

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

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

SD PUC DOCKET EL-17-055

SUR-SURREBUTTAL TESTIMONY OF MICHAEL MAROUS
ON BEHALF OF CROCKER WIND FARM, LLC

May 9, 2018



1 **I. INTRODUCTION AND QUALIFICATIONS.**

2

3 **Q. Please state your name.**

4 A. My name is Michael MaRous.

5

6 **Q. Did you provide Rebuttal Testimony in this Docket on April 13, 2018?**

7 A. Yes.

8

9 **Q. What is the purpose of your Sur-Surrebuttal?**

10 A. The purpose of my Sur-Surrebuttal is to respond to the Surrebuttal Testimony of Mr.
11 Lawrence. Specifically, I respond to his four general critiques of my Rebuttal
12 Testimony: 1) the applicability of the peer-reviewed studies to South Dakota; 2)
13 alleged data inconsistencies in my Market Impact Analysis; 3) the persuasive merits
14 of my assessor surveys; and 4) the availability of market sales relevant to assessing
15 the potential impact of a wind turbine in proximity to a residence or agricultural
16 property.

17

18 **Q. What is your overall response to Mr. Lawrence's testimony?**

19 A. I appreciate Mr. Lawrence's professional criticisms. I also appreciate that his
20 Surrebuttal Testimony was provided in advance of the hearing so that I could review
21 the data he provided and conduct additional research and analysis. Having had the
22 opportunity to investigate and analyze the sales he identified, I believe his testimony
23 and the data further support my conclusion that there is no market evidence that
24 proximity to a wind turbine adversely affects South Dakota property values. This
25 conclusion is also consistent with my prior testimony, as well as my decades of
26 experience as an appraiser, including my experience with evaluating the potential
27 impact of wind turbines on property values throughout the Midwest.

28

29 **Q. Are you sponsoring any exhibits to your testimony?**

30 A. Yes. I am sponsoring the following exhibits:

- 1 • Exhibit A22-1: Brookings County Single-Family Residential Sales
2 Summary from Lawrence Surrebuttal Data - BK 1-5 and 7.
- 3 • Exhibit A22-2: Supplemental Paired Sales Analysis—Residential Sales
4 BK 1-5 and 7.

5
6 **Q. As an initial matter, you noted that you were going to provide an update on**
7 **your assessor’s license in South Dakota. What is the current status of your**
8 **appraisal license?**

9 A. I received my South Dakota State a Certified General Appraiser license No.-
10 1467CG, which is valid through September 30, 2018.

11
12 **II. APPLICABILITY OF PEER-REVIEWED STUDIES TO SOUTH DAKOTA.**

13
14 **Q. Mr. Lawrence criticizes the studies in your Rebuttal Testimony because “some**
15 **of the conclusions indicate there could well be a potential value impact to**
16 **properties near a wind project. In light of each of the above studies, a reader**
17 **could conclude the issue is unanswered.” (Lawrence Surrebuttal, p. 4.) What**
18 **is your response?**

19 A. I agree with Mr. Lawrence’s general conclusion that some of the studies cited in the
20 peer-reviewed literature I included with my testimony referenced other studies that
21 indicated a possibility that wind turbines could impact property values. However, the
22 studies Mr. Lawrence references regarding potential negative impact are generally
23 not representative of the overarching conclusion of the peer-reviewed literature.

24
25 **Q. Do you have any specific responses to the excerpts Mr. Lawrence cited on**
26 **pages 3 and 4 of his testimony?**

27 A. Yes. Mr. Lawrence takes six quotes from certain studies I provided. I included the
28 studies in my testimony to provide a balanced overview of the peer-reviewed
29 literature. These studies support my opinion that there is no definitive evidence in
30 the literature to indicate that the Crocker Wind Farm will negatively impact the value

1 of agricultural or residential properties. None of the quotes detracts from my
2 conclusion.

3
4 Mr. Lawrence quotes from five articles. The quotes from Exhibits 4 (Geeurin et. al.
5 2012) and 8 (Atkinson-Palombo and Hoen 2014) expressly support a finding that
6 there is no statistically significant impacts on the sale prices of residential properties
7 in proximity to wind turbines. The quote from Exhibit 5 states only that assessed
8 values of properties in proximity to wind turbines are equitably assessed.

9
10 Mr. Lawrence also cites to the Vyn and McCullough study, Exhibit 7. The Vyn and
11 McCullough study evaluated the impacts of 133 turbines in Melancthon Township on
12 property values. Vyn and McCullough concluded:

13 The empirical results generated by the hedonic models,
14 using three different measures to account for disamenity
15 effects, suggest that these turbines have not impacted the
16 value of surrounding properties.

17 MaRous Rebuttal, Exhibit 7 at p. 26. The researchers note the study “does not
18 preclude any negative effects from occurring on individual properties”. Lawrence
19 Surrebuttal at p. 4.

20
21 Vyn and McCullough then note the Lansink (2012) appraisal from which Mr.
22 Lawrence quotes. Mr. Lawrence fails to include Vyn and McCullough’s criticism of
23 the Lansink appraisal because the sales were not market sales and therefore may
24 not be representative of the market—“the five properties in question were purchased
25 by Canadian Hydro developers and resold after turbines had been constructed.”
26 Transactions involving the developers, who often pay premiums to secure their sites,
27 do not provide a basis from which credible, fair market value comparisons may be
28 drawn. In my opinion, the Lansink appraisal is not indicative of the market value
29 impacts of a wind farm because of its limited, non-market sales data. Further, the
30 quoted language is not representative of the overarching conclusions of the article’s
31 authors.

1
2 The other article Mr. Lawrence cites – twice – is Exhibit 6 by Lang and Opaluch, and
3 he does so incompletely. The first quote affirms my conclusion: “while we cannot
4 conclude for sure that there is no effect on housing prices, there is no statistical
5 evidence of a large, adverse effect”. Lawrence Surrebuttal at p. 4.

6
7 Lang and Opaluch, in their discussion of the literature, also describe a study in
8 Upstate New York. Mr. Lawrence quotes a sentence stating that the Upstate New
9 York study “impl[ies]” that a wind farm within a half mile of a turbine could impact
10 value. However, Mr. Lawrence did not include the limitation for that study that Lang
11 and Opaluch point out: “It is important to note, however, that the average distance
12 to a turbine of a transaction in their data is over 10 miles, and they interpolate effects
13 to close proximity.” MaRous Exhibit 7 at p. 7. In fact, Lang and Opaluch emphasize
14 that the more persuasive study work is by Hoen, one of the authors of the LBNL
15 studies:

16 The strongest research to date is a recent report from Hoen
17 et al. (2013) [Exhibit 3], which updated Hoen et al. (2011).
18 They collect over 50,000 transactions within 10 miles of wind
19 farms spanning 27 counties in nine states.... Similar to our
20 results, Hoen et al. (2013) find no statistical effect of wind
21 turbines on property values.

22 MaRous Rebuttal, Exhibit 6 at pp. 7-8 (emphasis added).

23
24 **III. ALLEGED DATA INCONSISTENCIES IN MY MARKET IMPACT ANALYSIS.**

25
26 **Q. On page 5 of Mr. Lawrence’s Surrebuttal Testimony, Mr. Lawrence alleges four**
27 **inconsistencies in the data provided for Brookings County sales comparison**
28 **of 19937 473rd Avenue and 5705 Rathum Loop. What is your response?**

29 A. I do not believe Mr. Lawrence’s criticisms are well-founded. I have included each of
30 Mr. Lawrence’s allegations below and my specific responses below:

1 *"1. The sale price is not reported accurately. The Market Impact Analysis lists the*
2 *19937 473rd Avenue sale price as \$169,500. The Brookings County records &*
3 *Brookings County MLS show the 19937 473rd Avenue sale price as \$167,500."*

4 Mr. Lawrence is correct that the publicly available county records do show a
5 \$167,500 sale price. However, our further research found that \$169,500 is the
6 accurate figure. Further, I would not consider a \$2,000 difference in price to be
7 material.

