

North Dakota Lignite Industry Economic Analysis

**A Project Proposal
Submitted to the North Dakota Industrial Commission by**

**The North Dakota State University
Department of Agricultural Economics**

Principal Investigator:

F. Larry Leistritz

Date: September 1991

Amount Requested: \$5,060

Table of Contents

| | <u>Page</u> |
|-----------------------------------|-------------|
| Summary | ii |
| Objectives | 1 |
| Background | 1 |
| Goals | 1 |
| Methods | 1 |
| Timetable | 2 |
| Personnel | 2 |
| Qualifications of Applicant | 2 |
| Budget (Annual) | 2 |
| University Contribution | 3 |
| Appendix | 4 |

Objectives

Opportunities for additional development of North Dakota's lignite resources would be enhanced by establishing a permanent economic data base on which decisions affecting future development could be supported.

Background

Data on the lignite industry's economic impact on North Dakota would be developed by the Agricultural Economics Department at North Dakota State University (NDSU), which would use a computer model to conduct an economic analysis of the state's lignite industry. The approach used would be similar to that used in previous analyses (for example, see Coon and Leistritz 1986, 1990).

Goals

The long-term goal is to establish a permanent economic data base detailing the economic development of North Dakota's lignite industry on an annual basis. In addition, compilation of this data will serve as a knowledge base used to support future lignite development.

The economic analysis base would relate to the following areas:

- * The lignite industry's economic impact on North Dakota; and
- * The industry's past, present, and future role in North Dakota's development.

Methods

The NDSU Department of Agricultural Economics would request the North Dakota Lignite Council to collect data needed for the economic analysis. Detailed questionnaires would be sent to all lignite users and producers. The completed questionnaires would be sent to NDSU for analysis in March. In April, NDSU would provide a written report of its findings.

This data, along with data from other state agencies such as the Tax Department and the Public Service Commission, would be used by decision-makers to determine the lignite industry's economic impact on the state. This includes tax revenue generated by the industry, direct and indirect employment, and business volume.

Summary

Objective

To build a base of factual economic data on North Dakota's lignite industry and its impact on the state's economy.

Expected Results

As a result of the economic analysis, North Dakota will have a factual data base of information on lignite development in the state, its past impact, its present impact, and a basis from which to measure potential future impact. The economic analysis will provide planners and developers with data on jobs, tax revenue, in-state expenditures, and business activity generated by the lignite industry.

Time Period

Work on the economic analysis begins in January each year and is completed by April.

Total Project Costs

Total cost for the lignite industry economic analysis is \$5,060 per year.

Major Participants

The Agricultural Economics Department at North Dakota State University with assistance in data collection from the North Dakota Lignite Council and its members.

Timetable

The following timetable is proposed:

| | |
|----------|--|
| January | Work on revisions or modifications to questionnaires. |
| February | Send questionnaires to all North Dakota lignite users and producers. |
| March | Receive completed questionnaires. Run data through computer model. |
| April | Issue final report on economic analysis results. |

Personnel

F. Larry Leistritz has been a professor of agricultural economics with North Dakota State University since 1977. He has been instrumental in developing the computer model analyzing the economic impact of the lignite industry on North Dakota. Leistritz has a master's degree in agricultural economics and a doctorate in philosophy from the University of Nebraska. He has directed a number of research projects dealing with economic impacts of natural resource development and is the author of nine books and numerous journal articles and research reports.

Qualifications of Applicant

A brief resume of the principal investigator is attached.

Budget (Annual)Salary

| | |
|-------------------------------|---------------|
| Research Specialist (1 month) | \$2,900.00 |
| Secretarial (40 hrs.) | 300.00 |
| Fringe Benefits (27%) | 860.00 |
| Travel | 400.00 |
| Printing | 150.00 |
| Supplies | 200.00 |
| Application fee | 100.00 |
| Communication | <u>150.00</u> |
| Total | \$5,060.00 |

University Contribution:

North Dakota State University's contribution to the project will include salary and fringe benefits for Dr. Leistritz, as well as access to the physical facilities and equipment necessary to complete the project. Dr. Leistritz' time commitment to the project (estimated to be 0.75 month) exceeds the amount requested from the sponsor:

| | |
|-------------------------|------------|
| Salary (0.75 mo.) = | \$4,112.50 |
| Fringe benefits (25%) = | \$1,028.13 |

Appendix

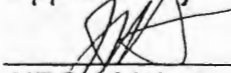
Previous Analyses Conducted for
North Dakota Lignite Industry

