Lignite Research Council (LRC) chairman John Dwyer called the LRC meeting to order on October 26, 1999, at Radisson Inn, Bismarck, North Dakota.

Approval of Minutes – 7/21/99 LRC Meeting

Dwyer asked for a motion for approval of the minutes of the July 21, 1999 Lignite Research Council meeting. Dave Sogard so moved; Dean Peterson seconded. Motion carried. Dwyer said the minutes of the April 15, 1999 Lignite Research Council Executive Committee meeting are in the LRC’s October 26, 1999 meeting materials for information only. They will be approved by the LRC Executive Committee at its next meeting.

Lignite Research, Development and Marketing Program Updates

Clifford Porter said the materials for this LRC meeting contain short summaries of all the research program projects active in the last year or two. The summaries are divided into the three categories: lignite marketing feasibility studies, small research projects, and demonstration projects. The materials for this meeting also include a brief summary of the status of funding that is available as of October 12,
1999 for the small research project priority areas. There is a total of $702,222 in funding available as of October 12, 1999 for the small research projects. Porter said the one Grant Round XXXV request to be considered by the LRC at this meeting has a funding request for $75,000.

Financial Summary

Porter summarized the North Dakota Lignite Research, Development and Marketing Program financial data for the 1999-2001 biennium. The data is a summary as of August 31, 1999, and was provided to the LRC electronically or via the U. S. Postal Service.

The budget items are divided into four categories: administration, lignite marketing feasibility studies, small research projects, and demonstration projects. $400,000 was budgeted for administration of the program for the 1999-2000 biennium; $29,568 was spent as of August 31, 1999.

For lignite marketing feasibility studies, $500,000 was budgeted for the biennium and $500,000 is still available.

For the small research projects area, there is a carry forward of $547,500 of obligated funds and a carry forward of $316,188 of unobligated funds. Estimated lignite production will generate $1,836,000 during the 1999-2001 biennium based on the assumption that 45% of the available funds go for small research projects and 55% for demonstration projects. Porter said additional production will generate an estimated additional $67,790 for the biennium. Available uncommitted 1999-2001 biennium funds for small projects total $702,222.

Porter summarized the demonstration projects financial data as of October 11, 1999. For the 1999-2001 biennium debt service schedule for the Lignite Research Program Series 1995 A Bonds, the repayment amount is $2,141,152. Porter said the bonds will mature as of November 15, 2005. There is $2,668,658 in available funding for demonstration projects. Estimated 1999-2001 production generation is $3,594,000 and additional production is $219,968. There is a carryover of obligated demonstration funds of $7,171,200. Funding of $2,668,658 is available for demonstration projects for the 1999-2001 biennium.

Summarizing available funds for the 1999-2001 biennium, Porter said as of October 11, 1999 there is $500,000 for lignite marketing feasibility studies, $702,222 for small research projects, and $2,668,658 for demonstration projects.

Karlene Fine said that at the July 30, 1999 meeting of the North Dakota Industrial Commission, the Commission members accepted the LRC’s recommendation for the reallocation of Lignite Research Program funds as follows: Increase the amount available for small research projects from 25% to 45% and decrease the amount for demonstration projects from 75% to 55%.

She said the Commission also took action regarding minimum industry cash contributions and in-kind contributions for projects. Two of the six grant applications presented to the Commission at its July 30, 1999 meeting involved all of the matching industrial funds as in-kind contributions. Fine said she and Porter recommended to the Commission that in future grant rounds there be guidelines of a minimum industry cash contribution of 25%, with a priority being given to projects that provide a higher cash contribution.

She said the Commission accepted the LRC’s recommendations as presented, with two exceptions. The Commission required the “Demonstration of North Dakota Lignite Flyash in Haulroad Construction” and the “Lignite Testing in an Advanced High-Temperature, High-Pressure Transport Reactor Gasifier” projects provide a minimum of 25% of the industry match in the form of cash contributions.

Fine said the Commission approved Dakota Gasification Company’s September 22, 1999 financing plan, which is a request for the transfer of certain assets pursuant to provisions of the DGC/Industrial Commission Investment Agreement of 1995.
Gordon Westerlind asked Fine to explain the minimum 25% cash contribution from industry; she did so.

**Grant Round XXXV Grant Application**
LRC-XXV-B: “North Dakota Children’s Health Study”; Submitted by North Dakota Department of Health and Lignite Energy Council; Program Administrator: Clifford R. Porter; Stakeholder representatives: Alana Knudson-Buresh, Ph.D. (for North Dakota Department of Health) and Clifford R. Porter (for Lignite Energy Council); Co-Principal Investigators: John D. Spengler, Ph.D. and Jonathan Samet, M.D.; Request for: $75,000; Total Project Cost: $225,000; Timeframe: 14 months.

Porter summarized the three technical peer reviewers’ comments and technical advisor recommendations for funding for the Grant Round XXXV proposal LRC-XXXV-B, titled “North Dakota Children’s Health Study”. The proposal was submitted by the North Dakota Department of Health and the Lignite Energy Council. Porter said the co-principal investigators for the proposal are Dr. John Spengler and Dr. Jonathan Samet. Spengler is with the Harvard School of Public Health; Samet is with Johns Hopkins University. The request is for $75,000; total project cost is $225,000. Porter said that $75,000 will be provided by member companies of the Lignite Energy Council and $75,000 will be provided by the North Dakota Department of Health.

Porter said the objective of this project is to assess the prevalence rates of respiratory symptoms of kindergarten through sixth grade pupils in “coal country”, to assess the prevalence rates of respiratory symptoms in kindergarten through sixth grade pupils in a comparable North Dakota region removed from “coal country”, and to compare the prevalence rates while controlling the confounding factors. Key methodology involves the use of a questionnaire. A sample of the questionnaire was provided in the meeting materials LRC members received prior to the meeting. Porter said the study might ascertain whether or not there is a statistically significant difference between the rates of respiratory symptoms between the two regions. However, the study will not determine what factors are associated with any of the differences that may appear.

Porter said Technical Reviewer 99-34 gave the proposal a weighted score of 181 out of 250 and recommended funding to be considered. Reviewers 99-35 and 99-33 gave the proposal weighted scores of 239 and 213, respectively. Both reviewers recommended the project be funded.

Porter summarized some of the reviewers’ comments. He said that reviewer 99-33 mentioned “The researchers have the ability to deal with the sample size”. Porter said that one of the issues in dealing with a study of this size is that the sample is very small in these regions. From a statistical point of view, it is preferable to have as large a sample size as possible. Porter said that reviewer 99-33 was concerned there might be biases present in filling out the questionnaire. Reviewer 99-33 recommended the project be funded, but that attention be paid to the reporting bias and the methodology. Porter said technical peer reviewer 99-34 suggested funding to be considered. The key issue relates to air quality differences, and reviewer 99-34 wrote there might be some difficulty in obtaining this information. The selection of comparable communities is not discussed, and yet it is a key factor.

Reviewer 99-34 also mentioned that the project coordinator is not identified and the coordinator’s background is not given. Those are also key factors, according to reviewer 99-34. Porter said that reviewer 99-35 gave the project a high rating of 239 out of 250 points and indicated the project should be funded. The reviewer said the project’s goals are very clear; however, health effects studies are not listed as an eligible project under the LRC guidelines. Other comments from reviewer 99-35 included “the budget is reasonable, but recruiting field staff may require more time”, “the co-principal investigators are respected researchers in environmental health science” and “this project should be funded.”

As technical advisor, Porter said he has several concerns about the proposal. First, the study is a highly specialized area of epidemiology and Porter said he is concerned there is a lack of the necessary
capabilities within our staffs and organizations to be peer reviewers of this program. He said the subject is highly emotional in our area of the state, and being highly emotional makes it more difficult to look at the study in a clear, scientific manner. Selection of the project coordinator is critical; however, the principal investigators have gone out of their way to make sure the project coordinator is trained and properly coached. Selection of the comparable areas is critical in terms of how the “reference country” community is selected. Porter also said that care must be taken to ensure that a reporting bias does not affect the study outcome.