8
9 *"2. The Market Impact Analysis does not provide any discussion about the proximity*
10 *to the high-traffic Interstate corridor along the west property boundary."*

11 The interstate is 500 feet away from the residence at 19937 473rd Avenue and
12 blocked by two large outbuilding and trees. Due to this screening, I concluded there
13 was no effect on value.

14
15 *"3. The Market Analysis lists 5705 Rathum Loop as having a crawl space. Brookings*
16 *County shows 5705 Rathum Loop as having a finished $\frac{3}{4}$ basement with 800*
17 *square feet finished in the lower level."*

18 Again, while Mr. Lawrence accurately reports what is in the public records, our
19 research indicates that the Rathum Loop property has only a crawl space.

20
21 *"4. 19937 473rd Avenue is located on a gravel road and in rural setting 13 miles*
22 *north of Brookings. 5705 Rathum Loop is on the east edge of Brookings on a solid*
23 *surface road and would be considered within the City of Brookings real estate*
24 *market."*

25
26 I disagree that the Rathum Loop property should be considered within the City of
27 Brookings real estate market. While Rathum Loop is closer to the Brookings city
28 limits, it is still approximately two miles away and rural in nature. Also, both
29 properties in this paired sale analysis are located on gravel roads.

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IV. ASSESSOR SURVEYS

Q. Mr. Lawrence, on pages 5 and 6 of his testimony, states that assessors lack appraisal training, are not focused on assessing individual market values of properties, and therefore interviews with assessors are “not substantively valid in determining the negative impacts from a wind project.” What is your response?

A. First, I disagree with Mr. Lawrence’s criticism of an assessor’s training and knowledge. A county assessor must obtain the Certified Appraiser Assessor designation from the South Dakota Department of Revenue. (SD Laws 10-3-1.1; SD Laws 10-3-1.2; SD Admin. Rules 64:02:01:14). To be eligible for this certification, they must have “at least one year of full-time experience in the assessing and appraising field, have completed and passed the required training prescribed in § 64:02:01:16, and ha[ve] passed the certification examination.” (SD Admin. Rules 64:02:01:05). Assessors also have first-hand knowledge of property values in their communities. They receive input on factors influencing value, and know of complaints from parties protesting the assessor’s opinion of market value. Thus, while assessors may have less formal training than appraisers, they are required to complete specified property valuation training, and also have personal knowledge of the market in their area.

Second, I believe Mr. Lawrence may be misunderstanding the purpose of the assessor surveys. Appraisers routinely and reasonably rely upon information provided by assessors to prepare market analyses and appraisals and I believe it was appropriate to do so here. My surveys of assessors in South Dakota was intended to be another data point for my overall analysis of the potential impact of wind turbines on property values. The assessors have experience in assessing properties in counties where wind farms are located. The assessors’ interactions with landowners and knowledge of landowner complaints about valuation and formal

1 value appeals is valuable data and indicates that wind farms have not resulted in
2 reduced assessments on proximate properties.

3
4 **V. MARKET SALES**

5
6 **Q. Mr. Lawrence in his testimony, on pages 8 to 12, challenges statements in**
7 **your Rebuttal Testimony and Market Impact Analysis that stated you found no**
8 **arms' length sale of a property proximate to a wind turbine in the State of**
9 **South Dakota or a sale of South Dakota farmland in which the transaction**
10 **included a wind turbine. What is your general response?**

11 A. In my property sales research, I used the Multiple Listing Service ("MLS"); residential
12 online services, including Trulia and Zillow; brokerage research; and public county
13 records. In general, I found South Dakota data to be limited.