- Coon, Randal C., John F. Mittleider, and F. Larry Leistritz. 1983. Economic Analysis of the North Dakota Lignite Industry. Agricultural Economics Miscellaneous Report No. 67. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1985. The Contribution of North Dakota's Lignite Industry to the State Economy, 1984 and 1985: A Statistical Analysis. AE 85016. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1986. North Dakota Lignite Industry's Contribution to the State Economy. Agricultural Economics Miscellaneous Report No. 99. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1987. The Contribution of North Dakota's Lignite Industry to the State Economy, 1986 and 1987: A Statistical Analysis. AE 87003. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1988. Economic Contribution of the North Dakota Lignite Industry, 1987 and 1988. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1989. A Statistical Analysis of the North Dakota Lignite Industry's Contribution to the State Economy for 1988 and Projected 1989. AE 89008. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1990. A Statistical Analysis of the North Dakota Lignite Industry's Contribution to the State Economy for 1989 and Projected 1990. AE 90004. Fargo: North Dakota State University, Department of Agricultural Economics.
- Coon, Randal C., and F. Larry Leistritz. 1991. A Statistical Analysis of the North Dakota Lignite Industry's Contribution to the State Economy for 1990 and Projected 1991. AE 91002. Fargo: North Dakota State University, Department of Agricultural Economics.

NDSU MAIN RESEARCH STATION STANDARD PROPOSAL BUDGET

| Budget TCC | BUDGET ELEMENTS | REQUESTED AMOUNT | NDSU MATCHING |
|---------------|----------------------------------|---------------------|------------------|
| | PERSONNEL EXPENSES: | | |
| 950 | Salaries & Wages - Faculty | \$ | \$ 4112 |
| 951 | Salaries & Wages - Support Staff | 3200 | |
| 952 | Salaries - Sabb/Develop Leave | | |
| 953 | Fringe Benefits | 860 | 1110 |
| | Total Personnel Expenses | \$ 4060 | \$ 5222 |
| | OPERATING EXPENSES: | | |
| 954 | Travel - Domestic | \$ 400 | \$ |
| 954 | Travel - Foreign | | |
| 955 | Utilities | | |
| 956 | Communications | 150 | |
| 957 | Insurance | | |
| 958 | Data Processing | | |
| 959 | Rents & Leases | | |
| 960 | Office Supplies | 150 | |
| 961 | Repairs | | |
| 962 | Supplies | 200 | |
| 963 | Fees | | |
| 964 | Instructional | | |
| 965 | General | 100 | |
| | Total Operating Expenses | \$ | \$ |
| | EQUIPMENT: | | |
| 966 | Equipment < \$500 | \$ | \$ |
| 976 | Major Equipment | | |
| | Total Equipment | \$ | \$ |
| | Total Direct Costs | \$ 5060 | \$ 5222 |
| 972 | Indirect Cost Expense | \$ | \$ |
| | TOTAL COST | \$ 5060 | \$ 5222 |

Approved By



NDSU Main Research Station
Budget Office

NDSU

NORTH DAKOTA STATE UNIVERSITY
SU Station, Box 5790
Fargo, North Dakota 58105-5790

(701) 237-7033

Date: September 17, 1991

To: F. Larry Leistritz

Fr: Annelee Donnelly
Research Administrator

Re: University Approval: Log # 5030-St-R-92092 Title: North Dakota Lignite
Industry Economic Analysis

- Enclosed for your records is a copy of a fully executed Proposal Transmittal Form indicating university approval for the above referenced proposal to North Dakota Industrial Commission.
- Also enclosed is an NDSU Application Transmittal sheet, signed by Dean Schnell as an indication of university approval and commitment to this project. It should be attached to your proposal as a cover page when you mail it out.
- After the rush of mailing the application is over, we would appreciate receiving just a few sentences in very basic language describing the purpose of the study. It will be used to satisfy Board of Higher Education reporting requirements, and may also be used for publicity purposes.
- We would also appreciate receiving two complete copies of the proposal. If it is funded, we will send one copy to the Office of Restricted Funds Accounting for their reference in setting up an account.
- Just a gentle reminder that we cannot guarantee that university approval will be obtained in time to meet an application deadline when the proposal is submitted less than 72 hours before mailing.

We appreciate your cooperation with NDSU prior approval procedures for external funding requests. Best wishes for obtaining funding for this project.

Other: