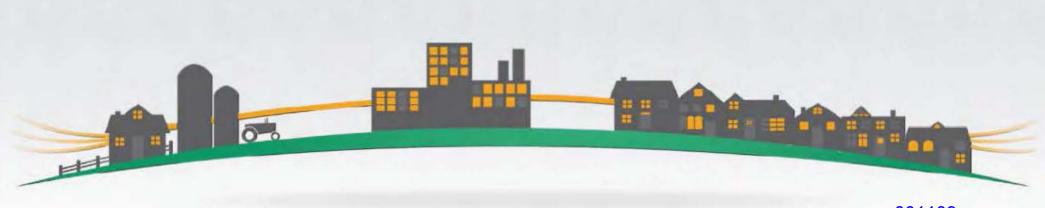


## **Public Hearing**

## October 2013





### Today's presentation will cover:

- Applicant overviews
- Project development
- Project overview
- Routing process
- Engineering design
- Project outreach
- Right-of-way
- Next steps



### Montana-Dakota Utilities Co.



- Headquartered in Bismarck, North Dakota
- Electric and/or natural gas service to parts of Montana,
   North Dakota, South Dakota, and Wyoming
- Service area covers about 168,000 square miles
- Approximately 312,000 customers



### Otter Tail Power Company



- Headquartered in Fergus Falls, Minnesota
- Electric service to parts of Minnesota, North Dakota, and South Dakota
- Service area covers about 70,000 square miles
- Approximately

   129,400 customers in
   422 communities



## Project development and benefits

### Project development

Project developed by MISO after several studies on future generation needs

Notice of Intent to construct was filed in SD on March 5, 2012 (within 90 days of MISO approval by statute)

SDPUC set Public Hearing date as October 17, 2013 (within 60 days by statute)

We are here

Approved by MISO in December 2011 Application for a Facility Permit filed with SDPUC on August 23, 2013 (within 18 months by statute)

- Project benefits
  - Enables the delivery of low-cost generation
  - Increases system reliability



### Local economic benefits

- Short term local economic benefits during construction
  - Construction expenditures (estimated range \$3 \$7 Million through construction period)
  - Other tax benefits: (estimated range \$5.5 \$9 Million)
    - Sales and use taxes
    - Contractor taxes
- Long term local benefits
  - Increased taxes paid to affected counties/townships
  - Estimated annual property taxes paid by Project:
    - \$715,000 \$885,000 in Brown County
    - \$535,000 \$755,000 in Day County
    - \$490,000 \$605,000 in Grant County



### Project overview



- New 345 kV transmission line
- Anticipated length: 160 miles to 170 miles
- Connect Ellendale substation to Big Stone South substation
- Anticipated total
   Project cost: \$293M –
   \$370M
- SD investment est. \$250M -\$320M
- In service in 2019



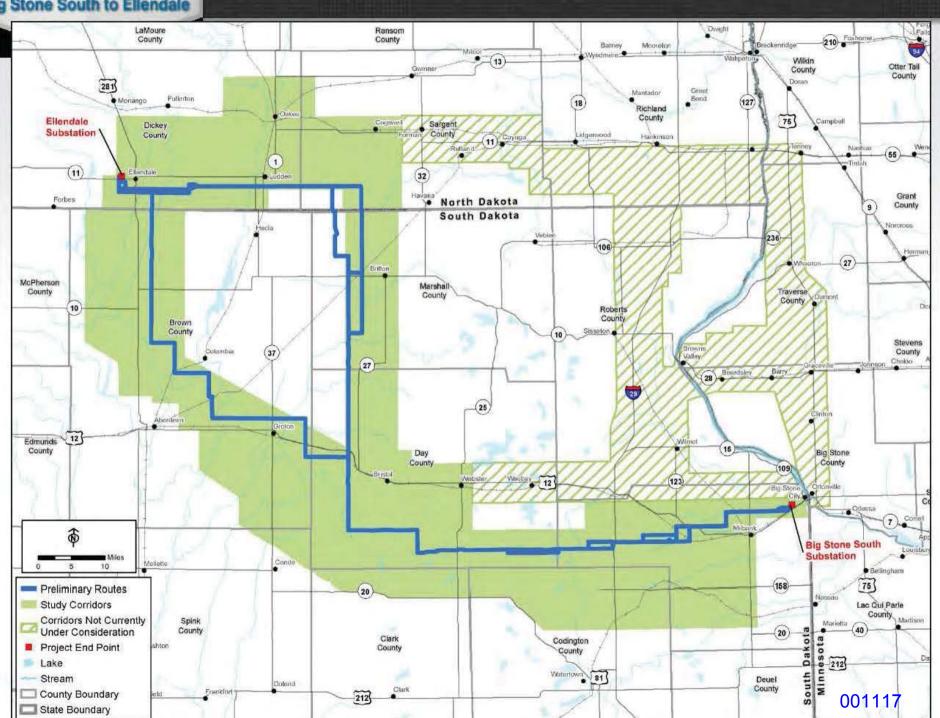
### Owners' routing criteria

### Information evaluated:

- Overall length and cost
- Existing high voltage transmission lines and transportation infrastructure
- Section lines
- Populated areas/residences
- Environmental and engineering considerations
- River crossing locations
- Public and agency feedback

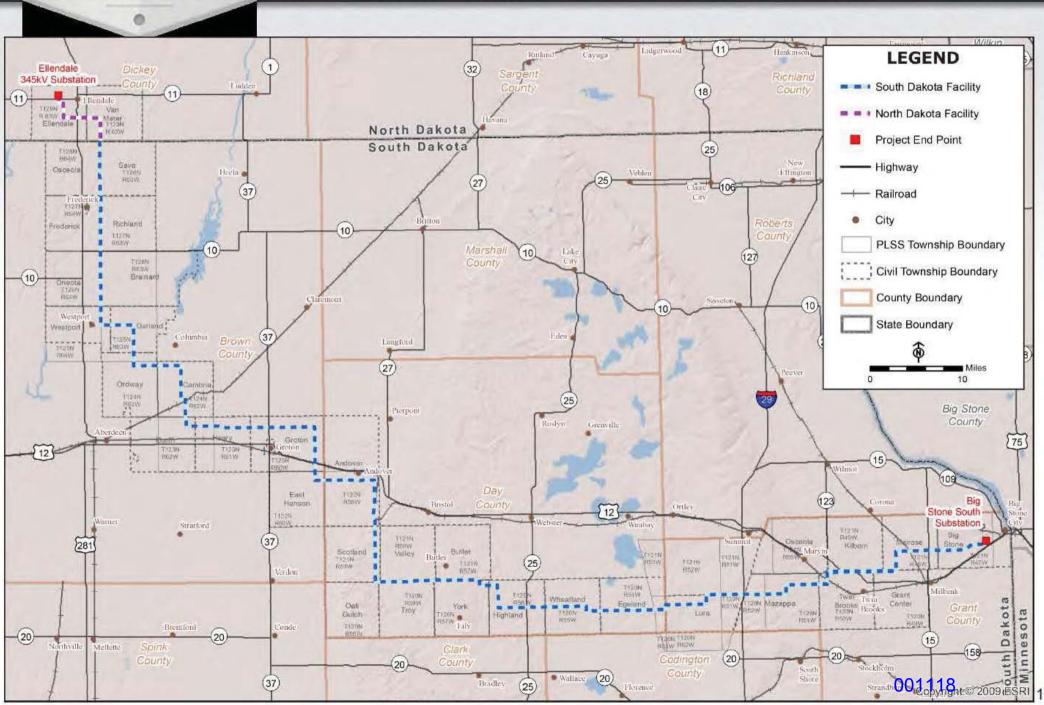


## Routing process: Preliminary Routes





## Routing process: Preferred Route





## Engineering design considerations



Average	
measure	ments
Above-grade height	125 - 155 ft
Foundation diameter	6 - 11 ft
Span	700 - 1200 ft
Structures per mile	5 - 6
Minimum ground clearance	30 ft



### Construction overview

- Survey structure locations and identify ingress and egress locations.
- Auger the holes where the structure poles will be set and pour foundation (if required).
- Assemble the structure on the ground adjacent to the holes/foundation.
- 4 Lift structure and place in hole or on foundation.
- 5 String wires.
- 6 Restore right-of-way and energize line.













### Project outreach summary

- Letters or postcards mailed (September 2012, October 2012, February 2013, April 2013, May 2013, June 2013, August 2013)
- Open house meetings (October 2012 & February 2013)
- Newsletters mailed (November 2012, June 2013, October 2013)
- County meetings (August 2012 & January 2013)
- Interagency meetings (August 2012 & January 2013)
- Tribal Agency meetings (October 2012, March 2013, May 2013, July 2013)



## Easement process as of October 14th

- Started contacting landowners on August 5, 2013
- Over 90% of the SD parcel owners have been contacted to date
- 94 options have been signed
- Nearly 30% of the SD project miles have options signed



## Next steps

2008-2012 Planning 2012-2014 Environmental review and permitting 2012-2016 Engineering design and right-of-way 2016-2019 Construction 2019 In service

We are here

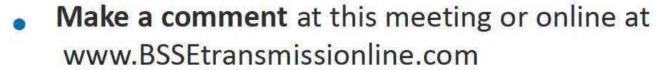


## Thank you!



# HOW TO STAY INFORMED and PROVIDE FEEDBACK:

- Visit our website at www.BSSEtransmissionline.com
- Call our toll-free information line: 1-888-283-4678
- Join our mailing list (online or at this meeting)
- Email us at: info@BSSEtransmissionline.com





#### Valuation Guidelines for Properties with Electric Transmission Lines

By: Kurt C. Kielisch, ASA, IFAS, SR/WA, R/W-AC

Before a discussion can be entered about the perception of electric transmission lines and their effect on property value, it is important to understand what a transmission line is and how it differs from a distribution line.

An electric transmission line is an electric line that transports electrical power from one substation to another. These lines are typically 100kV (kilovolts) or larger exceeding one mile in length<sup>1</sup>, have large wood or steel support towers over 45ft in height, and often have more than one set of wires (3 wires per circuit plus the static wire). Electric transmission lines do not directly serve electric utility customers: their power is distributed from distribution point to distribution point. Transmission line wires are not insulated and are "bare". Typically, they constructed to have at least 20ft of clearance between the ground elevation and wire at low sag.

An electric distribution line is a power line that transports electricity from the substation to the electric utility customers. These lines are of less voltage, typically under 65kV, carried on wood poles of 45ft in height or less and hold one pair of wires. The voltages of these lines are downgraded before the electricity is brought to the customer's residence or commercial building. The focus of this report is on "transmission" lines, not "distribution" lines

#### Perception = Value

The valuation of properties that have an electric transmission line requires an understanding of the basic principles of Market Value. Market Value is defined, in layman's terms, as the value a property would sell for at a given date considering an open market. (A complete definition of this term is included in the body of the appraisal report.) An open market assumes that the property is available for purchase by the public, being properly marketed for maximum exposure, and that the buyer is well informed, fully knowledgeable and acting in their best interest. Included in this definition is that the buyer has full knowledge of the pros and cons of the property, and then acts with that knowledge in a way that will benefit them. In other words, the value of the property is based on the perception of the buyer. Understanding that perception drives value is the foundation in analyzing the effect that electric transmission lines have on property value.

The key point of the Market Value definition, which gives guidance to answer the "impact" question, is the "willing buyer" part of the equation. In appraising a property the appraiser attempts to reflect the potential buyer of the subject property and estimate their action as to the subject property with all its advantages and disadvantages (knowledgeable buyer). To accurately reflect this buyer, the appraiser must determine the typical profile of such a buyer of the property in question. An example of this

would be a one bedroom condominium along a lake may indicate a typical buyer to be a retired couple who is looking for a recreational retreat for themselves and their guests. Another example would be a parcel with the best use being a dairy farm; the typical buyer would be a person either currently engaged in dairy farming looking to expand or relocate, or one who desires to enter into this field -- in either case a "dairy farmer." Such an analysis should be obvious, yet often overlooked when appraising properties.

For rural properties that are utilized for agricultural purposes, the most likely buyer would be one who: (1) prefers the rural lifestyle over the urban lifestyle; (2) typically generates their income from working in the agricultural field; (3) would be sensitive to environmental issues that affect the uses of the land and the view shed of the land; and (4) would be sensitive to health and safety issues relating to the land and its use.

It is most likely that such a person, when confronted with an electric transmission line traversing the property, would view such an improvement as aesthetically "ugly," potentially hazardous to their health, disruptive to rural lifestyle and potentially harmful to the use of the land for agricultural purposes.

#### **Research Format**

Our research into the impact of electric transmission lines followed several stages. The first was a "literature" study. This study involved investigating, collecting, indexing and reading many of the published articles, news stories and published transcripts relating to the topics of EMFs and stray voltage. Stray voltage was included in this research due to the concern dairy farmers have relating to its presence from high voltage power lines. This research resulted in over 2,500 pages of information collected and analyzed. The purpose of this study was to discover "what is the public's perception of high voltage transmission lines." Overall, the majority of the articles indicated a "fear" of these power lines, citing health concerns as the primary factor. Other concerns included stray voltage issues (mainly with rural publications) and aesthetics. It was clear that most of the information the public receives about these matters is negative. The literature study will follow these "guidelines."

The second part of our study involved researching studies completed on the effects on property value due to the presence of electric transmission lines. This included collecting many of the published research studies on this topic found in the public domain. Additionally, the study reviewed trade journals not available to the public, but available only to real estate professionals. Again, to be fair, some of the studies indicated that there was no measurable effect. However, there were a number of studies (mostly recent) that indicated there was a measurable effect and that effect ranged from a loss of 10% to over 30% of the overall property value. These studies included both improved and vacant land.

#### **Empirical Studies**

Below is a sampling of some studies we have reviewed regarding the impact that electric transmission lines have on land value and were utilized to formulate our opinion of value when a property is impacted by a high voltage transmission line.

Study of the Impact of a 345kV Electric Transmission Line in Clark County, Town of Hendren.

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(Appraisal Group One, Kurt C. Kielisch, 2006, revised 2009) This study was limited to Hendren Township, Clark County, and covered a five year time period from January 1<sup>st</sup>, 2002 to June 1<sup>st</sup>, 2006. This study included 22 land sales of agricultural and recreation land, of which 4 were encumbered with a 345kV electric transmission line having wood H-pole design, 60ft height and 150ft wide easement. The other 18 land sales were considered comparable to the power line encumbered sales. The conclusion of this study was that: (a) the land sales with an electric transmission line sold for 23% less than comparable land sales without a transmission line; and, (b) the more severe the location of the power line the greater was the loss of value.

- An Impact Study of a 345kV Electric Transmission Line on Rural Property Value in Marathon County Wisconsin. (Appraisal Group One, Kurt C. Kielisch, 2006) This study focused on the impact a 345kV line, known as the Arrowhead-Weston line, had on property value. This power line was a 345kV electric transmission line, having steel single poles ranging in height from 110ft to 150ft, single and double circuit lines, having a 120ft wide easement. The study compared sales within a 2 year time period (January 1<sup>st</sup>, 2004 to December 31<sup>st</sup>, 2005) in Marathon County, Wisconsin, focusing the area to the Townships of Cassel and Mosinee. This study used 14 land sales, of which 5 were encumbered with the power line and 9 were not. A simple regression technique and matched pair analysis was used to extract the value impact. The study concluded with a finding that when the power line traversed the property along the edge, such as a back fence line, the loss was as low as -15%, and when it bisected a large parcel the loss was as high as -34%. The properties were all raw land sales with either agricultural or residential land use.
- Transmission Lines and Property Values State of the Science (Electric Power Research Institute [EPRI], 2003). This study completed by EPRI for the benefit of its electric utility clients reviewed the issue of property values being impacted by electric transmission lines by summarizing research they had on the subject. Essentially they concluded that the results are mixed, some cases showing a loss in value ranging from 7-15% with appraisers who had experience with valuing such properties, to having no effect. Interestingly, it appeared in their survey that appraisers who did not have experience valuing such properties tended to overrate the negative effects.
- American Transmission Company, Zone 4, Northeast Wisconsin High Voltage Transmission Line Sales Study (Rolling & Company, 2005). This study researched the impact that high voltage electrical transmission lines have on property value in the northeast Wisconsin area. They collected information on 682 land sales of which 78 involved lots near a transmission line corridor, but not directly encumbered by the transmission line. Their conclusions were: (a) easement lots sold at about 12% less than lots located over 200ft from the transmission lines; and (b) no clear impact on "proximity" lots those that lie within 200ft from the easement area but are not directly subject to the easement.

- Properties Near Power Lines and Valuation Issues: Condemnation or Inverse Condemnation (David Bolton, MAI. Southwestern Legal Foundation. 1993). This study cites a number of studies that prove a loss of property value due to proximity to an electric transmission line and then cites his own study. His own study found that in the Houston area assessed values of properties that adjoined a power line easement had a 12.8% to 30.7% lower assessment than the average homes not on the line, but in the same area. He also found that: (1) many buyers refused to even look at such properties; (2) such properties took at least twice as long to sell; (3) some brokers said such properties can take three times longer and finally sell at a 25% loss of value; and (4) overall homes adjoining transmission line easements took six times longer to sell and experienced a 10% to 30% loss in value.
- Power Line Perceptions: Their Impact on Value and Market Time (Cheryl Mitteness and Dr Steve Mooney. ARES Annual Meeting paper. 1998) The authors interviewed homeowners on or near electric transmission lines and found: (1) that in relation to the average impact of overall property value, 33% said 2-3% loss and 50% said a 5% loss or greater; (2) nearly 66% said the power line negatively affected their property value; (3) 83% of real estate appraisers surveyed said the presence of the power lines negatively affected the property values, most saying the loss was 5% or greater.
- Analysis of Severance Damages (James Sanders, SRA, 2007) This study completed an analysis of the impact of a transmission line through the middle of the Continental Ranch subdivision outside of the Tucson, Arizona area. This subdivision had a wood H-pole high voltage electric transmission line running through a portion of the subdivision. The author compared the residential lots abutting the easement to ones that were not. All lots abutting the easement were much bigger than the non-easement abutting lots. The author used improved properties for his study and by the use of regression analysis isolated many variables of value for an improved property to remove them from the analysis. In conclusion, through extensive use of the regression technique, the author finds an overall loss to the improved properties abutting the power line easement at -12%. This loss is attributed to both the land and improvements. However, the author notes that the lots are typically twice the size of the non-easement lots. When the size of lots was factored the overall loss to the land only was factored at -40%. It should be noted that the residences were at a distance from the power line.
- The Peggy Tierney property: A Comparative Study of the Impact of a 69kV Transmission Line v. 345kV/69kV Transmission Line (Kurt C. Kielisch). This was a brief study on the impact difference, if any, between an existing 69kV transmission line and a new proposed 345kV and 69kV transmission line on the same property. The property was a 3.70 acre residential lake front improved property that had an existing 69kV transmission line crossing the west half of the parcel along the road and required the property owner to cross under the power line to enter the parcel. The 69kV line had an easement width of approximately 100ft, wood H-poles at 50-60ft in height. The new 345kV line was to be placed within the existing easement, more or less, would have 140ft monopoles and carries both a 345kV and 69kV line. The seller attempted to sell the property at its full list price after an experienced lake front home Realtor established the list price from a comparative sales analysis. The home eventually sold for 27% less than the list price and took longer to sell in a relatively strong lake front home market. The buyer cited the pending 345kV line as the principle reason for their low offer.
- A comparative sales analysis to isolate the percentage of loss a residential and/or agricultural

land use property suffers due to the presence of a high voltage electric transmission line (HVTL). This study was found in an appraisal completed by Aari K. Roberts for American Transmission Corporation (ATC) on the Herbert Bolz property located in the Town of Rubicon, Dodge County, Wisconsin. Mr. Roberts compared the sale of a rural agricultural 24 acre land parcel that had an HVTL crossing the property, to three comparable agricultural land sales of comparability that did not have a HVTL. His sales comparison study concluded that the property with a HVTL suffered a 29% loss of value due to the presence of the HVTL. This study was completed in September 2007.

A sales analysis of the property located at: N8602 CTH D, Town of Deer Creek, Outagamie County, Wisconsin. This is a single family home located on 3.19 acres in the rural area of Outagamie County. The home was a ranch style residence with 1,500sf GLA, attached 2-car garage, 8/3/2 room count, full basement and was in average condition overall. The property also had a 104ft x 52ft pole barn and two other outbuildings. There were two appraisals completed on this property, one by the condemnor (ATC) and one by the property owner. The average Before taking value of the two appraisals was \$221,000. The property was then improved with a 345kV & 138kV electric transmission line having 126ft pole height and was placed along the roadside reaching 68ft into the property. The edge of the easement was in less than 20ft to the residence, however the placement of the pole was as close to the roadway right-of-way as possible. The condemnor American Transmission Company (ATC) purchased the property and installed the transmission line. Then they upgraded the property with new paint, doors, sinks, dishwasher and flooring, plus cleaned the premises and outbuildings. ATC put the property on the market asking \$179,900 a number established by the appraiser for ATC as the After value. It was sold for \$128,500 10 months after ATC purchased it.

The Before taking average value was \$221,000. The property was then improved and upgraded at an expense estimated to be \$8,000-\$10,000, then resold 10 months later with the transmission lines in place for \$92,500 less or 42% less. The only differences between the Before taking market value and After taking sale price were the transmission line and time. A review of the Outagamie County market between November 2008 and September 2009 shows only a small downward trend in rural residential property value, therefore the biggest part of the loss is attributed to the presence and near proximity of the transmission line that being 38%-40%.

• The Gene Laajala property: A Comparative Study of the Impact of a 161kV Transmission Line v. 345kV/161kV Transmission Line (Kurt C. Kielisch). This was a brief sales study on the impact difference, between an existing 161kV transmission line and a new 345kV/161kV transmission line on the same property. The property was a 20 acre rural agricultural and residential property that had an existing 161kV transmission line bisecting the parcel along the east side. The 161kV line had an easement width of approximately 120ft, wood H-poles at 50ft± in height. This line was replaced with an upgraded easement comprised of 345kV/161kV line which was to be placed within the existing easement, more or less, and had (2) 110ft and (3) 120ft steel H-poles. The property was appraised in January 2007 with a Before condition value of \$204,500 using the Cost approach and \$185,500 using the Comparable Sale approach, by Ted Morgan, MAI. (The whole property appraised was 40 acres and the 20 acre parcel was portion out of this whole). The ATC appraiser did not appraise the home in the Before condition, but did conclude the Before taking land value was \$44,000 for 20 acres (using his \$2,200/acre conclusion for 40 acres) and the assessed value of the improvements were \$107,600, indicating a \$151,600 Before

value. The property sold and closed in October 2007 for \$120,000. The seller attributes the loss to the new power line, it being larger and more lines. The loss indicated was \$65,500 (using Morgan's Comparable Sales value) or \$31,600 (using ATC's land plus assessed improvement value), indicating a loss range of 35% to 21%.

• An Impact Study of the Effect of High Voltage Power Lines on Rural Property Value in Southwestern Indiana (Kurt C. Kielisch, Appraisal Group One, 2010). This study was based in southwest Indiana in Gibson County. It was focused on large agricultural land and the impact of a high voltage transmission lines (HVTL) varying in size from monopole to large steel lattice towers. The study included 32 land sales of which10 were HVTL sales. The time period was January 1<sup>st</sup>, 2006 to December 31<sup>st</sup>, 2009. Adjustments were made for time, location and other utility easements (if any) and the results were graphed to compare the non-HVTL land sales to the HVTL land sales. The study concluded that the power lines negatively impacted the property with an impact range from -5% to -36% with the average impact being -20%.

#### Other Value Issues

Another issue relating to the presence of the transmission line is potential for the creation of an "utility" corridor. Such a corridor is a where several utility transmission lines are placed, such as gas transmission pipelines and communication lines. Indeed, the State of Wisconsin made it a legislative rule that future placement of such utilities are to be given preference to "existing utility corridors." An electric transmission line meets the definition in this statute as an existing corridor. This "corridor" concept continues to grow in the perception of the public as such rules become more commonly known. The reality of such an event happening is the placement of the Arrowhead-Weston Power line, which was often placed within an existing utility corridor such as an oil transmission pipeline, smaller electrical transmission lines or abandoned electric transmission line easements. The very power line that is the focus of this analysis is further proof of the corridor effect for it has been expanded, enlarged and added circuits within the existing easement.

Other factors to consider regarding the valuation of HVTL impacted rural properties are agricultural equipment concerns operating under and near the line, health issues of workers in close proximity of the lines, health concerns of farm animals in close proximity of the lines, stray voltage, the concerns of public in relation to electro-magnetic fields, safety issues regarding bare wires of the transmission line and other concerns addressed in the literature study to follow.

In conclusion, it can be stated with a high degree of certainty that there is a significant negative effect ranging from -10% to -30% of property value due to the presence of the high voltage electric transmission line. The actual loss depends on factors of land use, location of the power line and its size.

#### **Literature Study**

#### **HVTL Impacts on Rural and Agricultural Properties**

Throughout the nation's rural communities, literature research suggests that the presence of an HVTL easement can have a noticeable impact on both the use and appeal of rural properties and farms. Common concerns include stray voltage, health risks to livestock and cattle, diminished livelihoods and heritage, limited land use, and lessened aesthetic appeal. As the following literature survey will show, many different issues play a role in shaping one's perception of the impact of HVTLs on rural property values.

#### Stray Voltage

To understand the potential impact of HVTLs on rural land, it's important to discuss a key component in many farmers' apprehension about HVTLs: stray voltage.

Stray voltage is the rural equivalent of the high-profile residential Electromagnetic Field (EMF) factor, but instead of fearing leukemia or brain cancer, farmers fear their animals will become unproductive, ill, and even die.

Whenever energy is transferred, some is lost along the way. If metal buildings are near leaking energy, they can act as a conduit for voltage to find its way to feeding systems, milking systems and stalls.

In their 1995 presentation, "Stray Voltage: The Wisconsin Experience," a team of researchers led by Mark Cook and Daniel Dascho stated that farmers most worry that stray voltage will increase somatic cell count in their animals, make cows nervous, reduce milk production, and increase clinical mastitis.<sup>3</sup>

"Few issues are more upsetting to dairymen than fighting case after case of clinical mastitis with more and more cows in the sick pen," writes Dr. Winston Ingalls. "It represents extra time to properly handle such cows, lost production, vet calls, treatment products, concern about contaminated milk and an occasional dead or culled cow."

In Cook & Dascho's presentation, they discuss their findings from a non-random sampling study of farms with stray voltage complaints stemming from a nearby substation. Their research team found no significant relationship between cow contact current and distance from the substation or contact currents. However, they also noted that cow contact current depends on many physical factors from on-farm and off-farm electrical power systems. They say, "There are many confounding factors that may outweigh the impacts of stray voltage which makes it difficult to draw conclusions from field studies about its effects on production and animal health."

<sup>3</sup> **Stray Voltage: The Wisconsin Experience.** Written for presentation at the 1995 International Meeting by Mark A Cook, Daniel M Dascho, Richard Reines and Dr. Douglas J Reinemann.

<sup>4</sup> Clinical Mastitis. Winston Ingalls, Ph.D. GoatConnection.com. August 2, 2003.

http://goatconnection.com/articles/publish/article 173.shtml

<sup>5</sup> **Stray Voltage: The Wisconsin Experience.** Written for presentation at the 1995 International Meeting by Mark A Cook, Daniel M Dascho, Richard Reines and Dr. Douglas J Reinemann.

In a 2003 study prepared for the NRAES Stray Voltage and Dairy Farms Conference, a research team conducted by the University of Wisconsin-Madison and led by Dr. Douglas J Reinemann studied the effects of stray voltage on cows at four dairy farms over a two-week time period. He and his team found that after the first few days of exposure, cows quickly acclimated to the presence of stray voltage. They also found that stray voltage of 1mA had little effect on the immune system of a cow.<sup>6</sup>

Concerning EMF levels, they noted that "even though man-made signals were larger than the naturally occurring currents, levels are significantly lower than what is considered sufficient earth current strength to develop step potential anywhere near the Public Service Commission 'level of concern."

Stray voltage is usually undetectable by humans, and some researchers believe it occurs when electricity escapes a power line or wiring system and emits a secondary current. The problem intensifies with older barns that add automated electrical equipment, "raising ambient levels of current. Soon the cumulative effect of these secondary currents becomes harmful to cows." Though stray voltage can be measured, experts don't know how and why it happens or what conclusive effect (if any) it has on animals.<sup>8</sup>

Despite little concrete evidence, courts have compensated farmers for their losses due to stray voltage when all other factors are eliminated. In 1999 a jury awarded Peterson Bros. Dairy \$700,000 after deciding that stray voltage from an automated feeding system from Maddalena's Dairy Equipment of Petaluma, California slashed the herd's milk output and increased the cow's death rate.<sup>9</sup>

The company's defense attorney called stray voltage "junk science," the Petersons' claim of stray voltage in the milk barn a "harebrained theory" unsupported by electrical engineers, and blamed the herd's health problems on the Petersons' own mismanagement.<sup>10</sup>

In a similar case in Wisconsin in 2004, a dairy operation owned by George and Kathy Muth successfully sued Wisconsin Electric Power Co. (now We Energies) for negligence in the maintenance and operation of a distribution system on their farm. They claimed that the system led to stray voltage that injured and killed several of their dairy cows and damaged their milk production. The utility said that the levels of stray voltage were "extremely low" and were levels you could find anywhere.<sup>11</sup>

<sup>6</sup> Dairy Cow Response to the Electrical Environment: A Summary of Research conducted at the University of Wisconsin-Madison. Paper presented at the NRAES Stray Voltage and Dairy Farms Conference. Dr. Douglas J. Reinemann. April 2003.

<sup>7</sup> Results of the University of Wisconsin Stray Voltage Earth-Current Measurement Experiment. A revised version of a report submitted to the State of Wisconsin Legislature on June 25, 2003. Written by David L Alumbaugh and Dr. Louise Pellerin.

<sup>8</sup> Jury gives \$700,000 to dairy farmers for losses blamed on "stray voltage." Author Unknown. The Associated Press. April 21, 1999.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Power company negligent in dairy suit; Jury awards \$850,000 to couple over effect of stray voltage on cows. Lauria Lynch-German. Milwaukee Journal Sentinel. February 27, 2004.

The farmers said that shortly after moving to their new location, they faced low milk production, excessive illnesses, and deaths of cows. <sup>12</sup> The cows didn't walk right or act normal. They didn't want to go into the barn, inside, or into the stalls. The Muths examined everything from the animals' food to their bedding until consultants told them it could be stray voltage. In one year, they lost 15-18 cows and calves. Autopsies were inconclusive. <sup>13</sup>

After reviewing herd management and nutrition, they hired a consultant who detected stray voltage. Later that year the utility found no stray voltage problems. The farmers further consulted with veterinarians and tested and ruled out all the other factors except for stray voltage.<sup>14</sup>

The farmers hired an electrician to upgrade the farm's wiring, but it didn't decrease the stray voltage. After being asked, the utility made some other changes, but this also had no effect. Further consultants still found stray voltage from a conductor on the utility's distribution lines. A couple years later the utility removed a piece of underground electrical equipment and the herd immediately recovered...though the level of stray voltage remained the same.<sup>15</sup>

The utility's attorney stated that being able to measure something doesn't make it harmful. He cited several federal and state studies that say the current must be 2 milliamps or higher to adversely affect cattle and said no reading on their farm reached that level.<sup>16</sup>

The jury awarded the dairy farm \$850,000 in damages. 17

Stray voltage fears aren't limited to dairy or cattle operations. Max Hempt, a horse farm owner in Pennsylvania, tried to oppose a proposed 9-mile 138kV HVTL because he feared that the line's EMFs caused by stray voltage could cause sterility and death among his horses.<sup>18</sup>

Though it's difficult to prove a significant presence of stray voltage, and even more difficult to prove a direct correlation between stray voltage and poor health, courts have awarded farmers sizable judgments to compensate them for damaging stray voltage from nearby power lines.

In 2002, one such case in Iowa made it to the state supreme court where the court upheld a \$700,000 judgment to a dairy farmer who argued that stray voltage from nearby power lines injured his herd. A substation sits less than a quarter mile from his farm. He said he often got electric shocks from the metal buildings on the farm. Also, he said his herd acted oddly, appearing frightened and refusing to enter barns. Milk production also suffered.<sup>19</sup>

<sup>12</sup> Jury must decide in voltage complaint; Farm family says stray power harmed dairy herd. Lauria Lynch-German. Milwaukee Journal Sentinel. February 5, 2004.

