

BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET NO. EL17-055

**IN THE MATTER OF THE CROCKER WIND FARM, LLC, PERMIT
APPLICATION FOR A WIND ENERGY FACILITY AND 345 KV
TRANSMISSION LINE IN CLARK COUNTY, SOUTH DAKOTA**

**Surrebuttal Testimony of David Lawrence
On Behalf of the Staff of the South Dakota Public Utilities Commission
May 2, 2018**



1 **Q: State your name.**

2 A: My name is David Lawrence.

3

4 **Q: Did you provide Direct Testimony in the Docket on March 28, 2018?**

5 A: Yes.

6

7 **Q: What is the purpose of your Surrebuttal Testimony?**

8 A: The purpose of my Surrebuttal Testimony is to respond to the Rebuttal
9 Testimony and Exhibits submitted by Mr. Michael MaRous on behalf of Crocker
10 Wind Farms, LLC. Mr. MaRous submitted a number of new studies on April 13,
11 2018, less than four weeks prior to the evidentiary hearing. With a limited amount
12 of time, I have identified a number of issues and inconsistencies. Commission
13 Staff would like to provide the Applicant this information in advance of the
14 evidentiary hearing in order to afford the Applicant time to prepare for the hearing.

15

16 **Q: What materials have you reviewed in this matter?**

17 A: In addition to the materials identified in my Direct Testimony, I have reviewed
18 the rebuttal testimony and exhibits of Michael MaRous.

19

20 **Q: In your opinion, does Mr. MaRous meet the criteria to be a real property**
21 **appraiser in South Dakota?**

22 A: Yes. Mr. MaRous has indicated that he has applied for a temporary practice
23 permit with the Appraisal Certification Program for the assignment with the

1 Applicant. Mr. MaRous' qualifications show extensive appraisal experience with
2 different property types including energy and wind projects, and competency in this
3 type of appraisal work.

4

5 **Q: In your opinion, do the rebuttal testimony and studies of the Applicant**
6 **adequately reflect the potential impact to the value of properties in the**
7 **vicinity of the proposed Crocker Wind project?**

8 A: It is my opinion that the rebuttal testimony and studies have limitations that
9 need to be considered for their applicability to South Dakota.

10

11 First, the Market Impact Analysis presents limited market evidence from South
12 Dakota to gauge the potential value impacts a wind project can have on real
13 property values. Only one sale, from White, S.D. is analyzed and is located over
14 four miles from a wind tower. Second, most of the studies present statistical
15 analysis of a large, well-defined residential dataset from other market areas that
16 are not necessarily comparable to South Dakota (Ontario, Canada; Rhode Island;
17 Ridgetown, Canada; and Massachusetts). Third, the studies presented as Rebuttal
18 Exhibits 4 & 5, are developed to assist with Canadian assessment valuations for
19 the purpose of taxation, and are not necessarily applicable to South Dakota.
20 Fourth, the studies do not reveal a consistent consensus among the authors about
21 potential impacts of wind towers, turbines, and wind projects on property values:

- 1 • MaRous Rebuttal Exhibit 4, page 3 of 86, states, “*The 2012 CVA study also*
2 *found there is no statistically significant impact on sale prices of residential*
3 *properties in these market areas resulting from proximity to an IWT.*”
- 4 • MaRous Rebuttal Exhibit 5, page 7 of 39, states, “*MPAC Concluded that*
5 *2016 Current Value Assessments of properties located within proximity of*
6 *an IWT are assessed at their current value and are equitably assessed*
7 *when compared to the assessments of properties that are not in proximity*
8 *to IWTs.*”
- 9 • MaRous Rebuttal Exhibit 6, page 4 of 29, states, “*Our principle finding is*
10 *that the best estimate is that there is no price effect, and we can say with*
11 *90% level of confidence if there is a price effect, it is roughly 5.2% or less.*
12 *Thus, while we cannot conclude for sure that there is no effect on housing*
13 *prices, there is no statistical evidence of a large, adverse effect.*”
- 14 • MaRous Rebuttal Exhibit 6, page 7 of 29, states “*Fortunately, better studies*
15 *have been carried out recently. Heintzelman and Tuttle (2012) examine*
16 *impacts of wind farms in three counties of Upstate New York using over*
17 *11,000 transactions and a specification that treats distance as a single*
18 *continuous variable. They do find some significant price effects from*
19 *proximity, though they are not consistent across counties. Their results*
20 *imply that a newly built wind farm within a half mile of a property can*
21 *decrease value by 8-35%.*”
- 22 • MaRous Rebuttal Exhibit 7, Pages 26-27 of 42, states, “*While the results*
23 *indicate a general lack of significantly negative effects across the properties*

1 *examined in this study, this does not preclude any negative effects from*
2 *occurring on individual properties. In fact, a recent appraiser's report on the*
3 *impacts of Melancthon's wind turbines (Lansink 2012) found that the values*
4 *of five specific properties in close proximity to turbines declined by up to*
5 *59%. While the set of properties examined in this study may not be*
6 *representative of all open-market sales in close proximity to the turbines ...,*
7 *it provides evidence that values of specific properties may be negatively*
8 *impacted, which supports the claims made by a number of local residents."*

- 9 • MaRous Rebuttal Exhibit 8, page 3 of 49, states "*The results of this study*
10 *do not support the claim that wind turbines affect nearby home prices."*

11
12 What is particularly noteworthy about the studies cited above, is that some of the
13 conclusions indicate there could well be a potential value impact to properties near
14 a wind project. In light of each of the above studies, a reader could conclude the
15 issue is unanswered. That is why it is essential to have *credible* market evidence
16 from South Dakota to determine the effects of wind projects on real property
17 values.

18
19 **Q: Does the Market Impact Analysis shown on MaRous' Rebuttal Exhibit 1**
20 **provide credible market evidence from South Dakota?**

21 A: While the Market Impact Analysis provides additional insight with case-by-case
22 examples in Iowa, Minnesota and Illinois, the analysis does not provide a qualified
23 market sale from South Dakota that has been impacted by a wind project, tower or

1 turbine. The study does include one example from South Dakota; however, I don't
2 see the reasoning in using a sale that is over four miles from a wind tower as a
3 comparable sale to measure the potential impacts from a wind project. In addition,
4 there seems to be some inconsistencies with the sales data identified in the Market
5 Impact Analysis that raises concerns about the applicability of the research. Some
6 examples of concern are:

- 7 1. The sale price is not reported accurately. The Market Impact Analysis lists
8 the 19937 473rd Avenue sale price as \$169,500. The Brookings County
9 records & Brookings County MLS show the 19937 473rd Avenue sale price
10 as \$167,500.
- 11 2. The Market Impact Analysis does not provide any discussion about the
12 proximity to the high-traffic Interstate corridor along the west property
13 boundary.
- 14 3. The Market Analysis lists 5705 Rathum Loop as having a crawl space.
15 Brookings County shows 5705 Rathum Loop as having a finished $\frac{3}{4}$
16 basement with 800 square feet finished in the lower level.
- 17 4. 19937 473rd Avenue is located on a gravel road and in rural setting 13 miles
18 north of Brookings. 5705 Rathum Loop is on the east edge of Brookings on
19 a solid surface road and would be considered within the City of Brookings
20 real estate market.

21
22 If the facts upon which the conclusions are based are inaccurate, the conclusions
23 may be inaccurate. A Market Impact Analysis requires a stronger sales population
24 from South Dakota to provide credible market evidence.

1 **Q: Do you agree with the relevancy of relying on interviews with South**
2 **Dakota Assessors to support impacts on real property values near wind**
3 **towers, turbines or wind projects?**

4 A: I work with many assessors across South Dakota daily, and they are great at
5 what they do, which is assessing mass real property for the purpose of fair and
6 equal taxation. Assessors are not focused on assessing the individual market
7 values of properties nor the influences a property can have from different market
8 conditions. For example, agricultural property for assessment in South Dakota is
9 valued based on a soil productivity rating. This rating or multiplier is applied to the
10 property's production capabilities to determine the assessed value. The
11 assessment process does not consider conditions that could impact individual
12 value, whether positive or negative, such as a transmission line, wind tower,
13 mineral rights or payments paid to landowners from a wind tower lease. Mass
14 appraisal techniques are used for assessing thousands of properties in the county
15 for taxation, not determining if an individual property shows a negative or positive
16 influence from an externality. Assessor interviews are not substantively valid in
17 determining the negative impacts from a wind project.

