \$2,958,100 for small research projects and \$18,420,560 for demonstration projects, for a grand total of \$22,574,460. The balance on a cash basis as of August 31, 2000 is \$19,964,115, which breaks down as follows: \$201,666 for administration, \$323,489 for LMFS, \$2,176,640 for small research projects and \$17,262,320 for demonstration projects. Porter said that the \$795,800 budgeted for LMFS is committed for the Lignite Vision 21 Project.

In the small research projects budget, Porter said the estimated amounts are as follows: carry forward obligated funds: \$547,500; carry forward unobligated funds: \$316,188; estimated production (45:55 split): \$1,836,000; additional production: \$67,790; additional production for FY 2000: \$155,087; and additional funds resulting from cancellation of Project FY98-XXX-85: \$35,535, for a subtotal of \$2,958,100. Subtracting the committed funds of \$2,638,639 from the subtotal leaves \$319,461 in available uncommitted funds.

Porter said that there is one outstanding commitment in the demonstration project area for the 1999-2001 biennium. It is a commitment for repayment of \$2,140,707 for the 1995 Series A Program Bonds. The bonds will mature on November 15, 2005.

Porter discussed the demonstration project budget subtotal of \$18,420,560 breaks down as follows: \$995,842 for carryover unobligated funds; \$250,000 for the carryover joint program funds (joint programs with the U. S. Department of Energy, Electric Power Research Institute and other entities); \$3,594,000 estimated production; \$219,968 additional production; \$189,550 additional production for FY 2000; \$7,171,200 for carryover obligated funds; and \$6,000,000 additional funds (return of Dakota Gasification Company's carbon dioxide pipeline project funds). There is \$8,858,653 available in the demonstration projects area. This breaks down as follows: The subtotal carry forward of \$18,420,560 minus \$2,140,707 for Program bonds, \$155,000 for joint program uncommitted funds, \$95,000 for joint program committed funds and \$7,171,200 for committed funds = \$9,561,907. (\$18,420,560 minus \$9,561,907 = \$8,858,653 in available funds for the demonstration projects area.)

July 26, 2000 Minutes Approved

Dwyer asked for a motion to approve the minutes of the July 26, 2000 LRC meeting. Vernon Laning so moved; seconded by Dean Peterson. Motion carried.

Dwyer said that prior to discussion about the Lignite Vision 21 Project Phase II, the meeting will be closed pursuant to the confidentiality provisions of the state. The meeting will be reopened after the Lignite Vision 21 Project Phase II discussion.

Lignite Research, Development and Marketing Program Updates

Porter gave an update on the Program's lignite marketing feasibility studies, small research projects and demonstration projects.

Six LMFS received 1999-2001 biennium funds. Porter said that five of those six projects deal with the Lignite Vision 21 Project and the total commitments are in the \$750,000 to \$800,000 range. He said the Lignite Vision 21 Project Phase II commitment is \$500,000.

There are 24 small research projects in the 1999-2001 biennium (four completed projects and 20 active projects). The 24 projects, which have a total project cost of \$19,959,405, have received \$4,043,274 in Lignite Research Fund commitments.

Three current demonstration projects have a Lignite Research Fund commitment of \$1,356,500 and a total project cost of \$5,467,800. The fourth demonstration project, titled "An Application for Funding Assistance for the Capture, Compression and Transportation of Carbon Dioxide from the Gasification of North Dakota Lignite for Enhanced Oil Recovery", has been declined.

Porter said that he and Karlene Fine will be reviewing current projects to determine if any of the Lignite Research Fund commitments should be returned to the fund.

Porter said that two-sentence summaries of all projects (LMFS, small research and demonstration projects) are accessible on the North Dakota Industrial Commission web site.

Lignite Vision 21 Project – Phase I

Tony Rude presented an update and showed slides concerning the Lignite Vision 21 Project – Phase I, which was completed June 30, 2000. The Industrial Commission had approved \$10 million in matching funds for this Phase I development phase of the project.

Dwyer asked for a motion to close the meeting pursuant to NDCC 54-17.5 -06. Bob Wood so moved; seconded by Dick Bergstad. Motion carried.