<sup>13</sup> Dairy farm owner testifies that stray voltage killed cows in his herd. Lauria Lynch-German. Milwaukee Journal Sentinel. February 10, 2004.

<sup>14</sup> Jury must decide in voltage complaint; Farm family says stray power harmed dairy herd. Lauria Lynch-German. Milwaukee Journal Sentinel. February 5, 2004.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

<sup>17</sup> Power company negligent in dairy suit; Jury awards \$850,000 to couple over effect of stray voltage on cows. Lauria Lynch-German. Milwaukee Journal Sentinel. February 27, 2004.

<sup>18</sup> Farmer Fears Stray Voltage From PP&L 138 kV Line Could Harm His Horses. Author Unknown. Northeast Power Report. June 24, 1994.

<sup>19</sup> Court upholds stray voltage judgment. Mike Glover. The Associated Press. October 10, 2002.

The defendant, Interstate Power Co., said that "there's an inherent risk to transmitting electricity" and it shouldn't be vulnerable to such lawsuits unless they were negligent. The court ruled in favor of the dairy farmer, citing the lack of a statute exempting electric utilities from nuisance claims.<sup>20</sup>

One year later the Wisconsin Supreme Court similarly found "that a utility can be held responsible for harming the health of a dairy herd with stray voltage even though state-recommended voltage tests did not find potentially damaging levels where the animals congregated."<sup>21</sup>

As the preceding case studies show, courts have acknowledged stray voltage and its possible effects. However, to fully understand the apprehension surrounding power lines, one must examine the EMF debate and its fear factor.

#### **EMFs** and Fear

In 1990, the EMF debate was so prevalent that members of Congress passed a bill that would limit the public's exposure to EMFs. A couple years later, in response to public concern about EMFs, Congress established the EMF-RAPID program in 1992. Its purpose was to coordinate and execute a limited research program to fill information gaps concerning the potential health effects of exposure to EMFs, to achieve credibility with the public that previous research has not earned, and to coordinate and unify federal agencies' public messages about possible EMF effects. The program originally was to receive \$65 million in funding, but total funding is expected to be \$46 million.

Several years later in 1999, the National Institute of Environmental Health Sciences studied the health effects of EMF exposure and found conflicting results. Though they concluded that the evidence is weak linking EMFs to health risks, they also found that the most common health risk was leukemia (mostly appearing in children). They also found a fairly consistent pattern of a small, increased risk of childhood leukemia with increasing exposure. The majority of the panel's voting members voted to acknowledge EMFs as a possible human carcinogen. They concluded that ELF-EMF exposure cannot be recognized as entirely safe because of weak scientific evidence.<sup>25</sup>

In 2005, UK scientists conducted a case-control study on childhood cancer in relation to distance from high voltage power lines in England and Wales. They found an association between childhood leukemia and proximity of home address at birth to HVTLs. "The apparent risk extends to a greater distance than

<sup>20</sup> Ibid.

<sup>21</sup> Utility liable for stray voltage, high court says. Don Behm. Milwaukee Journal-Sentinel. June 26, 2003.

<sup>22</sup> **Electric Powerlines:** Health and **Public Policy Implications** – Oversight Hearing before the Subcommittee on General Oversight and Investigations of the Committee on Interior and Insular Affairs House of Representatives, 101<sup>st</sup> Congress, second session on electric powerlines: health and public policy implications. March 8, 1990.

<sup>23</sup> **Electric and Magnetic Fields Research Program** by Mr. Mukowski from the Committee on Energy and Natural Resources. 105<sup>th</sup> Congress, first session. June 12, 1997.

<sup>24</sup> Ibid.25 NIEHS Report on Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields.Released by the National Institute of Environmental Health Sciences on May 4, 1999.

would have been expected from previous studies" although they have yet to discover an "accepted biological mechanism" to explain their results. 26

Though an accepted biological mechanism remains elusive, an early nineties case made it possible to link loss of property value to a fear of EMFs. In the 1993 case, *Criscuola v. Power Authority of the State of New York*, the court found that, "there should be no requirement that the claimant must establish the reasonableness of a fear or perception of danger or of health risks from exposure to high voltage power lines" and "Whether the danger is a scientifically genuine or verifiable fact should be irrelevant to the central issue of its market value impact."<sup>27</sup>

Utilities say that landowners should not be able to recover damages or injunctive relief "based on myth, superstition or fear about an alleged health risk that is not supported by substantial scientific or medical evidence."<sup>28</sup>

With the EMF debate unresolved, and evidence for both sides of the argument, some communities are reluctant to approve new HVTLs...and may even legally oppose them.

In an effort to preempt public opposition, Public Service Enterprise Group offered hundreds of thousands of dollars to New Jersey towns opposing its proposed HVTL project if the towns dropped all opposition and didn't comment on the payments. Opponents called them "bribes." The utility called them "settlements" to help minimize impacts of the project on towns and residents.<sup>29</sup>

Some towns accepted payment, but the majority did not. Either they said they didn't have enough time to respond to the offer, or they rejected them as payoffs. One of the opposing mayors, Mayor James Sandham of Montville, said it's not about the money; "It's about safety and property values." <sup>30</sup>

#### **HVTLs and Property Values**

Fear can impact the public's buying habits. Residential homeowners' resistance to abutting HVTLs is well documented. Though homeowners may fear negative effects on their community and environment, their first point of opposition is usually safety, especially if there are many children in the neighborhood. Though the 1979 Wertheimer study linking EMFs to childhood leukemia has long been contested, supported, and contested again, the very existence of a debate about the safety of EMFs sows enough doubt in residents' minds to justify the fear. And that fear can influence the values of nearby homes. 33 34 35 36

<sup>26</sup> Childhood cancer in relation to distance from high voltage power lines in England and Wales: a case-control study. Gerald Draper, Tim Vincent, Mary E Kroll, John Swanson. British Medical Journal (bmj.com). June 3, 2005.

<sup>27 &#</sup>x27;Criscuola' - The Sparks Are Still Flying. Michael Rikon. New York Law Journal. April 24, 1996.

<sup>28</sup> High Court Hears Arguments Today on EMF Claims. Todd Woody. The Recorder. June 6, 1996.

<sup>29</sup> Opponents of \$750M N.J. power line project argue towns were paid to drop opposition. <u>Lawrence Ragonese.</u> <u>The Star-Ledger</u>. January 31, 2010.

<sup>30</sup> Ibid.

<sup>31</sup> NY Power Line Opponents Win Court Fight. Associated Press. New York Post. February 20, 2009.

<sup>32</sup> Lines in Sand and Sky. B.Z. Khasru. Fairfield County Business Journal. September 3, 2001. Vol. 40 Issue 36, p3, 2p.

<sup>33</sup> Power line plan concerns metro residents. Melissa Maynarich. News 9 (Oklahoma). July 22, 2008.

When given the choice to purchase two identical homes, one with such health concerns and the other without, most buyers will choose the home without the concern, <sup>37</sup> forcing the homeowner to lower their price. Aesthetic impact can also influence a property's value. Many residents don't want to look at HVTLs, <sup>38</sup> something they consider to be an "eyesore." <sup>39</sup>

One of the hardest properties to sell can be one encumbered by an HVTL. Unlike roadway proximity, its effect isn't readily noticeable or measurable. Though homes near HVTLs typically have larger lots (and that can be a benefit), the biggest disadvantage is the fear factor surrounding EMFs.<sup>40</sup>

In the early nineties, when EMFs were just entering the public consciousness, it was difficult to find a measurable price difference between homes close to an HVTL and those that were not.<sup>41</sup> However, two researchers (Hsiang-te Kung & Charles F Seagle) conducted a case study on the impact of power transmission lines on property values and found that such negligible results depended almost entirely on the public's ignorance of EMFs and their related issues. They also found that the amount of potential property loss increased dramatically the more homeowners were aware of the potential health impacts of EMFs.<sup>42</sup>

The effect of HVTLs on property values has long been a matter of contention with many studies either proving a diminutive effect or none at all. Methodologies differ and different areas of the country register different results. Some markets (ex. high-end homes) are very sensitive to HVTLs whereas others (ex. low-end homes) hardly notice them. The size of the line and the pylons are also a factor. A 69kV power line will have less effect than will a 1,200kV power line. Distance from the easement also matters. Some studies combine homes thousands of feet from HVTLs with those directly encumbered. Research sponsors also may play a factor with many being funded by the utilities themselves.

For example, in a 2007 study funded by a utility, researchers Jennifer Pitts and Thomas Jackson conducted market interviews, literature research and empirical research and reported little (if any) impact of power lines on property values. However, they did note that there is an increasing recent opinion that proximity to power lines has a slight negative effect on property values.<sup>43</sup>

<sup>34</sup> Power Line Worries Landowners. Ben Fischer. The Wisconsin State Journal. June 3, 2006.

<sup>35</sup> Lines in Sand and Sky. B.Z. Khasru. Fairfield County Business Journal. September 3, 2001. Vol. 40 Issue 36, p3, 2p.

<sup>36</sup> Commissioners voice opposition to transmission lines. David Rupkalvis. The Graham Leader. February 9, 2010.

<sup>37</sup> **Real Estate Agents on Property Value Declines.** 4 Realtor opinion letters submitted to residents in the Sunfish, MN area whose properties are being affected by an HVTL. 38 **Ibid**.

<sup>39</sup> Power line plan concerns metro residents. Melissa Maynarich. News 9 (Oklahoma). July 22, 2008.

<sup>40</sup> High Voltage Transmission Lines, Electric and Magnetic Fields (EMF's) And How They Affect Real Estate Prices. David Blockhus. January 3rd, 2008. <a href="http://siliconvalleyrealestateinfo.com/electric-and-magnetic-fields-emfs-and-how-they-effect-real-estate-prices.html">http://siliconvalleyrealestateinfo.com/electric-and-magnetic-fields-emfs-and-how-they-effect-real-estate-prices.html</a>

<sup>41</sup> Impact of power transmission lines on property values: A case study. Hsiang-te Kung & Charles F Seagle. Appraisal Journal. Vol. 60, Issue 3, p.413, 6p. July 1992. 42 Ibid.

<sup>43</sup> Power lines and property values revisited. Jennifer M. Pitts & Thomas O. Jackson. Appraisal Journal. Fall, 2007.

Two California appraisers, David Harding and Arthur Gimmy, published a rebuttal to the Pitts-Jackson study that disagreed with their methodology, took issue with their sponsor, addressed omitted information, and failure to conduct before-and-after cost comparisons.<sup>44</sup>

Pitts and Jackson responded to the rebuttal and defended their methodology, saying they purposely limited their literature research to only include empirical, peer-reviewed articles from The Appraisal Journal and the American Real Estate Society journals. They acknowledged they conducted the research for "a litigation matter" but did not elaborate on their sponsor. 45

In a similar case, researchers James A Chalmers and Frank A Voorvaart published a large study spanning nearly 10 years and over 1,200 properties in which they found that an encumbering HVTL had only a small negative effect on the sale price of a residential home. In half of their samples they found consistent negative property values mostly limited to less than 10%, with most between 3%-6%. 46

They summarized their findings as showing "no evidence of systematic effects of either proximity or visibility of 345-kV (kilovolt) transmission lines on residential real estate values."

They did, however, say that "An opinion supporting HVTLs effects would have to be based on market data particular to the situation in question and could not be presumed or based on casual, anecdotal observation. It is fair to presume that the direction of the effect would in most circumstances be negative, but the existence of a measureable effect and the magnitude of such an effect can only be determined by empirical analysis of actual market transactions."<sup>48</sup>

Appraiser Kerry M. Jorgensen disagreed with the authors' views that paired data analysis and retroactive appraisal were "too unrefined and too subjective to be of much value," and that only through objective statistics could the effect of HVTLs on property value be truly understood. He argued that relying too much on statistics can be dangerous as there could be problems with how the data is compiled and interpreted. For example, he points out that out of their set of 1,286 qualifying sales, only 78 (6%) are directly encumbered by a power line easement, and only 33 (2.6%) more are within 246 feet of a power line easement.

<sup>44</sup> Comments on "Property Lines and Property Values Revisited." (Letter to the editor) David M. Harding & Arthur E. Gimmy & Thomas O. Jackson & Jennifer M. Pitts. <u>Appraisal Journal</u>. Winter, 2008. <a href="http://www.entrepreneur.com/tradejournals/article/176131510.html">http://www.entrepreneur.com/tradejournals/article/176131510.html</a>

http://www.entrepreneur.com/tradejournals/article/176131510.html 45 lbid.

<sup>46 &</sup>lt;u>High-Voltage Transmission Lines: Proximity, Visibility, and Encumbrance Effects</u>. James A Chalmers and Frank A Voorvaart. The Appraisal Journal via the Appraisal Institute website. Volume 77, Issue 3; Summer, 2009; pages 227-246. Reposted by CostBenefit of the Environmental Valuation and Cost-Benefit News blog -

 $<sup>\</sup>frac{http://www.envirovaluation.org/index.php/2009/11/09/high-voltage-transmission-lines-proximity-visibility-and-encumbrance-effects$ 

<sup>47</sup> Power Lines Don't Affect Property Values. The Appraisal Journal. July 30, 2009.

http://www.appraisalinstitute.org/about/news/2009/073009 TAJ.aspx

<sup>48</sup> High-Voltage Transmission Lines: Proximity, Visibility, and Encumbrance Effects. James A. Chalmers, PhD and Frank A. Voorvaart, PhD. The Appraisal Journal. Summer 2009. Pgs. 227-245.

<sup>49</sup> Letters to the Editor. Kerry M. Jorgensen. Appraisal Journal. January 1, 2010.

http://www.thefreelibrary.com/Comments+on+"high-voltage+transmission+lines:+proximity,+visibility,...-a0220765052

The Chalmers-Voorvaart study also attracted the interest of Washington Post Real Estate writer Elizabeth Razzi who wrote that the study was paid for by Northeast Utilities and completed before they proposed a high-voltage transmission grid in New England. She also wrote that both Chalmers and Voorvaart are appraisers and expert witnesses for the power industry.<sup>50</sup>

Several studies have found that, over time, property value damages from nearby HVTLs diminish though properties near the pylons stay permanently damaged no matter the elapsed time.<sup>51</sup> In the first case, though the property owner may grow accustomed to HVTLs and thus think less of them, new potential buyers aren't as sensitized and the diminutive impact is fresh to them.

Realtors usually oppose HVTLs. Nearly all surveyed realtors and appraisers in the Roanoke and New River valleys of Virginia said that close proximity to HVTLs would diminish property values by as much as \$25,000, but mostly for high-end homes. Lower-end homes see little impact.<sup>52</sup>

Diminished property values can also impact communities. In one case, Delaware residents were worried that a proposed 1,200 megawatt HVTL would depress local property values, thus weakening the local tax base and leading to higher taxes to offset the losses. Kent Sick, author of a 1999 paper on power lines and property values, projects losses from a few percentage points to 53%. 53

In Atlanta, a local realty group named Bankston Realty ranked power lines as the number one item that damages resale value, followed closely by busy roads and inferior lot topography. They advise buyers to pay 15% less of the asking price if power lines are present, and they advise sellers to accept it as a logical perception of value.<sup>54</sup>

Evidence suggests that HVTLs affect the health of residents in close proximity to lines 345kV and higher. Evidence also suggests that the power lines have little to no impact on property values because encumbered lots are often larger and more private than unencumbered lots, resulting in no diminution of purchase price. However, most studies did observe longer time on the market for encumbered properties.<sup>55</sup>

#### **Rural Impact**

Now that the reader is aware of stray voltage, EMFs, and property values, the reader will have a deeper understanding of the potential effects of HVTLs on rural land throughout the United States.

<sup>50</sup> **Do High-Voltage Lines Zap Property Values?** Elizabeth Rassi. Local Address. August 4, 2009. http://voices.washingtonpost.com/local-address/2009/08/do high-voltage lines zap prop.html

<sup>51</sup> The Effect of Public Perception on Residential Property Values in Close Proximity to Electricity Distribution Equipment. Sally Sims, B.Sc. Paper presented to the Ph.D. Forum at the Pacific Rim Real Estate Society Conference. January 2002. This is the first part to the study.

<sup>52</sup> A Question of Power: Part III – Realtors: High voltage lines lower property values. Leslie Brown. Roanoke Times. 1998. <a href="http://www.vapropertyrights.org/articles/98lineslowervalues.html">http://www.vapropertyrights.org/articles/98lineslowervalues.html</a>

<sup>53</sup> Expert: Power lines hurt property value, market research shows sellers lose up to 53 percent. Elizabeth Cooper. Gannett News Service. May 20th, 2006.

<sup>54</sup> Atlanta Homes and Resale Value... Power lines are a definite NO. The Bankston Group. July 17, 2008. <a href="http://atlantaintheknow.com/2008/07/17/atlanta-homes-and-resale-value-power-lines-are-a-definite-no/">http://atlantaintheknow.com/2008/07/17/atlanta-homes-and-resale-value-power-lines-are-a-definite-no/</a> 55 High Voltage Power Lines Impact On Nearby Property Values. Ben Beasley. Right of Way Magazine. February 1991.

In Goodhue County, Minnesota, an area locally known for protecting agriculture, CapX2020 (a utility consortium) is proposing to build a 345kV HVTL through the county that may be doubled to 690kV. Local landowner Linda Grovender voiced her concern in a 2010 letter to the editor of the Cannon Falls Beacon. She worries that the line, proposed to traverse residential and agricultural lands instead of following existing utility right-of-way, will have an adverse effect on her family's health (due to EMFs), jeopardize agricultural interests, result in lost agricultural productivity, and damage property values. She wrote that if the proposed 345kV HVTL is doubled to 690kV (as it legally could be) it could have an adverse effect on her family's health, jeopardize agricultural interests, result in lost agricultural productivity, and damage property values. The state of the county of the county

Elsewhere n Minnesota, Dairyland Power Cooperative (one of the chief members of CapX2020) surveyed rural landowners for their opinion regarding the proposed HVTL in their area. Whether they were crop or dairy farmers, each had several reasons why the proposed line would impact their business. The unnamed respondents shared Grovender's views and said they prefer to use highway corridors and woodlands to avoid impacts to productive agricultural land; protect livestock; avoid interference with large farm equipment, GPS, and navigation systems used in farm machinery; preserve open channels for crop-dusting; protect farm buildings; protect pasture land, tree farms, and timber production. 58

The Dairyland survey also found that livestock operations are concerned that the HVTL will generate stray voltage, impacting livestock and feedlots. Cattle, horses, and other livestock will not go near transmission lines due to stray voltage. And stray voltage can impact the health of beef cattle and hogs. Farmers also fear potential impacts on dairy operations, poultry, livestock mortality, horse boarding facilities, and herd reproduction. <sup>59</sup>

HVTLs also pose potential technological obstacles. For example, The GPS equipment used in the farm equipment may not be able to steer around transmission poles, potentially making farming around the towers extremely difficult.  $^{60}$ 

One major concern was the routing the HVTLs through the middle of properties or fields. The surveyed farmers quoted many repercussions for bisecting a property. They include: Interrupted irrigation and tile drainage equipment and practices; decreased food production; fragmented existing cropland and dairy operations; diminished lease value: the addition of transmission lines would make it difficult to lease farm land for the top rental price; compacted soil from construction of the HVTLs and access roads: it would take 3–5 years to restore.<sup>61</sup>

Across the border in Wisconsin, the state's Department of Agriculture validated many of the Minnesota respondents' concerns when it found that HVTL construction could compact soil, making it difficult to

<sup>56</sup> No CAPX2020. Letter to the Editor by Linda Grovender. The Cannon Falls Beacon. March 23, 2010.

<sup>58</sup> SE Twin Cities-Rochester-La Crosse Transmission System Improvement Project Macro-Corridor Study,

Appendix A: Summary of Public Comments regarding a proposed HVTL. Dairyland Farm Cooperative. September 2007.

<sup>59</sup> SE Twin Cities-Rochester-La Crosse Transmission System Improvement Project Macro-Corridor Study, Appendix A: Summary of Public Comments regarding a proposed HVTL. Dairyland Farm Cooperative. September 2007.

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

plow and plant those areas, naturally resulting in reduced crop yields. The HVTLs force farmers to change planting patterns to avoid support structures. Since farm land is only as valuable as its ability to yield good crops, rural property values suffer from the limitations and effects of HVTLs on their land. 62

Potential compaction, forced building changes, and lower property values equally threaten dairy operations as much as agricultural farmers. Susan and Robert Herckendorf, dairy farmers in the path of the proposed A-W HVTL, are worried that the line could put local dairies out of business. <sup>63</sup>

In researching the possible negative factors of the then-proposed Arrowhead-Weston HVTL in Wisconsin in 2000, the state's Public Service Commission found that rural property values may decrease from "concern or fear of possible health effects from electric or magnetic fields; The potential noise and visual unattractiveness of the transmission line; Potential interference with farming operations or foreclosure of present or future land uses." They also found that the value of agricultural property will likely decrease if the pylons inhibit farm operations." However, they also found that adverse effects appear to diminish over time. 66

The impact report further states that, on farmland, HVTL installation can remove land from production, interfere with operation of equipment, create safety hazards, and deprive landowners the opportunity to consolidate farmlands or develop the land for another use. The greatest impact on farm property values is likely to occur on intensively managed agricultural lands.<sup>67</sup>

Nearly a decade later in 2009, the Wisconsin Public Service Commission conducted another study on the environmental impacts of transmission lines and found that "in agricultural areas, the number of poles crossing a field may be the most significant measure of impact," and "agricultural values are likely to decrease if the transmission line poles are in a location that inhibits farm operations." Beyond the impact of pole placement, the PSC found that "the overall aesthetic effect of a transmission line is likely to be negative to most people, especially where proposed lines would cross natural landscapes. The tall steel or wide 'H-frame' structures may seem out of proportion and not compatible with agricultural landscapes or wetlands." They further explained that "Transmission lines can affect farm operations and increase costs for the farm operator. Potential impacts depend on the transmission line design and the type of farming. Transmission lines can affect field operations, irrigation, aerial spraying, wind breaks, and future land development."

The study further examines how rural HVTL pole placements can affect agricultural land values: They can create problems for turning field machinery and maintaining efficient fieldwork patterns; expose

<sup>62</sup> Line could affect farms, property values. Author Unknown. Oshkosh Northwestern. June 26, 2000.

<sup>63</sup> Ibid.

<sup>64</sup> Property Values (pages 212-215) from Final Environmental Impact Statement, Arrowhead-Weston Electric Transmission Line Project, Volume 1. Public Service Commission of Wisconsin. Docket 05-CE-113. Date issued, October 2000.

<sup>65</sup> Ibid...

<sup>66</sup> Ibid.

<sup>67</sup> Property Values (pages 212-215) from Final Environmental Impact Statement, Arrowhead-Weston Electric Transmission Line Project, Volume 1. Public Service Commission of Wisconsin. Docket 05-CE-113. Date issued, October 2000.

<sup>68</sup> Environmental Impacts of Transmission Lines. Public Service Commission of Wisconsin. March 2009.

<sup>69</sup> Ibid.

<sup>70</sup> Ibid.

properties to weed encroachment; compact soils and damage drain tiles; result in safety hazards due to pole and guy wire placement; hinder or prevent aerial activities by planes or helicopters; interfere with moving irrigation equipment; hinder future consolidation of farm fields or subdividing land for residential development.<sup>71</sup>

To oppose these potentially diminutive effects on their land, landowners sometimes organize against them. In Ohio, a group of concerned citizens formed the group, Citizens Advocating Responsible Energy (CARE), to oppose FirstEnergy's proposed Geauga County power line. On their website they state the reasons for their opposition. They fear the HVTL will devalue the properties it crosses, force affected property owners to continue paying taxes on damaged property, damage natural beauty and local ecology, lessen agricultural productivity of impacted land, thus reducing farm income and local purchasing power, and create a thorough-fare for snowmobiles and off-road vehicles.<sup>72</sup>

Other times, concerned landowners are united in voice, but not in form. In 2010, Idaho property owners in Bonneville County are nervously following the progress of Idaho Falls Power's proposed 161kV HVTL that would pass close to their homes.<sup>73</sup>

Lynn Pack, a Bonneville County dairy farmer, has educated himself on HVTLs and said he's most concerned with stray voltage. "It causes so many problems with cow's production. They won't feed, they won't drink water, they dry up and when they dry up they just don't give any milk." <sup>74</sup> Another property owner, Sharon Nixon, fears the HVTL could harm her husband's health after his recent victory over bone cancer. She also fears the value of her home will fall. "It is not something we want in our backyard. We worked all our lives. This is our dream home." <sup>75</sup>

Idaho Falls Power General Manager Jackie Flowers said the HVTL is a necessary step to meet new federal energy reliability standards and that the utility is open to the public's input. <sup>76</sup>

A year earlier in Idaho, a coalition of Rockland County farmers tried to convince Idaho Power Company to avoid routing a new HVTL through their land, citing environmental and development concerns. Doug Dokter, Idaho Power project leader, said the new lines are required because the existing lines are at their capacity. Because of their concerns, utility representatives say they're looking at other options and hope for a compromise to avoid invoking eminent domain to take the land.

Sometimes opposition to a proposed HVTL route can alter its course. In 1994, Public Service Company of New Mexico abandoned plans to take new right-of-way through the Jemez Mountains for a 50-mile long HVTL extension that Indian groups and environmentalists argued would cut through several miles

<sup>71</sup> Ibid.

<sup>72</sup> We oppose FirstEnergy's proposed Geauga County power line. Website posting by Citizens Advocating Responsible Energy (CARE). Date unknown but website copyright suggests sometime from 2008-2009.

<sup>73</sup> Transmission Lines Worry Property Owners. Brett Crandall. Local News 8. March 5, 2010.

<sup>74</sup> Ibid.

<sup>75</sup> Ibid.

<sup>76</sup> Ibid

<sup>77</sup> Headway being made on proposed route for power transmission line. Author Unknown. The Power County Press and Aberdeen Times. April 8, 2009.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid.

of pristine vistas and Native American ruins.<sup>80</sup> The utility instead re-routed the extension to follow an existing utility corridor, bringing the decade-long dispute to a close.<sup>81</sup>

In 2008, California farmers and ranchers found themselves in a similar situation. San Diego Gas & Electric proposed a 150-mile long, 500kV HVTL (in conjunction with several 230kV HVTLs) across San Diego and surrounding counties to meet increasing energy needs and transport required renewable energy.<sup>82</sup>

Affected landowners are worried the line will have "huge" impacts on their properties. Katie Moretti, an affected cattle rancher, and other farmers worry that building construction access roads across untouched land will limit their land's future use. She also worries that the utility won't compensate her for the loss of use. 83

Another rancher, Glen Drown, also worries about the impact the line will have on land-use and property values since the proposed route bisects several of his parcels subdivided for future development.<sup>84</sup>

Local dairy producer, Richard Van Leeuwen, is worried that stray voltage from the line would damage the health of his calves and milking cows. To protect his herd's health he said he would have to relocate the calf farm to another part of his property, costing millions.<sup>85</sup>

San Diego County Farm Bureau Executive Director Eric Larson acknowledges that the farming community won't be able to stop the project, but he's trying to make it compatible with the area's farming interests by recommending burying the line underground in some areas, going around some areas, and utilizing existing right-of-way.<sup>86</sup>

Elsewhere in the state, the City of Brentwood researched the potential impact of HVTLs on agricultural land values by interviewing several of their local and experienced Real Estate brokers. All the brokers said that "Agricultural land with power lines above ground is worth less than properties with belowground utilities." <sup>87</sup>

However, in a 2007 report, the California Department of Conservation's Farmland Mapping and Monitoring Program reported that HVTLs installed on agricultural land for a wind farm will result in a temporary disturbance of 10 acres of farmland and permanently affect 1 acre. Since the affected areas are mainly grazing land, the report concluded that the HVTL would not significantly impair productivity. Though the impact to agricultural productivity during construction would be negative, they claimed it would be mostly insignificant.<sup>88</sup>

<sup>80</sup> PNM Scraps Jemez Power Line Plan. Keith Easthouse. Sante Fe New Mexican. December 16, 1994.

<sup>81</sup> Ibid.

<sup>82</sup> Proposed power line would impact farms. Christine Souza. California Farm Bureau Federation. May 28, 2008.

<sup>83</sup> Proposed power line would impact farms. Christine Souza. California Farm Bureau Federation. May 28, 2008.

<sup>84</sup> Ibid.

<sup>85</sup> Ibid.

<sup>86</sup> Ibid.

<sup>87</sup> **City of Brentwood, California.** Website page explaining their approaches to valuing agricultural land. Date and author unknown.

<sup>88</sup> **3.3 Agricultural Resources.** Part of the public draft by The California Department of Conservation's Farmland Mapping and Monitoring Program. July 2007.

Across the country in Leesburg, Virginia, 26 landowners opposed Dominion Energy's proposed 230kV HVTL, saying it will damage their property values, thus decreasing their tax base and thus affect the county as a whole. They also fear its impact on Blue Ridge tourism.<sup>89</sup>

Bill Hatch, owner of a 400-acre farm was upset to learn the line would run through his farm. He said the proposed line would so affect his farm that he could only afford to keep it by direct marketing or agrotourism, but he admitted that few people would want to visit a farm with power lines.<sup>90</sup>

Landowners want the utility to bury the lines, but the utility says it will cost 10 times more than traditional overhead lines. However, Harry Orton, an underground power line expert, testified that while the initial costs of burying the lines are higher, the lower cost of maintenance over the years evens the cost along the lines' lifecycle. 91

A year later in 2006, Dominion proposed an additional 500kV HVTL to meet growing demand and routed it through northern Virginia because it was the most efficient route. However, the area is also one of the state's most pristine, and the proposal met with fierce resistance from landowners, environmentalists, Congressman Frank Wolf, and actor Robert Duvall. 92

In the path of the HVTL are landowners of some of the most valuable land in Virginia, and they were bothered that the utility plans to erect the 40-mile, 15-story HVTL in their back yards. 93

One landowner, Cameron Eaton, fears the line will bring financial ruin and "sink" her investment into her 100-acre Fauquier County property and horse business. "No one will buy that land if some ugly power line could run right over their house. I'm broken off at the knees."

Real estate agents consider the area's picturesque countryside to be its most valuable quality. Matt Sheedy, a land developer and president of Virginians for Sensible Energy Policy, said that the very proposal that the line will soon dominate the countryside has already "sent land values plummeting." Brokers confirmed that the market froze. People backed out of real estate contracts, unwilling to live anywhere under the line. Sheedy's groups estimated that land immediately affected could lose as much as 75% of its value. 95

"When you're out in the country and you're selling property, what you're selling is the open space and the bucolic views and the history," Sheedy said. "Running power lines through an area like this is just devastating." To landowners Gene and Deborah Bedell, who were trying to sell their 223-acre farm to pay for their retirement, it was a hard blow. Their agent old them no one would buy their property if they knew "that it could have a power line looming over it."

<sup>89</sup> Committee Hears Debate Over Underground, Overhead Power Lines. Megan Kuhn. Leesburg Today. May 20, 2005.

<sup>90</sup> Ibid.

<sup>91</sup> Committee Hears Debate Over Underground, Overhead Power Lines. Megan Kuhn. Leesburg Today. May 20, 2005.

<sup>92</sup> Landowners Fear Ruin from Power Line Route. Sandhya Somashekhar. Washington Post Staff Writer. December 11, 2006.

<sup>93</sup> Ibid.

<sup>94</sup> Ibid.

<sup>95</sup> Ibid.

<sup>96</sup> Ibid.

