

EAST RIVER

ELECTRIC POWER COOPERATIVE

121 Southeast First St.
Madison, SD 57042

P.O. Box 227
Telephone (605) 256-4536

April 30, 2008

Ms. Kara Semmler
South Dakota Public Utilities Commission
State Capitol Building
500 East Capitol Avenue
Pierre, SD 57501-5070

RE: Response to South Dakota Public Utilities Commission Staff Data Request
Number 1 – In Docket Number EL08-010 – In the Matter of the Application of
East River Electric Power Cooperative, Inc., for a Permit to Construct
Approximately 13 Miles of 115 kV Transmission Line

Dear Ms. Semmler:

Enclosed is East River's response to the first data request in the matter referenced
above.

We have electronically filed this response and request that it be part of our application
and the official record for this proceeding.

Please contact me if you have any questions.

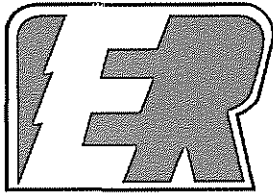
Sincerely,

Bob Sahr
General Counsel

BS/sl

Enc.





EAST RIVER

ELECTRIC POWER COOPERATIVE

121 Southeast First St.
Madison, SD 57042

P.O. Box 227
Telephone (605) 256-4536

EL08-010 In the Matter of the Application of East River Electric Power Cooperative, Inc. for a Permit to Construct Approximately 13 Miles of 115 kV Transmission Line

DOCKET EL08-010

PUC Staff Data Request 1

April 30, 2008

- 1-1. Explain what environmental studies have been completed, whether any are ongoing and whether any additional studies are necessary or planned along the facility route. Provide a copy of any such report.**

East River engaged Augustana College to perform a Level III Cultural Resources Survey (Exhibit 15) of the proposed Transmission Project and also submitted the necessary information on the proposed Project to five governmental agencies for their review of the Project. The five governmental agencies were the South Dakota State Historical Society (Exhibit 16), U.S. Corps of Engineers (Exhibit 17), U.S. Fish and Wildlife Service (Exhibit 18 and 19), S.D. Department of Game, Fish and Parks (Exhibit 20) and the S.D. Department of Environment and Natural Resources (Exhibits 21, 22 23 and 24). Each of these agencies has responded favorably towards the proposed Transmission Project. Copies of their findings and the findings from Augustana College are attached. All environmental studies and reviews required for the proposed Project are completed and no additional environmental studies are planned for this proposed Project.

- 1-2. According to SDCL 49-41B-38, the Commission shall require a facility to furnish an indemnity bond to perform construction on a facility of this type. What is an appropriate bond amount and why?**

East River believes a \$5,000 indemnity bond for each county and township is an appropriate amount. We base this on a number of factors.

First, the equipment and vehicles necessary to build this 115 kV line will have a very small impact on roads. The equipment and vehicles will be the same as used on a regular basis by East River to build, operate, repair and maintain 69 kV and 115 kV lines. For

facilities larger than 115 kV lines, bigger vehicles and equipment may be needed, and a larger bond amount may be appropriate. Second, as we do with our other projects, East River crews and contractor crews will make repairs to the roads as we are constructing the line thus lessening or eliminating any residual need for repairs. Third, we believe this proposed bond amount makes sense as compared to other projects recently reviewed by the Commission when factoring into the equation the size of the line, necessary equipment and vehicles and type of roads impacted.

- 1-3. According to SDCL 49-41V-22 the proposed facility, “shall not unduly interfere with the orderly development of the region with due consideration having been given to the views of governing bodies of affected local units of government.” Describe the communication you had with applicable local bodies of government regarding the proposed facility?**

East River has requested county franchises from both Brown County and Day County for the proposed Project. The franchise requests are scheduled on the May 6, 2008 commission meeting agendas for both Brown County and Day County. During the meetings, East River will present an overview of the proposed Project to the two County commissions and request approval of the franchises.

- 1-4. Per ARSD 20:10:22:11, provide a map showing cemeteries, places of historical significance, transportation facilities, or other public facilities adjacent to or abutting the transmission site. If there are none, please provide a statement to that effect.**

We have attached the South Dakota Department of Transportation, General Highway Map as Exhibit 11a and 11b. We are not aware of any cemeteries, places of historical significance, transportation facilities or other public facilities adjacent to or abutting the transmission site.

- 1-5. Per ARSD 20:10:22:12(1), provide how the general criteria used to select alternative sites were “measured and weighed, and the reasons for selecting these criteria”.**

Siting of the proposed transmission line required two different engineering evaluations and decisions with different criteria on the alternatives. First there was the evaluation and decision on the high voltage source for the transmission line which is where we will tap the high voltage transmission system to supply the power for the Project. Second, there was the evaluation and decision on the actual line route from the decided upon high voltage source to the distribution substation located on the pump station property.

High Voltage Source Evaluation

As described in the application, two high voltage sources, Western’s Groton 345/115/69 substation and East River’s Bristol 115/69 kV substation, are available for serving the proposed Project.

