

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

In the Matter of the Transmission Permit for the
Big Stone South to Ellendale Project

EL13-028

**MONTANA-DAKOTA UTILITIES CO.
AND OTTER TAIL POWER
COMPANY'S ANSWERS TO GERALD
PESALL'S SECOND SET OF
DISCOVERY REQUESTS TO
APPLICANTS DATED MARCH 5, 2014**

Montana-Dakota Utilities Co. and Otter Tail Power Company (collectively "the Owners"), for its Responses to Gerald Pesall's Second of Discovery Requests to Applicants dated March 5, 2014, states as follows:

ANSWERS TO INTERROGATORIES

1. State the name, title, contact information and relationship to the applicants of each individual, other than counsel, who assists in preparing answers to these discovery requests.

ANSWER: The answers were prepared based on the knowledge of employees of Otter Tail Power Company, Montana-Dakota Utilities Company, Power Engineers, Inc., Kadrmas, Lee & Jackson and HDR Engineering, Inc. as a whole. The primary persons are as follows, who do not have personal knowledge of all the answers.

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2. State the full name, address, telephone number, and occupation of each witness and/or expert from whom you intend to present testimony in this proceeding, and provide a summary of the facts and opinions which each is expected to provide

ANSWER: At this time, Owners intend to call the following witnesses who are all qualified as experts:

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The specific substance of the testimony will be disclosed in the prefiled testimony deadlines imposed by the Public Utilities Commission of South Dakota (“the Commission”), but generally, these witnesses will provide the testimony to establish the Owners’ burden of proving that the Commission should issue the requested permit for the Big Stone South to Ellendale Project (“the Project”).

3. Describe in detail the projected cost difference between the currently proposed route and the other potential routes examined by the applicants for the construction of the transmission facility.

ANSWER: The Owners have not calculated the projected cost differential between the currently proposed route and the other potential routes identified in BSSE 9, which was produced as part of the Owners' response to Gerald Pesall's First Set of Discovery Requests to Applicant. The best estimate of cost is the length of the proposed route. The rejected preliminary route shown on BSSE 9, which goes through Marshall County and western Day County, is longer than the proposed route. The length of the proposed route and corresponding cost was not the sole basis, however, for selecting the proposed route. Instead, the proposed route was selected based on the route selection process and considerations discussed in section 8.1 of Application to Public Utilities Commission of the State of South Dakota, as amended ("the Application").

4. Describe in detail the impact, if any, which applicants contend the proposed facility may have upon persons using either pacemakers, cochlear implants, or similar devices while under or near the transmission line.

ANSWER: Owners do not anticipate any impact on persons with pacemakers, cochlear implants, or similar devices while under or near the transmission line at ground level.

5. Describe in detail the impact, if any, which applicants contend the proposed facility may have upon electronically controlled planting equipment when operated under or near the transmission line.

ANSWER: Owners do not expect that transmission line electric and magnetic fields will impact electronic controls of planting equipment. Isolated cases of interference related to GPS based systems are possible but unlikely.

As stated in answer to interrogatory number 12 in Gerald Pesall's First Set of Discovery Requests to Applicants dated January 28, 2014, section 14.4 of the Application addresses any impact of the Project on the use of global positioning systems (GPS). There are two possible impacts to GPS systems: (1) a line-of-sight obstruction; and (2) electric field corona from high voltage power lines. The Project will have no effect on the usability and productivity of GPS or ground based transmitter systems.

Regarding "line of sight" obstructions, the Project's impact to GPS systems is similar to the impact from trees, buildings or other line-of-sight obstructions. Any limited line of sight impact on the GPS system caused by the Project's structures is expected to be temporary and will be eliminated once the equipment or GPS receiver moves such that the structure no longer impedes the line of sight between the receiver and the GPS satellites at issue.

Some GPS systems also make use of real-time kinematic (RTK) systems to improve the accuracy of the GPS system by making use of the ultra-high frequency radio communication range. RTK systems are ground based GPS systems. RTK signals are transmitted from antennas that are typically only a few meters high, and thus, transmission line towers are not expected to produce much blocking of the line of sight signals from these sources either. Repositioning of the RTK base station antenna should resolve any line of sight interference issues if they occur.