18
19 **Q: Do county assessors and credentialed appraisers have the same**
20 **educational and experience requirements in South Dakota?**

21 A: No, they do not. Assessors are not credentialed appraisers in South Dakota.
22 County assessors are part of the state's Property Tax Division which is responsible
23 for overseeing the tax system. To be hired as a county assessor, there are no

1 qualifications or experience requirements in appraisal. The Department of
2 Revenue does require the county assessor to attend training classes conducted
3 by the state within one year of being hired, but these requirements are completely
4 different from the criteria to become a credentialed appraiser in South Dakota.

5

6 **Q: What claims did the Applicant make regarding market sales from South**
7 **Dakota that have been impacted by a wind tower, turbine, or wind project?**

8 A: The Applicant made the following claims regarding market sales in South
9 Dakota:

- 10 • MaRous Rebuttal Exhibit 1, Market Impact Analysis, Page 12, states “*The*
11 *only sale found in South Dakota that is located in the general market area*
12 *of a wind farm, based on data research from the entire state, was a*
13 *residence approximately 4 miles to the Buffalo Ridge Wind Farms in nearby*
14 *Brookings County.*”;
- 15 • MaRous Rebuttal Testimony, Page 14, Line 23, states “... *the research I*
16 *conducted in these seven eastern counties resulted in no arms’ length sale*
17 *of a property proximate to a wind turbine...*”; and
- 18 • MaRous Rebuttal Exhibit 1, Market Impact Analysis, Page 31, states “*There*
19 *was a lack of data to discover any sales of South Dakota farmland in which*
20 *the transaction included a wind turbine...*”.

21

22

1 **Q: Are you aware of any market sales of real property in South Dakota that**
2 **have sold near a wind tower, turbine or wind project?**

3 A: Yes. Arm's length sales influenced by wind projects do exist in East River
4 South Dakota. In an afternoon, here is what my research assistant and I found for
5 sale evidence in Brookings County. This is not an exhaustive search of the South
6 Dakota counties with wind projects, nor has a complete sales analysis been
7 developed. Our research was limited to using the internet at my office and the
8 Brookings County website as a research tool:

- 9
- 10 • **Sale BK1 Elkton, S.D.** -- 2003 ranch acreage with eight acres. Listing price
11 \$218,000. Sale price \$183,000. Arm's length sale managed by broker.
12 Encompassed by 14 wind turbines circling the property. Tower #1 1,200 +/-
13 feet to the east. Tower #2 5,000 +/- feet to the northeast. Tower #3 3,800
14 +/- feet to the north. Tower #4 665 +/- feet to the north. Tower #5 4,300 +/-
15 feet to the northwest. Tower #6 5,000 +/- feet to the northwest. Tower #7
16 800 +/- feet west. Tower #8 2,700 +/- feet west. Tower #9 4,500 +/- feet
17 southwest. Tower #10 3,500 +/- feet southwest. Tower #11 3,600 +/- feet
18 southeast. Tower #12 750 +/- feet southeast. Tower #13 2,400 +/- feet
19 southeast. Tower #14 4,000 +/- feet southeast.
 - 20
21 • **Sale BK2 Toronto, S.D.** – 1998 1.5 Story acreage with 10 acres. Purchased
22 for \$234,900. Listed for \$339,900 six years later after completion of nearby
23 wind project. Reduced listing price to \$279,000 after market exposure and
24 no offers. Final sale price of \$235,000. Arm's length sale managed by
25 broker. Encompassed by 16 wind turbines. Tower #1 890 +/- feet northwest.
26 Tower #2 1,700 +/- feet northwest. Tower #3 2,700 +/- feet northwest.
27 Tower #4 3,600 +/- feet northwest. Tower #5 4,600 +/- feet northwest.
28 Tower #6 5,400 +/- feet southwest. Tower #7 4,500 +/- feet southwest.
29 Tower #8 3,800 +/- feet southwest. Tower #9 2,800 +/- feet southwest.
30 Tower #10 2,400 +/- feet south. Tower #11 2,100 +/- feet southeast. Tower
31 #12 2,500 +/- feet southeast. Tower #13 3,600 +/- feet southeast. Tower
32 #14 4,500 +/- feet. Tower #15 5,800 +/- feet southeast. Tower #16 7,000
33 +/- feet southeast. Sale verification confirmed with Brian Gatzke, Northern
34 Plains Appraisal in Brookings. Interview with seller indicated the sale terms
35 were negatively impacted by the proximity to wind towers. Buyer paid a
36 reduced price because of the proximity of the turbines and negotiated with