Evaluation of the two high voltage sources was based first on their capacity to provide the necessary power at the required voltage level to supply the pump station load as well as any other loads that may be served from the proposed transmission line. Second, the length of the transmission line from each of the high voltage sources was taken into consideration. Quality of electric service from a shorter line is usually better than that received from a longer transmission line as the shorter line is less impacted by inclement weather conditions. Third, the overall cost of the transmission lines and upgrades to the high voltage sources needed to serve the proposed Project were taken into consideration and other operating problems. The longer the transmission line, the higher the cost to construct the transmission line.

Engineering evaluation shows a 115 kV voltage source can provide better service and more capacity than a 69 kV voltage source, due to the 115 kV being able to provide a more robust service.

A transmission line from the Groton substation was approximately 6 miles shorter in length than a transmission line from the Bristol substation would be and will result in less transmission line exposed to weather conditions and other problems.

A 115 kV transmission line, dependent upon a number of items including labor, material and right of way is estimated to cost as much as \$150,000 per mile. Reducing the length of transmission line needed by six miles by utilizing the Groton substation rather than the Bristol substation would result in Project savings of approximately \$900,000.

Transmission Line Route Evaluation

There are numerous County and Township roads which transmission line could be routed from Western's Groton substation to the distribution substation at the pump station.

Evaluation of the routing was based first on environmental constraints. The area around the proposed Project consists of many wet areas used by wildlife as well as wet areas that make it extremely difficult to construct and maintain a transmission line in. Second, we considered the impact to existing homes and trees. Landowners prefer not to have a transmission line going by their house, nor do they want their trees trimmed or removed. So avoidance of occupied homes and trees when possible is important. Third, we considered the impact to existing utilities both overhead and underground. The location of existing utilities may be such that space for the proposed Project to exist in is not available. Fourth, the overall cost of proposed Project was considered.

The final line route was decided based upon these evaluation criteria.

- 1-6. **Per ARSD 20:10:22:12(3), provide a discussion of the extent to which reliance upon eminent domain powers could be reduced by the use of an alternative site, if applicable.**

East River is not planning or anticipating using eminent domain powers for the proposed Transmission Project. Where private right of way can not be obtained from landowners, East River has designed the transmission line so that it is completely located in the public right of way. East River's response to Data Request Question 1-13 explains and illustrates how this is accomplished. Since eminent domain powers are not being used for this proposed Transmission Project, use of an alternative site or route would not reduce the reliance upon use of eminent domain powers.

- 1-7. Per ARSD 20:10:22:16, provide an analysis of the impact of construction and operation of the proposed facility on breeding times and places and pathways of migration and important species and planned measures to ameliorate negative biological impacts as a result of construction and operation of the proposed facility. SD Game Fish & Parks and US Fish & Wildlife Services comments would be appropriate.**

East River has requested comments from the U.S. Fish and Wildlife Service on the environmental aspects of the proposed Project (Exhibit 18). The response from Mr. Pete Gober, Field Supervisor for the South Dakota Field Office of the U.S. Fish and Wildlife Service on the proposed Project is attached (Exhibit 19).

In his letter, Mr. Gober does not indicate that the construction and operation of the proposed Project will have an impact on breeding times and places and pathways of migration. He does note the possible existence of the protected Topeka Shiner in streams and a list of best management practices to minimize potential impacts specifically to Topeka Shiners is included in Mr. Gober's letter. East River will implement this list of best management practices to minimize any potential impacts to Topeka Shiners.

East River also requested comments from the South Dakota Department of Game, Fish and Parks on the environmental aspects of the proposed Project. Subsequently East River received a response of "no significant impact on fish and wildlife resources" from the S.D. Department of Game, Fish and Parks. A copy of East River's initial letter with the S.D. Department of Game, Fish and Parks stamped reply is attached (Exhibit 20).

- 1-8. Per ARSD 20:10:22:18, provide a more appropriate land use map. The map provided as Exhibit 3 is not clearly labeled and only includes Brown County. Furthermore, any land uses requested in 20:10:22:18(a) through (l) that are not included in the map should be accompanied with a statement to that effect.**

Enclosed are Exhibits 12a and 12b showing the Land Use adjacent to the proposed Project. The following land uses are not shown on the map as we are unaware of their existence in this area, (b) Irrigated lands, (e) Undisturbed native grasslands, (f) Existing and potential extractive nonrenewable resources, (g) Other major industries, (j) Public, commercial and institutional use, (k) Municipal water supply and water sources for organized rural water systems and (l) Noise sensitive land uses.

- 1-9. Per ARSD 20:10:22:23(1), provide a forecast of the impact of the proposed facility on housing, land values, and the labor market.**

East River believes that the proposed Project will have minimal, if any impact, on housing, land values or the labor market. East River bases this, in part, on our long history with similar facilities crossing similar rural routes in the States of South Dakota and Minnesota. The physical aspects of the proposed facilities are like other 69 kV and 115 kV lines which already cross this state with little or no economic impact. The land use and characteristics are typical for such a build, and there is nothing unusual in the proposed route that should cause heightened concern.