Further north in New York, over 50 landowners and local officials spoke before the state's Public Service Commission in opposition to Upstate NY Power Corp's proposed construction of a 230kV HVTL in their community.<sup>97</sup>

Sharon B. Rossiter, co-owner of Doubledale Farms in Ellisburg, said the HVTL will damage their crop cycle, remove 100 acres from use, and make planting difficult by having to navigate around the poles. Also worried is Roberta F. French, owner of Farnham Farms in Sandy Creek. The proposed line will bisect her blueberry farm, eliminating two-thirds of it. 98

Jay M. Matteson, Jefferson County agricultural coordinator, advocated routing the HVTL through public land to avoid damaging productive, private land. "The burden should be on New York state and the developer to prove to local landowners why their land is less valuable than public land," he said. 99

The Town of Henderson opposed it because the town's foundation is tourism and agriculture, and the community is "very concerned about the visual impacts of this project." <sup>100</sup>

Robert E. Ashodian, chairman of the Henderson Harbor Area Chamber of Commerce's Economic Development Committee, agreed. "The scenic resources of the community and the natural resources are at the heart of the value of the community." <sup>101</sup>

In an effort to appease worried or angry landowners, agricultural property owners in Montana with HVTLs encumbering their land will be exempt from paying taxes on land within 600 feet on either side of the HVTL Right-of-Way. 102

In the 2002 study, "The Impact of Transmission Lines on Property Values: Coming to Terms with Stigma," authors Peter Elliott and David Wadley cite a 1978 Canadian study that, according to one commentary, found "the per acre values from more than 1,000 agricultural property sales in Eastern Canada were 16-29% lower for properties with easements for transmission lines than for similar properties without easements." The impact was greater on smaller properties. The 1978 study found little difference in impact from 230kV or 500kV HVTLs. The study also found that the impacts didn't seem influenced by time. 103

Three more Canadian studies on the impact of HVTLs on agricultural land values found different results. Brown 1976 studied the effect of low-voltage power lines on agricultural land in Saskatchewan and found no measurable impact on property values. The Woods Gordon 1981 study focused on the effects of 230kV to 500kV HVTLs on Ontario farmland and found some areas had an average of a 16.9% negative impact, two areas had a positive effect, and others showed no statistically

<sup>97</sup> Transmission line gets no support. Nancy Madsen. Watertown Daily Times. November 17, 2009.

<sup>98</sup> Transmission line gets no support. Nancy Madsen. Watertown Daily Times. November 17, 2009.

<sup>99</sup> Ibid.

<sup>100</sup> Ibid.

<sup>101</sup> Ibid.

<sup>102</sup> Tax facts on proposed power line. The Montana Standard Staff. The Montana Standard. July 11, 2009.

<sup>103</sup> The Impact of Transmission Lines on Property Values: Coming to Terms with Stigma. Peter Elliott & David Wadley. Property Management, pgs.137-152. 2002.

<sup>104</sup> The Effects of Overhead Transmission Lines On Property Values: A Review And Analysis Of The Literature. Edison Electric Institute Siting & Environmental Planning Task Force. 1992.

significant effect. The third study, a master's thesis referred to as Thompson 1982 found sales prices lower for properties crossed by HVTLs but only where the land has potential for irrigation.(pgs. 56-57) <sup>105</sup>
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October 17, 2013

## BSSE/ South Dakota Public Utilities Commission

Today's letter, comments, and questions	10/17/13	Pages 1, 2, & 3
Permission Statement	10/15/13	Page 4
Photo Example		Page 5
BSSE response letter from our 10/01 letter	10/09/13	Page 6
Second letter to BSSE, signatures & map	10/01/13	Pages 7, 8, 9, & 10
BSSE response letter & map from our 7/23 letter	9/12/13	Pages 11, & 12
1 <sup>st</sup> letter to BSSE, signatures & map	7/23/13	Pages 13, 14, 15, & 16

Attached you will find the correspondence we have had with BSSE, beginning with the most current. On October 15, I visited with Terry Fasteen by phone, and we agreed to set up a time and place to meet regarding a revision we initiated to move the line that BSSE proposed in our particular area. On October 1, a group of us sent a letter and map (pages 7, 8, 9, & 10) with our ideas and concerns to BSSE. On October 9, we received a letter from Terry Fasteen (page 6) that our idea was under consideration for revision and he accepted our invitation to see the route we proposed first hand. Basically our letter of October 1 stated that if the new revision were considered it would benefit seven occupied residences with a possible negative impact on one in Section 29 of Garland Township. Since that time, we have had discussions with that family in section 29 and they signed a statement (page 4) that they would have no problem if the power line traveled along 122<sup>nd</sup> St north of their place and were willing to let the power line be put onto their property on the north edge if need be.

Attached you will also find photo's (page 5) to serve as a visual aid in trying to assess the immensity of the proposed transmission line tower heights as well as the safety concerns when these towers are in close proximity to homes. Bob Heilman in Section 8 is 180' from the road center line and Joel Podoll in section 9 of Garland Township is 195'. Approximately 600' to the east of Joel Podoll is the Western Area Power Line. It is very likely that one of the 150' power poles we were told about at the Tacoma Park meeting would be placed out his picture window so it can clear the WAPA line. Now refer to the 108' tower in the picture (page 5) and add another 42' to that. The house in the photo is 219' from this 108' tower. How far will the BSSE towers be, if they are 150' tall, from Bob Heilman and Joel Podoll? The figures that have been put out through newsletters and meeting have been inconsistent at best. The June newsletter said that the right of way of 150' would mean that the closest home could be 75'. At

the Tacoma Park meeting 300' to homes was discussed by the presenters. So Joel Podoll, as well as Bob Heilman to the west, could have these 130' to 150' poles placed anywhere near their residences, at the discretion of BSSE once they have the easements in place. Joel Podoll's job also depends upon the internet a great deal. He has had numerous internet connection problems that Northern Electric has been trying to correct. Under the current proposal, the BSSE lines and poles will be directly between his residence and Northern Electric towers at Bath SD. Can anyone with BSSE guarantee that these 345 Kv lines will not totally obliterate his internet connections?

Another issue is noise pollution. Arnold and Darlene Dennert, the retired couple that are referred to in the October 1 letter, have a BEP 345 Kv tower out their back door, close enough to hear the crackling of the line consistently. Now the BSSE proposal is to put one closer out their front door which could more than double the noise. Is anyone concerned about how this extra noise pollution will affect them? Does anyone have a solution? Does anyone care?

In a letter to BSSE on July 23, 2013, (pages 13, 14, & 15) we proposed three other ideas for consideration that were denied in a letter from BSSE on September 9, 51 days later, (pages 11 & 12). Had we not brought up at the Tacoma park meeting that we still had no response, we feel we might never have received one. We still think these ideas have some merit because it eliminates some corners, diagonals some lines therefore shortening the distance and saves money. BEP did not have a problem crossing a river 9 times in a diagonal stretch covering 10 mile lines. It kept it away from many residences. Also enclosed with that letter was a map showing the MDU, BEP, and WAPA lines now in our area as well as the newly proposed BSSE line (page 16). These 4 lines, for the most part, would cover a stretch 7 ½ miles wide for 20 miles. Many of the same farmers, ranchers, and residences feel that they being asked to sacrifice again and again. Why should one area be discriminated against and overloaded with transmission lines? Is anyone concerned about the safety of these same individuals that will have to traverse these four lines again and again with equipment, as well as repeated exposure?

We have also studied the issue of devaluation of property and residences in connection with transmission lines. There is one extensive, unbiased study on the internet that was well researched. It also refutes some of the biased studies that are out there. Devaluation can have a significant impact, especially on homes, to the extent that recent mortgages could be higher than the value of the home after appraisals when transmission lines are in close proximity. Two new homes built recently, and one extensive remodel could possibly be devalued to this extent with your lines and poles. We have included a 21 page copy of that study.

The biggest concern we have is in the area of health and safety. If you search the internet, you will find most anything you want to see. Regulators not wanting to admit they failed to protect the health of the public, company executives denying health issues and paying for biased studies to support it, and environmentalists looking for anything to stop these lines. No matter where you stand on this issue there are two facts that are prevalent in most articles out there. One is the high incidence of childhood leukemia near power lines. Both Bob Heilman and Joel Podoll families have children at home, and they are in very close in proximity to the lines now being proposed by BSSE. Can any of you tell us what the actual safe distance in feet is so those living near these lines will not get cancer? Is there a written

guarantee with that? The second is that the more studies that are done the more facts prove that there are health issue concerns for everyone as well as animals. We are at the point today in health involving power lines that we were at 30 years ago with cigarettes as well as second hand smoke. Today we need to proceed on the side of caution for the sake of our children and grandchildren.

At this time our group is not attempting to stop this line. We are asking for a revision. We understand progress and the need for state revenue. You must also understand that agriculture is still the state's largest revenue, and you must give equal concern to those who live in the country and farm the land and ensure that the progress we make is not at their expense or detriment to their health. In the event that BSSE does not approve our request or one of the previous ideas proposed, we ask that the PUC require them to find an alternate route of their own around the seven residences we have concerns about. Cost should not be an excuse for BSSE as the option they chose was the most expensive by their own standards as listed in the bullet points from the letter we were sent on September 12, 2013. Bullet point one, shortest distance, their own maps show they selected the longest distance. The shortest distance by any standard would have been a route from Ellendale to near the Havana ND area and then diagonal through the Coteau Hills to the Big Stone area saving many corners and approximately 45 miles with savings of possibly \$80 million, over 20% of their entire budget. Their map shows a small area to the southeast that was not given consideration, buy why and is the reason factual. The railroad went through that area with no problems, why? Number two, least impact on occupied homes. Their proposal has a large impact on seven of our occupied homes. Three, minimize river crossings. BEP did nine river crossings with no problem and reduced the impact on occupied homes. Four, determining the fewest corner structures required. The route selected had the most corners required. This corner issue was stressed at the Groton meeting by BSSE officials as being costly and something they would like to avoid. Why tell us that and then select it as the preferred route? Many of the facts and figures presented to us over the past year have been contradictory and we don't know why.

We have a question for BSSE. If you purchase an easement of 150' are the poles always placed at 75', in the middle of that easement? Can you place the poles off center to allow room for a parallel line in the future, under the same easement? Is that your intention? Will the poles you currently plan to install handle additional lines in the future, exceeding 345 Kv? Do you have the capability to increase this to a 690Kv line? Does your easement specify none of these things will happen?

We have a question for the PUC. Is it customary for a company such as BSSE to file a Facility Permit Application with the PUC without having easements in place? Maybe the entire request should be denied until such time as easements are in place. Maybe a law should be passed to make it mandatory before filing. There is a lot of confusion among the landowners up to this point and BSSE appears to have the confidence and attitude that the PUC will give a blanket approval to their requests. Only you know the answer to that.

Thank you all for your consideration in this matter.

October 15, 2013

BSSE

As a resident on Section 29 of Garland Township I have no problem with your proposed power line adjacent to our property on 122<sup>nd</sup> St. As part owner of the remaining property, the rest of my family and I would be willing to discuss allowing your line onto the northern portion of our property if it would help the situation or if the property owner to the north of 122<sup>nd</sup> St. would be in disagreement.

Dean Podoll

12237 390<sup>th</sup> Ave

Aberdeen SD 57401



Sand Lake Tower 108' tall

Distance to residence 219'

View from residence front to tower

View from behind residence



October 9, 2013

Lyle and Catherine Podoll 11957 390<sup>th</sup> Avenue Westport, SD 57481

Re: Big Stone South to Ellendale 345kV Transmission Line Project letter received from Joel & Jolynn Podoll, Chris & Caitlin Podoll, Bob & Michelle Heilman, Jason & Becky Podoll, Arnold & Darlene Dennert and Lyle and Catherine Podoll.

Dear Mr. & Mrs. Lyle and Catherine Podoll;

Thank you for your letter, received on October 3, 2013, requesting the Big Stone South to Ellendale (BSSE) project team to consider a route revision. Your request will be presented to project team members this week for initiation of research into the potential impacts along the proposed route revision.

The project team will also research property ownership along the proposed route revision to assure landowners have been personally contacted regarding the BSSE project. Each landowner will have the opportunity to respond to the proposed route revision.

We anticipate the research, additional landowner contacts and potential routing discussions will be completed within two to three weeks. However, it is possible a formal response from the project team could be slightly delayed due preparation for the upcoming South Dakota Public Utility Commission hearings.

Thank you for your invit to meet in person and your willingness to show us the proposed route revision. We appreciate the offer and gladly accept. Please contact me at 701-271-4851 to arrange a date and time for this meeting.

Thank you for your participation in the Big Stone South to Ellendale project. If you have additional questions or comments you would like us to address, please contact us again.

Sincerely,

Terry Fasteen
KLJ ROW Services

Teng Josten

Cc: Joel & Jolynn Podoll, Chris & Caitlin Podoll, Bob & Michelle Heilman, Jason & Becky Podoll, Arnold & Darlene Dennert, Lyle& Catherine Podoll and Senator Jason Frerichs, Representative Dennis Feickert, and Representative Susan Wismer October 1, 2013

Henry Ford, Montana Dakota Utilities

Dean Pawlowski, Otter Tail Power Company

In reference to your letter of September 12, 2013 we find that your comments lack any concern for the residences involved. Your bullet points are merely a repetition of the literature that you have sent.

On the subject of the residences we were concerned about, your data is totally incorrect. The residence along the western edge of Section 18 Westport Township has been vacant since the 1990's and is not listed as owner/occupied at the courthouse. The residence on the NW corner of Section 20 Garland Township is also not listed as owner/occupied and has been vacant since at least February of 2013. There is also a new residence on the north edge of Section 22 Garland Township that has been occupied since 2010 that your records did not indicate until the owner recently brought it to your attention. As this is a \$340 million project, did anyone actually drive the route's you proposed to see firsthand how residences would be affected?

We are enclosing a map with another option for consideration. If you would like to send a representative to this area, we would be glad to show you this proposal in person. Now your proposed line is coming into Westport Township on 388<sup>th</sup> Ave to 120<sup>th</sup> St. Arnold and Darlene Dennert reside near this corner and your line would be approximately 375 yards out their front door. Just for the record, they now have a Basin Electric Power line out their back door. A huge four cornered steel tower. We would propose that you stop at the quarter line ½ mile north of 120<sup>th</sup> St on 388<sup>th</sup> Ave and go east on Section 7 of Westport Township to the west edge of 389<sup>th</sup> Ave. There is one residence across the road in Section 8 of Garland Township which has been vacant since the late 1990's and likely could remain that way. The line could then go south for 2 ½ miles along sections 7, 18, and 19 of Westport Township to the corner of 389<sup>th</sup> Ave and 122<sup>nd</sup> St. Remember that the residence in Section 20 of Garland Township is vacant. This vacant residence also sets approximately 120 yards back from the road as compared to Bob Heilman in Section 8 at 60 yards and Joel Podoll in Section 9 at 65 yards. Joel also has a Western Area Power line in close proximity to his buildings now. For safety and health reasons alone this proposal should be considered.

For the remaining 2 ½ miles east along 122<sup>nd</sup> St we could have the option of putting the line directly on the township road which is not maintained at this time. This would keep the line and poles off any

landowner property, the township could vacate the road and the landowners would have the benefit of using the remaining property. The Garland Township Chairman said this could be considered. In checking with the State Association of Townships this has been done with transmission lines in other parts of the state and has worked well.

This proposal would have a net benefit to seven occupied residences that are now within ½ mile of your proposed line, two of these within 60 and 65 yards of the road. The two vacant residences would have neither a negative or positive, remembering that the one vacant property, if were to become occupied, would still be back twice the distance of the two mentioned above. There could be one negative for the residence on Section 29 of Garland Township, but this residence is approximately 600 yards from 122<sup>nd</sup> St and is also behind a shelterbelt and would not be as visible and would also minimize health and safety issues.

Just as a reminder I would like mention again that two of the residences we have been discussing already are in close proximity to BEP and WAPA lines and this alone should warrant additional consideration for their well being.

We ask that you please give serious thought to this proposal.

Thank you.

Cc. Senator Jason Frerick

Representative Dennis Feickert

Representative Susan Wismer

Joel & Jolynn Podoll 39010 120<sup>th</sup> St. Westport SD 57481

Chris & Caitlin Podoll 39135 121st St. Columbia SD 57433

Bob & Michelle Heilman 38954 120<sup>th</sup> St.

Westport SD 57481

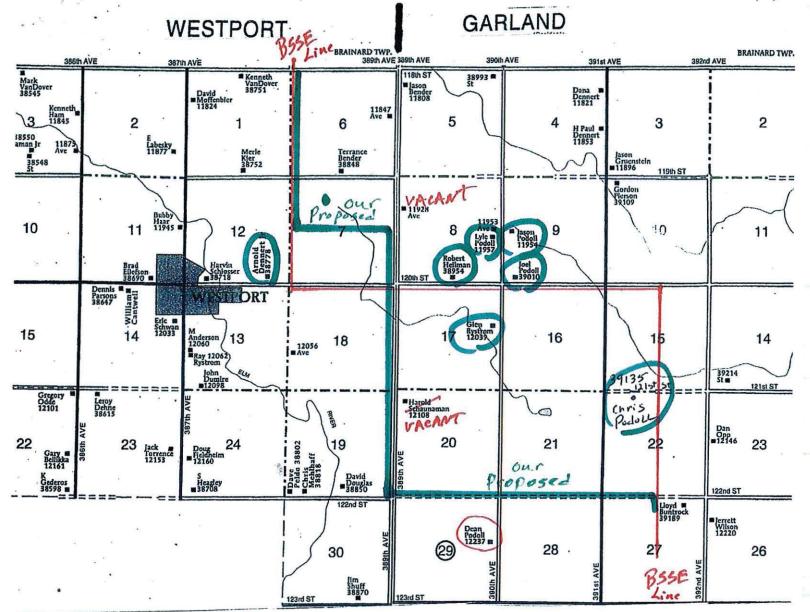
Arnold & Darlene Dennert

38778 120th St. Westport SD 57481

Jason & Becky Podoll 11954.390<sup>th</sup> Ave. Westport SD)57481

Lyle & Catherine Podoll 11957 390<sup>th</sup> Ave.

Westport SD 57481







September 12, 2013

Lyle & Catherine Podoll 11957 390<sup>th</sup> Avenue Westport, SD 57481

RE: Big Stone South to Ellendale (BSSE) Response to Mailed Comment Joel & Jolynn Podoll, Bob & Michelle Heilman, Jason & Becky Podoll, Lloyd & Joan Buntrock, Chris & Caitlin Podoll, Lyle & Catherine Podoll

Dear Mr. and Mrs. Podoll,

Thank you for mailing your comments. You stated your concerns about the Big Stone South to Ellendale transmission line being routed where three other transmission lines are already present. You are concerned that your properties and residences may lose value. You presented three options for routing the BSSE transmission line that you believe will affect fewer people and less farmland, and you noted homes that you believe to be vacant. We have recreated your suggested alternative routes on the enclosed map, as shown by three dashed lines. Please let us know if our interpretation is incorrect. We have also highlighted properties identified in our database as belonging to you.

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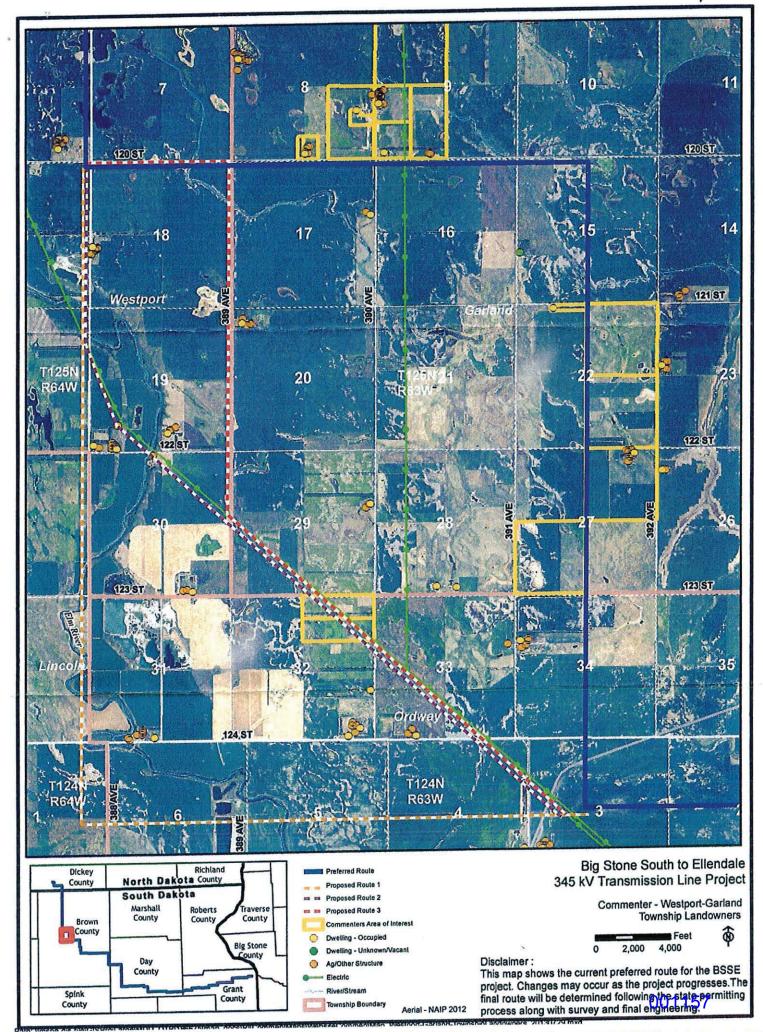
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The preferred route is the result of a nearly one-year route-development process that included public participation, agency and tribal coordination in both South Dakota and North Dakota, and environmental and engineering considerations. We selected this route because it was the most suitable route for balancing the input we received and for meeting federal, state and project routing criteria, which included:

- Finding the shortest distance between two substation endpoints.
- Determining the least impacts to occupied homes.
- Minimizing river crossings.
- Determining the least impacts to federal and state protected lands and archaeological resources.
- Determining the fewest corner structures required.
- Minimizing impacts to irrigation.

We understand your concern. However, we believe the preferred route is preferable to your proposed alternatives. Your first alternative includes two or three additional crossings of the existing transmission lines and additional crossings of the Elm River that meanders back and forth across 388<sup>th</sup> Avenue. Additionally, with both the preferred route and the first alternative route you suggest, the number of homes within a quarter section of the transmission line does not differ significantly.

Of the three homes you identified as vacant, our data show two as occupied (along the western edge of Section 18 and in the NW corner of Section 20 of Westport Township).



July 23, 2013

Al Koeckeritz, Otter Tail Power

Chad Miller, Montana- Dakotas Utilities Co.

A group of us have some concerns about the proposed BSSE Transmission Line that is coming through our area. We are not opposed to the line as we have several through our area already, but the placement of the portion along 120<sup>th</sup> St. east and south of Westport and in both Westport and Garland townships. By the enclosed maps, you can see that there are already three transmission lines that cross 120<sup>th</sup> St. from NWPS on 384<sup>th</sup> Ave., BEP east of 387<sup>th</sup> Ave., and WAPA east of 390<sup>th</sup> Ave. That is three transmission lines in approximately 6 ½ miles, and now you are proposing an additional 3 ½ miles along 120<sup>th</sup> St. We have six residences that are less than ½ mile from your proposed line, and two that will likely have it in their backyard or out their front door.

We are mostly small farms or residences and three of us already have BEP and WAPA through our property. Even if the proposed line does not come through our property, we feel the close proximity along with the other lines we already have will further devalue our small properties and residences. There seems to be a corridor in the north half of Brown County that must bear the brunt of all these transmission lines, with the MDU from Barnard north there continues to be three lines within a six or seven mile width all the way to the North Dakota border. There are twenty miles east, here in Brown County, that do not have any transmission lines. It appears that our corridor continues to be discriminated against, and everyone in this area must continue to work around these lines. Each additional line will further devalue our property. We can only surmise that the property values in this area are less than those to the east, but that is not a legitimate reason to continue to decimate and devalue this area. We think it is time for our legislators to consider legislation like our neighboring states which adequately compensates land is and residences for the devaluation of their property and overloading one a with transmission lines, especially from a transmission line that is of no direct benefit to them.

We hope you will consider some of the alternate routes we have proposed. The first proposal will start at the corner of 388<sup>th</sup> Ave. and 120<sup>th</sup> St. you could continue a direct line 4½ miles south and go 4½ miles east to connect with your proposed route that direction with no additional corners. We know there is the issue of the river, but BEP crossed it with steel towers so we know it can be done and will affect far fewer people and less farmland. The second proposal would be to continue south of 120<sup>th</sup> St. on 388<sup>th</sup> Ave. approximately 1¼ miles, by a long time vacant farm, and then parallel the BEP towers for approximately five miles until you meet up with your proposed route going east. BEP and WAPA paralleled towers starting in section 33 of Ordway Township for about ten miles to the south east. This would put additional towers on a small parcel of section 32 in Ordway township that one of us owns, but that would be preferable to running through several residences, and here again this would affect less farmland. This

route would shorten the line and save money. One presenter at the Groton meeting said they did not like to parallel lines because of storms, which does not make any sense as the parallel poles were not affected by severe storms in the '80s, but did take down lines from both BEP and WAPA that were two miles apart. This would also support moving the lines to the east part of Brown County so a storm would not take out all three or four lines that are in close proximity to each other. Common sense should dictate that decision. Now the issue of corners will probably come up. At the meeting in Groton, the presenter on several occasions stressed the fact that they try to stay away from making corners as they are expensive. If they do corners, they like them no more than one per ten miles. We would like to point out, if our calculations are correct, from Ellendale to south east of Groton there are eleven corners and it appears that eight of these are less than ten miles apart. It begs to question why a route would be chosen that directly contradicts what they so adamantly stressed at the meeting would be too costly. Our point is that the cost of adding one or two corners should not be a consideration to make some minor route changes as the corners were not a consideration in your selection of the preferred route. We have also included proposed route changes for you to consider that would not add corners.

We the following are property owners that reside in close proximity to the proposed transmission line along and two miles south of 120<sup>th</sup> St. in both Westport and Garland Townships. We ask that you review this residential area and make minor adjustment in this portion of the route, possibly from one of the suggestions listed above.

Thank you,

Joel & Jolynn Podoll 39010 120<sup>th</sup> St. Westport SD 574? Bob & Michelle Heilman 38954 120<sup>th</sup> St. Westport SD 57481 Jason & Becky Podoll 11954 390<sup>th</sup> Ave.

Westport SD \$7481

Chris & Caitlin Podoll 39135 121<sup>st</sup> St. Columbia SD 57433

Lyle & Catherine Podoll 11957 390<sup>th</sup> Ave. Westport SD 57481

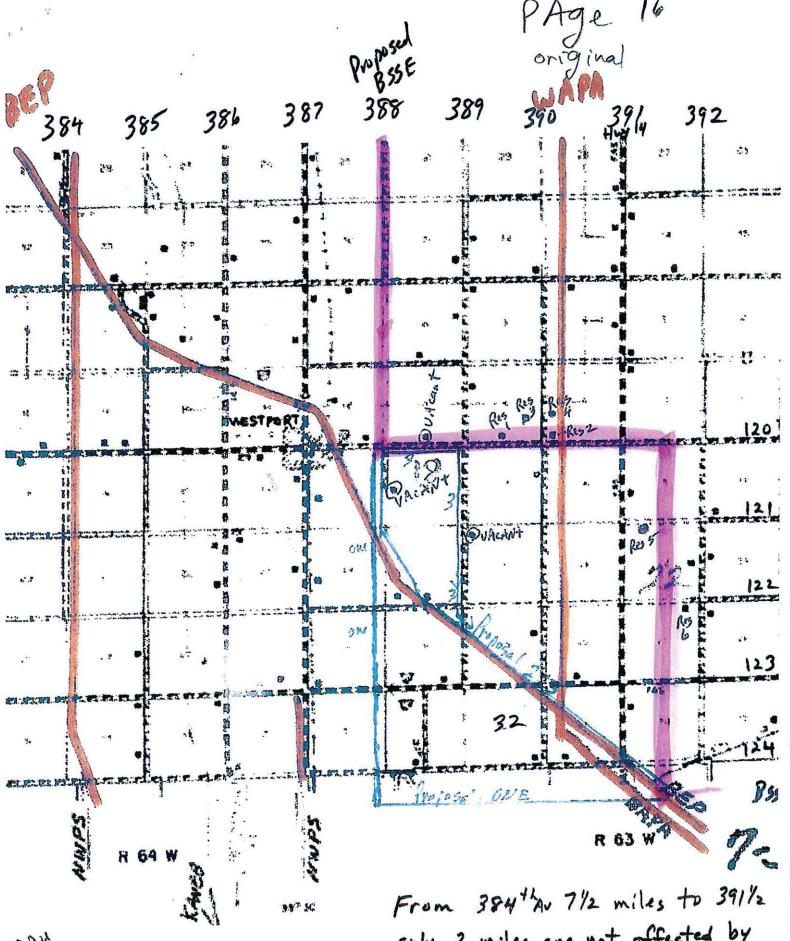
Lloyd & Joan Buntrock 39189 122<sup>nd</sup> St.

Columbia SD 57433

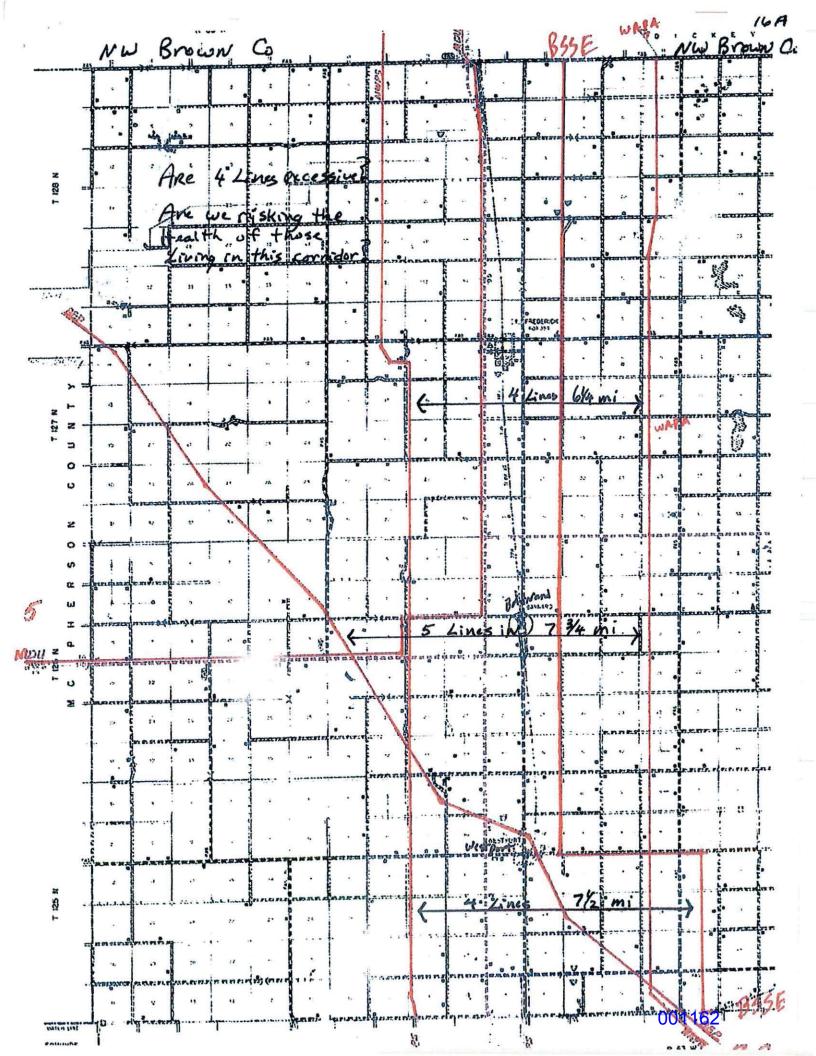
cc:

Senator Jason Frerichs

Representative Dennis Feickert Representative Susan Wismer



MAPA. Western Area Power BEP - Basin Electrice Buer From 384th 7/2 miles to 391/2 only 2 miles are not affected by either dissecting or parallel lines proposed on 120th St. 001161



1	BEFORE THE PUBLIC UTILITIES COMMISSION
2	OF THE STATE OF SOUTH DAKOTA
3	EL 13-028
4	IN THE MATTER OF THE APPLICATION )
5	OF MONTANA-DAKOTA UTILITIES CO. ) AND OTTER TAIL POWER COMPANY FOR )
6	A PERMIT TO CONSTRUCT THE BIG ) STONE SOUTH TO ELLENDALE 345 KV )
7	TRANSMISSION LINE )
8	)
9	TRANSCRIPT OF PUBLIC COMMENTS HEARING
10	
11	<b>BEFORE: PUBLIC UTILITIES COMMISSION</b> Gary Hanson, Chairman
12	Chris Nelson, Commissioner Kristie Fiegen, Commissioner
13	
14	NORTHERN STATE UNIVERSITY
15	Student Center - Centennial Rooms 1200 South Jay Street
16	Aberdeen, South Dakota
17	October 17, 2013
18	12:00 P.M.
19	
20	<b>Nancy McClanahan</b> Reporter/RPR,RMR
21	McCLANAHAN REPORTING
22	1 - 8 0 0 - 8 1 3 - 0 9 3 6
23	605-882-0936 P.O. Box 342
24	Watertown, SD 57201
25	

PROCEEDINGS

2 (EXHIBIT 1 MARKED.)

CHAIRMAN HANSON: We would ask that if you are reading something, when it's your opportunity to chat with us and ask questions that you speak a little bit more slowly. I have a tendency, when I read things, to start getting off real fast and I don't know how court reporters keep up, but we'd really appreciate it if you'd help Nancy out that way.

I do have a few things that I have to go over first and formally in order to open it up. We ask that if you have cellphones, that you put them on vibrate at this juncture so that we wouldn't have too many interruptions. And if you're going to speak on a cellphone, if you need to take a call, please step out of the room. We occasionally have folks that want to actually engage in the phone call while they're in the room and that's pretty disruptive. So we appreciate your doing that.

I'll start out by formally starting the meeting. My name is Gary Hanson, Chairman of the South Dakota Public Utilities Commission. With me here today are Commissioners Chris Nelson and Kristie Fiegen.

Our purpose is to hold a public hearing in

Docket EL 13-028 titled In the Matter of the

Application of Montana-Dakota Utilities Co. and Otter

Tail Power Company for a Permit to Construct the

Big Stone South to Ellendale 345 kV Transmission Line.

The Application submitted by MDU and
Otter Tail is for approval of a permit to construct a
345-kilovolt transmission line of approximately 150 to
160 miles long in South Dakota. The proposed line
will cross the South Dakota-North Dakota border in
Brown County and extend south and east through Brown,
Day, and Grant Counties to Big Stone South substation
in Grant County near Big Stone City. Modifications to
the project may occur, depending on the final route
permitted, land rights, and the final engineering
design.

We received a few questions from area residents asking why we scheduled this hearing during harvest season and hunting season, etc., etc. The commission is required by law to hold the hearing within 60 days after the application was filed, which was on August 23. We are just about to the end of that period. The law also dictates and it does not allow us to hold the hearing any sooner than 31 days after the Applicant has given notice to landowners in

the project area and published notice in area papers. 1 So we're pretty hemmed in as far as a scheduling 2 Realistically, we have about a 10-day window 3 window. in order to -- as structured by law, in order to 4 5 put -- have a meeting take place. 6 With the other items on our calendar that also have statutory deadlines and finding available 7 locations and times, this was a difficult scheduling 8 9 challenge for us. This is the best we could find. I would also note that we did schedule two 10 11 hearings -- The second one will be in Milbank this 12 evening -- so that people would have the opportunity 13 to attend after normal working hours if they wanted We understand that that's a bit of a drive, but 14 15 we're trying to schedule them in the area as best we 16 can so that as many people can attend as possible. 17 For those of you standing in the back that 18 are looking for chairs, we do have three -- Is this -19 Are these seats open here? 20 AUDIENCE PARTICIPANT: (Nods 21 affirmatively.) Uh-huh (Yes). 22 CHAIRMAN HANSON: So we have at least 23 four chairs open up here if you'd like to venture forth. 24

So why did MDU and Otter Tail file when they

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did? There is a reason in law for that as well.

However, I'll allow the companies to address that in their opening presentation.

The purpose of this hearing is to provide information to the public about the proposed project and to receive public comments about the project. Interested persons have the right to present their views and comments regarding the Application and we encourage you to do so. We want to hear from you. We want to -- It doesn't look like we'll have that problem today of encouraging you to come up here. We really want to hear what you have to say.

No decisions are being made today or in the near future. A copy of the Application is on file with each of the Brown County, Day County, and Grant County Auditors. You may also access the Application and all other nonconfidential documents in the official file on the Commission's website. The Commission's website is at www.puc.sd.gov. You can look under commission actions and then commission dockets, and then the 2013 electric dockets, and stroll down to this docket, is EL 13-028; or you can call or write or stop at the Commission.

The parties to this proceeding at this time are MDU, Otter Tail, and the Commission. Under

South Dakota law, each municipality, county, and governmental agency in the area where the facility is proposed to be constructed or any interested person or organization may be granted party status in this proceeding by making written application to the Commission on or before October 22 of this year. We have applications available here this evening if you would like to apply for party status.

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I would like to emphasize to everyone, however, that you do not need to become a party in the case to make your voice heard by the Commission. reason we're here today is to hear your comments and your concerns about the project. We will also be accepting comments in writing from anyone, either by mail, personal delivery, or e-mail, right up until the time of our decision. You only need to apply for party status if you want to participate formally in the case by presenting actual testimony and other factual evidence, conducting discovery, cross-examining witnesses, making legal arguments, etc., and to preserve your right to appeal to the Courts if you do not like our decision. So you'd become an intervenor at that -- if you formally wish to have party status.

For its permit to be approved, our law states

that Xcel and Otter Tail must show that the proposed transmission facility will comply with all applicable laws and rules, will not pose a threat of serious injury to the environment, or to the social and economic condition of inhabitants or expected inhabitants in the siting area, will not substantially impair the health, safety, or welfare of any inhabitants, and will not unduly interfere with the 9 orderly development of the region.

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With due consideration of the views of governing bodies of affected local units of government, based on these factors, the Commission will decide whether the permit for the project should be granted, denied, or granted upon such terms, conditions, or modifications of the construction, operation or maintenance of the facilities as the Commission finds appropriate.

Off the record now.

## (DISCUSSION OFF THE RECORD.)

Back on the record. CHAIRMAN HANSON: would like to point out to everyone that we have Nancy McClanahan, our court reporter here today, so I ask you to please use the microphone and introduce yourself and spell your name when you speak so we get it on the record. I will also

point out that Brian Rounds of the Commission's staff is here today. Brian? There. And we want you to feel free to seek him out if you have any questions or need help with anything, either here today or in the future. Boyce Hillmer is also here. Boyce? Behind the podium. He's in back. And he's helping out today. He's not assigned to the case, but you can chat with him here today.

Karen Cremer is a Staff Attorney, and
Darren Kearney is a Staff Analyst. They are also
assigned to this case. They were unable to attend
today. We do have some of Karen's business cards here
today if you need a contact name and number.

We will begin the hearing by having the MDU and Otter Tail folks make a presentation to explain their proposed project. Following that presentation, we will take comments from any interested persons or organizations, and we strongly encourage members of the public to present your views.

Before we get started, I ask that each of you make sure to put your information on the sign-in sheets on the record in the back so that we have a record of the meeting of who attended, and so that we can make certain that we're able to contact people if we need to.

Tom Welk will be the spokesman here today for Otter Tail and MDU. Tom, would you please introduce your folks and you have the floor.

THOMAS WELK: Thank you, Mr. Chairman, and Commissioners. My name is Tom Welk. Along with my partner, Jason Sutton. We represent MDU and Otter Tail. Also with me today is Jennifer Smestad, who is the General Counsel for Otter Tail.

The way that we intend to proceed is we have one individual, Henry Ford, from MDU, who is going to give the PowerPoint presentation. We also have a number of consultants and people from the two companies. If a question is asked and it's an engineering question and Henry feels that he needs some help, he'll refer that.

So with that introduction, and I also have, Mr. Chairman, marked and given the court reporter a copy of the PowerPoint presentation that Mr. Ford is going to make, and I would ask that that, which has been marked as Exhibit 1, be introduced into the formal record.

CHAIRMAN HANSON: Okay.

THOMAS WELK: I'll take that that has been introduced into the record.

chairman hanson: I'll place it on the record. Yes, it's been accepted.

THOMAS WELK: With that, we'll have

Mr. Ford do the presentation, Mr. Chairman and

Commissioners.

HENRY FORD: I'm not sure how this is going to work out best. I know that the arrangement of the room might make it difficult for a lot of you to see the screen so hopefully you'll bear with me. But I'm going to be speaking off the slides that will be on the screen here, and we'll do this the best we can. I'm probably going to turn my back to you quite often, because I'm going to be referring to some of my notes. Go ahead to the second one.

So I just want to say good afternoon to everybody. Appreciate everybody coming out. I know the weather is probably conducive to you leaving the fields and coming in here so I appreciate that. I appreciate seeing so much interest in the project. I think the more interest we have from the public, the better the project should go for us.

So my intention today is to cover several items pertaining to this project. I want to spend some time, just very briefly, I'll introduce for those

of you who don't know us, I'll introduce MDU and Otter Tail so you have some idea of what these two companies are. I'm going to give a little description of the development of the project, basically, how the project came to be and came to where it's at today. Also plan to talk about the project details itself, basically, a project overview of how the project is going to look and how it's going to be built. Spend some time talking about the routing process, which is probably of most interest to everyone. You know, how did we decide where to run this line? So this, this is an area that I'll touch on at least briefly. Also talk a little bit about engineering design, just what this line is actually going to look like when it's constructed.

I'll give you a little bit of background on the public outreach that we have been involved in to date, just for everyone's information, and then give you an update on where we stand today with our right-of-way acquisition efforts, because we have started right-of-way acquisition. And finally just give you briefly what our next steps are in the project and how we see this project working forward, so. Next slide.

So just to start out with, and as Tom

indicated, my name is Henry Ford. I'm actually the Director of Transmission Engineering with MDU. So this is my company, Montana-Dakota Utilities Co. We are a combination utility meaning we serve both gas and electric service. And what you can see on here is the service territory of the utility. Basically those four states; Montana, North Dakota, South Dakota, Wyoming. We serve roughly 312,000 customers between the electric and gas.

Otter Tail Power is an electric company, and they operate in portions of Minnesota, North Dakota, and South Dakota, cover -- You can kind of see our two systems overlap a little bit. And they serve approximately 129,000 customers within those three dates.

So we're the two partners on the project. We're the two companies that are planning to build this transmission line.

So the project started out as a project that was developed by an organization called MISO. And MISO is an independent system operator, which means that they operate all the transmission system in the Upper Midwest, and they do that on behalf of the member utilities. So companies like Otter Tail, MDU, we actually are members of MISO. So they operate the

transmission system for all of the utilities in the Upper Midwest. They also do a lot of significant planning studies to determine what is necessary down the road for additions to the transmission system.

So MISO had performed studies for a number of years, I believe, looking at this particular area of the country, looking at, you know, what's going on with load growth, what's going on with generation potential to serve customers throughout the MISO footprint. And basically, they determined that there was a need for a transmission line to be built essentially from these two endpoints that we're going to be talking about in just a couple moments here between Ellendale and Big Stone.

So they propose that question or that project, and then within the MISO organization that project was approved, which means that now that project is at a point where it can be constructed.

So MDU and Otter Tail, as members of MISO, we agreed and stated to MISO that we are interested in building this facility. We then filed a Notice of Intent to Construct with the South Dakota Public Utilities Commission March 5 of 2012, and that kind of is dovetailing with what the Chairman was explaining to you that we essentially had 90 days to file that

Notice of Intent once this project had been proposed.

And once the Notice of Intent was filed, then the clock starts ticking and we had essentially 18 months from that point in time to file our Route Permit Application.

So all of these dates are governed by statute and basically required us to get our Application in by roughly August 23 of 2013, which is the date that we filed. And as the Chairman indicated, the reason we're here today is because of the statute that says that we have to have the public hearing within 60 days of the filing of the Application.

So that kind of gives you I think some idea of how the project has progressed from inception to the point where MDU and Otter Tail are now looking at building this line.

MISO themselves have identified kind of from this macro-level perspective what they see as benefits for a project like this. This project enables delivery of low-cost generation, really, throughout the MISO network, which in terms of geographic area is kind of the North Central United States. It also increases electric system reliability just from the sake of the fact that you have now high-voltage transmission duplicating some of the systems that are

lower voltage, so you have this -- this increase in reliability just by nature of that.

But in addition to those kind of macro benefits, a little bit almost pie-in-the-sky benefits, you might say, that MISO is looking at, there are definite local benefits, local economic benefits to this project for the State of South Dakota for this project. We've listed a couple of them up here. They're short-term benefits, obviously.

During construction, there is going to be a lot of people in here. We're talking about 75 to 100 people working on construction crews that will be building this line. We've estimated that during that roughly three-year construction period, we could see between 3 and 7 million dollars being spent by these construction folks. And that may be for materials. It may be for fuel, meals, motel rooms, all of those kinds of expenses that will actually occur, you know, throughout the route, in the communities throughout the route on this project.

In addition, though, there are of course on top of that, there is the tax benefits. Any of those purchases are subject to tax and so you've got sales and use taxes, contractor taxes. That's going to be an additional 5.5 to 9 million based on our

statements. So those are the short-term benefits, which aren't, I don't believe, insignificant, for about a three-year period of time.

Once this project is actually complete, then, and in service, there is a long-term tax benefit to the state and the counties and the townships that are affected by this project. And both MDU and Otter Tail, we pay property tax to the state, we're centrally assessed. Those taxes are then distributed out to the affected counties. So we've been able to do some calculations based on what we currently believe is the cost of this project, as well as the length of the line, those types of factors.

And what we've been able to estimate is that Brown County should see somewhere in the range of \$715,000 to \$885,000 annually in property tax payments; Day County, \$535,000 to \$755,000 in annual property tax payments; and Grant County, \$490,000 to \$605,000 annually in property tax payments. So those are some, I think, relatively significant benefits that this project will bring to these local areas of the state.

So as I mentioned earlier, MISO, you know, through their planning study, they determined that this project needed to be a 345 kV transmission line,

and it needed to run from basically Ellendale,
North Dakota, to Big Stone, South Dakota. And from
their perspective and from our perspective, what that
means is that 345 kV is a higher-voltage transmission
line. It is, you might say, comparable to an
interstate highway system when compared to like a
secondary road system.

So there is a lot of transmission already in this area. I'm sure most of you know that. Most of that transmission is lower-voltage transmission, you know, 69 kV, 115. What the impact of a line like this is, is that there is a lot more capacity on this line to deliver a lot more energy from point A to point B. What that does is that has a tendency to unload or reduce the flows, just the same way as an interstate highway takes the cars off of the secondary roads, puts them on the main highway, let's those secondary roads, you know, have more capacity then for other traffic.

So the ultimate effect is that these other transmission lines, the low-voltage transmission lines, now have capacity available for potentially other things like community development and other singling projects or whatever they may be interested in interconnecting. So the fact that this one line is

being built, it has an impact really in this whole
Eastern South Dakota or Northeastern South Dakota
area, because of how the transmission system works.

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So knowing that we had to run between Ellendale and Big Stone, that means that this was going to be a 345 kV transmission line, as I mentioned. Essentially, the line is expected to be between 160 and 170 miles. I mentioned already it's going to connect Ellendale to Big Stone. Based on our initial calculations here, we think the project, total project now -- This includes the North Dakota portion -- is going to cost somewhere between \$293 million and \$370 million to build this transmission line. The South Dakota portion of that project is somewhere between 250 million and 320 million. And the goal is to have this line built, completed, and in service sometime in 2019. So before the end of 2019.

So we were given essentially the endpoints.

We were told, Here is, you know, you need to go from

Ellendale and you need to get to Big Stone. How do

you do that? You know, you have to select a route to

get from one point to the other. And so we sat down,

as owners, and really developed a list of what we

thought were criteria from our perspective that have a

major impact in how this line would be built as far as cost, as far as impacts to, you know, the residences in the area and so forth.

And this is really the list that we came up with. And, you know, overall length and cost, they're not necessarily listed in order of importance but, obviously, the longer the line is, the more it's going to cost. So those two are directly tied.

We had to look at existing high-voltage transmission lines. They serve a function very similar to this line in that both transmission is the main highways, and they help unload the lower-voltage transmission.

We had to look at locations where we could safely cross those lines without creating, you know, great interference. We also wanted to look at areas where we might want to parallel some of those, but in general terms, we don't really like to parallel other high-voltage transmission because now in that situation in a storm, for example, you can knock out two of your main highways, which greatly reduces the reliability to the system. So there are all those kinds of factors that we had to look at.

Transportation infrastructure is just highways and byways, essentially that. We needed to

be aware of where those are located and make sure that our crossings of those roads or parallel to those roads made the most sense for the project.

Section lines. You'll see when you look at the preferred route, that our line tends to do a lot of kind of stair-stepping motion. It was our feeling as owners of this project that it would be better to try to stay parallel to those cardinal directions, stay parallel to section and quarter lines, rather than run diagonally or kitty-wampus across cropland or pasture land. So that was the reason why we ended up developing the route appearance that you see today.

Also, then, look very closely at populated areas, which includes rural residences. So we made a fairly intensive effort to identify all of the occupied homes anywhere throughout the route corridor area. And our goal was to try to avoid by a great a distance as possible as many of those residences as possible. So we have a very small, small number of some residences that are within, say, 500 feet, but otherwise most of -- most of the project is well away from occupied housing.

There is, of course, any time you do something in this day and age, there is environmental concerns. There is cultural resources concerns. And,

of course, we've got engineering concerns. Can you build a line, you know, over this particular type of geology? You know, soil conditions come into play. All those factors also come into play in trying to determine what's the best route.

We have a crossing of the James River on this project. And we had to make sure that we crossed the James in what looked like probably the most economically feasible location for that or the most practical location.

Then we were looking for public and agency feedback, and we've had, you know, meetings with state and federal agencies. We've had numerous open houses with the public and taken that input that we've got and those comments, we've taken those back and applied those in our routing process as best as we can. And that continues to go on today. I think a lot of you out here know that there is still discussions about route. So those are the criteria that we used to select this route.

And essentially using that criteria, we narrowed the original study area, which is -- was really a box around this whole area, basically the whole map. We narrowed that down into corridors, which are the solid green and the cross-hatched green

areas that we thought might be potentially good places to try to run this transmission line.

Then essentially what we did was you apply all that criteria to try to determine where a route might be within those corridors, and then you run the math. And you, basically, it's kind of a checks and balances where you come down to which route really meets the majority of that criteria at least cost. That's really the bottom line.

So we were able fairly early in the game to dismiss the -- There is a far right-hand route that actually crossed into Minnesota for a short time, and then there is another route that parallelled I-29 up into North Dakota and goes west. Those routes were -- or those potential routes were thrown out fairly early in the discussions just because of some of the -- We had another river crossing, for example, in the case of the Minnesota route. But, you know, cost overall drives this project, and we wanted to make sure that we were coming up with what appeared to be the most cost-effective route.

So those were dismissed fairly early on. We narrowed it down to basically what you see here in the blue. Those were the two kind of final-route options that we had zeroed in on as making the most sense for

the project.

After, really, after further study of those two routes, we were able to conclude that using the routing criteria, again, we were able to conclude what we felt was the best route from the project's perspective, and that's on the next slide here.

So I think all of you have seen this particular slide before. This is the currently preferred route for this project. This is the route that was part of the Application that we made to the Public Utilities Commission. This is the route that the land agents are working with the landowners on so this is the route right now that we are talking to all of you landowners that we've talked with as far as where we believe the line could potentially be routed.

So, that's how we're proceeding. That's how we've kind of gotten to where we are today. It took a lot of -- It's a very large team of people that are looking at all of the different aspects of how running a line at this location affects this factor or that factor or that factor. So there is a lot of analysis that goes into route selection, and a lot of times when you get done, it may not look like the most logical or obvious route, but it's the route that overall we believe gives the least amount of impact to

the largest number of people. So, that's our route.

Next slide.

We also then went through a process of kind of engineering analysis. We, I think at one of the or at least the first set of open house meetings that we had, we were talking in terms of H-frame wood construction. H-frame is a two-pole construction, very typical of some of the higher voltage transmission lines. We initially had started looking at building the project that way. That is a slightly lower cost on a per-structure basis.

But, you know, we heard the feedback from the public and really based on that feedback, we made the decision that we should build this line as what's called monopole or it's a single pole. And so what you see here is going to be the most common structure out on this project. This is what we call a tangent structure. It's a steel pole and so it's a steel structure, and it sits on a poured concrete foundation.

So if you look at the little table off to the right there, you can see that these structures are going to be somewhere in the range of 125 to 155 feet tall, above ground. They will be sitting, then, bolted down to a concrete foundation. That foundation

will range from 6 to 11 feet in diameter. Most of the foundations, because most of the structures are this tangent type or the type that you see on the screen, the foundations for those are roughly 6 to 7 feet. So you're going to be looking at, you know, something like a 6-foot diameter concrete foundation projecting from the ground a foot, a foot and a half, something like that. But you'll have just a single pole, and that will be your only impact.

The span lengths being 700 to 1200 feet.

Span length is the distance between structures. So from one structure to the next, you know, we're talking probably on average something like a thousand feet. So that means that there will be roughly five structures to a mile. You know, five or six, but probably on average more like five structures per mile.

We also designed this line, or will be designing this line for a minimum ground clearance of 30 feet. And ground clearance is the distance between the ground and the lowest conductor at its worst condition. So, in other words, whenever that conductor is sagging the most, what would its distance above the ground be? So 30 feet is what we're designing to. That means under the majority of the

operation time of this line, the ground clearance between the conductors and the ground is something greater than 30 feet. Maybe 35 feet or possibly even more, depending on the span. And there again, this is only at the very lowest point of that sag. So you think in terms of like a jump rope, the lowest point of that jump rope is 30 feet from the ground.

This slide is just to give you a little bit of an idea of what the construction of this line might look like. You know, there is going to be several crews, obviously, running through your property to construct this line, and there is several stages of the construction activity starting with just going out there as a small survey crew and actually staking the structure locations.

Once those locations are found, then there is a crew that comes out that digs the 6-foot diameter hole, and it pours the concrete and puts in the rebar cage and gets the foundation ready. Then there is a crew that comes in that actually takes the steel structure materials and puts that structure together, and then stands it up and bolts it down to that foundation.

So once the structures are actually standing, then there are other crews that come through that

actually string the wire from structure to structure. We also then have to pull that wire up to a certain tension, and then we also have to connect the wire at each structure. So there is a bunch of different kind of steps that go on in getting this line from, you know, just a green field to having a standing transmission line that can be energized.

That process alone for any probably given landowner out here, you know, you're talking about a number of trips through your property. Probably a total amount of construction time, if you were to add all that together, total amount of construction time of maybe two to three weeks at any given structure location, but that two to three weeks is probably spread out over a two-to-three-month time, because of the different crews that come through and when they come through.

So, you know, if you've got a handful of structures on your property, there will be activity possibly going on, say, throughout the summer of whatever particular year they might be constructing in your area.

Once construction is totally done, all the crews are gone, there is a final crew that comes through. Their job is to restore the right-of-way.

And our goal there is just to make the best effort we can to restore that right-of-way to pre-construction condition. Whether that means reseeding pasture, you know, leveling, reseeding, any of those kind of things are part of the right-of-way restoration. There is fences, of course, that we have to insert gates in.

Some of those gates may stay; some may be removed. We generally work with the landowners on details like that.

So that's kind of how the construction would proceed on this project.

I talked earlier about some of the project outreach that we've done today. Hopefully there isn't anyone in this room, if they're an affected landowner, that hasn't received numerous mailings from us. And we have, as you can see, we sent out I think it's a half a dozen or so different letters and postcards to all the affected landowners. We've also sent communications out to all kind of affected agencies and other stakeholders, county government bodies and so forth. So there has been a lot of outreach to landowners, as well as agencies, as well as local jurisdictions, I guess you could say.

Hopefully most of you had a chance to attend at least one of our two open house meetings we had.

Each of those dates there represent actually four or five open house meetings that we held. You know, we held one early on in the project before we had come down to any kind of idea of a route. We held a second one after we had essentially narrowed this down to close to the preferred route. So hopefully all of you had a chance to attend those and make your input known to us.

We also have a project newsletter. Those newsletters I think were all made available. If you haven't seen one for some reason, there was some that were laid out, I believe, at the front desk. Those newsletters we're kind of sending out as we see the need. Something happens, you know, on the project, a milestone or something, then the newsletter comes out. So it's not on a specific mailing schedule. But the newsletter is a good source of information on the project and the project status.

We had meetings with county governments that I mentioned. We didn't necessarily attend any county commission meetings, but we had REDX informational meetings with members of the county commission and other interested commission -- or county employees. And then we've also met fairly extensively with several tribal agencies of a couple of the tribes in

the general area there.

So we've been working, I think, fairly diligently here for the last two-plus years to make sure that everyone knows about this project, knows why this project is coming, and just what the project is all about.

I mentioned the right-of-way acquisition process has been started. We started at -- August 5th we actually released land agents to the field. And as of October 14, this data is as of this past Monday, we have been able to successfully contact actually over 90 percent of the South Dakota parcel landowners. A lot of those are, you know, face-to-face meetings. We've sat down and gone through with the landowner the easement package that we put together to explain the easement process, explain the payment process we're proposing, all of that.

As a result of that, we've gotten 94 parcel owners to date that have signed options. We're out securing options at this point rather than the easements. And 94, it's roughly about 30 percent of the South Dakota route we now have options signed. We actually feel that's pretty good progress considering that we've really only been out for just a little over two months, and the fact that we've already secured

almost 30 percent of the route. So that's kind of how we stand today.

Where are we going to go from here? Well, hopefully, we're going to continue on the road to construction of this project. We are currently continuing work with environmental review and permitting, including this process today. We also have engineering activity going on, and as I just described, we have a lot of right-of-way activity going on.

The goal here is that we would be finished potentially with right-of-way acquisition maybe towards the end of 2015, which would allow us then to get the design finalized, get the structure materials ordered, and be able to physically start construction of the line in 2016. And we're saying construction, you know, this is a pretty long line, construction of a line of this type, that length, can very easily take up to three years. So that's why we need to start in 2016 in order to complete this project by the end of 2019, which is our goal.

So that's pretty much all I wanted to say as kind of an introduction to the project right now. I just remind you all that we do have our website out there, that you can continue to check at any time

that's going to be a good resource for information about the project, what's the status of various aspects of the project. We also have our toll free line that you can call and leave your comments on as well.

We have a mailing list so if you're not getting the newsletter, it means that you're not on our mailing list for some reason. So you can sign up today or you can, I believe, sign up on the website or you can leave a message on the toll free hotline that you want to sign up for the newsletter. That's another, a good source of information. So feel free to utilize any of those tools out there that would help you stay abreast of the project.

You can make comments today. I believe we have some comment forms available today. So you can write a comment if you prefer. And you can do that at any time using the hotline or the website or the e-mail address that we have up here on the screen.

So that's kind of the end of my story. I guess at this point I'll turn it back to Tom or Commissioner Chairman.

CHAIRMAN HANSON: Thank you very much for the presentation. How are you doing, Nancy?

THE REPORTER: Good.

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Okay. What we'd like
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             CHAIRMAN HANSON:
    to do now is we have Brian Rounds with a
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    microphone. He'll be walking around. We'd like
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    you to -- We really encourage you to make
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             We'd like -- Obviously, be respectful.
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    What we're interested in here, we are interested
    as Public Utilities Commissioners in hearing what
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    your concerns are. At the same time, you have the
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    opportunity right now, the Applicant is here.
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    They have their experts here. We want you to ask
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    the questions that are on your mind that you need
    answers to of the Applicant. So you have both of
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    those avenues right now.
             But at the same time, as has been mentioned,
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    if you wish to contact us by letter, by e-mail,
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    however, you can certainly do that. If you do send us
    a letter, because this is a docketed item, we act --
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    we're in a quasi-judicial position here. We act as
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    judges. At this juncture, we're just listening to
    information and hearing some testimony, things of that
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    nature. But this is your opportunity to gain
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    information. So we're turning it over to you at this
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    point so that you can have an opportunity to ask those
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    questions.
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             KEN VOGELE: My understanding -- I'm
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Ken Vogele. V-O-G-E-L-E. My understanding is
that our right-of-way rights where the
transmission line goes are lost forever, and I'm
wondering what, what rights we're giving up or
what rights the companies have once the power line
goes across our land.

For example, let's say this power line is taken down at some time in the future, but the company decides they want to run a big oil pipeline across our land. Can that sort of thing be done? I want to know all the things that the company can do in our right-of-way into the future.

CHAIRMAN HANSON: I'm going to let the Applicant answer that, because we are not involved in the process of eminent domain. That would be before a court.

HENRY FORD: Yeah, or whether it's eminent domain or whether it's just securing an easement, you're just wondering what those easement rights actually are. Generally speaking, the way an easement is written, the easement will be for this line only. So if at some point in the future this line is removed, nothing else could be built on that same easement.

The easement is going to describe an electric

transmission line. You know, it's going to have that language in there that is specific to the project. It will also have an attachment or an exhibit with the easement that shows you exactly where the center line of the line goes, shows you where the structures will be placed on your property. So it's about as precise a document as you can get as far as what this easement is for.

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And easement rights really for us as a company, those rights are only to construct and maintain, you know, to place this power line on this The easement will describe this as a strip of land. strip of land, a hundred fifty feet wide, 75 feet on either side of the center line, and then it will describe the center line. So you'll have basically a survey description of the center line that says, Here is where the line is at. And 75 feet on either side of that is what we will hold as an easement. And the only reason for that is to be able to get in and do any future work on that line, if a structure should fall over or something breaks, or we just need to go through and do inspections. You know, those kind of things are going to happen. So the easement gives us the right to come onto your property once the line is standing in order to do those inspections and that

maintenance, and the easement gives us the right to 1 2 have the line there. That's really the extent of what the easement is. I don't know if I answered your 3 question or --4 5

(Nods affirmatively.) KEN VOGELE:

**HENRY FORD:** Okay. Thank you.

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PAUL DULITZ: Paul Dulitz. D-U-L-I-T-Z.

I have some concerns and primary concern is the value of the land -- of the easement payments, the safety concerns, and another one, another concern is what will happen to this topsoil once the foundation is duq. But primarily, let's look at the value.

My consideration is that it's unlikely that a landowner will receive greater offering of, you know, purchase of a future transaction if this project is built and that he would more than likely receive less for his land once this easement is signed. That's my primary thing.

I've seen land prices change somewhere on the order of 20 to nearly 30 times, 30 fold higher in my nearly 40 years of farming. So we're getting paid once and the land price, who knows, maybe the land price could be 20,000 an acre and we're only getting paid once. That's my primary concern here. Do you

want to address that before I continue?

know, we, as we develop the easement price that we are offering, we of course are looking at what the, you might say, pre-construction value is of that land. So the easement price itself is based on the current land value as best as we can determine, you know, and short of actually having to do appraisals of every single parcel.

But our offering is 80 percent of that full land value at today's value, so, and that's for the entire right-of-way strip. So 150 feet wide times however length of land that we're occupying. You know, I guess it's our feeling that the structures themselves, you know, the physical towers, that's the real impact to the agriculture. And I know it's a major pain in the rear to have to farm around the towers. We're trying to locate the line, you know, in such a place that the farmers can work easiest around those structures. That's why we've been proposing putting the center line actually further out into the cropland so that you can get around all sides of the tower.

But I guess from my perspective, I'm saying, I'm paying 80 percent of what, how many acres of

right-of-way we're taking here. But the structures themselves are only impacting a very small fraction of that total strip of land. So I mean, it's -- yeah, it's a negotiation, obviously. But this is how we came to the number we came to, kind of somewhat based on what we've seen other recent transmission projects using for their calculation for easement value. We looked at a couple other projects that are being built right now that are of comparable size, and, you know, they've had, I guess, success paying for the easements at this level. So ultimately, I guess we believe that, we think, anyway, that the compensation is fair for the amount of what I would call permanent impact, which would be that structure location.

PAUL DULITZ: I understand. One of my concerns with that is what kind of a legacy am I leaving for my children, potential grandchildren, and their children? The scar is going to be there for a long time.