Confidential Session re: Lignite Vision Project Phase II Transmission Studies

At the end of the confidential session concerning “Lignite Vision Project Phase II Transmission Studies”, Dwyer asked for a motion for re-opening the meeting. Wood so moved; seconded by Michael Jones. Dwyer announced that the meeting was now open and that those who had been asked to leave the room prior to the confidential session could now return if they wished to do so.

Proposed 2001-2003 Biennium Budget for Lignite Research, Development and Marketing Program

Dwyer asked Karlene Fine to hand out a sheet listing the funding requested for the Lignite Research, Development and Marketing Program for the 2001-2003 biennium. He said that \$16,450,000 is the appropriation that will be requested for the Program during the 2001 North Dakota legislative session. The \$16,450,000 includes requests for \$1,300,000 for the lignite marketing feasibility study program, \$1,350,000 for clean coal demonstration projects, and \$13,800,000 for lignite grants and administration costs.

Dwyer asked Clifford Porter to discuss the Grant Round XXXVIII proposal applications. Prior to doing so, Porter gave an update on available funding. There are no funds available for lignite marketing feasibility studies, \$319,461 for small research projects, \$8,858,653 for demonstration projects, and \$155,000 for the joint programs. For all project areas, the total available funds are \$9,333,114. Dwyer said that in August 2000, the Industrial Commission recommended that up to \$10,000,000 be made available in matching demonstration project funds for the Lignite Vision 21 Project. He said that it is expected that at least \$8,000,000 of the \$10,000,000 would come out of this biennium and \$2,000,000 from the next biennium, assuming coal production stays where it is.

Grant Round XXXVIII Grant Applications

LRC-XXXVIII-A: “Pilot Scale Study of Mercury Oxidation Catalysts at Coal Creek Station, Underwood, North Dakota”; Submitted by: Great River Energy; Principal Investigator: Gary Blythe (URS Group, Austin, TX); Request for: \$50,000; Total Project Cost: \$1.2 Million.

Porter said that the objective of proposal LRC-XXXVIII-A is to evaluate the effectiveness of catalyst materials to oxidize elemental mercury to oxidized mercury. He said that the project could result in technically and economically viable means for mercury control, and that there is a high probability that the U. S. Environmental Protection Agency will recommend mercury control standards.

Porter, who is Technical Advisor to the Industrial Commission, recommended that the LRC vote to recommend that the Industrial Commission approve funding for the project. He said that the technical peer reviewers gave the project an average weighted score of 186.3 out of a maximum 250 points. All three technical peer reviewers recommended the project be funded. Porter said that Great River Energy is the conflict-of-interest party for this proposal.

John Weeda spoke in support of the proposal. Dave Loer said that he had attended a recent meeting at which it was discussed that the cost of removing mercury was \$60,000 per pound. Weeda said that he had seen studies that showed cost ranges up to that amount. Bob Wood asked about disposal of the mercury. Porter said that mercury is not eliminated, but it is moved from one stream to another stream, necessitating concerns of disposal. Proposal LRC-XXXIX-A would assess the effectiveness of moving the mercury to the flue gas desulfurization stream.

LRC-XXXVIII-B: “Construction of a Forced Oxidation Plant for Gypsum Production - Amended Proposal”; Submitted by: Great River Energy; Project Manager: Russ Nelson; Contract FY98-XXIX-80 Grant: \$926,500; Amended Total Grant Request: \$1,673,600;

Total Estimated Project Cost: \$5,200,000.

Porter said this project has an amended total grant request for \$1,673,600. The original grant award for Contract FY98-XXXIX-80 was \$926,500; the request in LRC-XXXVIII-B is for an additional \$747,100. Porter said that the objective of the project is to construct and operate a commercial scale demonstration facility to convert Coal Creek Station flue gas desulfurization (FGD) slurry sludge to gypsum, a substance that is commonly known as a component of wallboard. Porter recommended that the project be funded. He said that two of the three technical reviewers recommended funding and one recommended that funding be considered. The technical reviewers gave the project an average weighted score of 177 out of 250 points. Great River Energy is the conflict-of-interest party for this proposal.

Russ Nelson spoke and showed slides in support of the proposal.

LRC-XXXVIII-C: “Ashworth Combustor Demonstration – North Dakota Lignite Evaluation”;
Submitted by: ClearStack Combustion Corporation and Great River Energy, Stanton Station; Principal Investigator: Robert A. Ashworth (ClearStack Combustion Corporation); Request for: \$199,600; Total Project Cost: \$503,018.

Porter said that the objective of this project is to demonstrate the Ashworth Combustor, a three-stage combustion system. Porter recommended that the project not be funded. The technical reviewers gave the proposal an average weighted score of 168 out of 250 points. One reviewer recommended the project be funded, one recommended funding should be considered, and one recommended the project not be funded. Great River Energy is the conflict-of-interest party for this proposal.

Robert Ashworth and John Weeda spoke in support of the project. Ashworth also presented a slide show concerning the project.

Nominations for LRC Chairman, LRC Vice Chairman and LRC Executive Committee

Dwyer asked Dick Bergstad, chairman of the nominating committee, to announce the nominating committee’s recommendations for chairman and vice chairman of the Lignite Research Council and for members of the LRC Executive Committee.

Bruce Hagen was chairman of the nominating committee, which also included Dick Bergstad and Kevin Cramer. Bergstad said that the nominating committee met October 20, 2000 and unanimously recommended John Dwyer as LRC chairman and Doug Kane as LRC vice chairman. Dwyer asked if there were any nominations from the floor. Hearing none, Dave Loer moved that nominations cease and that a unanimous ballot be cast for John Dwyer as the LRC chairman and Doug Kane as the LRC vice chairman; seconded by Bob Wood. Motion carried.

Bergstad announced that the nominating committee’s unanimous recommendations for the seven members of the LRC Executive Committee are: LRC Chairman John Dwyer as the LRC Executive Committee Chairman; Doug Kane of MDU Resources Group as the LRC Executive Committee vice chairman; Chuck Reichert of BNI Coal, Ltd., Dave Loer of Minnkota Power, Al Lukes of Dakota Gasification Company, John Bluemle of the North Dakota Geological Survey and Gordon Westerlind of Great River Energy. Dwyer asked if there were any nominations from the floor. Hearing none, Marlowe Johnson moved that nominations cease and that a unanimous ballot be cast for this slate of seven LRC Executive Committee members; seconded by Wood. Motion carried.

Grant Application Deadline Dates for 2001

Dwyer announced that the grant application deadline dates for 2001 are January 1 (Grant Round XXXIX), May 1 (Grant Round XL) and September 1 (Grant Round XLI). In addition, the North Dakota Industrial Commission has agreed to add monthly grant application deadlines from December 1, 2000 through December 1, 2001, to facilitate Lignite Vision 21 Project grant applications.

Ballot Results

Dwyer announced that the Lignite Research Council voted as follows to recommend that the Industrial Commission approve or disapprove funding for the proposals:

LRC-XXXVIII-A: Recommend Funding: 18; Do Not Fund: 0.

LRC-XXXVIII-B: Option 1 (Amended Request for: \$1,673,600):
Recommend Funding: 3; Do Not Fund: 1.

OR:

Option 2 (Technical Advisor's Recommendation for Amended Request of \$1,300,000):
Recommend Funding: 14; Do Not Fund: 0.

LRC-XXXVIII-C: Recommend Funding: 8; Do Not Fund: 10.

Other Business

Dwyer announced that the next Lignite Research Council meeting will be held at 1:30 p.m. February 14, 2001.

Porter announced that he plans to retire in November 2001. Dwyer said that there will be a joint hiring decision between the Lignite Energy Council and the North Dakota Industrial Commission to hire Porter's replacement.

Adjournment

There being no further business, Dwyer asked for a motion to adjourn the meeting. Bob Wood so moved; seconded by Vern Laning. Meeting adjourned.

Vicki Gilmore, Recording Secretary