Porter said he recommended the LRC vote to recommend the Industrial Commission approve funding for the proposal, subject to three contingencies. First, he said selection of a technical advisory panel comprised of the principal investigators’ peer review is important and peer reviewers should be selected subject to approval by the Commission’s technical representative and the project manager from the North Dakota Department of Health. Another contingency concerns selection of comparable areas with comparable air quality. Selection of the areas should be subject to approval by the Commission’s technical representative and the NDDOH project manager. Thirdly, Porter said the NDDOH and the LRC/North Dakota Industrial Commission should appoint co-project managers for the purposes of this study. Vern Laning asked Porter if the proposal addressed what the motivation would be for completing the lengthy questionnaire. Porter said there would be some type of individual incentive and an incentive for the school returning the highest percentage of questionnaires. The exact types of incentives have not yet been determined.

Bob Wood said that reviewer 99-35 observed that health effects studies are not listed as an eligible project. Porter said that they are not identified as ineligible.

Chuck Reichert asked if the contingencies that Porter mentioned would be addressed. Porter said his contingencies are on the ballot and will be part of the motion.

Dwyer called on Murray Sagsveen, state health officer, to provide comments about the proposal. Sagsveen said the NDDOH is very interested in the project and will provide $75,000 in funding. He said the NDDOH agrees with the contingencies that Porter listed. Sagsveen said he has designated Dr. Alana Knudson-Buresh as the principal from the NDDOH to work on this project. She holds a Ph.D. in public health with an emphasis on statistics. Dwyer said Dr. Knudson-Buresh had participated with Porter and with Diane Stockdill from Great River Energy’s Coal Creek Station in developing the grant application.

**Ballots for Proposal LRC-XXXV-B**

Dwyer said that any LRC member or alternate who has not signed a confidentiality agreement needs to do so before voting. He said that only one vote is allowed for each organization represented on the LRC.

Dwyer said the ballot includes the three contingencies that Clifford Porter explained. These contingencies are listed on the ballot for LRC-XXXV-B as follows: 1) selection of Technical Advisory Panel with qualifications comparable to the co-principal investigators and acceptable to the Industrial Commission’s Technical Representative and the Health Department’s Co-Project Manager; 2) selection of demographic regions that contain ambient air quality monitoring data comparable to data in “coal country” and acceptable to the Industrial Commission’s Technical Representative and the Health Department’s Co-Project Manager; and 3) that the Health Department and the Lignite Research Council/NDIC designate Co-Project Managers.

**LRC Primary/Alternate Members’ E-mail Addresses**

Forms requesting LRC members to list their e-mail addresses and to designate alternates for 2000 were distributed. Dwyer said it is Karlene Fine’s intention to start sending more of the LRC materials electronically.
Grant Round XXXVI Deadline; Next Lignite Research Council Meeting
Dwyer said the Grant Round XXXVI application deadline is January 1, 2000. Other grant application deadlines for 2000 are May 1 and September 1. The LRC meeting dates for 2000 will be February 22, July 26 and October 25.

Dwyer said the materials for this LRC meeting were posted on the Internet and that future LRC meeting materials will be provided in this manner. He asked if the materials should be posted in Word, Adobe or another format. Fine said the materials for this meeting were posted in Adobe. Porter said if anyone has problems opening the materials in Adobe, they should let him know.

Ballot Results
The LRC cast confidential ballots concerning funding the Grant Round XXXV proposal LRC-XXXV-B titled “North Dakota Children’s Health Study”. The Industrial Commission will meet on November 8, 1999 to consider the LRC’s recommendation.

Dwyer said the balloting results for LRC-XXXV-B are as follows:

Fund: 16; Do Not Fund: 2.

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

Vicki Gilmore, Recording Secretary