Regarding electric field corona from the Project, there is no expected impact. Electric field corona from high voltage transmission lines can produce radio frequency emissions, but they are primarily below the frequencies used for satellite and ground based GPS systems. Therefore, the radio frequency broadcast produced by high voltage power lines is very unlikely to interfere with or overcome GPS signals.

6. In the event a landowner's average crop yields are reduced due to construction activities during the construction process, or as a result of ongoing maintenance, describe the compensation, if any, which applicants will provide to landowners to offset reduced crop insurance payments in future years.

ANSWER: If damage occurs to crops during the construction process, the Owners will pay for the crops damaged, including hay land. The damage payment for standing crop shall be determined by the following formula (acres x yield x price per bushel/ton).

The Owners will strive to work with the landowner to jointly establish the acres affected by construction. To determine the yield component, the Owners will consider the yield obtained by the landowner on the remainder of the field affected and historical data. The price per bushel shall be determined by the market rate at the time of the crop damage.

The Owners will pay a lump sum payment equal twice the amount of the crop damage payment calculated pursuant to the formula discussed above. The Owners pay twice the amount of the crop damage calculated to reflect future yield reductions caused by the construction.

Actual crop damages from maintenance operations will be reimbursed by the Project.

7. State the average cost per linear foot to construct the proposed transmission line on the currently proposed route.

ANSWER: The Owners have not calculated the cost per linear foot of constructing the Project. As stated in section 5.0 of the Application, the total estimated cost of the Project is \$293 to \$370 million in 2013 dollars. Of this amount, according to

section 5.0 of the Application, the cost of transmission line portion of the Project is \$265 million to \$342 million. As stated in section 2.0 of the Application, the Project includes approximately 160 to 170 miles of transmission line. These estimates can be used to calculate a range of anticipated costs for building each mile of the transmission line.

8. In answer to your Interrogatory No. 6 of Gerald Pesall's First Set of Discovery Requests, you indicate that road damage will be monitored and repaired. Describe in detail who will provide monitoring and repair services, and how they will be provided.

ANSWER: As part of the construction of the Project and the use of best management practices during the construction, it is expected that road damage, if any, will be minimal. Nevertheless, a person or party (*i.e.*, engineer, project manager, construction manager, construction contractor) will be assigned responsibility to monitor any road damage. At this time, the identity of the person or party responsible for monitoring any road damage has not been determined. The Project will work with the entity that has authority over the road in making a damage assessment. The Project plans to repair road damage either through either the use of a contractor or by compensating the government entity to restore the road. In addition, the bond required by the Commission in connection with the issuance of the permit will be available to provide security of payment for any road damage.

9. Describe in detail the impact, if any, applicants contend the construction of the proposed facility will have on the field-to-field transmission of soil and plant-born pests, including but not limited to the soybean cyst nematode, and the "sudden death syndrome" fungus, and any preventative measures applicants will take to prevent the transmission of the same during construction and ongoing maintenance of the proposed facility.

ANSWER: The Owners contend that the construction of the Project will have no impact on the field-to-field transmission of soil and plant borne pests. Based on the Owners experience in constructing, operating, and maintaining 5,700 miles of transmission lines in North Dakota, South Dakota, Minnesota, Montana, and Wyoming, the construction and maintenance of these lines has not materially contributed to the field-to-field transmission of soil or plant-born pests. Any field-to-field transmission of soil or plant-born pests would be no greater than would be expected as a result of standard farming practices, such as moving farming equipment between fields.

10. Describe in detail any alternative means by which applicants may comply with clean energy mandates imposed by the State of Minnesota in the event that the application is denied.

ANSWER: The Owners assume that the reference to "clean energy mandates imposed by the State of Minnesota" means renewable portfolio standards that apply in Minnesota, which requires that 25% of retail energy sales must come from

renewables by 2025 and 1.5% of retail energy sales coming from solar energy by 2020.

Montana-Dakota Utilities Co. is not subject to Minnesota's clean energy mandates because it does not serve customers within the State of Minnesota. Otter Tail Power Company ("OTP") does serve customers within the State of Minnesota and therefore is subject to the requirements imposed by Minnesota.