seller not to sign a wind tower lease on adjacent farmland owned by seller within proximity to the residence. See sale BK2.5.

- **Sale BK2.5 Elkton, S.D.** – 16.95 acres of tillable cropland with a soil productivity rating of 86. Sold for \$50,000 or \$2,950 per acre. 16 wind turbines surround the farmland. No wind turbines located on the property. Tower #1 750 +/- feet northwest. Tower #2 1,600 +/- feet northwest. Tower #3 2,500 +/- feet northwest. Tower #4 3,500 +/- feet northwest. Tower #5 4,500 +/- feet northwest. Tower #6 5,400 +/- feet southwest. Tower #7 4,500 +/- feet southwest. Tower #8 3,750 +/- feet southwest. Tower #9 2,700 +/- feet southwest. Tower #10 2,400 +/- feet south. Tower #11 1,900 +/- feet south. Tower #12 2,300 +/- feet southeast. Tower #13 3,500 +/- feet southeast. Tower #14 4,400 +/- feet. Tower #15 5,700 +/- feet southeast. Tower #16 6,700 +/- feet southeast. Sale verification confirmed with Brian Gatzke, Northern Plains Appraisal in Brookings. Interview with seller indicated they had to cancel wind lease agreement per negotiation with buyer of sale BK2. Arm's length sale managed by broker.
- **Sale BK3 Elkton, S.D.** – 1918 Two-story acreage with 14.28 acres. Listing price \$189,900. Sale price \$175,000. Arm's length sale managed by broker. Surrounded by 17 wind turbines. Tower # 1 2,000 +/- feet north. Tower #2 2,800 +/- feet northwest. Tower #3 3,600 +/- feet northwest. Tower #4 4,200 feet +/- northwest. Tower #5 4,300 +/- feet southwest. Tower #6 3,700 +/- feet southwest. Tower #7 2,700 +/- southwest. Tower #8 2,200 +/- feet southwest. Tower #9 1,500 +/- feet south. Tower #10 1,900 +/- feet southeast. Tower #11 3,400 +/- feet southeast. Tower #12 8,500 +/- southeast. Tower #13 7,400 +/- feet southeast. Tower #14 6,400 +/- feet east. Tower #15 4,000 +/- feet east. Tower #16 2,100 +/- northeast. Tower #17 875 +/- feet northeast.
- **Sale BK4 Toronto, S.D.** – 1989 Ranch acreage with 13 acres. Listing price \$569,900. Sale price \$530,000. Arm's length sale managed by broker. Nine wind turbines located south and east. Tower #1 10,500 +/- feet east. Tower #2 9,200 +/- feet east. Tower #3 7,700 +/- feet southeast. Tower #4 6,500 +/- feet southeast. Tower #5 5,400 +/- feet southeast. Tower #6 4,100 +/- feet southeast. Tower #7 3,100 +/- feet southeast. Tower #8 2,400 +/- feet southeast. Tower #9 1,800 +/- feet south, southeast.
- **Sale BK5 Elkton, S.D.** – 1936 Two-story with 6.95 acres. Purchased for \$215,000. Sold four years later for \$190,000. \$25,000 less than previous purchase price or depreciation of approximately -11.6%. Both sales were advertised and managed by a broker. Four turbines located east, north and west. Tower #1 2,000 +/- feet northeast. Tower #2 3,600 +/- feet north. Tower #3 745 +/- feet west. Tower #4 2,700 +/- feet west.

