

TECHNICAL REVIEWERS' COMMENTS
LRC-LXXI (71) – C

"Annual Lignite Energy Council Education Seminar: Energy, Economics & Environment"

1. OBJECTIVES

The objectives or goals of the proposed project with respect to clarity and consistency with North Dakota Industrial Commission/Lignite Research Council goals are: 1 – very unclear; 2 – unclear; 3 – clear; 4 – very clear; or 5 – exceptionally clear.

Reviewer 01-01 (Rating 4)

I would agree that the proposed education seminar objectives fall in line with those of the NDIC/LRC, particularly in the preservation and creation of new jobs.

Reviewer 01-02 (Rating 5)

The objectives of the seminar are consistent with the goals of the Research program as they relate to education and as was reflected in the value to North Dakota.

2. ACHIEVABILITY

With the approach suggested and time and budget available, the objectives are: 1 – not achievable; 2 – possibly achievable; 3 – likely achievable; 4 – most likely achievable; or 5 – certainly achievable.

Reviewer 01-01 (Rating 4)

The proposal's timeline and budget were very clear and concise, I have no reason to believe the objectives may be compromised due to scheduling or budget constraints.

Reviewer 01-02 (Rating 4)

As outlined the applicant should be able to conduct the seminar in the manner presented.

3. METHODOLOGY

The quality of the methodology displayed in the proposal is: 1 – well below average; 2 – below average; 3 – average; 4 – above average; or 5 – well above average.

Reviewer 01-01 (Rating 4)

The agenda contained in the proposal was adequate to clarify the methodology. It would have been nice if the proposal contained additional information as why particular subjects are included or excluded from the education seminars.

Reviewer 01-02 (Rating 3)

If the ultimate goal is to encourage employment in the lignite industry, this is certainly one avenue. What wasn't clear in the proposal is what teachers are being encouraged to attend – grade school, middle school, high school. Educating our students regarding the lignite industry is advantageous but at some levels this reviewer is uncertain as to the value this seminar would have for job recruitment.

4. CONTRIBUTION

The scientific and/or technical contribution of the proposed work to specifically address North Dakota Industrial Commission/Lignite Research Council goals will likely be: 1 – extremely small; 2 – small; 3 – significant; 4 – very significant; or 5 – extremely significant.

Reviewer 01-01 (Rating 3)

While this project is not a technical proposal, I do believe that the general scientific contribution is significant enough to meet the goal of preserving and creating jobs in the production and utilization of ND lignite resources.

Reviewer 01-02 (Rating 3)

No comment

5. **AWARENESS**

The principal investigator's awareness of other current research activity and published literature as evidenced by literature referenced and its interpretation and by the reference to unpublished research related to the proposal is: 1 – very limited; 2 – limited; 3 – adequate; 4 – better than average; or 5 – exceptional.

Reviewer 01-01 (Rating 3)

I do not feel that this rating is applicable to this particular proposal. A score of three was used by default.

Reviewer 01-02 (Rating 2)

Little is provided as to what other efforts are being made to educate teachers on the lignite industry and students on the potential for jobs in the lignite industry. More information on what the lignite industries or the Lignite Energy Council is doing in relation to job fairs, media campaigns, etc. would have been beneficial.

6. **BACKGROUND**

The background of the investigator(s) as related to the proposed work is: 1 – very limited; 2 – limited; 3 – adequate; 4 – better than average; or 5 – exceptional.

Reviewer 01-01 (Rating 5)

The background and experience of the representatives leading the education seminar is outstanding. The proposed agenda items and guest speakers support the “exceptional” rating as well.

Reviewer 01-02 (Rating 5)

The faculty for the seminar is exceptional.

7. **PROJECT MANAGEMENT**

The project management plan, including a well-defined milestone chart, schedule, financial plan, and plan for communications among the parties involved in the project, is: 1 – very inadequate; 2 – inadequate; 3 – adequate; 4 – very good; or 5 – exceptionally good.

Reviewer 01-01 (Rating 4)

I feel the proposed budget and seminar schedules were well prepared and thorough. The agenda, as proposed, will provide educators with a solid understanding of ND's lignite industry.

Reviewer 01-02 (Rating 4)

The use of a UND faculty member along with the expertise and experience provided by the seminar coordinator and Lignite Energy Council staff is exceptionally good. No milestone chart was provided although I am uncertain as one is needed.

8. **EQUIPMENT PURCHASE**

The proposed purchase of equipment is: 1 – extremely poorly justified; 2 – poorly justified; 3 – justified; 4 – well justified; or 5 – extremely well justified. (Circle 5 if no equipment is to be purchased.)

Reviewer 01-01 (Rating 5)

N/A.

Reviewer 01-02 (Rating 5)

No equipment purchases noted.

9. **FACILITIES**

The facilities and equipment available and to be purchased for the proposed research are: 1 – very inadequate; 2 – inadequate; 3 – adequate; 4 – notably good; or 5 – exceptionally good.

Reviewer 01-01 (Rating 4)

The purchase of the educational materials, speaker gifts, etc., are well justified and do not appear to be excessive. The additional transportation and facility expenses also appear reasonable.

Reviewer 01-02 (Rating 4)

No comment

10. **BUDGET**

The proposed budget value relative to the outlined work and the financial commitment from other sources is of: 1 – very low value; 2 – low value; 3 – average value; 4 – high value; or 5 – very high value.

Reviewer 01-01 (Rating 3)

I feel a 50/50 match for the proposed education seminar is a fair balance of public/industry participation.

Reviewer 01-02 (Rating 3)

No comment

OVERALL COMMENTS AND RECOMMENDATIONS:

Please comment in a general way about the merits and flaws of the proposed project and make a recommendation whether or not to fund.

Reviewer 01-01 (Rating: FUND)

I recommend funding the proposed education seminars based on the proposal's alignment with LRC's goals and purposes.

ND's lignite industry, along with other energy sectors, will soon be facing the "great crew change" and preservation of ND's lignite industry is dependent on the next generation of workers. The seminars will be a wonderful tool to empower ND teachers to educate students about the exciting career options in ND's lignite industry.

One thing that I would have liked to see as a reviewer was some statistics on event success. Entrance and exit surveys would be one method of collecting such data. Additional statistics on the educators (grade level, field, etc.) would also be useful.

Reviewer 01-02 (Rating: FUND)

The seminar is a value to the lignite industry and to the State of North Dakota and should be funded.