Regardless of whether the permit for the Project is granted or denied, OTP would embark on a similar approach to that which it has historically taken when adding generation resources to comply with Minnesota's clean energy mandates.

OTP currently provides about 19% of its total retail sales from wind energy. To date, all of OTP's wind energy has been added cost effectively.

As mentioned in sections 4 and 6 of the Application, the Project, along with the rest of the MVPs, will reduce the wholesale cost of energy delivery for consumers across MISO by increasing transmission capacity. If the Application is denied, the Project may not be built, thereby jeopardizing the benefits the MVP portfolio offers to the MISO region, which includes South Dakota. Without these benefits, energy prices in the MISO region could be higher, therefore increasing costs to consumers system-wide.

STATE OF NORTH DAKOTA)
COUNTY OF Burleigh) :SS.

Henry Ford, being duly sworn is the authorized agent of Montana-Dakota Utilities Co., for purposes of the response.

He states that he does not have personal knowledge of all the facts recited in the foregoing Responses of Montana-Dakota Utilities Co. and Otter Tail Power Company to Gerald Pesall's Second Set of Discovery Requests to Applicants, but the information has been gathered by and from employees, contractors of the owners of Big Stone South to Ellendale Project; and that the information is verified by him as being true and correct on behalf of the owners of the Big Stone South to Ellendale Project.

Dated this 7th day of April, 2014.

MONTANA-DAKOTA UTILITIES CO.

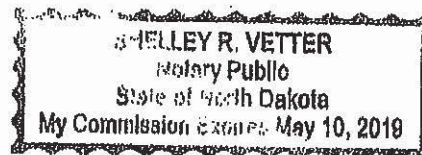
By [Signature]
Henry Ford
Its Director - Electric Transmission Engineering

Subscribed and sworn to before me this 7th day of April, 2014.

[Signature]

Notary Public
(SEAL)

My Commission Expires: _____



STATE OF MINNESOTA)
)
) :SS.
COUNTY OF Otter Tail)

Jason Weiers, being duly sworn is the authorized agent of Otter Tail Power Company, for purposes of the response.

He states that he does not have personal knowledge of all the facts recited in the foregoing Responses of Montana-Dakota Utilities Co. and Otter Tail Power Company to Gerald Pesall's Second Set of Discovery Requests to Applicants, but the information has been gathered by and from employees, contractors of the owners of Big Stone South to Ellendale Project; and that the information is verified by him as being true and correct on behalf of the owners of the Big Stone South to Ellendale Project.

Dated this 4th day of April, 2014.

OTTER TAIL POWER COMPANY

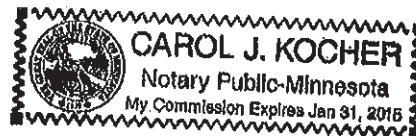
By Jason J. Weiers
Jason Weiers

Its Manager, Delivery Planning

Subscribed and sworn to before me this 4th day of April, 2014.

Carol J. Kocher
Notary Public
(SEAL)

My Commission Expires: Jan. 31, 2015



CERTIFICATE OF SERVICE

I, Jason R. Sutton, do hereby certify that I am a member of the law firm of Boyce, Greenfield, Pashby & Welk, LLP, attorneys for Montana-Dakota Utilities Co. and Otter Tail Power Company and that on the 7th day of April, 2014, a true and correct copy of Montana-Dakota Utilities Co. and Otter Tail Power Company's Answers to Gerald Pesall's Second Set of Discovery Requests to Applicants Dated March 5, 2014 was served via first-class mail to the following addresses listed:

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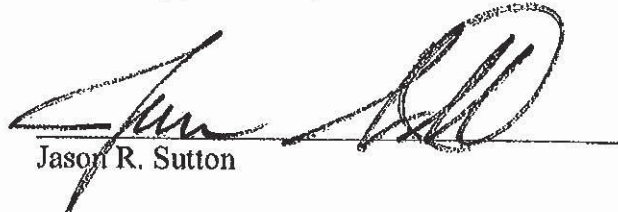
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