- 1 • **Sale BK6 White, S.D.** – 80 acres of productive cropland. Sold at public
2 auction for \$340,000 or \$4,250 per acre. According to the auction flyer,
3 there were 66.8 tillable acres per FHA maps. Property has a wind energy
4 road easement across property to access turbine located just east of the
5 northeast corner. Road access easement payment of \$2,400 per year.
6 There is no wind tower on the property; however, eight turbines surround
7 the farm. Tower #1 200 +/- feet east. Tower #2 2,000 +/- feet northwest.
8 Tower #3 7,900 +/- feet northwest. Tower #4 800 +/- feet west. Tower #5
9 3,300 +/- feet west. Tower #6 5,000 +/- feet west. Tower #7 4,400 +/- feet
10 southwest. Tower #8 1,300 +/- feet southwest.
11
- 12 • **Sale BK7 Elkton, S.D.** – 1992 ranch acreage with 13.35 acres. Sold for
13 \$180,000. Thirteen wind turbines surround the property. Tower #1 1,800
14 +/- feet north. Tower #2 2,500 +/- feet northeast. Tower #3 3,300 +/- feet
15 northeast. Tower #4 4,200 +/- feet northeast. Tower #5 5,200 +/- feet
16 northeast. Tower #6 6,700 +/- feet east. Tower #7 8,500 +/- feet east.
17 Tower #8 7,900 +/- feet southeast. Tower #9 6,000 +/- feet southeast.
18 Tower #10 3,900 +/- feet southeast. Tower #11 3,000 +/- feet southeast.
19 Tower #12 1,700 +/- feet southeast. Tower #13 1,100 +/- feet south.
20 Preliminary review of the Warranty Deed indicates an arm's length sale.
21
- 22 • **Sale BK8 Elkton, S.D.** – 158 acres of productive cropland. Sale price
23 \$493,750 or \$3,125 per acre. Arm's length sale. Seller partitioned two,
24 one-acre tracts with two wind towers from the 160-acre quarter. Seller
25 retained wind energy lease and access rights by easement. Buyer
26 purchased cropland encumbered with two wind towers and access road
27 crossing the north half of property. Fourteen wind turbines surround the
28 property, including two wind turbines directly located within the property
29 boundaries. Tower #1 2,000 +/- feet northeast. Tower #2 3,500 +/- feet
30 northeast. Tower #3 5,300 +/- feet northeast. Tower #4 7,300 +/- feet
31 northeast. Tower #5 5,800 +/- feet east. Tower #6 7,000 +/- feet east.
32 Tower #7 4,400 +/- feet east. Tower #8 2,500 +/- feet southeast. Tower #9
33 780 +/- feet southeast. Tower #10 6,300 +/- feet southeast. Tower #11
34 1,500 +/- feet southeast. Tower #12 560 +/- feet south. Tower #13 & #14
35 are located within the north half of the 160-acre quarter.
36
- 37 • **Sale BK9 Elkton, S.D.** – 152 acres of productive cropland. Sale price
38 \$958,000 or \$6,302 per acre. Arm's length sale. Sale encumbered by two
39 wind turbines with a wind tower lease. Thirteen wind towers surrounding
40 the property. Tower #1 1,500 +/- feet north. Tower #2 1,700 +/- feet
41 northwest. Tower #3 2,500 +/- feet northwest. Tower #4 4,000 +/- feet
42 northwest. Tower #5 2,700 +/- feet west. Tower #6 4,800 +/- feet southwest.
43 Tower #7 770 +/- feet south. Tower #8 3,500 +/- feet south. Tower #9 2,000
44 +/- feet south. Tower #10 2,900 +/- feet southeast. Tower #11 2,400 +/- feet
45 southeast. Tower #12 2,200 +/- feet northeast. Tower #13 3,400 +/- feet
46 northeast.

