

**MEETING MINUTES**  
**LIGNITE RESEARCH COUNCIL**  
**August 27, 2002**  
**Doublewood Inn, Bismarck, ND**

**MEMBERS (or their authorized alternates) PRESENT:**

Dick Bergstad, International Brotherhood of Electrical Workers, # 714  
Randy Christmann, North Dakota Senate  
Bruce Browsers, Minnesota Power  
John Dwyer, Lignite Research Council  
Thomas Feeley, U. S. Department of Energy – National Energy Technology Laboratory  
Layton Freborg, North Dakota Senate  
L. David Glatt, North Dakota Department of Health  
Carlyle Hillstrom, North Dakota Farm Bureau  
Mike Hummel, BNI Coal, Ltd.  
Mike Jones, Energy & Environmental Research Center  
Luther Kvernen, Minnkota Power Cooperative  
Vernon Laning, Basin Electric Power Cooperative  
Ed Murphy, North Dakota Geological Survey  
John O’Laughlin, Dakota Westmoreland Corporation  
John Pelerine, Great River Energy  
Dean Peterson, The North American Coal Corporation  
Lee Peterson, North Dakota Department of Commerce  
Fred Stern, Dakota Gasification Company  
Ward Uggerud, Otter Tail Power Company  
Wilfred Volesky, Coal Conversion Counties Association  
Susan Wefald, North Dakota Public Service Commission  
Bob Wood, MDU Resources Group

**OTHERS PRESENT:**

Dave Allard, Lignite Energy Council  
Jeff Burgess, Lignite Vision 21 Program  
Clyde Bush, Basin Electric Power Cooperative  
Karlene Fine, North Dakota Industrial Commission  
Vicki Gilmore, Lignite Energy Council  
Terry Graumann, Otter Tail Power Company  
John Graves, Minnkota Power Cooperative  
Mike Holmes, Energy & Environmental Research Center  
Curtis Jabs, Basin Electric Power Cooperative  
Dennis James, The Falkirk Mining Company  
Harvey Ness, Lignite Research Council  
Jan Rudolf, Otter Tail Power Company  
Mark Strohfus, Great River Energy  
Jeff Thompson, Energy & Environmental Research Center  
Bill Weaver, Dakota Westmoreland Corporation  
John Weeda, Great River Energy

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Lignite Research Council (LRC) chairman John Dwyer called the LRC meeting to order on August 27, 2002 at the Doublewood Inn, Bismarck, North Dakota.

**Approval of June 19, 2002 LRC Minutes**

Dwyer asked for a motion to approve the minutes of the June 19, 2002 LRC meeting. Dean Peterson so moved; seconded by Mike Jones. Motion carried.

**Financial Summary as of July 31, 2002**

Harvey Ness, technical advisor for the North Dakota Industrial Commission (NDIC) and the LRC, summarized the Lignite Research, Development and Marketing Program (Program) financial information that is available on the NDIC web site. As of July 31, 2002, available funding balances from the Lignite Research Fund (LRF) for the 2001-2003 biennium were as follows: \$221,153 for administration of the Program; \$100,000 in non-matching funds for lignite marketing feasibility studies, \$279,068 in uncommitted funds for small research projects; a continuing balance of \$155,000 for the joint program with the U. S. Department of Energy, Electric Power Research Institute and other entities; and \$4,062,947 for demonstration projects.

**Consideration of 2003-2005 Proposed Budget**

Karlene Fine distributed a handout that summarized the proposed \$16,270,000 budget for the Lignite Research, Development and Marketing Program for the 2003-2005 biennium. Dwyer asked for a motion to recommend that the North Dakota Industrial Commission approve the proposed \$16,270,000 budget. Vernon Laning so moved; seconded by Bob Wood. Motion carried.

**Lignite Research, Development and Marketing Program Updates**

Ness said that 13 small research projects are currently active. Funding from the LRF for the small research projects is \$3,173,410 Total project costs, including the industrial cost-share, is \$13,248,013. The funding ratio is \$1 in state dollars for \$4.2 dollars of total project costs. Ness said that \$650,000 in state funds is committed to six mercury-related projects. For these six projects, Ness said that the funding ratio is \$1 in state funds to \$10.8 in total project costs (industry-supplied funds).

