MEMBERS (or their authorized alternates) PRESENT:
Steve Benson, Energy & Environmental Research Center
Randel Christmann, State Senator
Kevin Cramer, ND Public Service Commission
Carroll Dewing, The Falkirk Mining Company
Tom Durham, Westmoreland Coal Company
John Dwyer, Lignite Energy Council/Lignite Research Council
Joe Friedlander, The Coteau Properties Company
Shane Goettle, North Dakota Department of Commerce
Daniel H. Hagemeister, ND Coal Conversion Counties Association
Mark Hager, International Brotherhood of Electrical Workers (IBEW)
Carlyle Hillstrom, North Dakota Farm Bureau
Mike Hummel, BNI Coal, Ltd.
Luther Kvernen, Minnkota Power Cooperative, Inc.
Vernon Laning, Basin Electric Power Cooperative
Ed Murphy, ND Geological Survey
Terry O’Clair, North Dakota Department of Health
Allan S. Rudeck, Minnesota Power
Jan Rudolf, Otter Tail Power Company
Dave Smith, SaskPower
Andrea Stomberg, Montana-Dakota Utilities Co.
Rich Voss, Great Northern Power Development
John Weeda, Great River Energy

OTHERS PRESENT:
Dave Allard, Lignite Energy Council
Mike Briggs, The Falkirk Mining Company
Tera Buckley, Energy & Environmental Research Center
Jeff Burgess, Lignite Research Council
Jim Deutsch, North Dakota Public Service Commission
Karlene Fine, North Dakota Industrial Commission
Dave Fischer, ND Oil and Gas Research Council
Vicki Gilmore, Lignite Energy Council
Curtis Jabs, Basin Electric Power Cooperative
Dennis James, The North American Coal Corporation
Al Kuntz, Lignite Energy Council
Mike Paul, Basin Electric Power Cooperative
Tom Spaulding, Basin Electric Power Cooperative
Josh Stanislawski, Energy & Environmental Research Center
Sandi Tabor, Lignite Energy Council

Lignite Research Council (LRC) chairman John Dwyer called the LRC meeting to order at 12:10 p.m. (Central Time) November 21, 2006, at the Best Western Doublewood Inn, Bismarck, ND.
Dwyer announced an addition to the agenda. Under “VII. Administration”, there is a new letter B: LRC vote required on Basin Electric Power Cooperative’s request for consideration from the LRC to amend Contract FY05-LII-134 for membership of North Dakota lignite interests in the Canadian Clean Power Coalition (CCPC).

A copy of Basin Electric Power Cooperative’s 11-20-06 letter regarding the request for amendment to Contract FY05-LII-134 was handed out.

On the agenda, the following two items now have new letters (C and D):
D. 2007 Legislature – Amendments to Transmission Authority Act / procurement and confidentiality and Lignite Research Program borrowing authority.

**Approval of August 17, 2006 LRC Meeting Minutes**

Dwyer asked for a motion to approve the minutes of the August 17, 2006 LRC meeting. Vern Laning so moved; seconded by John Weeda. Motion carried.

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

Jeff Burgess, technical advisor for the North Dakota Industrial Commission (NDIC) and the LRC, summarized the Lignite Research, Development and Marketing Program (Program) financial information. From 1987 to the present, there have been 120 small research projects ($15.7 M from NDIC for the 120 projects; $97 M total project costs; $1 in state funds to $7 total investment); 12 demonstration projects excluding LV 21 projects ($14.7 M from NDIC for the 12 projects; $206 M total project costs; $1 in state funds to $14 M total); and seven LV 21 projects ($24.9 M from NDIC; $952 M total project costs.) He said that the current Technical Advisor activities involve 37 projects ($34.7 M in project funds). There 22 small research projects, 10 demonstration projects and two marketing projects.

**ND Transmission Authority Update**

Sandi Tabor presented a brief update about the ND Transmission Authority.

**Individual Project Updates**

Updates concerning three project were presented. Mike Hummel gave the update for project titled “Activated Carbon from North Dakota Lignite” (Contract FY05-LIII-140). Steve Benson gave the update for projects titled “Controlling Mercury Emissions for Utilities Firing Lignites from North America – Summary Report” (Contract FY06-LV-145), and “Gasification of Lignite to Produce Liquid Fuels, Hydrogen and Power” (Contract FY06-LV-144).

**Grant Round LIX (59) Proposals**

Grant Round LIX (59) Grant Application LRC-LIX-A: “Review of North Dakota Regulations, Standards, and Practices Related to the Use of Coal Combustion Products”; Submitted by: Energy & Environmental Research Center (EERC);
Project Manager: Tera Buckley; Request for: $12,000; Total Project Costs: $36,000; Project Duration: 12 Months.

Burgess said that this proposal will assess activities, laws, regulations, policies, guidelines, and use practices applicable in North Dakota pertaining to coal combustion products (CCPs). He said that EERC intends to accomplish this by working with industry, state agencies, and other stakeholders. The objective of the proposal is to identify any impediments or changes that could be made to improve CCP use.

Burgess said that the three technical peer reviewers gave the proposal an average weighted score of 171 out of 250 points. (The weighted scores were 188.5 out of 250 points from reviewer 06-10, 149 out of 250 points from reviewer 06-11 and 176 out of 250 points from reviewer 06-12.) Technical peer reviewers 06-10 and 06-12 recommended that the project be funded; technical peer reviewer 06-11 recommended that funding may be considered.
As technical advisor, Burgess recommended that the proposal be funded at a level not to exceed $12,000 (small research funds from the Lignite Research Fund). He said that there are no contingencies; however he recommends a cursory review of what other states in the region are doing regarding CCP utilization and the policies affecting their use.

Burgess said that conflict-of-interest parties for proposal LRC-LIX-A are EERC, Basin Electric Power Cooperative, Great River Energy and Minnkota Power Cooperative.

Tera Buckley of EERC handed out copies of EERC’s response to the technical peer reviewers’ comments regarding the proposal. She also gave a presentation in support of the proposal.

**Grant Round LIX (59) Grant Application LRC-LIX-B: “Upgrade and Refurbishment of a Bench-Scale Entrained-Flow Slagging Gasifier”; Submitted by: EERC; Principal Investigator: Jason Laumb; Request for: $129,000; Total Project Costs: $354,000; Project Duration: Seven Months.**

Burgess said that EERC proposes to upgrade and refurbish an existing bench-scale gasifier. He said that one of the most widely available commercial gasifiers today is the entrained-flow style gasifier. However, there has been little experience with lignite coals in entrained-flow gasification systems. The objective of this proposal is construction of a bench-scale entrained-flow slagging gasifier that will be used for syngas production, cleanup and separation testing.

Burgess said that the three technical peer reviewers gave the proposal an average weighted score of 172 out of 250 points. (The weighted scores were 164 out of 250 points from reviewer 06-13, 158 out of 250 points from reviewer 06-14, and 194 out of 250 points from reviewer 06-15.) Technical peer reviewers 06-13 and 06-15 recommended that the project be funded; technical peer reviewer 06-14 recommended that funding may be considered.

As technical advisor, Burgess recommended that the proposal be funded at a level not to exceed $129,000 (small research funds from the Lignite Research Fund) subject to the following two conditions: Written confirmation of industry participation; and there must be at least one Fort Union lignite industry utility sponsor.

Burgess said that EERC is the conflict-of-interest party for this proposal.

Josh Stanislowski of EERC gave a presentation in support of the proposal.

- **Administration Item A: Request by Basin Electric Power Cooperative for Additional $90,000 for Lignite Testing** (Contract FY05-LI-129: “Lignite Coal Test at a Transport Reactor Gasification Facility in Wilsonville, AL”) – Request authority for LEC Executive Committee to act on behalf of Lignite Research Council;

- **Administration Item B: Request by Basin Electric Power Cooperative to Amend Contract FY05-LII-134 ("North Dakota Partnership in the Canadian Clean Power Coalition" for Additional $156,000 in NDIC Funds Over Three Years for Phase III of the Project”.

Tom Spaulding of Basin Electric Power Cooperative (BEPC) gave a presentation in support of the BEPC’s request for additional funding for Contract FY05-LI-129.
Mike Paul of BEPC gave a presentation in support of BEPC’s request for additional funding for Contract FY05-LII-134. He said that BEPC is at the LRC meeting to represent the partners in the project, not only BEPC’s interests. He said that BEPC is acting as project coordinator.

John Weeda made a motion to authorize the LRC Executive Committee to consider these BEPC requests for additional funding for contracts FY05-LI-129 and FY-05-LII-134. Carlyle Hillstrom seconded the motion. Karlene Fine conducted a roll-call vote of the LRC members at 2:00 p.m. The roll-call results regarding the motion were as follows (yes: 22; no: 0); motion carried:

Benson, Steve: YES.
Christmann, Randel: YES.
Cramer, Kevin: YES.
Dewing, Carroll: YES.
Durham, Tom: YES
Dwyer, John: YES.
Friedlander, Joe: YES.
Goettle, Shane: YES.
Hagemeister, Daniel: YES.
Hager, Mark: YES.
Hillstrom, Carlyle: YES.
Hummel, Mike: YES.
Kvernen, Luther: YES.
Laning, Vernon: YES.
Murphy, Ed: YES.
O’Clair, Terry: YES.
Rudeck, Allan: YES
Radolf, Jan: YES.
Smith, Dave: YES
Stomberg, Andrea: YES.
Voss, Rich: YES.
Weeda, John: YES.

Administration Item C: Nominating Committee Report for Officers / LRC Executive Committee (2007-2009)

Kevin Cramer, chairman of the nominating committee, said the he and the other nominating committee members (John Weeda and Mike Hummel) nominate the following LRC officers and LRC Executive Committee members serve for the term starting Dec. 1, 2006 and ending Dec. 31, 2008:

- LRC officers: John Dwyer of Lignite Energy Council, chairman; Bruce Imsdahl of Montana-Dakota Utilities Co., vice chairman.
- LRC Executive Committee members (seven members): John Dwyer, chairman; Bruce Imsdahl, vice chairman; and David Loer (Minnkota Power Cooperative, Senator Randy Christmann, Gary Loop (Dakota Gasification Company), Ed Murphy (ND Geological Survey) and Senator Layton Freborg.

Cramer made a motion that the individuals on these two lists (LRC officers and LRC Executive Committee members) be elected. The motion was seconded by John Weeda. Karlene Fine conducted a roll-call vote of the LRC members at 2:10 p.m. The roll-call results regarding the motion were as follows (yes: 22; no: 0); motion carried:

Benson, Steve: YES.
Christmann, Randel: YES.
Cramer, Kevin: YES.
Dewing, Carroll: YES.
Durham, Tom: YES
Dwyer, John: YES.
Friedlander, Joe: YES.
Goettle, Shane: YES.
Hagemeister, Daniel: YES.
Hager, Mark: YES.
Hillstrom, Carlyle: YES.
Hummel, Mike: YES.
Kvernen, Luther: YES.
Laning, Vernon: YES.
Murphy, Ed: YES.
O’Clair, Terry: YES.
Radeck, Allan: YES
Radolf, Jan: YES.
Smith, Dave: YES
Stomberg, Andrea: YES.
Voss, Rich: YES.
Weeda, John: YES.
Sandi Tabor spoke about ND Transmission Authority legislation proposed for the 2007 North Dakota Legislature. Copies of that legislative bill were handed out. John Dwyer made a motion that the bill be introduced at the Nov. 22, 2006 NDIC meeting. Seconded by Rich Voss. Karlene Fine conducted a roll-call vote of the LRC members at 2:20 p.m. The roll-call results regarding the motion were as follows (yes: 22; no: 0); motion carried:

Benson, Steve: YES.
Christmann, Randel: YES.
Cramer, Kevin: YES.
Dewing, Carroll: YES.
Dunham, Tom: YES
Dwyer, John: YES.
Friedlander, Joe: YES.
Goettle, Shane: YES.
Hagemeister, Daniel: YES.
Hager, Mark: YES.
Hillstrom, Carlyle: YES.
Hummel, Mike: YES.
Kvernen, Luther: YES.
Laning, Vernon: YES.
Murphy, Ed: YES.
O’Clair, Terry: YES.
Rudeck, Allan: YES
Rudolf, Jan: YES.
Smith, Dave: YES
Stomberg, Andrea: YES.
Voss, Rich: YES.
Weeda, John: YES.

Next Grant Application Deadline; Next LRC Meeting

Dwyer said that April 1, 2007 is the next grant application deadline. The next LRC meeting is scheduled for May 21, 2007.

Ballot Results re: Grant Round LIX (59) Proposals

Dwyer announced the LRC’s confidential ballot results concerning recommendations for NDIC funding of the two Grant Round LIX (59) proposals:

LRC-LIX-A: “Review of North Dakota Regulations, Standards, and Practices Related to the Use of Coal Combustion Products”; Submitted by: EERC; Project Manager: Tera D. Buckley; Request for: $12,000; Total Project Costs: $36,000; Project Duration: 12 Months. (Technical Advisor’s recommendations: Fund from Small Research Projects dollars; cursory review of what other states in the region are doing regarding CCP utilization and the policies affecting their use.):

Recommend Funding: 21 votes.
Do Not Fund: 1 vote.

LRC-LIX-B: “Upgrade and Refurbishment of a Bench-Scale Entrained-Flow Slagging Gasifier”; Submitted by: EERC; Principal Investigator: Jason Laumb; Request for: $129,000; Total Project Costs: $354,000; Project Duration: Seven Months. (Technical Advisor’s recommendation: Fund from Small Research Projects dollars with the following two conditions: Written confirmation of industry participation; and there must be at least one Fort Union lignite industry utility sponsor):

Recommend Funding: 19 votes.
Do Not Fund: 3 votes.

Adjournment

There being no further business, Dwyer requested a motion to adjourn the LRC meeting. Luther Kvernen so moved; seconded by Allan Rudeck. Motion carried.