Getting into safety. As I understand it, these structures are designed to carry a half-inch ice load. I don't believe that's sufficient. I believe that the potential for that half-inch ice load taking some part of this transmission line down is going to be before the end of my life, I hope. Because I hope

to be here for quite a while. I've seen it before 1 2 in -- I saw a transmission line around 2005, 2006, we had that November ice storm, the line north of Summit. 3 That's an H-line, two wooden posts with a crossbar. 4 And as far as I could see, that whole line was down. 5 6 I probably could see about eight miles or so as I was driving the Interstate. And that line was down. 7 So I do have some concern about the ice load. 8 I have concerns about the lines falling onto 9 10 roads and outside of the easement area. I have concerns -- This is not a safety concern, but I have 11 12 concerns about the project is going to benefit 13 probably more urban customers than rural customers, 14 and we're going to be paying the price for it. 15 you like to address the safety concerns before I move 16 on to the last concern? 17 HENRY FORD: Sure. Sure. I quess as far 18 as the structure and line design at this point, 19 that's still in very preliminary stages. even sure -- I have the engineer sitting here, but 20 21 I'm not sure that we have any intention of 22 designing this for only half-inch ice. I believe 23 that it's going to be designed for significantly more than that. But as I said, we're still really 24

in very preliminary stages on this project. So we

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don't -- Although, you know, I show you a 1 2 structure design, that's a conceptual drawing. don't know, you know, exactly how big are those 3 crossarms, what's the diameter of the actual poles 4 5 themselves. You know, the type of steel or, you know, just exactly how all of this is going to go 6 7 together. That's part of the final design that 8 comes more once we've completed the right-of-way. But I agree with you that half-inch ice, 9 10 half-inch ice comes out of the National Electric 11 Safety Code, which utilities are required to follow. 12 Most utilities like MDU and Otter Tail, we see those 13 code standards as minimum, which is what they are. 14 What we design for is what we know from experience can 15 occur in our area. And I agree with you a hundred 16 percent that half-inch ice actually is getting to be 17 almost more rare than -- much heavier ice loading than 18 that. We have seen, even just recently, two and three 19 inches of radial ice in the last few years. So this 20 line is going to be designed for significantly more 21 than a half inch of ice on the conductors around the 22 structure.

PAUL DULITZ: Yeah, I believe that was
probably half-to-three-quarters of an inch in
Sioux Falls that caused that tremendous amount of

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damage. I was in Sioux Falls at the time during that ice storm.

a follow-up question. You're on a very important point here. I was just out west two days ago and saw all of the toothpick remnants of wood poles from disaster out there. Are these steel posts typically going to withstand ice better than what wood structures, even H-frame wood structures would do?

**HENRY FORD:** Would you say yes?

AUDIENCE PARTICIPANT: Yes.

HENRY FORD: I mean, I believe they would for a number of reasons. No. 1, the structure is a lot more expensive in the first place, so we're going to design that for a lot heavier duty factor, you know, a safety factor, because you have one of those fall over and you've got a lot more money to spend to put it back up than if it was a wood structure.

The other factor is wood poles, you know, they change with time. You have a brand new wood pole and it's got a certain strength and certain ability to withstand galloping and these kind of ice load conditions. As that structure gets older, that kind

of capability gets to be less and less and less.

You're not going to really have that with the steel. The steel structures, these will most likely be weathering steel. You know, they don't change much over time. These structures are going to last a very, very long time without degrading their strength.

So, yeah, I think this line is going to be far superior to a wood pole line when it comes to being able to precisely design for certain safety factors and know that that safety factor is going to remain constant.

COMMISSIONER NELSON: Thank you.

that either Otter Tail or Mon-Dak can do to assist the farmers would be to secure commitments for wind development if a farmer so chooses along this line. So that they can -- they can -- the farmer can see continuing benefit, the area can see continuing benefit from this line. And this line would make it easier, as you stated, to use that wind benefit on your existing lines. I would imagine it would be possible to apply substations to actually feed that onto this line.

One other concern is where will the soil that comes out of those holes when you dig a 6-foot hole,

how deep is that hole going to be? 6-foot around?

What happens to that soil? Is that going to be given back to the landowner, spread around the structure?

Are you going to, you know, remove the topsoil for when the heavy equipment comes in to bring this in?

Or what are we going to have for impacts on our farm productivity? Go ahead.

HENRY FORD: Okay. Okay. For soil

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Okay. Okay. For soil HENRY FORD: impacts, these foundations are typically 20 to 30 feet deep, something like that. So, you know, to your points, I'm sure only that top maybe foot of it or so is topsoil. The rest of it is probably not very good soil. It's not our plan or intention to take any of that subgrade soil and spread it around on your field. That subsoil will be hauled off the project. If you had an area that you wanted filled, for example, you know, our crews would certainly work with you to put that soil somewhere where you could benefit from it. Otherwise, we're going to move it off the project altogether. So I think maybe -- Does that answer that part of the question?

And I forgot what was your first part of the question about wind generation? You were asking about whether we could help make sure wind generation is

secured? 1 2 PAUL DULITZ: That was part of it. asked if you could -- Yeah, I believe that would 3 provide a greater good for this project is if you 4 could secure commitments from whoever does the 5 6 wind generation --7 **HENRY FORD:** Uh-huh (Yes). PAUL DULITZ: -- along this, so that if a 8 9 farmer decides, well, it would be good entirely 10 for the planet to have a wind generation, you 11 know, in my backyard. You know, can I help --12 What can we do? How can we work together? You 13 know, that's what I was looking for with your --14 HENRY FORD: Sure. 15 PAUL DULITZ: -- comment on wind 16 generation --17 **HENRY FORD:** Yeah. 18 **PAUL DULITZ:** -- is how can we work 19 together? 20 **HENRY FORD:** Yeah, absolutely. Kind of 21 what I alluded to during my presentation, 22 actually, I think the expectation will be that the construction of this line will result in more wind 23 24 development in South Dakota. That wind 25 development may not -- it could but it may not be

looking to interconnect directly with this 1 particular line, because this being a 2 higher-voltage line, it's more expensive to do 3 that to interconnect. Equipment, of course, is a 4 lot more costly to do that interconnection. 5 6 once this 345 line is in service, the 115 line 7 that may be five miles away, the flows on that line are going to change and that line may now 8 have the capacity for a couple hundred megawatts 9 10 of generation that it didn't have before. 11 So the way these wind farms typically develop 12 is they go through this process of talking to the 13 local utilities, and in our case, they will talk to 14 MISO, and they will determine where the best place is 15 for this interconnection. So we do work directly with 16 the wind generators that have a project that they're 17 looking to development. We will work with them as we 18 always have to help them determine the best location 19 for this interconnection, and I think this line is definitely going to open up the potential for more of 20 21 those wind farm projects to be proposed and built. 22 PAUL DULITZ: Okav. Thank you. 23 BOB PESALL: Good afternoon. Bob Pesall.

BOB PESALL: Good afternoon. Bob Pesall.

I'm an attorney from Flandreau, South Dakota. The

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last name is P-E-S-A-L-L. I'm here in my capacity

as an attorney representing the gentleman who is seated to my right, there in the hat who is waving. And we've actually read the Application that's been submitted so we have more or less concerns that we want to put on the list for the Commission to consider and fewer questions, although we do have one. And I'll begin with the question and then address my client's concerns as 9 he's asked me to do or to assist him here with in 10 the meeting today. 11

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But the question specifically for the gentleman from BSSE is exactly how many South Dakota customers are going to be receiving electricity from this line?

HENRY FORD: That could be kind of difficult to answer, because this is bulk transmission. Bulk transmission does not deliver power directly to end-use customers. So what bulk transmission does is it adds capacity to the overall system. And back to my interstate highway kind of scenario. Really what it's doing is taking significant flows off of other transmission lines, which do interconnect directly with customers, and so now these transmission systems have this capacity that it potentially didn't have

before to serve more customers or to interconnect generation or whatever the case may be.

So it's not as simple as saying, This line is going to serve these customers. That's not how transmission works, especially not bulk transmission. This line is going to have the capability of quite a number of megawatts of power flow on it. Those megawatts ultimately will flow to where the load is. So there will be cases where this -- some of the megawatts off of this line will drop off at Ellendale or drop off at Big Stone, ultimately go on to lower-voltage transmission to 30 kV or otherwise on down and serve customers.

So there is no way to answer that question and say that -- You could argue it from the way that this line with this capacity has the capability of serving that many customers based on capacity. But because customers aren't going to be interconnecting with 345 kV transmission, you can't answer the question that way.

BOB PESALL: The other side of the question, then, would be producers, what number of producers would be able to take advantage of this particular line apart from Montana-Dakota
Utilities and Otter Tail Power?

Speaking in terms of like 1 HENRY FORD: 2 wind generator interconnections and that type of 3 thing? BOB PESALL: For example. 4 **HENRY FORD:** That, again, gets down to 5 6 the question of what's the ultimate capacity of 7 this system and what part of that capacity would be used I guess initially when this line is 8 9 energized and what kind of capacity is in reserve 10 for wind generation projects. I know that -- And 11 I'm kind of looking over here to my planning 12 expert. I know that when MISO did those studies, 13 they looked at certain levels of generation that 14 they saw as requirements down the horizon, and 15 there was -- Do you know the number, how many 16 megawatts? 17 JASON WEIERS: Yes. 18 **HENRY FORD:** Or if you could tell me, I 19 can repeat it. 20 JASON WEIERS: Jason Weiers of Otter Tail 21 Power Company. I was involved in the planning 22 studies identified in the project. And as the 23 MISO studies did go on, they looked at future 24 scenarios representing 2021 time frame, and there 25 was approximately 900 megawatts of new wind

installed in South Dakota. Now, the trend for 1 2 this system is an open-access system so basically it's a first-come/first-serve type of scenario. 3 So as new wind developers come along, they will be 4 5 accommodated to the extent that there is capacity 6 available. 7 **HENRY FORD:** So you can take on 800 megawatts and, you know, most of these wind 8 9 projects that we see are 150, 200 megawatts, so 10 that kind of maybe gives you some idea. 11 BOB PESALL: And would those developers, 12 those wind energy units be able to tie directly into this line? 13 14 **HENRY FORD:** If they so choose, yes. 15 BOB PESALL: Having said that, the issues 16 that we wanted to put before the Commission, these 17 are things that -- I sat down with my client, who 18 is also a relative of mine. So if you wonder why his last name is also Pesall, that's the reason. 19 20 I sat down with him and explained to him what 21 a hearing like this does and what his opportunity was 22 to express concerns for the Public Utilities 23 Commission and just to try and narrow down a few. 24 Frankly, the number that I've heard from him and his

neighbors I could sit here and talk all day, and I

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know there are a lot of people that have more useful things to say than I do.

The concerns he has essentially deal with the legal compliance aspect, the health aspect, and the orderly development aspect that have been discussed. As to legal compliance, the whether and how eminent domain can be used, I think is something that, perhaps, the PUC isn't able to address, but to the extent that you can investigate it, we would invite the Commission to do that. We don't know that this is technically the sort of use by the public that our Chief Justice is fond of pointing out is required under South Dakota's takings laws.

That aside, there is the interference that this sort of a system will create with the traditional farming practices with the long-term family farms that exist in Day County and throughout the region that they're looking at building this system through.

I asked my client and his friends, you know, What are the specifics? What are you really concerned with? They pointed at page 59 of the Application. 59 indicates, There will be interference with GPS systems in and around the towers. And I think it's on page 60 it indicates, No mitigation is going to be required because we don't think it will interfere with

navigation.

Well, to an up-and-coming farmer, to a young farmer, to an old farmer that's looking to modernize, that's a huge issue, because in this day and age, those farmers have a GPS system that's steering that tractor through the field. That GPS system is tied in with the soil samples and determines how far apart to space that seed, how much chemical to apply, and allows them to maximize the production on every square foot. Now, you run a power line that's a hundred fifty feet wide as far as the right-of-way through the middle of that field, you've effectively rendered about an acre of land for every 300 feet of line farmable only by what would be Stone Age practices by comparison.

On the other side of the technological spectrum, you've got the interference with two-way radios, which is also acknowledged on page 59 and 60 of the Application. They may be using GPS systems and cellphones, but they're also using CB's, a lot of CB's, because that's the easiest, cheapest way to keep in touch with a couple of tractors and a couple of trucks at home base.

That kind of interference is going to neutralize farming practices that have been going on

for a very long time. And I don't know that the benefit we potentially might see from this power system is enough to override that.

Then there is a public safety aspect. If I've been driving with a GPS system all day long and I drive into an invisible electromagnetic field that suddenly shuts it off, do I react in time before I crash into something?

That aside, there is health issues. Now, I'm not going to stand in front of you and try to make the argument that there is some cancer connection. I think the Petition is probably correct, I don't think there is evidence to support that. We don't think it's necessarily going to cause health problems, but it may exacerbate the health problems that are out there. We looked at the National Institute of Health's concerns with respect to power lines, and the big one that comes up is pacemakers.

You've got a lot of aging farmers out there on tractors that are 20, 30 feet off the ground, you're putting a man with a pacemaker that close to a 345-kilowatt power line, you've created a substantial health risk and that man is in the driver's seat of a several ton piece of equipment, or woman.

Finally, you've got esthetics, and this one

gets a little personal to me. The man in the hat who waved right here is maintaining a family farm that's had my family name on it since 1882. That's seven years before statehood, if my math is correct. were wearing different shoes today, I could take you out in the field and show you exactly where the sod hut stood when my ancestors came and started that farm 130 years ago. I can stand on that site and I can look around and I can see exactly the same view that they looked out on when they had the gumption to say, "I'm going to make a life here." And I don't want to see that getting blasted with a big, ugly power transmission line any more than I would want to see a big, ugly power transmission line across the front of It may not be as dramatic a view, but Mount Rushmore. it is still culturally important to the State of South Dakota.

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Finally, there is wildlife. I've stood under these power lines; the folks I've talked to have stood under these power lines. You can hear them. You can feel the electricity in the air. And I'm an ordinary human being that sits indoors in front of a computer most of the day. If I can pick that up, I'm reasonably sure the game, fish, and wildlife can pick that up too.

Now, when I drove out here today, I came in from Interstate 29 and I see that sign that says, "Fur Game, and Fish, Diamonds in our Economy." It's a bit of a protest board but the person who put it up there has a point. Those animals are going to pick up on this stuff. They're going to notice it. A fish is going to notice electricity in the water far before I would, and there is a heck of a lot of fish in the prairie potholes of Day County, and it's doing wonders for Day County. Same with the deer; same with the pheasants. This is going to reduce habitat and ultimately reduce economic development in the area.

Those are the concerns that we have.

Ultimately, my client is going to take the position that he's not going to cooperate no way, no how, take me to court. So know that that's the perspective that he comes from, and frankly I can't fault him for that.

We invite the Commission to investigate those issues during the proceedings. We may intervene; we may not. We haven't decided yet but thank you for the opportunity to express the concerns.

## (Applause)

RON RINGGENBERG: My name is
Ron Ringgenberg. It's spelled just the way it
sounds. R-I-N-G-G-E-N-B-E-R-G. And I just say

amen to what you just mentioned, because that's a lot -- I have a lot of notes here and he covered a lot of what -- I live in Cambria Township, and we've already got four power lines about two miles south of us. Basin Electric has got a substation there. You're going to be crossing those two big lines, is the way we read this map.

As far as hindering farming, if we have to get an aircraft in and fly on any chemical or whatever, fungicide, all these corners, there is no way that they can put a plane in those fields. I mean, that's going to be hindering, you know, our farming practices. We're going to lose land. There is -- We're supposed to be -- You know, they say all the people that we're going to have to be feeding in the next 30 years or whatever, the population, we're taking acres away from. Some of the best land in the State of South Dakota is running through these counties that you're going through. And I think Brown County is probably one of the top corn and soybean counties in the state.

anything on with all these corners up there.

Between -- Just south of our place four miles there is

three corners. You know, you tell me how we're going

And, anyway, there is just no way we can fly

to get a plane in there and do any spraying. Thank
you.

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COMMISSIONER FIEGEN: Mr. Ford, would you be willing to respond to some of the farmers and agricultural issues with GPS, with aerial aircraft. I know we're here to hear, but also it's also nice for the developers to respond.

**HENRY FORD:** Yeah, I don't recall exactly how the Application was worded on that issue of GPS. You know, GPS is a navigation system that is taking a signal off of several satellites at a time, and it's potentially more of a -- what I'd call a line-of-sight type of communication between the satellite and the GPS receiver. So the fact that there is a power line there is not necessarily going to limit or totally obliterate the use of GPS. It may knock, you know, the communications to one of the satellites off, but since GPS is typically communicating with several satellites at a time, most of the impact, as far as I believe, would be potentially maybe some slight degradation in accuracy of position. That's if you lose, you know, one or more satellites. But I'm not even sure, you know, that that really would be the case. I don't know that

1 there is scientific studies or evidence that have

- 2 proven -- Danny, are you familiar with anything
- 3 like that out there?
- 4 DANNY FREDERICK: I think you said it
- 5 right. There is more -- You're picking up
- 6 multiple satellites. So it's a line-of-sight
- 7 issue. If you lose signal from one, you're still
- 8 going to have multiple other ones. And when you
- 9 pass the structure, if you're on some piece of
- 10 equipment, as soon as you get past that
- 11 | line-of-sight issue, the structure two-feet wide,
- 12 and now you've picked it back up again.
- 13 CHAIRMAN HANSON: Please always use the
- 14 | mike and identify yourself. What was you last
- 15 | name, please?
- 16 DANNY FREDERICK: Frederick.
- 17 F-R-E-D-E-R-I-C-K.
- 18 CHAIRMAN HANSON: Thank you. Was
- 19 | everyone able to hear what his response was?
- 20 AUDIENCE PARTICIPANT: I didn't.
- 21 CHAIRMAN HANSON: A lot of the people did
- 22 not. So if you'd --
- 23 DANNY FREDERICK: You want us to.
- 24 | CHAIRMAN HANSON: Please always use the
- 25 mike. Thank you.

1 DANNY FREDERICK: My name is 2 Danny Frederick. Like I was saying, GPS signals they normally pick up from multiple satellites. 3 So you're going to have four, five, six 4 5 satellites, whatever it is, and it's a line of 6 sight. So if the equipment or whatever you're in 7 is behind the structure that just happens to be perfectly lined up with the satellite in space, 8 9 you might lose signal from that one particular 10 satellite, but if you're moving, you're going to 11 get a couple feet beyond that and now your line of 12 sight is going to be restored so you'll restore 13 signal very quickly. 14 THOMAS WELK: Danny, why don't you tell 15 them who you work for and what your occupation is. 16 DANNY FREDERICK: I'm Danny Frederick. 17 work for Power Engineers, and I'm an engineer on 18 the project. 19 HENRY FORD: Danny is one of our 20 electrical engineers that's kind of the expert on 21 all things electrical. He's one of the project 22 designers as well. So we'll be directing --23 DARRIN ERDMANN: Excuse me. I'd like to 24 dispute that. Can I get a mike? My name is Darrin Erdmann. I farm by Groton. 25

E-R-D-M-A-N-N. I'm a tenant and a landowner for where this is going through. The last gentleman was exactly right. About 15 years ago, the technology that we were using then, but currently the technology that we're using with GPS now, we're using land locations that, GPS locations that are stationary, and to get the accurate positioning that we need, not just for navigation, but also for application and soil testing and recording of yield data to see whether what we're doing is working is triangulated with that land base with a two-way radio. So as far as it not being affected until just when you're driving by that tower is about 15-year-old information.

CHAIRMAN HANSON: I believe there is a gentleman right over here that's next.

COMMISSIONER FIEGEN: And I didn't hear -- I know the Commissioners get to ask questions during the hearing, and I apologize I shouldn't be asking now. But one other gentleman asked about aerial air crafts and spraying, and I don't know if I heard your response to that. And I know, because we will be asking you all that, those questions, of course, when we get to do that in our hearing, but I wanted to make sure that farmer had a response.

what he was saying, I understand, if there are several lines crossing together in a certain area, it's going to be very, very difficult to get a plane in there if you're going to do aerial spraying. You know, I don't know that there is a solution to that, if you have multiple lines that close together. Typically a single line in itself, you know, the aerial sprayer applies under the line or to the side of the line.

I don't really have an answer for him per se as to if the line is here, this is the solution. You know, I'm not going to tell him he can just ground spray instead of aerial spray. That's not a solution. I guess, I think the owners want to work with all the landowners on the project, and this is some of those kinds of factors that we have to look at as we're working on right-of-way acquisition, that if maybe this parcel of land is becoming unfarmable because of these reasons, we need to look at something different than potentially just an easement or an easement price that we talked about before.

But we are continuing, I'll just say, we are continuing to look at potential reroutes in the line, and so as though kinds of concerns are voiced, we do

take the time to look at where that specific issue is 1 2 and determine if there is any way we could shift the line a little bit one way or the other that would help 3 enough to solve the problem. If there is something we 4 can do like that, you know, we're going to be willing 5 6 to do that. We got four lines just 7 RON RINGGENBERG: right south of us. 8 9 CHAIRMAN HANSON: Please use the mike. This will be five. 10 RON RINGGENBERG: 11 We've got four lines south of us, and you 12 would be No. 5, and I understand, I think, 13 Basin Electric is talking about running a line over to 14 the ethanol plant at Groton. We're going to have six 15 lines to go around. Plus we got trees. And our 16 normal lines that go to the farm. So right there in 17 our area it's really congested for lines right now and 18 we don't need any more. 19 **HENRY FORD:** Yeah. CHAIRMAN HANSON: Sir, could you tell us 20 21 right where that --22 RON RINGGENBERG: Cambria Township. 23 CHAIRMAN HANSON: Approximately so that 24 we'd have as best idea. You can just tell us how 25 far north or south from some community, if you

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can. (Chuckles.)
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             RON RINGGENBERG: Well, Dennis, how about
    Plana?
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             DENNIS JONES: Yeah. Well, Plana is kind
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    of an unknown town, but in Cambria Township, which
 6
    is directly north of --
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             CHAIRMAN HANSON: Okay. We're going to
    get a mike to you, sir.
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             DENNIS JONES: Which is directly north of
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    Bath.
           Ronnie is exactly right, that there is a
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    substation there, and we have got a clutter of
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    transmission lines going through Cambria Township.
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    It's -- And when you talk to aerial sprayers and
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    everything, they just don't want to be around
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    Cambria Township. It's just too tough.
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             CHAIRMAN HANSON: Is that up close to
17
    Sand Lake then?
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             DENNIS JONES:
                            No.
                                 Directly south.
19
             CHAIRMAN HANSON:
                               Directly south of --
             DENNIS JONES: South of Columbia.
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             CHAIRMAN HANSON:
                               Okay.
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             DENNIS JONES: About halfway in, about
23
    four miles north of Bath is where you're going to
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    see. Some of them come diagonal; some go straight
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    east and west.
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All right. Thank you 1 CHAIRMAN HANSON: 2 very much. I believe you were next, too, with a 3 question, weren't you? **DENNIS JONES:** Yes, I think I was. 4 started researching this project when I kind of 5 6 found out about it, and I found out that there is 7 a lot of answers that I couldn't get answered. 8 And especially the people in the industry, the 9 people that you know, wouldn't answer it. They 10 avoided the answers, and so finally I found a 11 gentleman that had been in the industry for -- he 12 was retired. And he spent a day with me. And the 13 first thing he said, he said, You guys stand a 14 slim chance to nothing. It's about that, the way 15 it is. He says, I want to tell you how it works. 16 They hire a professional company, and -- What's 17 the name of your company? Are you the guy that 18 owns the company? 19 THOMAS WELK: I'm a lawyer. 20 **DENNIS JONES:** Okay. Who is the firm 21 that you guys hired to come in and talk to us? 22 HENRY FORD: Kadrmas, Lee & Jackson out 23 of North Dakota is the company that we've hired 24 for right-of-way services, as well as surveying

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work.

1 **DENNIS JONES:** Are they the ones that 2 held meetings with us? The open house meetings or 3 HENRY FORD: the face-to-face with one landowner? 4 5 DENNIS JONES: Yeah. Right. 6 **HENRY FORD:** The ones with the individual 7 landowners, that's Kadrmas, Lee & Jackson. Those 8 are land agents that work for Kadrmas, Lee & 9 Jackson. 10 DENNIS JONES: Right. He said, First of 11 all, why hire a company like that that is very 12 professional that can answer just about every 13 question there was? I hosted the meeting, and 14 they had about 11 or 12 there. Let's see. 15 were at the meeting and you were there. How many 16 were at that meeting, did you guys have there, that meeting? It was like a training seminar for 17 18 all the other people they had hired. 19 HENRY FORD: Six **DENNIS JONES:** What I found ironic in 20 21 that meeting is we got two different answers a lot 22 of times. So I decided to do -- try and do as 23 much research as I could. I finally found, and

you know the gentleman, it's one of the people in

here that is retired from the industry. He says,

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You don't stand a chance, is basically what he 1 says. He says, They hire a professional firm to 2 3 come in. And he says, You're going to see people that are out-of-state landlords that really don't 4 5 care. And you mentioned your 30 percent sign-up 6 you've got already. He said that's very 7 unprofessional. They should have been with stopped when started, to start with. But it's a 8 9 way to divide a group. But he says, the best way 10 to explain it, he says, it's like a group of farmers that are asked to come in on a rainy day 11 12 and play the New York Yankees at baseball. That's 13 about how much of a chance you've got. 14 But I spent about a day with him. And it was 15 16

Put I spent about a day with him. And it was very interesting. He said, I cannot see the need for this project. I can see the motive for profit. But I don't see the need. And we went through the -- your diagrammed route. And we drove some other routes. And he says, I have no idea whose decision it was to come into the Jim River Valley. He says, It does not make sense. No. 1, he knew the soil rating in that area. That does not give you a good base. Where they're crossing the James River, he said, you could cross it up by Ludden and there would be the river bottom.

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He said a lot of this does not make sense. It's like someone, like there is an ulterior motive there. And he explained a lot of things to me. said, No. 1 -- and I read an article a while back on this, that No. 1, he said, these new transmission lines should be adjacent to state highways, because of the traffic that is created by it. We're in an area where our township is basically broke. And we're in an area where Basin Electric has destroyed roads, and I have -- you know, because of the traffic. We don't have a base in here, in our area, because it's probably one of the prime -- It's hard to explain here. Our roads are in the best condition now than they've been in five years. But they were totally tore up, and it's because we're in an area that is rich in fertile farmland that does not give you a base.

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South Dakota Wheat Growers, for example, was, years ago, was looking for building a terminal along the James River Valley. They had to scratch that plan because they didn't get the base. They got a tremendous base over by Andover where they built that terminal. And so the soils vary so much. But to come through the James River Valley with the gentleman I spent that day with, he says, it doesn't make sense to

1 me. 2 And then he did some math and he says, This line is -- actually could be shortened up by about 3 35 miles. And he says, There is other routes. He did 4 5 not quite -- He says, I was not in on the planning on 6 I've been retired for a few years. He says, 7 Probably I'm saying things that I shouldn't be saying. But I think he's right when he said, and the people 8 that you had coming out to sign to get permission to 9 10 go on the land, that shouldn't even have happened yet. 11 It shouldn't have happened. It's a way to divide 12 people. And you know that. 13 And that's -- And the other question I want 14 to ask, how much are you paying this company? I want

And that's -- And the other question I want to ask, how much are you paying this company? I want to -- You know, my price is public, what you're going to pay for my land; you already told me that.

17 Everybody else in this room knows. I want to know how 18 much you paid that company to do that.

CHAIRMAN HANSON: Sir, would you state your name and then give them an opportunity to address the questions?

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**DENNIS JONES:** Absolutely. I apologize for not stating my name. Dennis Jones, Bath.

J-O-N-E-S.

**HENRY FORD:** Well, you obviously threw

out a lot of different --

THOMAS WELK: It's not on.

CHAIRMAN HANSON: There are additional chairs available now for anyone who would like to sit behind us. I don't know how comfortable I am telling people to sit right behind me.

(LAUGHTER.)

CHAIRMAN HANSON: But I see some familiar faces. If anyone wants to have a chair back here, there are some that are open. Please go ahead and address whatever you feel is appropriate.

HENRY FORD: Yeah, I guess I was just going to comment about the price that we paid Kadrmas, Lee & Jackson to do this work. I mean, we have a contract with them to do this work. I don't think I would be willing to discuss what price they bid to do the project. They are doing a lot more than just right-of-way. They're doing survey work and so forth. I would leave that more up to Terry, if he wanted to talk about what his land agents' wages are, whatever the case may be. Any, you know, any payments themselves for right-of-way options or easements, the owners pay that themselves. The contractor doesn't have any --

I wasn't referring to 1 DENNIS JONES: 2 I was referring to the contract that you 3 have with this company. **HENRY FORD:** Yep. 4 5 **DENNIS JONES:** Not what people are 6 getting paid. CHAIRMAN HANSON: 7 Sir, we're trying not 8 to be argumentative here. We want to be able to 9 have Q and A if we can. I'll tell you that the 10 Commission will not -- That will not weight on the 11 Commission's decision, if they paid somebody too 12 much or too little, or if they hire a million 13 people to come in here or if they only hire one 14 person to come in and talk to people. There is a 15 lot of folks that are going to have questions 16 here, and what I'd like to do is get to as many of 17 those as I possibly can. 18 **DENNIS JONES:** I understand exactly what 19 you're saying. 20 CHAIRMAN HANSON: Thank you. 21 **DENNIS JONES:** But I have to point out 22 what we're up against and what's already started. 23 And it shouldn't have started. Before a lot of 24 things, a lot of questions were answered. 25 know. Would you allow some people in this room to

explore alternative routes with your company? 1 2 **HENRY FORD:** We're essentially doing that 3 every day. CHAIRMAN HANSON: Can you hold the mike 4 5 closer to you? **HENRY FORD:** This mike doesn't seem to be 6 working anymore. 7 JENNIFER SMESTAD: Hold it closer. 8 **HENRY FORD:** Hello? Apparently it just 9 10 doesn't have very much sensitivity left in it. 11 No, we have, as our land agents are going 12 around talking to landowners, as landowners are 13 proposing a different route that they think makes more 14 sense from their perspective, we look at every one of 15 those. 16 DENNIS JONES: Okay. I'm referring to a 17 total different route, would you let us? People 18 in this room, discuss with you the difference? 19 I'm not talking changing a half a mile. 20 **HENRY FORD:** Yeah. I don't think there 21 is any way to do that. You think of the number of 22 factors that are involved in selecting the route 23 that was selected, in order to -- I mean, it's not 24 just KLJ here. There is other consultants that 25 are experts in the environmental and the

ecological, you know, all of those kinds of things as well. All of those factors came into determining what was the best route. We have to try to please as many people and agencies as we can. But, yeah, you can draw any infinite number of lines between those two points and who is to say which is really the best route, other than based on a set criteria of these are the things that are identified as important to determining where the route goes.

about pleasing people. I'm talking about what's doing right, what's right. What is the best route? You're not going to please everybody. I'm asking you, Will you let us with you and see your work, and spend a day or two with us exploring? I went out with this gentleman. I was him for about a day. And he says, I don't understand. He says, This route, I don't understand. And he says, I understand where it would be -- He pointed out some other areas. I drove them. It is very -- It's the only way I could find out anything.

I'm asking you, Will you check? Let us check, work with you, and ask you the question: why can't you go through an area that's got less

population, does not have as much wildlife, does not have -- get water dumped through that area from the State of North Dakota, and why you're coming through some of the best land in the State of South Dakota that doesn't have the soil base.

HENRY FORD: Yeah, I have no idea what your other route idea is. I'm sure, you know, if you wanted to send it to us, we could probably answer for you why that particular route did not look as good as the route we chose.

pennis Jones: You could answer every question. I know you could. That's not why I'm asking. Would you work, and if your people work, and so we're confident that the right area was explored and the right route, the correct, the best route. Not the route to please people. But the best route.