Ness said that there are currently four active demonstration projects that were committed to for the 2001-2003 biennium. Three of the four demonstration projects are Lignite Vision 21 (LV21) Program-related. The one non-LV21 project's funds were committed prior to the 2001-2003 biennium. This is project FY98-XXVIII-80 ("Construction of a Forced Oxidation Plant for Gypsum Production"), for the purpose of constructing a gypsum plant at Great River Energy's Coal Creek Station for the manufacturing of wallboard. The three LV21-related projects are: Great River Energy's Lignite Vision 21 project, Montana-Dakota Utilities Company/Westmoreland Coal Company's Lignite Vision 21 project for Gascoyne, ND, and Great Northern Power Development's Lignite Vision 21 feasibility project.

**Lignite Vision 21 Program Update**

An update about the LV21 Program's environmental strategies and transmission issues was presented by Jeff Burgess, LV21 Program manager of environmental services. There are three applicants under contract with the NDIC for LV21 demonstration projects: Great River Energy (contract approved April 19, 2001); MDU/Westmoreland (contract approved May 2, 2001), and Great Northern Power Development (contract approved September 7, 2001). Burgess said that two critical areas for the LV21 projects are transmission of electricity, and environmental regulations.

**Grant Round XLVII (47) Grant Application: LRC-XLVII-A: “Long-Term Mercury Monitoring at North Dakota Power Plants”; Submitted by: Energy & Environmental Research Center; Project Manager: Michael Holmes; Request for: \$129,000; Total Project Costs: \$430,000; Time Frame: 10 Months.**

Ness said that there is one request from the Energy & Environmental Research Center (EERC) to be considered at today’s LRC meeting. The grant proposal was submitted by EERC at the request of the North Dakota Mercury Task Force. Ness said that the proposed data, collected from two North Dakota power plants and from existing information, will be used to define emission control systems applicable to lignite-fired power plants. The information about emission levels and variability will support a proposal submitted to the U. S. Department of Energy’s National Energy Technology Laboratory’s anticipated solicitation for tests of mercury emission control systems in field tests. The title of the proposal is “Long-Term Mercury Monitoring at North Dakota Power Plants”.

Ness said that in the small research projects area, there is \$279,068 in available funds. If the request for proposal LRC-XLVII-A is fully funded, the remaining available fund balance for the small research projects area will be \$150,068.

Ness said that the project will involve conducting long-term monitoring at two North Dakota power plants to characterize mercury emissions. Data to be collected includes mercury speciation (oxidized, elemental) as a function of the power plant type, coal variability and the influence of power plant operational variations. Existing data from other North Dakota power plants will also be provided for analysis. Results will be used to begin defining mercury control technology for lignite-fired power plants.

Ness said that the three technical peer reviewers gave the proposal an average weighted score of 186.7 out of 250 points. All three technical peer reviewers recommended that the project be funded. As technical advisor, Ness said that his recommendation is to fund the \$129,000 request.

Ness said that there are no contingencies to his recommendation for funding. He said that the conflict-of-interest parties for this proposal are Basin Electric Power Cooperative, Great River Energy, Minnkota Power Cooperative, MDU Resources Group and Otter Tail Power Company.

Michael Holmes of the Energy & Environmental Research gave a slide presentation in support of the proposal.

### **Other Matters**

LRC member Lee Peterson, Commissioner of the North Dakota Department of Commerce, gave a short update about the activities of the Department, which was formed one year ago. LRC member Thomas Feeley gave a short update about the U. S. Department of Energy – National Energy Technology Laboratory activities.

### **Ballot results re: LRC-XLVII-A (“Long-Term Mercury Monitoring at North Dakota Power Plants”)**

Dwyer announced that the LRC voted as follows to recommend that the Industrial Commission approve funding of the Grant Round XLVII request: LRC-XLVII-A (“Long-Term Mercury Monitoring at North Dakota Power Plants”; Submitted by: Energy & Environmental Research Center; Project Manager: Michael Holmes; Request for: \$129,000; Total Project Costs: \$430,000; Time Frame: 10 months): **Fund:** 22 votes. **Do Not Fund:** 0 votes.

The LRC’s recommendation for the Grant Round XLVII request will be considered by the NDIC at its meeting on September 13, 2002.

**Grant Application Deadline: LRC Meeting**

Dwyer said that there is an October 1, 2002 grant application deadline date. If grant applications are submitted by the deadline, the LRC will meet on November 26, 2002.

**Adjournment**

Dwyer announced that the North Dakota Mercury Task Force meeting will begin after today's LRC meeting. There being no further business, Dwyer asked for a motion to adjourn the LRC meeting. Jones so moved; seconded by Wood. Motion carried.

Vicki Gilmore, Recording Secretary.

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