- 1-10. Per ARSD 20; 10:22:23(2), provide an estimate of the annual dollar value impact of the project on property taxes.**

East River believes that the proposed Project will not have any dollar value impact on property taxes. For personal property used in the distribution and transmission of electricity (SDCL 10-36-2), such as with the proposed Project, rural electric cooperatives pay a two percent gross receipts tax pursuant to SDCL 10-36-6. This tax is in lieu of other taxes including property taxes. SDCL 10-36-11. A prorated share of this tax is paid to the individual counties and ultimately distributed to local school districts. SDCL 10-36-7; 10-36-8; and 10-36-10. So, while the facilities themselves will not directly increase property taxes, the increased sales to customers served by this line will increase the overall gross receipts tax paid and bring tax benefits to the area and state.

- 1-11. Per ARSD 20:10:22:23(6), provide a forecast of the impact of the proposed facility on landmarks and cultural resources of religious, scenic or natural significance. SD State Historical Preservation Office comments would be appropriate.**

East River asked the South Dakota State Historical Society to review the proposed Project. A response dated March 31, 2008 from the South Dakota State Historical Society states they find no adverse effect as a result of the proposed Project. East River's initial letter of request and the Historical Society's stamped reply are attached to this letter (Exhibit 16).

- 1-12. Per ARSD 20:10:22:35(3), provide the proposed transmission site and major alternatives as depicted on overhead photographs and land use culture maps.**

We enclose Exhibits 12a, 12b and 12c showing the proposed route of the Project. Enclosed for the Project alternatives are Exhibits 13 and 14.

- 1-13. In section 2.23.6, the application states that "(w)here private easements cannot be obtained the transmission line will be installed in the public ROW." Staff's experience with siting 115 kV transmission lines provides that the ROW required to site a transmission line of that width can be difficult to fit exclusively in the public ROW. Provide a counter statement, or provide the right-of-way or condemnation requirements, per ARSD 20:10:22:34(5).**

115 kV transmission lines typically utilize either a two pole "H" structure design or a single pole design. The two pole "H" structure design requires a wide right of way and usually placement of at least one of the poles on private land. The single pole design, which East River typically uses requires a smaller right of way.

For this Project, East River is utilizing a single pole design with side mount insulators to support the conductors (See Exhibit 5 in the Application). This structure design, approximately eleven feet in width with at least one side mount insulator extending over private land fits easily within the road right of way. Where East River is unable to obtain an overhang easement for the side mount insulator and conductor, we will utilize a single pole design with the side mount insulators all mounted on the public right of way side of the pole so that all of the structure and conductor are located on public right of way (See Exhibit 7 in the Application).

- 1-14. Per SDCL 49-41B-11(4), provide the estimated number of employees employed at the site of the facility during the construction phase and during the operating live of the facility. Estimates shall include the number of employees who are to be utilized but who do not currently reside within the area to be affected by the facility.**

East River intends to hire an external contractor to construct the transmission line. We anticipate the contractor will have between 10 and 24 employees working on the transmission line performing various construction functions. In addition, East River will have one or more of its employees at times reviewing the construction work for safety and quality of workmanship. DGR Engineering will also have from time to time a member of their engineering staff on the construction site to review quality of workmanship. Once the line is constructed and complete, there will be no new employees that will reside in the area as result of the Project.

- 1-15. Per SDCL 49-41B-11(10), provide the potential short and long range demands on any estimated tax revenues generated by the facility for the extension or expansion of public services within the affected areas.**

East River anticipates that the proposed Project will have minimal, if any demand on public services and does not foresee the need for any extension or expansion of public services within the affect areas due to the proposed Project.

- 1-16. Provide a map that illustrates occupied and abandoned residences within a half mile of the proposed transmission line, as well as placement of the line with respect to the road (e.g. which side of the road).**

We enclose the South Dakota Department of Transportation, General Highway Map as Exhibit 11a and 11b. The occupied residences are shown as a black box. The unoccupied residences are shown as a half white and half black box.

1-17. What will the noise levels be under the various combinations of operating conditions such as weather and line loading, near the closest occupied residence?

Noise from a transmission line can be associated to two causes, Corona and wind induced.

Corona noise is the result of an electrical break down of the air charged particles near high-voltage conductors. Generally corona noise is only heard under conditions of high humidity and primarily for lines at voltages of 345 kV and higher. No noise from corona is expected from the proposed Project under any operating conditions or line loading.

Wind induced noise can be either turbulent or Aeolian. Turbulent noise is a characteristic of any structure, artificial or natural and is not considered a nuisance. It is a characteristic of trees and some land forms. Aeolian noise is caused by the wind crossing over the conductor wires. Wind induced noise under all operating and line loading conditions is expected to be comparable to the existing noise environment and will not have a significant impact on humans or the environment.