HENRY FORD: Yeah, at this point, of course, it would be very difficult to just scrap everything that has been done and start over with a different route. Depending on what the route is that you're talking about. I think that -- I mean, I'm curious now what this route is that you're talking about. I would like to see it and understand why that is perceived as the best

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route. Obviously, the best route would be a
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    straight line from Ellendale to Big Stone South.
    That's the best route, because it's perfectly the
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    straight line, it's going to be the least
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    expensive, shortest, and therefore least impact.
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             DENNIS JONES:
                            It's a question of the
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    right route, though.
             HENRY FORD:
                           Yeah.
 8
                                  Yeah.
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             DENNIS JONES: Will you work --
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             CHAIRMAN HANSON:
                              Gentlemen, you know,
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    could I try and -- We're going to be going back
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    and forth here for some time.
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             Mr. Ford, if Mr. Jones sent you a route that
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    was better than the route than what you are presently
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    having, would you consider that route? Would you look
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    at it?
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             HENRY FORD: Yes, I think we would have
    to do that. I mean, if there was -- if there was
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    in reality a route that is better and the question
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    becomes better based on what criteria, and that's
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    really what ultimately this comes down to.
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    think criteria probably differs from our route
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    selection to their route selection.
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             CHAIRMAN HANSON:
                               I understand.
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             Mr. Jones, would you be willing to send a
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conceptual route that you think is better with your 1 2 arguments of why you believe it's better? DENNIS JONES: Well, I'd also want their 3 people with me. I just don't want to send 4 5 something and say. I want them to work with me as 6 we -- you know. And I'm not an expert on this. 7 You know, all I am is a farmer that has strung fences so I know that there is a lot of other 8 9 problems that are considered. But when you have a 10 guy who has been in the industry as long as the 11 gentleman was that I worked with and it didn't 12 make sense to him, he says, There probably is an ulterior motive here. 13 14 CHAIRMAN HANSON: Mr. Jones, are they 15 coming across your property? 16 **DENNIS JONES:** Yes, they are. 17 CHAIRMAN HANSON: Okay. Then they are 18 going to have to sit down and meet with you to 19 discuss it. And I think it's eminently clear to 20 them at this juncture that of the conversation, 21 the discourse that they're going to have to have 22 with you. So I would encourage them to have that discourse. 23 24 DENNIS JONES: Okay. But I need the

discourse of not just changing it a mile or

1 something like that. 2 CHAIRMAN HANSON: I understand. And they understand that too. 3 **DENNIS JONES:** In the area in 4 Brown County in crossing the James River where 5 6 you're, you know, it --7 CHAIRMAN HANSON: Mr. Jones, we spent about 15 minutes on this. 8 **DENNIS JONES:** I understand. 9 10 CHAIRMAN HANSON: And I'm hoping there is 11 some other folks that want to chat here, and I 12 want to be able to get their input as well. 13 DENNIS FEICKERT: Thank you. 14 Dennis Feickert. F-E-I-C-K-E-R-T. And I hope 15 this is appropriate to ask the Public Utilities 16 Commission a question. 17 CHAIRMAN HANSON: Okav. 18 DENNIS FEICKERT: I -- In the 19 presentation by Mr. Ford, he brought up that the 20 PUC has permitted an application for the -- this 21 process. And I'm curious as to -- Explain to the crowd, to the group, why it's permitted before all 22 23 the easements are in place. CHAIRMAN HANSON: Well, they have an 24 25 application process. We have not provided for a

permit at this point. I'm assuming that -- I didn't hear that from Mr. Ford. I was looking at other things. Perhaps -- I will say he misspoke if that's what he stated, because we have not made a permit of any sort at this juncture.

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**COMMISSIONER FIEGEN:** (Shakes head.)

PAUL MAMMENGA: My name is Paul Mammenga.

M-A-M-E-N-G-A. I live about a mile south of Columbia and a mile from Cambria Township. And how I got to know about this meeting and the preferred site location is I got a couple weeks ago a Certified letter in the mail, and this is -what I got is a couple information items I guess to pass on. And the Post Service had a hard time delivering the Certified Mail. It's our address, but it has my mother-in-law's name on there, and for the information that she's been deceased for since 2005. So I'm just putting it in the record that I would like to -- My wife's name is on the official plats and stuff so I don't know where they got the information from. So I would like to, you know, pass on that the official plat map should be looked at or old ones, I don't know, but that's just my information I wanted to pass on. You know, that I wrote my name down so hopefully

we can be included in that to clarify that.

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The other aspects that I know is the company, the companies and with the alternative routes and the preferred routes, that it is listed there, and I got looking at it and I went to the PUC's website, to our company's website, and dug some digging and dealing with the wildlife issue I know that the company's real concerned about minimizing environmental, cultural, farmers' rights and so forth. And that's great.

So I got looking at some of the information and where the power line or transmission line is going to enter into Cambria Township is about a mile south of me. And looking at Brown County, I did -- was able to get some information on bald eagle nests. essentially, this year, is the second year that I had a successful bald eagle nest, and I'd like to know that they are continuing to look at new information on wildlife and stuff. And the other aspects is the tradition of where that transmission line comes in to Cambria Township is, if you really look at the topography of the land, is the Elm River comes up from Ordway, comes up to Columbia, which joins up into the James River, the floodplain which goes to the east. Essentially right in the heart of Cambria Township is kind of like a peninsula, like you might have heard

someone -- Mr. Ringgenberg and Mr. Jones, that that's some of the fertile ground and it's -- we're south of Sand Lake, and I realize you've got a pretty good buffer around Sand Lake National Wildlife Refuge for migratory waterfowl, but one thing is that waterfowl leave to come to feed. And just in that, where that transmission line enters in the Cambria Township, there is very large flocks of snow geese and ducks that utilize that peninsula area, the landscape there.

And my question is, is what -- how are you going to minimize the impacts of this waterfowl, migratory waterfowl that are using these fields that the transmission line is going to be located on now when they have traditionally, all the wildlife, all the wildlife lived there? They're always come to these fields in large concentrations. And once that transmission line is there, how do you minimize impacts on those and any new eagle nests that are going to be along the James River corridor and the Elm River, because I have a new nest now. And the reason why they build them nests, in particular, east of Sand Lake National Wildlife Refuge, is because of this food source and stuff.

So I'd take a closer look at Cambria Township and that peninsula between south of Columbia, between

the Elm River and the James River corridor and explain how you minimize the impact on this vast amount of migratory waterfowl that use this area.

And the other question, I would like a response is, since this traditional area is -- what is the requirements of shooting firearms under these power transmission lines?

HENRY FORD: Okay. That was an awful lot of questions. And I don't think I remember more than one or two of them now. So you'll probably have to stand up and ask them again.

Couple things. There is no restriction against discharging firearms under a power line. So your discharging a firearm is no different than whether the power line was there or not. Shooting directly at the power line, of course, that's a different issue, so. Keep that in mind when you're discharging.

But when it comes to bald eagle stick nests and impacts on waterfowl and so forth, you know, we have very, very tight stipulations, I guess you could say, by the U.S. Fish and Wildlife Service as to what we need to do if we're going to build a power line near a wetland or near what is considered acceptable habitat for these particular types of wildlife. So

we're already today in discussions with Fish and 1 Wildlife on what we need to do as far as -- We do such 2 a thing as, it's called, aerial bird diverters. 3 These are markers that we put on the top wire of the 4 structure that basically makes that line more visible 5 6 to waterfowl and wildlife. You've probably seen that a lot on other power lines. This is something that 7 the Fish and Wildlife Service feels confident in that 8 if this is done, the waterfowl, in this case, are 9 10 going to see that and they're going to fly above it. 11 They're not going to contact the line. 12 And as far as the stick nest, I know we've 13 done one stick nest survey already. So we know -- I 14 can't remember the distance, but we have a requirement 15 of staying a certain distance away from --16 BRIAN HUNKER: 660 foot. 17 HENRY FORD: So 660 foot. 18 BRIAN HUNKER: My name is Brian Hunker. 19 H-U-N-K-E-R. And I work for HDR Engineering and we're the environmental consultants on this 20 21 project. Henry is right. We did do one survey. 22 We plan to do a second survey. That survey found 23 that there was one eagle nest approximately a mile south of the line. I'm not sure if that's the 24

exact one where the landowner was talking about.

that was not listed on the Heritage Database that you got for the eagle nests for Brown County.

This is brand new. And it's three-quarters of a mile away from the transmission line along the Elm River where you're crossing the Elm River and stuff. Just, that was the information items for you to know that there was some more information out there.

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And as for the aspects of the traditional and the behavior of migratory waterfowl, in particular, mallards and snow geese, when they're going out to feed in this field where the transmission line is going to be located, they traditionally come to feed there, their behavior, that behavior is totally different than where they're nesting or roosting on the water sites and stuff. When they're in such large concentrations, a lot of people will hunt snow geese, in particular, when there is thousands of them feeding in these fields and how they get up and go is how, that type of feeding behavior and the waterfowl behavior on these feeding fields are going to notice these transmission lines? Have you done studies that show that it's very effective during those scenarios of migratory waterfowl behavior?

BRIAN HUNKER: As Henry indicated, we are 1 in discussions with the Game, Fish and Parks, and 2 then also the U.S. Fish and Wildlife Service on a 3 line-marking plan for the project. 4 5 CHAIRMAN HANSON: All right. And Paul 6 started out by addressing the fact that the 7 information that was sent to him was sent to the 8 wrong -- to the wrong name. How did you obtain 9 the names for the mail-out? Do you know? BRIAN HUNKER: Yeah, I believe it was 10 11 obtained from the county records. 12 CHAIRMAN HANSON: All right. 13 **HENRY FORD:** Tax records. THOMAS WELK: That's what the statute 14 15 provides. 16 CHAIRMAN HANSON: Okay. 17 **HENRY FORD:** Yeah. 18 CHAIRMAN HANSON: I'm sure you'll correct 19 that with Paul to make sure you get it to the 20 right name. Correct? 21 HENRY FORD: Correct. 22 CHAIRMAN HANSON: We're going to give 23 Nancy a break at this juncture so we're going to be off the record. 24 25 (RECESS TAKEN AT 1:56 P.M. TO 2:11 P.M.)

CHAIRMAN HANSON: Okay. Ladies and gentlemen, if you'd find your chair, we'll appreciate it. We've had a good discussion up to this point, good question and answer up to this point. And I understand there is a few people that actually had to leave because they had commitments. We don't want that to continue. We want everybody who came all the way here to have an opportunity to ask their questions. So let's let our questions roll and answer and go from there.

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I would like to point out one thing, though, in case some of you folks might have felt that the three of us were a little snobbish during the break. We've got a challenge here. I know a lot of you appreciate it and understand it, but when we go in the restroom or go someplace and someone starts to talk to us about this docket, we can't just engage you in a conversation on this docket. There are ex parte This is a rules. We are acting as judges. quasi-judicial situation for us. We have a docket. It would be like the plaintiff or the defendant going up to the judge and talking to the judge about their We can't do that. If we do that, we have to write up -- because of the ex parte rules, we have to

write up a document explaining who we've spoke with, what we've discussed, and then we have to file that and make that a permanent part of the record. And we don't want to have to do that ten times in a row and every break that we have. So we just appreciate it very much if you have that understanding with us.

So with that, where is the microphone? And, sir, you are on first base. Go ahead.

LELAND STAUCH: My name is Leland Stauch.

COMMISSIONER NELSON: Would you hold the mike up a little closer to you? Thank you.

LELAND STAUCH: My name is Leland Stauch. I graduated from Groton High School. I own land in the area, and some of this is wanting to come right through the middle of two quarters of land, which would separate the two quarters into eight different pieces. Because I've talked to aerial sprayers, they will not spray aerial spray where a bunch of these power lines are in.

If anybody wants to see what they look like, you have to drive to Minnesota. Highway 90, you can see them going up between Sauk Centre and the city of Albany. So right along Highway 94.

Anyhow, to talk about it, my suggestion, and I talked to a few farmers here. Right now we have a

right-of-way that's available, which is a railroad 1 2 right-of-way from Big Stone City all the way to The best place to carry this power line is 3 Aberdeen. on the railroad right-of-way that is already in 4 existence. 5 There is lines there. The right-of-way is 6 there. You're not interfering, it's not cutting 7 through anybody's field. That people that own the land along this railroad right-of-way wanted it that 8 way when they bought it. It's not being changed. 9 10 myself propose, and I think a lot of the farmers here 11 will agree the best right-of-way to affect the least 12 amount of people, follow the Milwaukee Roadway and 13 then head north on the east side of Aberdeen, straight 14 up north to Ellendale. 15 Another thing, on these posts going on your 16 property. Who is going to take care of the weed 17 control around these posts? There is going to be a 18 minimum of three-feet plus on each side of those 19 posts, because there is no big machinery to go up next

Talked to the guy a price. I told him it's not cheap.

He knows what it is. I'm looking at a net price. Net

contract, if I -- when I sign it, if I get my price.

to these posts to farm. So I plan to put in my

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15 percent to the federal government capital gains,

price per acre. That's a price after Obama taxes 3.4,

and 9.8 cents to Mr. Dayton in Minnesota. He just raised the taxes. So the top preparer now is paying 9.8 percent.

Anyhow, I plan to come up with a net figure for my land, not a gross figure. Gross figure don't mean crap. I want a net figure. And I'm going to get paid to take care of the weeds around these posts. That will be in the agreement if we sign it. If we don't, I'd just as soon have this power line built on the railroad right-of-way, and I think a lot of the farmers will agree with me. It will save a lot of heartache. This is the first meeting I've attended.

Like I say, the sprayers do not want to spray on that land. As far as that, if you have land you want to irrigate in the future, you will totally restrict the use of irrigation on any of this land you own. You'll be totally limited.

Another problem is, you talk about the right-of-way. It's a hundred fifty feet wide. Okay. 150 feet wide, I'm sure there is in that agreement, that I cannot build a building in that right-of-way. I have basically give up the use of that right-of-way for as long as the land is owned by me or my future grandchildren and so on. My land is not for sale.

None of it is for sale at any price, period. So I'm

```
not offering land for sale. I'm here to buy land, if
 1
    I can buy it right and I'll pay a fair price.
 2
 3
    believe you guys should take the -- treat the farmers
 4
    fair.
             This power is not going to be used by anybody
 5
 6
    in this area. The power is going out of state. Wait
 7
    and see if I'm not right. I can tell you where it's
    going, but you can figure that one out. It's not west
 8
 9
    of here or south of here or north of here.
                                                Figure out
10
    what state it's going to. So I don't think the
11
    citizens of South Dakota -- I was born here in 1937.
12
    I love this state. The only reason I don't live here
13
    there was no jobs for me when I got out of college so
14
    I was forced to go to Minnesota for a job. Thank you
15
    for your time. Have a good day.
16
             COMMISSIONER NELSON: If I could -- I'd
17
    like the response on the railroad right-of-way
18
    question.
               I think that's a great question.
19
             HENRY FORD: Yeah, I'm trying to
               I know we looked at railroad
20
    remember.
21
    rights-of-way when we were routing the line.
                                                  Is
22
    this an occupied? Is this a used right-of-way or
    abandoned?
23
                             The former Milwaukee road
24
             LELAND STAUCH:
25
           It goes through my land. I have no problem
    line.
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if you put it on the Milwaukee road right-of-way,
 1
 2
    railroad line, I have no problem.
             HENRY FORD: So this is an abandoned
 3
    right-of-way?
 4
             LELAND STAUCH: It's used now to haul
 5
 6
    coal to the power plant to Big Stone City. Now,
 7
   Minnesota did not want any power plant coal built
    in that State of Minnesota. Just remember that.
 8
 9
    They don't want that power plant but they want the
10
    electricity.
11
             HENRY FORD: Okay. So the right-of-way
12
    that we're talking about is owned by the Milwaukee
13
    or --
14
             AUDIENCE PARTICIPANT:
                                    Burlington
15
   Northern.
16
             LELAND STAUCH:
                             BNSF.
17
             HENRY FORD: BNSF?
18
             LELAND STAUCH: Yeah.
19
             HENRY FORD: Okay. So we have to work
20
    with the BNSF to use that right-of-way. You know,
21
    there are issues with using that railroad
22
    right-of-way. I'm not going to sit here and say
23
    it's absolutely impossible. One of the things
24
    that becomes a really big issue with railroads and
25
    high-voltage transmission lines is induction into
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the railroad. And so they don't want high-voltage transmission lines to parallel railroads. They prefer that we just cross them. The induction of this voltage into the railroad. They use --

COMMISSIONER NELSON: Well, you're going to have to explain that, because it's okay for induction to affect these guys' GPS potentially, but not a railroad, so explain that to me.

## (Applause.)

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(Chuckles.) Well, all I'm HENRY FORD: saying is that when we work with the railroad, we have to get a permit from the railroad in order to use their right-of-way. And that permit will be subject to those -- I don't even know for sure --I'm not the expert on working with the railroad. I'm not sure who is in this group here, if anyone would recall what kind of permit conditions there might be for working with them. But, you know, I know we did look at the right-of-way, the railroad right-of-way in some cases. Right now I can't tell you exactly where that railroad runs and how that is in relation to our line, as to whether or not that was an option or not. I would have to do a little checking into that one. I don't think I can sit here and really answer that one, at least

not myself.

commissioner Nelson: Just for the record, before these proceedings are concluded, at whatever point that might be, I would prefer, at least one commissioner would like an answer to that question. Thank you. We all would.

COMMISSIONER FIEGEN: Thanks.

KEN VOGELE: Ken Vogele, once again.

V-O-G-E-L-E. I'm interested in what we can expect in terms of the effect of the transmission line on our land's land value in terms of selling that land. It has to be known from all the lines that have been put across the country what happens to land values when you've a line on them.

HENRY FORD: Well, there are impacts to land value. Sometimes they're short-term impact, sometimes they're long. I think it's kind of a case-by-case basis. We looked at some studies pertaining to that to see if, you know, our offer -- What we are trying to do is the offer that we're making for the easement should, in our view, take into account what the impact is on devaluation of the land as well. So that's really ultimately what we're trying to do. I don't know if I could -- I'm probably not the best one to

answer that from like what's a percentage impact 1 2 or something like that. I don't know, Terry, if you have -- I forget 3 those studies that we were looking at. You were the 4 5 one that was talking about that. 6 KEN VOGELE: That has to be known. 7 CHAIRMAN HANSON: Sir, the mike. That has to be known. 8 KEN VOGELE: There 9 have to be studies out there that tell you exactly 10 what happens to land value when you look at a 11 number of different land sales compared to 12 surrounding land. 13 Yes, there are studies that HENRY FORD: talk about that. I'm not sure that the studies do 14 15 come out with a, you know, definitive answer that, 16 you know, a transmission line of this size has 17 this percentage impact on land value. But there 18 are studies that talk about an impact to land I would have to defer 19 value. That much I know. 20 to Terry for details about what the impact might 21 actually be, if he remembers. 22 Can I speak? TERRY FASTEEN: 23 HENRY FORD: Do you want to try to speak 24 to that? Put you on the spot. 25

That's all right.

TERRY FASTEEN:

Terry Fasteen. F-A-S-T-E-E-N. Oop, there goes all my business cards. I'm with Kadrmas, Lee, and Jackson.

Devaluation or valuation of properties is really only determined by actual appraisals of the property. The studies that we've looked at -- And there is several out there. I can't quote the author's name. But they seem to indicate that perhaps the year of construction, the first three to four years after, there is an assumed depreciation.

In agricultural areas, there is six items that they look at. The individual property. The quality of the property. The size of the property. Is there other property available for sale. Where the line is located on that property. How the structures are sited on that property.

Most of the studies that you look at say within the first five years after construction, there could be potentially a 3 to 10 percent reduction in value. But as time goes on, that reduction decreases. But, again, it can only be determined by an actual appraisal. There is -- Because you look at the studies they give you a range, just like anybody else. They're not willing to commit to a certain percentage that it's just going to be across the board. You

1 know, I really couldn't -- I could pick a number, but

- 2 | it's going to be refuted, so. But that's the best
- 3 that's out there that we've got access to. If that
- 4 helps.
- 5 HENRY FORD: You would agree, Terry, that
- 6 the easement prices that we have determined for
- 7 | this project did make an effort to take into
- 8 | account some land devaluation.
- 9 TERRY FASTEEN: It was part of the study.
- 10 | The vast majority of our values came off of
- 11 | current sales. You know, something that's within
- 12 | the last five years at the latest and went across
- 13 each county, was done by independent people, not
- 14 by the project, somebody we hired. Plus, the
- 15 | information was gathered by Agricultural Statistic
- 16 | Services from the colleges here in town, so -- in
- 17 | the state, excuse me. So that's what was
- 18 analyzed.
- 19 | CHAIRMAN HANSON: I would like to
- 20 piggyback on that. When you say the number of
- 21 | years that you had opportunity to look at, were
- 22 | there very many sales in the past year that you're
- 23 able to look at, and did you give more weight to
- 24 | the more recent sales?
- 25 **TERRY FASTEEN:** Everything was brought up

to current values with the information that we 1 2 have from the colleges, showed an inflationary 3 rate per year. Certain areas had more recent sales and I'll say in the last two to three years 4 5 than others, but everything was brought to a 2013 6 value. And we put it to potential inflation rate 7 for 2014, and that's the value we used was an 8 anticipated 2014 value. CHAIRMAN HANSON: Thank you. Do we have 9 10 another question over here? 11 **SCOTT SPERRY:** Yes. I'm Scott Sperry. 12 S-P-E-R-R-Y. And my question is, I have two 13 center pivots, and according to the map on your 14 website, the line is going to go right across one 15 of them. How is that going to work? 16 **HENRY FORD:** We've been working with 17 several landowners that have center pivot 18 irrigation. In most of those cases -- And I don't 19 know whether we have been talking to you 20 specifically about that yet or not. But now that 21 we have your name we'll make sure that we do. 22 Most of those cases we're able to shift the line a 23 little bit one way or the other so that it doesn't impact as far as the orbit, you might say, of the 24

center pivot. You know, as far as the spray

nozzle height and so forth, the conductor height is quite a bit higher than that so you don't have any concerns with actually water impacting the line. The main issue would be the swing arm of the center pivot, you know, having an obstruction in its path which would be one of the structures. So we're able to either shift the line or shift structures to avoid that. 

SCOTT SPERRY: I am considering putting on a corner system. So there would be no area in the field that would be not available to put power lines in.

HENRY FORD: Okay. Yeah. We just would -- We would want to sit down with you and see your center pivot plan so that we can determine if we can design the line around the impacts of that. That's what we've been doing with all the center pivots.

DON SCHORNACK: My name is Don Schornack. S-C-H-O-R-N-A-C-K. Probably the longest one here today. But anyway, I own some farmland northwest of Groton about five miles, and my question is this, in regard to right-of-ways: Why not try to go down the road right-of-ways, whether it be a township or county or whatever, rather than cut

across a quarter section or 80 acres or whatever it might be? Seems to me it would be logical. I don't know how your cost would be affected, but I guess that's what I'm looking for.

always face if we build a transmission line actually within road right-of-way is we get an occupancy permit from, if it's, say, a state highway, we get an occupancy permit from the state DOT. That occupancy permit states that if the state needs to come in and rebuild that line or do anything with that right-of-way, that we then have to relocate that line at our expense. So what can happen, obviously, is you build a line and then five years down the road, you're forced to move it and essentially build that line twice.

**DON SCHORNACK:** Okay.

HENRY FORD: So for that reason, we definitely try to stay out of the -- particularly the state highway right-of-way. And the county, county road right-of-way, I think there may be instances where we are utilizing some of that. You know, typically, the 33 feet right-of-way on the center lines, that type of thing. So it's primarily the state highways that are the biggest

concern.

COMMISSIONER NELSON: If I could just follow up on that because that's one of the questions I wanted to ask. In looking at the map, it looks like there is literally miles and miles of what's either township or county right-of-way where you're into the section, I don't know, 100, 200, 300 feet, as opposed to being in that county or township right-of-way. And it's -- You know, we're talking miles and miles, not just short sections. So what's the rationale for that?

HENRY FORD: The main rationale was

thinking that from a farmer's perspective, if we place that structure closer to the edge of the field, they are only able to drive by that structure on the one side. And I guess based on some of the feedback we've had on other projects, we've had cases where farmers have told us that it's actually preferable to have that structure further out in the field where they're able to drive by with the equipment on both sides. So the 150 feet out is chosen knowing that this is the size of a lot of the equipment that's out there today. So I guess it was kind of a judgment call on our part thinking that we would have more

support for the line at that location. I think if that is not the case, obviously, we're looking to adjust accordingly.

where you would be willing to work with individual landowners if they'd prefer to be in the road right-of-way, and there is any way to do that, you could maybe make those adjustments; is that correct?

**HENRY FORD:** In a general sense, yes.

DON SCHORNACK: I just want to thank you for making that comment, because it answered some -- my questions. So I come to you, and I say, I don't want this in the middle of my quarter or whatever, you're willing to negotiate?

**HENRY FORD:** Yes.

DON SCHORNACK: Okay. Thank you.

DAVE NILSSON: Hi. I'm Dave Nilsson and I live up by Columbia-Bath area. I've been talking to a lot of these guys all the way along. And I seem to be getting different answers every time I do this. I talked to them the first time and they said there is no way we're ever going to come this route because there is too many corners

in it. Next time I talked to them they said,

Yeah, we're going to come that way. I said, Why are you coming that way? I thought you said there were too many corners. Oh, we need corners in it to make it stronger. Now just talking to you earlier, you said it would be a lot easier just to go straight across and not have any corners at all. So which is it? Do you need the corners or don't you need the corners?

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**HENRY FORD:** The corners are one way of strengthening the line in the sense that when you have a corner, you do what we call double dead-ending, and that is you take the conductor and you cut the conductor at that point and you tie it in a different manner. It's secured to the structure on both sides. But we are going to have a structure of that type, roughly, I believe it's every five miles, or every five to ten miles along this route. So if you have a corner structure, the corner structure does the same thing as inline structure, as far as strengthening the line or not strengthening the line. So if you have a corner structure here, that means you don't have to put in one of those double dead-end structures in that stretch of line.

DAVE NILSSON: But you've got corners

every half mile. I looked at one quarter that I farm that you're going to be on the north side of it, and you're also going to be on the east side of it. Now, are you going to set brace corners in, or are you not going to put brace corners in? I've heard that both discussions. One guy said yes and one guy said no. So what are you going to do?

**HENRY FORD:** When you say "brace," do you mean as far as guyed or unguyed?

DAVE NILSSON: Yeah, you've got to have a brace in the corner to hold them? Or you just going to set a corner post, and then are you just going to take off with a wire? Or are you going to have a brace behind it like you would on a normal fence?

HENRY FORD: Uh-huh (Yes). At this point I think there is the option to do either, depending on the situation. We talked about within our team that there are probably some corner locations where putting anchor guys down is not going to interfere with the landowner, whether it be -- you know, I don't know what the situation might be. Certainly not in cropland, but, so there will be potentially some corner structures

out there that are guys, but there will be others that will be unguyed.

DAVE NILSSON: So you want us to say yes to this because we don't know where we got the poles, where they're going to be? Whether they're going to be in the fence line, they're going to be 200 feet out? We don't know if we're going to have a guy wire or not going to have a guy wire. We really don't know what we're up against but yet you still want us to sign stuff, do this, when we really don't know what you're doing.

trying to do is get an idea of where the center line for this project is going to run, which is the reason for the options. We do have now a preliminary structure locations defined. So we are able to share with you currently where we think structures are going to be placed.

DAVE NILSSON: So we're not going to be 200 feet out in the fields then?

HENRY FORD: I can't say specifically to your location where you're going to be. I mean, we can look at that. That was our -- Initial design criteria was that we would be out that distance from a right-of-way line or potentially

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edge of field. We're talking mostly section
 1
            Quarter lines, no. Quarter lines, if
 2
    we're running along a quarter line, initially
 3
    we're saying 10 feet off the quarter line.
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                           Why not go right down the
 5
             DAVE NILSSON:
    quarter line?
 6
                   That makes a lot more sense than
 7
    trying to have one guy is going to lose 10 feet of
    his field; the other guy is not going to lose any
 8
 9
    of his field. Go right down the middle, each one
    of them lose four feet.
10
11
             HENRY FORD: Yeah, and we're looking at
12
    that and we've done that already in some other
13
    locations so if that's what those landowners
14
    prefer in that area, that's probably what we're
15
    going to do.
16
             DAVE NILSSON:
                           Well, I know the one you
17
    got going in Marshall right now, that's what
18
    you're doing. I don't know if you guys -- who's
19
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doing it. They're going right down the middle, and they're going on the right-of-ways, and that's how they're building that one, the same power, same scenario.

> Uh-huh (Yes). HENRY FORD:

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21

22

23

24 LYLE PODOLL: Um, my voice isn't so good 25 today. Lyle Podoll. P-O-D-O-L-L. And I quess we

brought it up in the packet that we gave to the PUC. But a little studying our own, a few of us sat down and looked at this. There is an area going from Havana -- or from Ellendale to Havana, North Dakota, and to cut diagonally in the Coteau Hills where it's mostly pastures and not many people, and end up at the slope line, which is the rail line from Sisseton to Milbank, is a very little used line. And my sources tell me that they would be -- for money, they would be willing probably to sell right-of-way to that. It cuts 40-some miles probably off your route, could save you \$80 million.

I know when put up against the area there to the east, where you have put on your map that you did not consider for whatever reasons, but if you got to that point, then you could still go down around to the south, clip right here, you're going to end up the last few miles, anyway. Was that ever considered at all?

And I guess as a property owner, if I would have adjoined the rail line and the rail line didn't give you permission, as a property owner, I'd just as soon have eight-foot of pole out on my property and there is only five to a mile and work on that versus

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down the middle of the section, where two guys have to
 1
    work around it. I'm just still looking at if there
 2
    aren't other scenarios to look at here and save
 3
    yourselves a lot of money and save everybody here a
 4
                     So that's all I've got. Thank you.
 5
    lot of headache.
 6
             HENRY FORD:
                         Okay. Yeah, I'm not
 7
    familiar myself with those transmission projects
    you talked about so we'd have to do a little bit
 8
 9
    of digging on that.
                           In discussion with another
10
             PAUL DULITZ:
11
    individual the question was asked, What's the
12
    design life of this project?
             HENRY FORD: Steel construction of this
13
14
    type I believe we're expecting 75 to 80 years,
15
    something like that. You know, that would be
16
    typical.
17
             PAUL DULITZ: Okay. And then -- Thank
18
    you for that. Oh, excuse me.
                                   Pardon me, court
19
    reporter. Paul Dulitz, again, landowner.
20
             Also one other question that my renter had on
21
    his property, he had a center pivot, and according to
22
    what he told me, is that the acquisition people said,
23
    Well, if there is no center pivot on this property
24
    when we engineer it, we're not going to engineer it
    for a center pivot. So we're getting, again, you
25
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know, acquisition people that are speaking for, you
 1
    know, for BSSE that are not evidently taking into
 2
    account things of the landowner. But the comment was
 3
    made to me is, well, we'll put a center pivot on there
 4
 5
    in six months.
                   By the time you're ready to engineer
 6
    it, we'll have a center pivot there if you're not
 7
    going to engineer that way.
             HENRY FORD: Yeah, we certainly want to
 8
 9
    know about any center pivot projects that are
10
    being planned so that we can design the line
11
    accordingly. So I'm not sure the circumstances,
12
    whether that land agent would have said this, but,
13
    you know, within reason, we're wanting to make
14
    sure that if there are plans to put a center pivot
15
    on a location, we're going to want to work with
16
    you to avoid that.
17
             PAUL DULITZ:
                           There is permits, water
18
    permits; wells are there. The center pivot was
19
    taken down, but it could be relocated there very
20
    quickly.
21
             HENRY FORD: Well, I think there should
22
    be no problem to work with you then on that one.
23
             CHRIS PODOLL: Chris Podoll.
24
    P-O-D-O-L-L. And I would like to go back to the
```

property values a little bit here. I know you

said the easements were going to pay for some of 1 the devaluation, but what about the guy who has 2 one of your 150-foot poles 100 feet or 75 feet out 3 his front door right across the road from his 4 5 It's not on his property. But, obviously, 6 if I'm going to look at a house to buy one and 7 there is a 150-foot tower out in the front, I'm 8 going to probably not even look at the property. How would those situations be handled? 9 10 HENRY FORD: So you're suggesting, I 11 quess, that a landowner across the road from 12 another landowner where we're dealing with on 13 right-of-way, we've gotten an easement or whatever 14 from that landowner, they're signed up, but the 15 landowner across the road, we're not dealing with? 16 What we're going to do for him? Is that -- Did I 17 hear that now? 18 CHRIS PODOLL: That is what I stated. 19 But also let's say the landowner you're dealing was right out their front door, the easement, 20 21 obviously, the money you're paying for easement is 22 not going to cover the reduction in property value 23 for the guy with that line 75, 100 feet outside of his front door. 24