- **Sale BK10 Elkton, S.D.** – 482 acres of productive cropland and small area of pasture land. Sale price of \$1,720,000 or \$3,586 per acre. Arm's length sale. Sale included a wind energy lease and wind easement for one tower. Seventeen wind turbines surround the property. Tower #1 2,900 +/- feet northwest. Tower #2 1,900 +/- feet northwest. Tower #3 990 +/- feet north. Tower #4 800 +/- feet north. Tower #5 900 +/- feet north. Tower #6 1,200 +/- feet northeast. Tower #7 1,900 +/- feet northeast. Tower #8 800 +/- feet east. Tower #9 4,500 +/- feet northeast. Tower #10 1,700 +/- feet east. Tower #11 1,600 +/- feet southeast. Tower #12 5,100 +/- feet east. Tower #13 7,100 +/- feet east. Tower #14 5,500 +/- feet southeast. Tower #15 4,200 +/- feet southeast. Tower #16 275 +/- feet south. Tower #17 1,500 +/- feet west.
- **Sale BK11 Elkton, S.D.** – 224 acres of productive cropland. Sale price \$1,428,137 or \$6,375 per acre. Arm's length sale. No wind towers within property boundaries; however, ten wind turbines in the vicinity. Tower #1 4,500 +/- feet west. Tower #2 3,200 +/- feet west. Tower #3 2,200 +/- feet southwest. Tower #4 1,700 +/- feet southwest. Tower #5 3,800 +/- feet south. Tower #6 2,100 +/- feet south. Tower #7 3,000 +/- feet southeast. Tower #8 3,500 +/- feet south. Tower #9 4,300 +/- feet south. Tower #10 3,000 +/- feet south.

In addition to using the county website to search sales in Brookings County, I used the internet to research auction listings and below are my findings.

- **Sale BK 12, Elkton, S.D.** – Located just east of the South Dakota/Minnesota border. 161.92 pasture acres currently advertised for upcoming 2018 public auction. 109.30 acres of CRP expiring in fall of 2018. Two wind turbines on the property with annual wind lease payment. Wind lease payments for 2017 at \$13,011.32, 2016 at \$12,880, 2015 at \$12,438 and 2014 at \$12,360. Two wind and access easements encumber the property. Seven wind towers surround the farm. Tower #1 100 +/- feet west. Tower #2 2,000 +/- feet west. Tower #3 2,900 +/- feet northeast. Tower #4 900 +/- feet east. Tower #5 2,900 +/- feet southeast. Tower #6 1,800 +/- feet south. Tower #7 1,700 +/- feet southwest.
- **Sale JR 13, Wessington Springs, S.D.** – 800 acres of cropland and pasture land. Sold at public auction in four separate tracts. Tracts 1, 2 & 3 sold to one buyer for \$1,560,000 or \$3,250 per acre. Tracts 1, 2 & 3 included 480 acres with 439 tillable acres. Tract 4 sold to another buyer for \$896,000 or \$2,800 per acre. Tract 4 included 320 acres of rough pasture. Tract four was encumbered by a wind tower easement and wind tower lease payment. Aerial shows a transmission line crossing from northwest to southeast. 50-

1 year lease terms with 1% increase per year, with 41 years remaining.
2 Broker interview stated tract 4 sold for a premium because of the wind lease
3 payments.
4

5 Exhibit_DAL-2 provides an aerial map of the above referenced sales. These sales
6 do not constitute a study to support a conclusion, are in the preliminary stages of
7 development, and require a scope of work as previously described in my Direct
8 Testimony. As demonstrated by the research, it seems there is credible market
9 evidence in South Dakota that can answer the questions about the potential
10 impacts of wind projects on South Dakota real property values.
11

12 **Q: What is your opinion about the potential impacts of a wind project in**
13 **South Dakota based upon your initial research?**

14 **A:** The sales I've identified in South Dakota are too limited and unverified to
15 support a conclusion on potential impacts from a wind project. The limited market
16 evidence did raise concerns, as it shows there could be potential issues for
17 residential properties in proximity to a wind project. Also, I find the wind lease
18 payments reported with sale BK12 and JR13 to be a potential benefit to the
19 property because of the income stream. These hypotheses would need to be
20 supported with further market sale evidence, interviews, verification and research.
21 The point of the sales illustrations is not an attempt to draw unsupported
22 conclusions from limited research; they are to show that there is market evidence
23 in South Dakota that will answer the questions about potential impacts on property
24 values in the vicinity of a wind project.
25

1 **Q: Does this conclude your testimony?**

2 A: Yes.



