**HENRY FORD:** Yeah. Well, it's true that

```
on this project we don't have any homes that are
 1
    within that distance of the line. As I stated,
 2
    when we talked about the routing criteria, that
 3
    was one of the important routing criteria that we
 4
    had was to keep the line, the center line, and
 5
 6
    therefore structures, as far away from any
 7
    occupied housing that we found on the line.
                                                 So, I
    mean, that's our way of trying the best we can to
 8
    minimize impacts to land values of someone who,
 9
10
    you know, who may have a home on that property.
    I'm not sure that we can do much more than that.
11
             JOEL PODOLL: Joel Podoll. P-O-D-O-L-L.
12
13
    And your line is coming in front of my house
14
    probably within about 150 foot each. I don't own
15
    the land across the road from my house.
                                             It would
16
    be about 300-some feet, so, where the line is
17
    going to go. But what is that going to do to the
18
    value of my property, my house we just built three
19
                I don't really want to look across the
    years ago?
20
    road and look at your power line.
21
             HENRY FORD: Uh-huh (Yes). Well, I know
22
    we are, you know, working with you folks right now
23
    on some options to reroute the line. So I think,
24
    you know, it's best that we continue that
25
    conversation, try to determine if there is a
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reroute that can best satisfy your concerns and not create concerns for others as well. So, you know, we're -- We want to work with you and we're wanting to have these conversations, so you guys are doing the right thing by sending the letters and sending the recommendations for us to look at some potential route changes and, as I said, we're willing to do that.

COMMISSIONER NELSON: Joel, could you tell me what your township range and section is and where you're at?

JOEL PODOLL: Three miles east, the west quarter of -- It's Garland Township. Joel Podoll again. Garland Township, 9-125-63. I'm on the corner of 120th Street and 390th Avenue.

COMMISSIONER NELSON: Thank you. Thank you.

was presented earlier that the economic impact in the three counties would be quite substantial, and I would have to agree that in the initial phase of putting the line in, would have an instant impact on sales tax revenue. I guess one of the things that I noticed was that you lumped county revenue, and I think for Brown County, if I remember right,

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it was 750-to-800-some thousand dollars, and I
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    quess I'm not sure if you realize but you have to
 2
    break that down to the schools, to the various
 3
    townships, to the water development districts,
 4
 5
    those types of things, and I think pretty much
 6
    everybody in this room realizes that our roads are
 7
    in really, really bad shape in Day County,
 8
    Grant County, Brown County. So it looks really
    great when you present numbers like $850,000, but
 9
10
    65 to 70 percent of that is going to the school
11
    district. Then the other thing that I would like
12
    to have you explain to the crowd just exactly how
13
    centrally assessed works.
14
             HENRY FORD: I am not a tax accountant.
15
    (Chuckles.)
                 I'm not sure that I can do that.
                                                    Is
16
    there anyone here in the team that has any
17
    knowledge about central assessing of taxes?
18
    believe, and I'm kind of just speculating -- I
19
    don't know if I should do that or not. I think we
20
   pay the taxes to the state and the state
21
    distributes it? I'm not a hundred percent sure of
22
    that.
           I think there may be even a difference
23
    between North and South Dakota.
24
             THOMAS WELK: Why don't we try to answer
25
    your question by just giving a letter -- There is
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somebody that does this every day. This is

Tom Welk. Why don't we just try to answer your

question by giving that process -- There is people

that do this every day. It's very complex. I've

done some of this with the telephone company, but

why can't we just -- Now that you've made that

statement, there will be a transcript so we can go

back, and if you've got your address on it, we can

get somebody who does know about this to answer

your question.

again, Bath. You made the comment earlier about the railroad tracks and you wouldn't be able to do that because of the electricity in the rail line. What about the houses that they were talking about that are 150, 200 feet away? If the railroad doesn't want it on their property, why should we have it that close to our building site and our farm site? My son is going to have a house not that far from the property also, so. Answer that.

HENRY FORD: Well, the induction effects really are pretty limited in distance. If we're running right along the edge of the railroad right-of-way, and I don't know the specifics about this particular railroad or where we might end up

running, but my assumption was that we're going to be a lot closer than how we are running along these, near some of these homes where we have -- I know we had the statistics as to how many homes we come closer than 500 feet. 500 feet was our goal, when we started out with this project, was that we should not route the line within 500 feet of any home. And there are a small list of exceptions to that rule where at least with the current route we're not able to do that. But even at 300 or 200 feet, the induction is not as big of an issue. And the issue with the

But even at 300 or 200 feet, the induction is not as big of an issue. And the issue with the railroad is not so much just the fact that you are this distance, but that you're parallelling. They're like another conductor. Their railroad parallels, excuse me, parallels our transmission line for a long distance. And when you do that, that is where the induction becomes an issue. Something like a structure, very limited induction, because of just the fact that it's this point. I can't really explain it any better than that.

DAVE NILSSON: You also mentioned the fact of the high-line poles, the inconvenience of you guys having to move them if the road comes in.

What about the inconvenience for us over the 30,

1 50, 60, 80 years, that we've got to drive around 2 these all the time if we set them out in the field 3 200 feet?

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HENRY FORD: We certainly won't argue with you that that's not an inconvenience to you. And that's why our goal here is in trying to place the structures where the inconvenience is minimized. And, you know, we came into this with certain assumptions, and I quess if our assumptions are wrong as to whether the farmer would prefer it 150 feet out in his crop versus on the edge of his crop, you know, we're willing to look at that. And we've already, you know, stated that for the record. But we're, you know, we're doing our best to locate the line where we think has the least impacts. And that's really the bottom line. The line has to go somewhere, and we're trying to minimize the impacts as the best we can.

parrin Erdmann: Darrin Erdmann again. I have a question, beings we're -- you know, we're going to partner with you on this. If you want to come through our fields, our property, we're in this for 75, 80 years. There is GPS -- or there are GPS issues that are going to take place.

There are communications issues. There are 1 convenience issues. Our family is involved with 2 3 wind energy in South Dakota and part of the easement is profit sharing. Would you be willing 4 to pay us for the percentage of how much 5 6 transmission or electricity runs down the line? 7 **HENRY FORD:** You know, as a public 8 utility, we do not get paid anything for 9 electricity flowing on this line. This facility 10 is an asset, and this one is a little bit unique in the sense that it's -- As part of this MISO 11 12 process, what happens is the other MISO members 13 are helping pay for this line because the line is 14 identified as benefiting all MISO members. 15 whether there is one megawatt or, you know, a 16 thousand megawatts flowing on the line, there is 17 no change in compensation. Basically, for us, 18 this is, this is like building something that 19 you're going to get a fixed return on. So we 20 build this facility and we get essentially a fixed 21 cash flow return on that through the MISO tariff 22 process. 23 Dennis Feickert again. DENNIS FEICKERT: 24 Maybe a question for an electrical engineer. 25 far as the concern of conductivity on a railroad

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track, is there -- isn't there technology out
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 2
    there that would somehow alleviate some of that
 3
    problem or that problem in general?
             DANNY FREDERICK: Do you want me to --
 4
             HENRY FORD: He pointed to you.
 5
 6
             DANNY FREDERICK: Danny Frederick again.
 7
    Yeah, Henry pointed out the best, is the reason or
    the issue with the induction on the railroad is
 8
 9
    because you do have two large metal conductors
10
    that are running for miles and miles and miles.
11
    There are ways to mitigate that, yes. I don't
12
    know all -- There is multiple ways to mitigate it.
    I don't know each one of them. We don't need to
13
14
    go into that here. We can meet with you
15
    afterwards. What was the second part of your
16
    question?
17
             DENNIS FEICKERT:
                               That was just it.
18
             DANNY FREDERICK:
                               Did that answer that
19
    for you?
20
             DENNIS FEICKERT:
                               To the best you can, I
21
    believe. Thank you.
22
             DANNY FREDERICK:
                               Okay.
23
             CHAIRMAN HANSON:
                               If there is some folks
24
    who haven't had an opportunity to ask some
25
    questions, we would certainly like to get to you
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folks too. Raise your hand. There is a hand over here. Oh, you've got one there. Okay. Yes.

WAVA SEURER: I'm Wava Seurer.

our land.

S-E-U-R-E-R. And my sister and I have land that we rent out, and the man that rents it has a milking situation and everything is on computer. Everything. Now, this is coming awful close to his place. And all the cows are -- have their own little device on them, and that all goes into the computer. Okay. How much stuff would come off the power line to mess up that type of thing? Because that will also affect what he pays us for

CHAIRMAN HANSON: Can you give us an idea of what the individual, what the effect would be on individual sensors for dairy cattle?

HENRY FORD: You know, unless those -And probably not, because I'm not familiar with
the technology, but as far as the electric and
magnetic field that's generated by a power line,
that field, you can plot that field out and
generally what happens is by the time you get to
the edge of the right-of-way, that field is down
to essentially background level. So unless this
communications and this sensor and this operation

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is located within the right-of-way, there is not
 1
 2
    going to be any effects to this equipment. I
    mean, if it's 200 feet away or 300 feet away, it's
 3
    not going to affect that equipment.
 4
             CHAIRMAN HANSON: You'll have information
 5
 6
    for us, though, on that, when you come before us?
 7
    That's not so much a question, I guess.
 8
             (LAUGHTER.)
                          Whatever you would like.
 9
             HENRY FORD:
10
             CHAIRMAN HANSON:
                               All right.
                                           You'll
11
   provide that for us then.
                               Thank you.
12
                           I think that that would be
             WAVA SEURER:
13
    awfully close to his facility for milking.
14
             HENRY FORD: Yeah, I think we want to
15
    look at the precise location that we're talking
16
    about then. So that we can study that a little
17
    closer. So if we can get your -- Well, is the
18
    property in your name?
19
             WAVA SEURER:
                           It's in my name, and some
20
    of it is in hers and my name. We're sisters.
21
             HENRY FORD:
                          Okay. Just a second. Do we
22
    have that in the database, then, do you think?
23
             DANNY FREDERICK: Give me a section,
24
    township, and range.
25
             HENRY FORD: Yeah, I quess, do you have
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any idea what your section, township, and range
 1
 2.
    is?
 3
             WAVA SEURER:
                           Do you have that?
             AUDIENCE PARTICIPANT: We're just one
 4
    mile west of Andover.
 5
 6
             HENRY FORD: Okay. So if we look for
 7
   your name one mile west of Andover, we should be
           So we will do that. We will pull out your
 8
    okav.
 9
    properties there and we'll -- we'll try to locate
10
    the dairy barn operation and then we can do some
11
    analysis on the situation.
12
             LORIE GILCHRIST: I'm Lorie Gilchrist
13
    from Columbia. Just a couple questions. When you
14
    mentioned the valuations, I understood that you
15
    used sales values through 2012; is that correct?
16
             HENRY FORD: Just nod your head and I'll
17
    answer.
18
             TERRY FASTEEN:
                             Through 2013.
19
             HENRY FORD:
                          Through 2013.
20
             LORIE GILCHRIST: Okay. Actual sales
21
    values to 2013.
22
             HENRY FORD:
                          That's correct.
23
                               Thank you. I know that
             LORIE GILCHRIST:
24
    the easement payments will be made, but what kind
25
    of provisions are there for crop damages for -- I
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1 assume you're not going to be building these, from 2 November 15 to March 15. Or will you be?

**HENRY FORD:** Ah, it's possible. It depends on the location.

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LORIE GILCHRIST: Okay. So that could be a stipulation, if you were to agree to that, that they not disrupt farming during the April to November?

**HENRY FORD:** I mean, we probably couldn't build the whole line during those months. do have -- We will pay damages in addition to the easement. So any damages -- Let's say we had to, you know, crossed through your cropland after you had seeded it. We would figure out the amount of acreage that was disturbed by that crossing and pay you accordingly. There is a calculation that we go through as far as calculating out the crop loss. And then you go -- there is kind of another two-year step there that also tries to take into account potential compaction of the soil. So as far as cultivated land, any damages, really, any damages to anything we are committed to paying for those damages that we've caused. So that's outside of the easement.

LORIE GILCHRIST: So that wouldn't be

just in the initial year of construction, it would also include if you had to go in and repair something and --

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we go back in there. Like you say, if there was a storm and some structures went down and we had to get in there with heavy equipment to repair that, typically those storms don't occur at the best weather conditions, and odds are, you know, some of this property is going to be damaged. We will settle damages on each occurrence.

LORIE GILCHRIST: Okay. And for the questions that I'll think of on the way home and didn't think to ask here, can we contact -- do we express our questions or concerns to the PUC website?

CHAIRMAN HANSON: Yes, you do.

LORIE GILCHRIST: Okay. Thank you.

**COMMISSIONER NELSON:** I've got a

20 follow-up question on your land value question,

21 and we've established that you went through 2013

22 | with actual values, but I think you also mentioned

23 | that you are applying an inflation factor into

24 2014; is that correct? And what is that inflation

25 | factor? I think all of us would love to know what

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your projection is for land value inflation
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 2
   between 2013 and 2014.
             HENRY FORD: We don't have it with us?
 3
             TERRY FASTEEN:
                             No.
 4
 5
             HENRY FORD: Yeah. We got that inflation
 6
    factor, though, from -- We didn't invent that
    ourselves. Right?
 7
             TERRY FASTEEN: Average of five years.
 8
             HENRY FORD: Average of five years?
 9
10
             TERRY FASTEEN:
                             Yep.
11
             HENRY FORD: So whatever was the average
12
    inflation over the last five years was what we
13
   projected forward.
14
             COMMISSIONER NELSON:
                                   Okay. Thank you.
15
             AUDIENCE PARTICIPANT:
                                    In land prices --
16
             HENRY FORD: In land prices?
17
             AUDIENCE PARTICIPANT: -- or just
    inflation?
18
19
             TERRY FASTEEN: Land prices.
             HENRY FORD: No, in land prices.
20
21
    inflation.
22
             CHAIRMAN HANSON:
                               I would like to quick,
23
    if I could, piggyback on that as well. When you
24
    said compaction, when we did the Xcel/Keystone
    line, we looked at compaction and for subsequent
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years. Is that what you're doing here as well?

HENRY FORD: Yes.

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close as they should be.

CHAIRMAN HANSON: Okay. Thank you.

RANDY BRETSCH: My name is Randy Bretsch. B-R-E-T-S-C-H. I'm a landowner from up close to the North Dakota border. One of the issues that we have up there, and I appreciate you saying that you'd work with us as far as the right-of-ways, if we wanted them closer to the right-of-ways or, you know, farther. And that was one of our questions. But the other one is the land valuation figures we believe are off, as far as from the North Dakota line to 10, 15 miles in, the value is changing. We believe that that land is pretty much all the same price. Would you be able to work with something like that to negotiate? Because I don't know where you're getting your study from, but we do believe that your valuations aren't close, as

HENRY FORD: Yeah, I think like Terry had mentioned earlier, we used an appraisal firm that looked at sales, and we also had some information from the county, I believe, on relative prices of cropland and pastureland and so forth. So, yeah, we did not do any specific parcel-per-parcel

appraisals. You know, I'm not going to say that we would agree to do that on every parcel, because obviously that would be a very major expense. But if there was a particular reason why, you know, why that's the case here, why this study that the appraiser did for us is wrong, then we'd certainly want to look at it.

two townships that I'm involved in where it's going in between the township lines I don't believe there has been a land sale in either one probably in the last year or two, you know. So with the inflation in land and stuff, I don't know how accurate it is in that part of the country, you know.

HENRY FORD: Uh-huh (Yes). Do you have any other bases for the land value in that area then? I mean, do you have any information you could share with us?

RANDY BRETSCH: Um, if you lived there all your life, you kind of know what the land is worth. And I would pay more for some of the stuff north of me than I would south of me. Just soil types and different things like that.

**HENRY FORD:** Yeah.

RANDY BRETSCH: So on some of the stuff, the line is going through, we think that the valuation seems a little low.

HENRY FORD: I know that that county resource that we used, that also looks at cropland and pastureland pricing, does look at soil types and relative production, you know, capabilities of the different soils. That's how -- So that was supposedly factored in to the land value in a particular area.

difficult task, and I mean, I was just wondering if there was any negotiation there. I mean, you were able to negotiate, or talk if we wanted it moved close to the right-of-way. And could you put it right on the right-of-way? I mean, you don't want to do it on the road right-of-way because the road, the DOT might make you move it, but could we put it 10-foot off the right-of-way where the fence line is, or how far do you have to be away from the actual right-of-way then? Do you need to stay so far away from the right-of-way with the poles?

HENRY FORD: Once the poles are in private right-of-way or private land, I don't

really believe that there is anything that the 1 2 state can do to necessarily stop that. You know, we look at overhang as well. Some of the things 3 that was driving that was also looking at, you 4 5 know, conductor sag, and there is such a thing as 6 called conductor blow-out. And so we're looking 7 to minimize any potential impact to the right-of-way that way as well. But I don't know 8 if there is anything that would prevent us from 9 10 looking at placing it, like you say, 10 feet off 11 of the right-of-way line within the private. 12 AUDIENCE PARTICIPANT: Zoning. 13 HENRY FORD: Zoning? Yeah, if there is 14 counties that have particular zoning rules, then 15 that would be the issue. And I don't know if 16 that's the case where you're at or not. 17 AUDIENCE PARTICIPANT: The zoning guy is 18 sitting over there. 19 HENRY FORD: (Chuckles.) Well, he can 20 answer your question then better than I can. 21 LYLE PODOLL: This is Lyle Podoll again. I only had one comment I wanted to get on the 22 23 record, too, about health issues. I know there is 24 a lot of literature out there both ways if you

study the Internet. Our family history, we had a

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345-kilovolt Basin Electric line go through our
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    land.
           We're small operators.
                                   That's in the early
           And in '91, my dad had gotten cancer and
 3
    '70s.
    died.
           It was real quick; it only took like a week
 4
 5
           My brother and I developed cancer 15, 16
 6
    years ago. Ours was different than our father's.
 7
   Now, we could say that's genetic, it could well
    be, but we didn't have the same cancer he did.
 8
    The problem is my wife got cancer, and my
 9
10
    brother's wife died in 2004 of cancer. My mother
11
    and my sisters didn't have any problems.
12
    weren't out on the farm much. Now, on the guarter
13
    of land where these two poles run through
14
    diagonally, we go under and if we -- years back,
15
    with equipment we didn't have cabs on them, a
16
    14-foot swather, we make almost 200 passes under
17
    this line. And we do that over 20 or 30 years.
18
    I'm not accusing these lines of causing cancer,
19
    but you can imagine why five out of eight of us
    got cancer that we're a little concerned about it.
20
21
             So when my son says this thing is 300-some
22
    feet out his front door, I've got to think about my
23
    grandchildren too. So I mean, I hope that you as a
    power line and you as PUC people think about that,
24
25
   because the studies, there is two things that stick
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out in these studies. Childhood leukemia, a very,
 1
    very high rate of incidence, and when they've tested
 2
    under these lines. And the second thing is the more
 3
    we find out about power lines, the more evidence comes
 4
 5
    up that this could be a problem. So we need to
    consider that because 30 years ago, cigarettes weren't
 6
 7
    a problem either. But today we know how they are.
    Maybe 30 years down the road we'll find out.
 8
                                                  But the
 9
    problem with that is, you'll be retired and I'll be
10
    retired and nobody is going to have to answer for this
11
    if this is going to be a serious issue in the future.
12
    I mean, I'm just trying to from a personal standpoint,
13
    it kind of scares us a little bit about the way this
14
    thing can go. So, thanks for your time.
15
             CHRIS PODOLL: Chris Podoll again.
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    want to go back to I think it was maybe the very
17
    first question of the day about what else can take
18
    place on the easements besides, you know, I think
19
    the statement said, Can I -- Power line, can an
20
    oil line go in next to these power lines or --
21
             AUDIENCE PARTICIPANT:
                                    Speak up.
22
             CHRIS PODOLL: The way you answered the
23
    question, was, no, an oil line couldn't go in, but
    was there something within this easement that
24
    states that you can't hang a second power line on
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these same poles or put another set of poles right next to them within that easement.

the easement. Depending on how the easement is written, they're going to talk about -- I've seen easements where the language says one transmission line consisting of -- So the easements can be written as specific as they need to be written. You know, a hundred fifty foot wide easement is not wide enough to build another transmission line next to this transmission line that we want to build.

Now, our easements are not exclusive easements. So that means that if an oil company wanted to put a pipeline for some reason within that easement and you prefer that they put that pipeline in that same location, you could grant them an easement for the pipeline within the same strip of land that you've already granted an easement for the transmission line.

But the transmission line easement is going to state that it's an easement for an electric transmission line, and, you know, it's going to talk about the one set of structures. And, I mean, I don't think we have one here handy that we could pull out

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and read to you, but you've gotten a copy, I believe, of the easement form that we intend to use; correct? So you look at the language in that easement form and I think you'll find it's pretty clear that that easement is for this specific project. And that's really all it's good for.
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questions. Leland Stauch again. As far as land values, the only reason land prices took off in the last two years, and it's basically because of the high price of corn, soybeans that affect the land value. Land in the Groton area was selling in the area under \$5,500 an acre three years ago. The land that was sold last sales in that area and northwest of Groton have sold as high as 13,000 an acre. That's a pretty large increase from 5,500 to 13,000 an acre in just two years. And it's all been affected by the high prices of corn.

Now, if corn goes down, land prices will stabilize. The only check is this. Most people if the land is paid for will not sell the land, because once they've heard that 12,000, 13,000-dollar price, unless they're desperate, they're not going to sell the land.

And I would have to say right now with the

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present farm program where it is, I think land prices will remain stable. I'm an economics major, South Dakota State, and I'll tell you what, I don't look at land prices dropping within the next five years unless somebody gets forced to sell. That's where I come from.

What the price of the corn is going to be, right now, land rents have not went down. Most of them are either holding steady or going up. So there is nobody doing any discounts for this quick drop in corn prices in many places. What's going to happen two years from now, we don't know. And that's where the changes are. It's anybody's guess but I'll tell you what, most land is not going to sell at a distance. They just sold some land south of Andover, right next to my land. I bought it five years ago. The price is many times what I paid for mine. I paid a fair price. This sold at twenty-eight hundred and 25 bucks an acre for land with the soil classifications, the majority of it, No. 4 and 5 type soil, which is not cropland. Basically, a No. 4 and 5 soil is pasture or hay land. Thank you for your time. **DENNIS JONES:** Dennis Jones just one more That is a question for the PUC. Do you

have the proper protection for landowners as far

as problems, as far as transferring these 1 right-of-ways that we're giving down the road? 2 Does the State of South Dakota have things in 3 place that does protect us? 4 5 CHAIRMAN HANSON: I'm not sure I understand your question. Protect you from? 6 7 **DENNIS JONES:** From them possibly putting 8 an oil pipeline on this right-of-way. 9 CHAIRMAN HANSON: Oh. **DENNIS JONES:** Things like that. 10 11 Protection down the road. CHAIRMAN HANSON: As far as I understand, 12 13 the easement only provides for a -- I've never 14 heard of someone putting an oil pipeline down 15 through the same easement. Obviously within 16 communities you'll have numerous utilities along 17 the side of a street or under a street. 18 your -- the agreement and information, the siting 19 process that we have here today is only for an electrical transmission line for an easement. 20 21 they come -- If they're going to put down an oil

pipeline, for instance, they would have to come

South Dakota PUC again. This does not give them

carte blanche to put down just whatever they want

back and go through a siting process with the

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in the future.

**DENNIS JONES:** Thank you for answering that question.

Today there is a lot of landowners that aren't here today and a lot of them have not even had a formal discussion about this. Because of the time of the year, they've been busy. I had phone calls today regarding this and I think there is a strong opinion out there, I think my neighbor said it best, could we hold up decisions until January on this, until there is more thought and information that has been brought forth? I mean, this is a big deal for the people in this area. There is a lot of tough questions answered today. He couldn't answer the question, Can we look at different alternative routes? You know.

I mean, we're in a point in time in this country where we designed a country years ago with an interstate highway system. Yet we hodgepodged these electrical transmission lines kind of on the whims of the power companies. And I just read an article the other day and they say that's got to change. You know, and we found out in the past, this gentleman that I spent a day with the other day has got 36 years in the industry. He knows most of it. He says, We

made a lot of mistakes. And I appreciate the time
that he did. He didn't understand the route, why they
were taking it.

You mentioned that there is a need for it.

The need, is the need that's been explained to you
guys a real need? Or is it a profit motive? There is
a big difference there.

CHAIRMAN HANSON: Okay. You threw several things at us there.

**DENNIS JONES:** Yeah.

CHAIRMAN HANSON: State law requires us to make a decision within 12 months after an application is filed with us. And so that, that directs what we have to do. So as far as waiting for other folks, we are not here to make a decision today. We are here to just receive input. And this is a process that will be ongoing. We will be having hearings, formal hearings, in addition to the public hearings here -- the public meetings here. We will have formal hearings in Pierre, in which the Applicants will be -- well, they've already presented their lengthy permit. Excuse me, their lengthy Application to us.

And in order to go through that permitting

process, it requires to have that public hearing. 1 So 2 all those folks that have questions pertaining to it, they can contact the PUC. They can send us letters. 3 They can call. They can contact us with e-mails. 4 5 appreciate that information. We, as commissioners, 6 will not be able to directly converse with them but we 7 will receive that. It will be made a part of the record, and when we have our public meetings, they 8 will be given the opportunity, if they wish, to 9 10 present evidence, and you can go through that process 11 and contact the attorney. Do we have the -- We had 12 some cards. 13 AUDIENCE PARTICIPANT: Karen Cremer. 14 CHAIRMAN HANSON: Yes. We had some cards 15 for her. Are they on the back table? Karen 16 Cremer. And you can look it up on our website and 17 contact us. 18 We're very open from the standpoint of being 19

We're very open from the standpoint of being able to receive information and concerns and go through the process. So those people, if they feel that they aren't going to have an opportunity, have them send a letter, an e-mail with their questions. We've gathered a lot of very good information, and this is not the first time we've been on horseback or whatever here. So we understand -- We, the three of

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us, have certainly questions that haven't even been
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    asked and answered here today. And their Application,
    yes, it does cite a need; that is a requirement that
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    they have.
 4
             So tell those folks to contact us. And they
 6
    can contact us on the website, puc.sd.gov, and send
 7
    that information.
             DENNIS JONES: The one question I think
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 9
    is very important, I think, this permit applies to
10
    the route that you're taking today; correct? What
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    if we find a better route? What if we find a
12
   better route?
             CHAIRMAN HANSON: Well, God bless you, if
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             I mean, I don't know what you're asking,
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15
    what question -- If you do --
16
             DENNIS JONES:
                           Well, could we get
    reconsideration, then, and have them re-permit?
17
18
   mean, does this --
19
             CHAIRMAN HANSON:
                               Okay. Let me explain
20
    one other thing along that line. We, as a
21
    commission, cannot tell them where to put their
22
    line. We can either approve it, not approve it,
23
    or approve it with certain recommendations,
24
    certain conditions. Now, you as landowners in
25
    discussing this with them, we assume and we expect
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that if you present a good argument to them, that they will adjust the line. And I frankly in my 11 years in the PUC in seeing pipelines and transmission lines, etc., sited, I have never seen a line that was exactly the very same route that it first started to be anticipated to be. make adjustments as they go through it. I expect that they will do that here. 

Now, if they don't, I would certainly expect that I will see folks from this audience here and other audiences that we have, we will see you contacting us and telling us that this did not take place as it should have. And we will -- They need to accept that, make that change, because those will be questions that we have and a discourse that we have with them. And if they don't and we think they should, then our only opportunity then is just to say, you don't get the -- you don't get the permit. So they really have a big hammer over their head to work with people when it makes sense to make an adjustment to that line.

**DENNIS JONES:** How about a major change to the line?

CHAIRMAN HANSON: All I can say is asked and answered. That's the best answer I can give

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DENNIS JONES: The one problem that we did have when we had a meeting with them earlier, there was a lot of landowners that made it to that meeting, and they're going to send us a list of who was at that meeting. And this is what divides, this is what concerns me. You've got out-of-state landowners that say, Hey, I'll take the check; I don't live there.

And that's -- And I'll tell you what. I'11 challenge them right now, but a lot of those signatures they've got signed are from easy out-of-state landowners. They never sent us the list that they said they were going to, as to who was at In other words, do we each stand alone this meeting. individually? I mean, they've got all the information. They know all who we are. But how can we have some protection that you will mail us who was at this meeting. So in case we just don't have to stand alone in the corner of a room and wonder, we've got an idea here, but we have no way of transcribing it to everybody else. You didn't do that the first time, your company that you had hired.

You know, we've got more questions that need to be asked.

1 CHAIRMAN HANSON: All right. Thank you 2 for your question. We've gone through that. We've plowed that field and we have those 3 questions down, and we will expect that they will 4 5 answer those questions as we go through the 6 The ones that they have not been able to process. 7 answer now, they're still coming before us to 8 answer those questions. We appreciate it. have -- I hate to say it, a drop-dead time here. 9 10 We really have to end this by 4:00. We've got 11 35 minutes. So let's not go over items we've gone 12 over and over and over. Let's get on with the 13 other questions that we have. 14 Thank you, Mr. Jones. Thank you. 15 Other questions, please. 16 MAHLON MEIDINGER: Mahlon Meidinger. M-E-I-D-I-N-G-E-R. I have been notified that the 17 18 property we're affected is in the right-of-way. 19 One of the concerns that I ask or should have 20 asked probably a long time ago before the route 21 was actually definitive was, there was all --22 other power lines that I believe Otter Tail and/or 23 MDU own that are a small-line property, which they 24 have right-of-way to. And I believe they go to 25 Big Stone. Why do we need an additional large

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line, or can we not incorporate an existing
 1
    right-of-way that they own and rebuild at this
 2
 3
    time, because it's probably about a
    25-to-35-year-old line that exists with a two-pole
 4
 5
    system.
 6
             I quess I questioned this from the very
 7
   beginning, and I was reluctant to push the issue about
    it in the past. I hate to see the scarring, as I look
 8
    at it, as I've gotten older, of all of these power
 9
10
    lines that go across our country. And I do agree that
11
    there is not a lot of forethought, only meeting desire
12
    rather than a planned objective to get power where it
13
   needs to be. That's all I have. Thank you.
                               Henry?
14
             CHAIRMAN HANSON:
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             HENRY FORD: Do you want me to respond?
16
             CHAIRMAN HANSON:
                               Yes.
                                     Is it possible
17
    to -- You have an existing line, existing
18
    easement, for a smaller transmission or
19
    distribution line? We don't know which it might
20
   be, but --
21
             HENRY FORD: Yeah, there wouldn't be in
22
    the case of MDU, but I think there may be an
23
    Otter Tail transmission line or so that could be
24
    in this area.
                   I think there was some talk when we
    were doing the routing about maybe looking at some
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of that. I'm not sure if there was anyone that recalls why we did not decide to overbuild. Just not being familiar with your transmission system, Otter Tail, I'm not sure where that line might have been or what was the decision process there. So I would probably have to defer this question to Otter Tail.

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CHAIRMAN HANSON: Sir, would you get that location to us, and we will expect them to have the information for us on that?

MAHLON MEIDINGER: I know that it's in proximity to Highway 14. I would say probably about a three-and-a-half to four-mile from that area, and it kind of transverses the countryside going northward, and I believe it is probably an Otter Tail line. A lot of these are no longer marked for numerous different reasons. But I am aware of it because I have a property that's adjacent to that area, as a small, you know, piece of land that adjoins that or is adjacent to it. don't have, to my knowledge, there is no easement or anything on that property. But I visually see it when I have traveled over there and that was my question. In the first type of books that were released, they showed this as a small, I think it

was a 115 megavolt line, but I'm not exactly positive of what its size.

And the reason why I brought it up is, Okay, as these progressively get older, there is a time when they'll have to be removed. That's why, I guess to me, it makes more since to go in and utilize a right-of-way that already exists. You're not going to put another set of lines through another area. If you can improve and possibly, you know, build a multiple line versus having another point of contention where there has already been a power line that's in proximity and it can achieve the same goal.

LLOYD BUNTROCK: Lloyd Buntrock.

B-U-N-T-R-O-C-K. I'm just wondering on this power line, I'm not clear, coming up here at one meeting we were told it's 150/60-mile, whatever the route it is to Ellendale, also that it might be used to shoot the power back. What would be the purpose of building a line 160 miles up, and then shooting the power back another 160 miles. So who's benefiting from this, who is buying this electricity? I don't think they're doing a project on this amount that you don't know who is going to buy this electricity. So who's really going to benefit from this?

systems are kind of difficult to, I guess, explain from the standpoint, it's not the same thing as, say, a pipeline where you put the product into this end of the pipeline, and it comes out at that end of the pipeline. With transmission systems, there are various, lots of interconnections from one system to another. When power comes into the system, it naturally flows to where the load is. In other words, if there is a load over here calling for power, and there is generation up in this area that is generating, there is a good chance that power is going to flow from generator to load.

The reason there was probably a comment made that the power could flow the other way is by simply virtue of a transmission system. If under certain conditions, and we look a lot at contingency conditions, well, what happens if the generation up in North Dakota, for example, goes down? And we have load up there now and we've got these wind farm projects or the nuclear plant in Minnesota or whatever the case may be that has excess generation, that power flow is going to go to that load again.

So there will be situations, depending on

what's going on on the system as a whole, what generation is on line, what generation is off line, what are the relative loads scattered throughout the system. Those are the things that really determine how the power is flowing on this transmission line, what direction it's flowing, what amount is flowing.

You can have a generator at point A and a load at point B, and say, I'm buying 100 megawatts off of this generator. You can't guarantee that that line or that energy is going to be delivered across one particular transmission line, because it's going to follow the network. It's going to go -- Electricity follows the path of least resistance, and that's what's going to happen in the network.

So it's a very difficult thing and guys like Jason, who stood up earlier, that's kind of -- or at least used to be his whole job was doing these models of the power system and trying to determine how power is going to flow throughout that network under certain conditions.

So really the best explanation is still that this particular line is such that it has a large capacity between these two points, and ultimately what that does is that becomes the path of least resistance. And so power is going to have a tendency

to want to flow on this bigger, high-powered line than
it is on some of the smaller transmission network
system out there.

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But necessarily, you can't say, you know, there is a hundred megawatts on this line today, 50 of it's going to customer A, 25 to customer B. It's not that simple.

LLOYD BUNTROCK: You must know where it's going or why would you be building it? You're not building it -- You're going to be sending it some place to get money from it. You're doing it for profit? And the reason I get the question is, I understand and I hope I don't upset anybody if they're from Minnesota, but that they want the electricity, but they don't want it from Big Stone, because it's built -- because it's energized with coal. So then you're going to send it up here, and then send some wind power maybe back and tell them it's coming from wind power, which they wouldn't know the difference, whether it was -- turned right around and went back. Ιt don't make sense to me, when Big Stone is there, it's a lot quicker to build a line right to where whoever wants it.

The environmentalists has got so much power

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and that's what you keep talking, you can't do this,
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    you can't do that, because of the rules and
    regulations. But really us, as farmers, you know, in
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    all honesty, you can walk all over us. There is not a
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 5
    thing we can do about it. Yes, we can talk to you and
 6
    you might adjust it a foot or two. But if you want to
    come across our land, there is no way we can really
 7
 8
    stop you.
               Isn't that true?
             HENRY FORD: If we have the right of
 9
10
    eminent domain, that is true.
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             LLOYD BUNTROCK: I don't think that's
12
    right.
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             AUDIENCE PARTICIPANT: And a permit.
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             CHAIRMAN HANSON: And a permit.
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             (LAUGHTER.)
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             HENRY FORD: I wasn't making any
17
    assumptions.
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             LLOYD BUNTROCK: But you can really get
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    that from us, because even if I don't sign that
20
    ever, you can come and condemn my ground and put
21
    the poles on it.
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             HENRY FORD: If we had a permit, we could
23
    do that.
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             LLOYD BUNTROCK: That's what seems so
   unfair, you know, that there is railroad -- You
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don't want to fight with the railroad. I kind of 1 2 get that intention. Because it's going to be hard 3 to get the approval, with the county, with the state right-of-way, Game, Fish, and Parks. 4 5 if I could see that there was a need for 6 electricity, you know, desperate or they're up 7 there without electricity or whatever, but you're not telling me, Where is this going? And then you 8 want me to sign an agreement that it's okay to 9 10 come on my ground, and, yet, there is a lot of 11 questions that really aren't answered, that you 12 don't have the answers to, really. Not even what 13 type of poles. 14 And at the one meeting, there was going to be 15 no guy wires. Now I understood you that there is a 16 possibility that there could be guy wires. And we 17 were told at one meeting that there would be 18 absolutely no guy wires. So, I mean, it's a little 19 hard to sign something when you don't know what you're 20 really signing. Or where it's really at for sure, you 21 know.

HENRY FORD: Yeah. Well, and that's kind of the virtue of the option. The option is really just a way of getting, I guess, an agreement to the sense that you're not objecting to the power

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line crossing your property. Now, when you get to
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    the easement, then the easement works out all
 2
    those kind of details that you have talked about.
 3
    The easement is when it will be stipulated exactly
 4
    where poles go, if there is anchors or not
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 6
    anchors. Any of those kind of details.
 7
             LLOYD BUNTROCK: What if you don't get
    any of them? Just, we don't sign, then what?
 8
 9
    When you get to the point of coming to the
10
    easement, what happens then?
11
             HENRY FORD: If you sign the option and
12
    then you don't want to sign the easement?
             LLOYD BUNTROCK: No, if we don't sign the
13
14
    option.
             Can you just come with the easement then?
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             HENRY FORD: Oh, yes.
                                   Yes.
                                          We could
16
    have come with the easement -- or let me put it
17
    this way. We could have delayed talking to
18
    anybody for options until we had the line all
19
    designed and came out strictly looking for
20
    easements. The only reason we were -- we agreed
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    to do options, as far as the partners are
22
    concerned here, is because we wanted to get out
23
    there and talk to individual landowners and try to
24
    determine if we had enough support for the
25
   particular center line that we're working towards
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here.

So that's why we're also, I think, at this point, a lot more flexible about where that center line is going to be. And that's why I'm saying we're willing to and trying to work with landowners to adjust that center line as much as we can, as much as we think that we can fit within the project. So that when we come with the easement, then the easement really does cover what you're willing to agree to.

me, you kind of put the cart ahead of the horse.
Why wouldn't you check with us landowners and kind of get the view of everybody along the line where you're thinking of proposing before to see what type of opposition, just to save all this type of hassle?

HENRY FORD: Well, and that was the reason or that was what we were trying to do when we had our public meetings. You know, we had our two sets of public meetings. And the purpose of those meetings was simply to get together us as project owners and you as landowners to talk about here is where the project is, possibly going to go or potentially going to go. You know, what are your thoughts? What are your comments?

Like I mentioned earlier, one of the things we did gather from all of those meetings, it came across very loud and clear, that the monopole or a single-pole structure is much preferred over something like an H-frame structure. So even though the monopole are more expensive, we felt that that was a good investment to make in trying to continue to move forward with the landowners.

So we had those public meetings. We invited everybody that we could find to those meetings and we, you know, we listened to all those comments. We noted all those comments, and we tried to incorporate those comments into our design and ultimately into our route selection.

comment. See, I never got notified. It's coming on my ground, and I never got notification of the first two meetings whatsoever. And like in the case where someone has passed away, I can see where a mistake could be made, but --

**HENRY FORD:** Yeah.

LLOYD BUNTROCK: So I didn't have any -All of a sudden it was a third meeting, or it was
practically through before I even knew about it.

CHAIRMAN HANSON: Okay. Do they have

1 your name now, sir? 2 LLOYD BUNTROCK: Yeah, I signed it at that last, down there at Dennis Jones' deal. 3 Yeah, I've been getting them now, but --4 5 BOB PESALL: Bob Pesall again. 6 follow-up question from a discussion earlier. You 7 had conceded when I first spoke that independent producers would have the opportunity to use this 8 line in addition to the two major utilities that 9 10 are behind developing it. My question then is, 11 assuming the landowner is considering taking 12 advantage of that, would they have information 13 available to them as to the rates that you would 14 be charging for access to that line so that they 15 can determine whether and where to put their own 16 generating capacity, in order to negotiate with 17 you exactly where the line runs across the back 18 40? 19 HENRY FORD: Yes, they do have access to 20 all of that rate information. In fact, the way it 21 is done, the interconnection to this particular 22 line is handled through the MISO interconnection

So this is all governed by MISO tariff. process. This is not governed by an MDU or an Otter Tail tariff. So there is a process laid out there.

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You can go out to their website. They have all of the information necessary for anyone to look at to determine how they would go about requesting permission to interconnect on this transmission

line or any transmission line.

CHAIRMAN HANSON: Since there is a little bit -- Oop, we'll do this one question, and then Commissioner Fiegen has some questions that she would like to ask and that might prompt some other ones.

DAVE NILSSON: This is Dave Nilsson again. You said it was an 85-year, was a long-term of what you thought this was going to exist, and then you're going to set the easements up just for 85 years and then you're done with the easements. Is that what you're doing?

HENRY FORD: I think the form that we're using is a perpetual easement. That's what's allowed in South Dakota.

DAVE NILSSON: Can we get that changed so it's only 85 or a hundred years so the grandkids, the great-grandkids and heirs down the line have an opportunity to resell this again somewhere down the line?

**HENRY FORD:** I wouldn't say no. I think

that that would definitely be something we would 1 2 be willing to talk about. You know, for example, in North Dakota, they have by statute a 3 requirement that the easements are only good for 4 5 So, you know, perpetual easements 6 aren't available everywhere anymore. 7 DAVE NILSSON: My next question is, you're talking about going through wind towers and 8 9 hooking wind towers up to this. You're going 10 through Brown County, Cambria, Groton, all those 11 townships down there, we're in the bottom of those 12 flatlands. No way in the world they're going to 13 put wind towers up down through there, but yet 14 you're still cutting right through the middle of 15 Why wasn't the proposal set up if you're 16 going to do wind towers to this, set it alongside 17 a place where the wind towers would be put? 18 **HENRY FORD:** Well, as I said earlier, I 19 personally don't expect a lot of these wind farm 20

personally don't expect a lot of these wind farm projects to interconnect at this 345 kV transmission line, because the cost of interconnecting on this line is much higher than if you can connect on a 230 kV line, which is a lower voltage or a 115. Those answers come out of the MISO studies when someone makes application

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for a wind farm interconnection. But this line is
 1
    going to ultimately allow for, I guess I would
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    have to say, increase the capacity of the
    transmission system in this area in such a way
 4
    that it will allow additional wind farm
 5
    interconnections, whether it be on this line or
 6
 7
    whether it be on a 230 or 115 line in the area.
                                   Although this isn't
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             COMMISSIONER FIEGEN:
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    a day the commissioners, the three of us are
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    asking all our questions, I did want to follow up
    with the home question just so that they would
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12
    hear it. It looks like on page 54, I think, you
    have all the list of the 21 homes that are
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14
    occupied, and I believe the six that are vacated.
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    Do you work with all 21 of these homes?
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             HENRY FORD: Work with in the sense of
17
    talking to those landowners?
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             COMMISSIONER FIEGEN:
                                   Yeah, these 21
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    homes that are listed, do you meet with all these
20
    homeowners that you're within 500 feet?
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             HENRY FORD: Probably if they are a
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    landowner that we need an easement from.
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                                   So if they're not a
             COMMISSIONER FIEGEN:
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    landowner, you don't visit with them?
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             HENRY FORD: I don't believe so.
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COMMISSIONER FIEGEN: I know we will all 1 2 have a lot of questions this summer. I assume Brian Rounds will probably bring this docket to us 3 in the summer of 2014, because we have to hear it, 4 like Commissioner Hanson said, by August it has to 5 6 be done. 7 A couple things I want you to know. Brian Rounds is the lead person. He hasn't said 8 9 anything today, but I know you're welcome to call him, 10 I think, and Karen and Darren. And even like he sent us the list of all the landowners, which Commissioner 11 Hanson has right on his phone. But you guys have 12 13 already put it up on the website. We get to see it 14 just as soon as you do. So what's so interesting 15 about being a commissioner is I can't ask Brian Rounds 16 any questions except right here at a hearing. But 17 they send us stuff that is open to the public. So the 18 commissioners see it just as fast as you do, and he 19 does have a service list of all the landowners, correct, Brian, because I looked at it? 20 21 BRIAN ROUNDS: We do, yes. 22 COMMISSIONER NELSON: On the website. 23 COMMISSIONER FIEGEN: On the website. 24 And that's it. I just wanted to thank you guys 25 for coming, and I know you won't get to ask us any

questions after the hearing, but Mr. Brian Rounds is around here.

(LAUGHTER.)

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question at this point. And, frankly, I was surprised that we didn't get more questions today about land restoration. In your initial presentation today you said, and I quote, that you will use the, quote, best effort we can, unquote, on restoration. And really wet years and really dry years, best efforts can amount to a very poor product. What is the standard for restoration of especially grassland? Is it simply best effort? Or is there some higher standard than that that you're going to guarantee?

**HENRY FORD:** Brian, do you know that?

BRIAN HUNKER: Again, I'm Brian Hunker with HDR Engineering. We're going to restore land to the MPDS permit. And typically that's 70 percent revegetation. If it's a really wet year, a really dry year, we may need to come out the following year to take a look at it, do some reseeding. The initial restoration effort is going to be to restore the land to the or -- yeah, restore the land to the pre-construction contours

and then do reseeding with it.

**COMMISSIONER NELSON:** Thank you.

BRIAN HUNKER: Sure. Can I address one more question too?

CHAIRMAN HANSON: Absolutely.

BRIAN HUNKER: This is in regards to the railways. I know there is a lot of questions regarding routing along railways. One of our main constraints with routing along the railways is that there is a lot of towns that are adjacent and within that the railway passes through. So it's very difficult to put a transmission line directly along that railway and go through those cities or those towns. In addition, the Waubay area is experiencing very high lake levels and putting a transmission line along the railway that is through that Waubay area creates a lot of engineering constraints as far as the foundations go.

DARRIN ERDMANN: Before you sit down, this is Darrin Erdmann again. So you're going to restore the top contours to the ground or we're just going to leave the compaction, or what answer are we going to with? He's given one and you've given one and you're the engineer.

Actually, I'm not an 1 BRIAN HUNKER: 2 engineer. I'm an environmental scientist, but we 3 are going to restore to the pre-construction contours. If there is compaction, I'm sure 4 5 they'll go in there and deep rip it and alleviate 6 that compaction. DARRIN ERDMANN: 7 The next question I have is, did we just get the answer from you why the 8 9 route along highway, the highway in North Dakota 10 going straight west wasn't considered? 11 South Dakota allows for unlimited, for perpetual 12 contracts -- or easements and North Dakota 13 doesn't? That was not considered? 14 **HENRY FORD:** No. That had no bearing 15 whatsoever. 16 LELAND STAUCH: I have one question yet 17 here to ask you. Should these power poles ever be 18 declared obsolete, who will pay for the cost of 19 removing these posts whether 75 years from now or 20 a hundred years from now? Is the landowner going 21 to be stuck with those poles setting there should 22 they become obsolete? 23 **HENRY FORD:** Any transmission lines that

we've ever deconditioned and determined no longer

needed, the utility company will remove that line.

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Actually, you know, a line like this, there could 1 2 be some pretty significant steel recycling value 3 here in copper -- not copper but aluminum recycling values. So we're not going to just 4 5 abandon the line and leave it in place. We can 6 take that line down and recycle those materials 7 and get some real money for that. 8 AUDIENCE PARTICIPANT: Does that include 9 the --10 HENRY FORD: The what? 11 CHAIRMAN HANSON: Excuse me. Let's 12 always be on record. 13 AUDIENCE PARTICIPANT: Okay. Sir, I forgot your 14 CHAIRMAN HANSON: 15 name. 16 LELAND STAUCH: Leland Stauch. 17 CHAIRMAN HANSON: Leland, thank you very 18 much. We have a gentleman with the mike over 19 here. 20 LYLE PODOLL: Lyle Podoll again. 21 wanted to follow up on Kristie's comment. 22 and Terry are going to come to our area and look 23 at it. With Joel not being a landowner, how does 24 that affect his rights with the PUC? Does he

still have any rights with the PUC, even if they

decided they didn't want to help him, just because
he's not a landowner where the line is going to
go?

Question. We will entertain any information that we receive from the public. It's up to us to ask questions, but we also expect it of the Applicant to answer those questions. The best thing they can do is to answer the questions. There has been a lot more questions here today than answers, and certainly those need to be answered because that -- there is a gravity to that that causes us to shy away from providing a permit.

And if a person does not own land, they still have a legitimate, as I pointed out when I was first discussing it, that anyone who has any interest -- Basically, when I went through that list of all of the parties that could have an interest in this, basically says anyone, because if there is an environmental impact, if there is a bird impact, an avian impact of some sort that people are concerned with, they have a legitimate right to ask those questions.

LYLE PODOLL: Thank you. That's all I wanted to know. I would like to comment on Brian, this thing about the railroad and the map. If you

look at that from Sisseton to Milbank, there is 1 2 three small towns there, according to one of the maps. One of the towns is on the edge of it. 3 if you look at the number of corners from 4 5 Ellendale to Big Stone, I counted them or tried to 6 count them one time, I don't know if there was 43 7 or how many corners there are, but if it took two 8 corners to get around three or four communities, I 9 mean, that's -- the small towns does not --10 Westport has this BEP line just a quarter mile out 11 It's been there for 30, 40 years. 12 skirting around town should not be an issue not to 13 consider it. And just as a point of interest, my 14 neighbor went there, lives just a couple hundred 15 yards, has all his life on that BEP line. 16 cancer too. 17 KIM MEIDINGER: My name is Kim Meidinger. 18 I just want to have something restated that I 19 heard at the February meeting in Ellendale. I 20 think the comment was made that you were going to 21 try to have the center line at least 500 feet from 22 a home that was occupied, that was your goal, but also the comment was made that in the State of 23 24 North Dakota, that that was the law they had to be

500-miles or 500 yards -- or 500 feet away from

the center line. I just wanted that to be stated. 1 2 **HENRY FORD:** Yes, that is correct. North Dakota has that in their siting rules. 3 So that it's considered an avoidance area, so we, we 4 don't absolutely have to stay 500 feet away. 5 6 can be closer than 500 feet, if the landowner grants a variance or a waiver, it's called, in 7 North Dakota. South Dakota does not have any 8 9 requirement in their siting rules. 10 JERALD PESALL: Hi, my name is 11 Jerald Pesall. P-E-S-A-L-L. I have one question 12 about the compensation for crop damage. You say 13 we'll get reimbursed. If you have Federal Crop 14 Insurance, you have to have the bushels to get the 15 credit. So if you have a loss down the road a 16 ways, bushels that you're going to lose because of 17 your power line going across my land, I won't get 18 credit for, and then you have the ten-year history 19 of the federal crop. So you're going to pay me 20 county average? Who farms here with county 21 average anymore? 22 **HENRY FORD:** Okay. I'm not sure I follow 23 the question. 24 **JERALD PESALL:** If you're not in a farmer

in the crop insurance, you don't know what I'm

talking about. 1 2 **HENRY FORD:** Right. **JERALD PESALL:** If you destroy a bushel 3 on my farm, I cannot get credit for history on the 4 5 crop insurance. You go out there and go across my 6 land, when the crop is just about ready to harvest 7 and destroy it all, say you destroy 300, 400 bushel off of a hundred-acre field, that's 8 9 three-bushel reduction on my crop insurance yields 10 which I get paid for if I have a crop loss in the 11 future. 12 **HENRY FORD:** Okay. 13 JERALD PESALL: Are you going to 14 reinstate my crop yield when you destroy it? 15 don't think you are, because you can't. 16 you've got to have the bushels to prove that I had 17 that loss, and you're going to push them in the 18 ground. 19 HENRY FORD: Okay. Yeah. I'm still not 20 real clear, but how we do it --21 JERALD PESALL: Crop insurance agent, and 22 he'll explain it to you. HENRY FORD: How we'll do this is and it 23

somewhat depends on the time of the year. But if

we were crossing your field with equipment, and

24

```
like you say, your crop was ready to be harvested,
 1
 2
    the damages would be the acreage that was
    impacted. And then when you combine the rest of
 3
    the crop, we take the yield you got off the rest
 4
 5
    of that crop and apply that to the damaged area.
 6
             JERALD PESALL: You've got to sell the
 7
   bushels to prove your yield, and I'm not selling
           I'm just getting paid for them so we don't
 8
    them.
    know definitely what I'm going to be losing.
 9
10
             AUDIENCE PARTICIPANT: How about we send
11
    you a bill?
12
             (LAUGHTER.)
13
             CHAIRMAN HANSON: Will with that, note --
14
             (LAUGHTER.)
15
             CHAIRMAN HANSON: -- we are at the
16
    witching hour, and we very, very much appreciate
17
    all the input that we received. I don't know that
18
    the Applicant appreciates all the input that they
19
    received, but at the same time, that's the purpose
20
    of these types of meetings.
21
             Ladies and gentlemen, we're on our way to
22
   Milbank, and if you want to caravan over there and
23
    continue this, you certainly may. We're not going to
24
    set a record tonight. Our record is seven hours up in
25
   Britton. We thought you folks might like to know
```

```
So we can go longer than four hours, but I
 1
    think we have a real good idea of input and concerns
 2
 3
    at this juncture. What we would like, though, is, in
 4
    fact, not that we're masticates, but we would like to
    have all of your continued input, information.
 5
 6
    have new thoughts, whatever, please contact us at
    South Dakota PUC, send the e-mails and letters to us,
 7
    and certainly be in contact and discussion with the
 8
 9
    Applicant. So thank you very, very much for your
    attendance this evening -- this afternoon.
10
11
             (HEARING CONCLUDED AT 4:00 P.M.)
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

```
STATE OF SOUTH DAKOTA
 1
                            )
                            :SS CERTIFICATE
 2
    COUNTY OF CODINGTON
 3
              BE IT KNOWN that the foregoing record was
 4
    stenographically reported by me, NANCY McCLANAHAN, a
 5
    court reporter; and that the foregoing 2 - 163 pages
 6
    are a true and correct transcript of all the
 7
   proceedings had upon the taking of said proceeding,
 8
    all done to the best of my skill and ability.
 9
              DATED at Watertown, South Dakota,
    Codington County, on this _____, day of _____,
10
11
12
                       Nancy McClanahan, RPR/RMR/NP
13
14
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Big Stone South to Ethendale

**Public Hearing** 

October 2013

BSSE 10-17-13 777

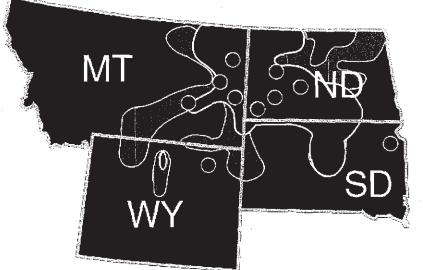


## Today's presentation will cover:

- Applicant overviews
- Project development
- Project overview
- Routing process
- Engineering design
- Project outreach
- Right-of-way
- Next steps



#### Montana-Dakota Utilities Co.



- Electric utility areas
- Natural gas utility areas
- Electric generating stations
- States of operations

- Headquartered in Bismarck, North Dakota
- Electric and/or natural gas service to parts of Montana,
   North Dakota, South Dakota, and Wyoming
- Service area covers about 168,000 square miles
- Approximately 312,000 customers



### Otter Tail Power Company



- Headquartered in Fergus Falls,Minnesota
- Electric service to parts of Minnesota, North Dakota, and South Dakota
- Service area covers about 70,000 square miles
- Approximately129,400 customers in422 communities



# Project development and benefits

#### Project development

Project developed by MISO after several studies on future generation needs

Notice of Intent to construct was filed in SD on March 5, 2012 (within 90 days of MISO approval by statute)



We are here

Approved by MISO in December 2011

Application for a Facility Permit filed with SDPUC on August 23, 2013 (within 18 months by statute)

- Project benefits
  - Enables the delivery of low-cost generation
  - Increases system reliability

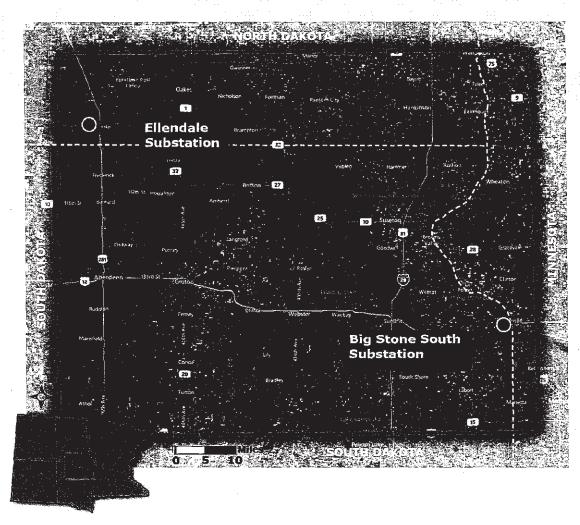


## Local economic benefits

- Short term local economic benefits during construction
  - Construction expenditures (estimated range \$3 \$7 Million through construction period)
  - Other tax benefits: (estimated range \$5.5 \$9 Million)
    - Sales and use taxes
    - Contractor taxes
- Long term local benefits
  - Increased taxes paid to affected counties/townships
  - Estimated annual property taxes paid by Project:
    - \$715,000 \$885,000 in Brown County
    - \$535,000 \$755,000 in Day County
    - \$490,000 \$605,000 in Grant County



#### Project overview



- New 345 kV transmission line
- Anticipated length:
   160 miles to 170 miles
- Connect Ellendale substation to Big Stone South substation
- Anticipated total Project cost: \$293M – \$370M
- SD investment est.\$250M -\$320M
- In service in 2019



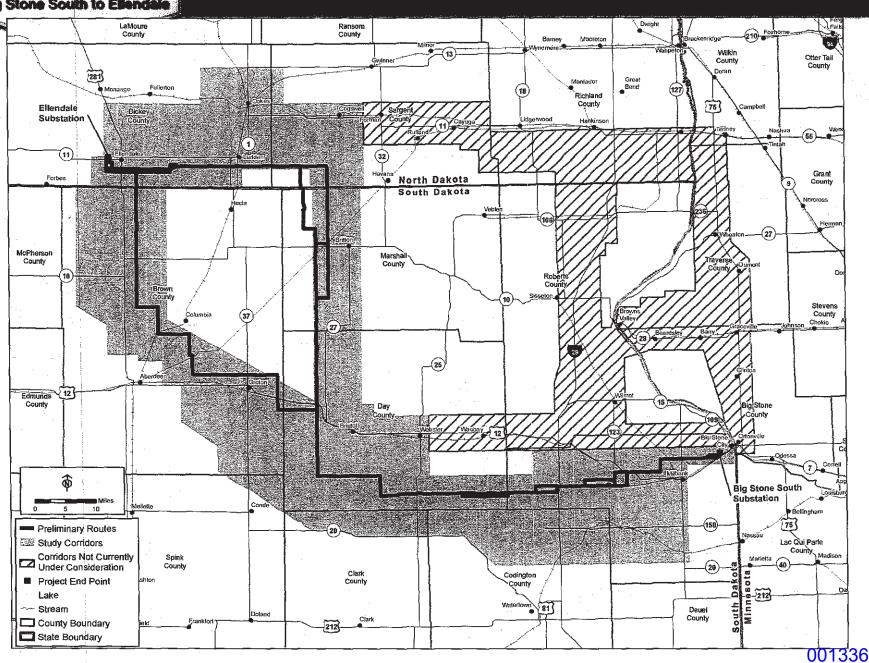
## Owners' routing criteria

#### Information evaluated:

- Overall length and cost
- Existing high voltage transmission lines and transportation infrastructure
- Section lines
- Populated areas/residences
- Environmental and engineering considerations
- River crossing locations
- Public and agency feedback

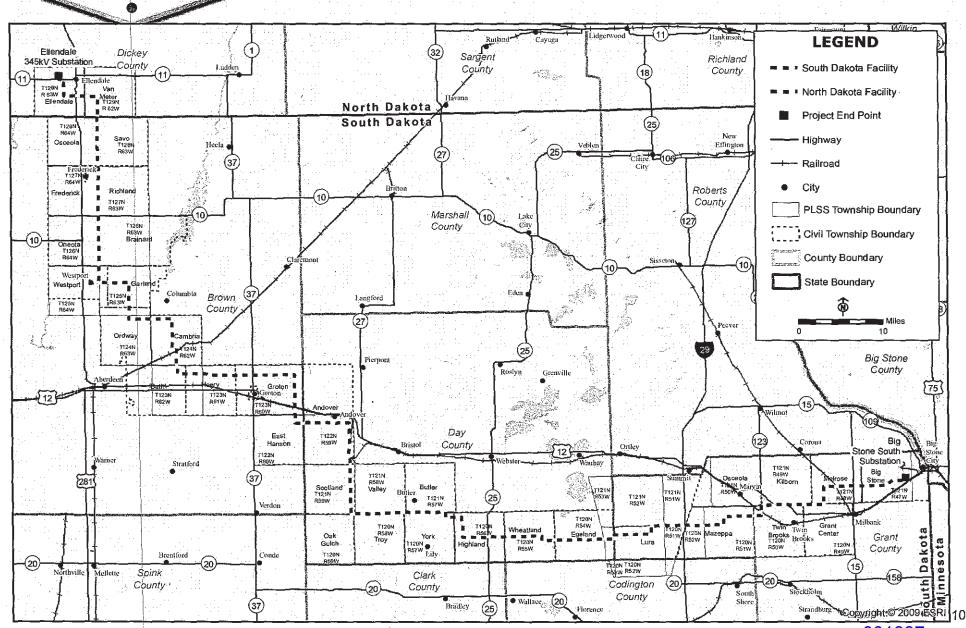
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## Routing process: Preliminary Routes



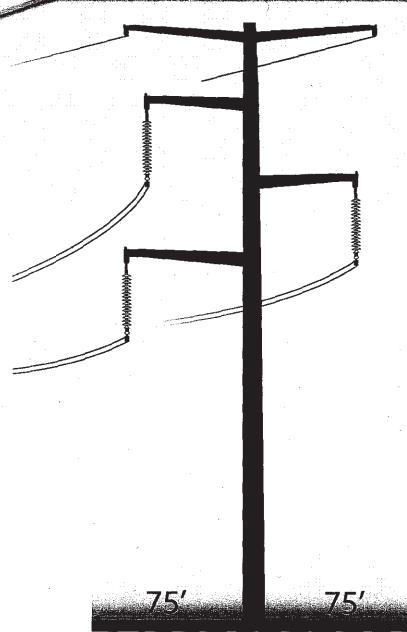
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## Routing process: Preferred Route





# Engineering design considerations

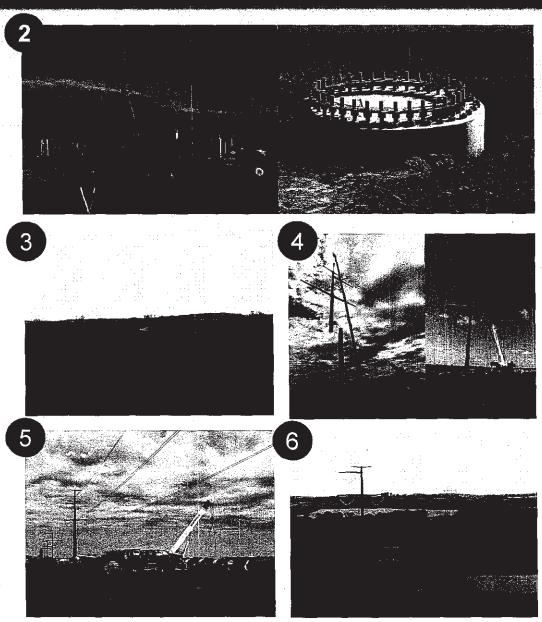


Average			
measurements			
125 - 155 ft			
6 - 11 ft			
700 - 1200 ft			
5 - 6			
30 ft			



## Construction overview

- Survey structure locations and identify ingress and egress locations.
- Auger the holes where the structure poles will be set and pour foundation (if required).
- Assemble the structure on the ground adjacent to the holes/foundation.
- Lift structure and place in hole or on foundation.
- 5 String wires.
- Restore right-of-way and energize line.





### Project outreach summary

- Letters or postcards mailed (September 2012, October 2012, February 2013, April 2013, May 2013, June 2013, August 2013)
- Open house meetings (October 2012 & February 2013)
- Newsletters mailed (November 2012, June 2013, October 2013)
- County meetings (August 2012 & January 2013)
- Interagency meetings (August 2012 & January 2013)
- Tribal Agency meetings (October 2012, March 2013, May 2013, July 2013)



#### Easement process as of October 14th

- Started contacting landowners on August 5, 2013
- Over 90% of the SD parcel owners have been contacted to date
- 94 options have been signed
- Nearly 30% of the SD project miles have options signed



## Next steps

2008-2012 Planning 2012-2014
Environmental
review and
permitting

2012-2016 Engineering design and right-of-way 2016-2019 Construction

2019 In service

We are here



# Thank you!



# **HOW TO STAY INFORMED and PROVIDE FEEDBACK:**

- Visit our website at www.BSSEtransmissionline.com
- Call our toll-free information line: 1-888-283-4678
- Join our mailing list (online or at this meeting)
- Email us at: info@BSSEtransmissionline.com
- Make a comment at this meeting or online at www.BSSEtransmissionline.com