14
15 Mr. Lawrence's testimony directed me to Beacon, another source of property sales
16 information for Brookings County. Beacon is a subscription service of which I was
17 not previously aware. To my knowledge, no other counties with wind farms in
18 eastern and central South Dakota have a service comparable to Beacon. In
19 response to Mr. Lawrence's testimony, I subscribed to the Beacon service and
20 reviewed the data Mr. Lawrence provided. I then conducted further research on the
21 residential sales to undertake a paired sales analysis. Based on this research and
22 my further analysis, I believe all of the sales Mr. Lawrence identified support the
23 conclusions in my prior testimony and Market Impact Analysis.

24
25
26 **Q. Please describe the residential property sales Mr. Lawrence identifies in his**
27 **Surrebuttal Testimony.**

28 A. There are six residential sales, BK Sales 1-5 and 7. A table showing these sales
29 and a figure showing the locations of the sales are provided in Exhibit A22-1.

1 **Q. Mr. Lawrence identifies distances of homes from turbines in his testimony. Did**
2 **you use the same measurements in your analysis of the sales he identified?**

3 A. When doing my analyses for the Market Impact Analysis and in my prior experiences
4 evaluating the potential impact of wind turbines on land values, I have used the
5 distance of a turbine from the residence. When I confirmed those distances, they
6 ranged from 1,118 feet to 10,538 feet.

7

8 **Q. Did you undertake a paired sales analysis of the residential sales?**

9 A. Yes. I reviewed the six residential sales and researched Brookings County sales
10 data to determine whether there was a comparable non-proximate sale for each that
11 could be used to conduct a paired sales analysis. I found six non-proximate sales
12 and conducted a paired-sales analysis using six pairs of property sales in Brookings
13 County.

14

15 **Q. What were your conclusions from the paired sales analysis?**

16 A. As detailed in Exhibit A22-2, Supplemental Paired Sales Analysis—Residential
17 Sales BK 1-5 and 7, the results of my analysis confirmed my prior opinion that there
18 is no record evidence to support a conclusion that proximity to wind turbines affects
19 residential property values. In all cases, when I evaluated the two properties in
20 detail and made appropriate adjustments for key factors including building size, year
21 date, utilities and sale date, the prices of the two properties were essentially the
22 same on a per square foot value.

23

24 **Q. Mr. Lawrence identifies Sales BK-2 and BK-2.5 as related. What is your**
25 **assessment of these sales?**

26 A. Mr. Lawrence appears to contend that BK-2, 198424 478th Avenue in Toronto
27 indicates some value diminution due to wind turbines because the initial price for a
28 house with 10 acres sold for less than its “listing price” and close to the price it was
29 in 1998. If this is his implication, I do not agree. The fact that a property sells for
30 less than listing price because, as I noted, listing prices – what a seller wants to get

1 for a property – may or may not be consistent with the reality of market price – what
2 a buyer is willing to pay.

3
4 Looking specifically at the parcels, both sales occurred after Buffalo Ridge II became
5 operational in 2010. Given this timing, I am not able to reconcile the note in Mr.
6 Lawrence’s testimony that states the sellers were able “to cancel wind lease
7 agreement per negotiation with buyer of sale BK2.” Also, I note that the BK-2.5
8 parcel is only 16.95 acres, which is undersized for a wind lease—typically, I have
9 seen those parcels to be of a 50-plus acres size.

10
11 BK2.5 has a poor, elongated shape and its unit price of approximately \$3,000/acre
12 appears reasonable, considering a major downward shape adjustment. The
13 property sold in January 2011 for \$50,000 and then again in September 2012 for
14 \$50,000.

15
16 BK-2 Sold in May 2004 for \$234,900, which is the sales price that Mr. Lawrence
17 uses on page 8. The property resold in March 2011 during the recession for
18 \$235,000 after the Buffalo Ridge wind farms became operational. Based on the
19 major drop in residential values from 2008 to 2011, the value should have probably
20 been less than the price in 2004; however, the property actually sold for a slightly
21 higher price in 2011. The sale price for BK-2 at approximately \$100/sf and an
22 overall price of \$234,900 or \$235,000 is at the upper end of the sale and comp
23 range.

24
25 **VI. CONCLUSION**

26
27 **Q. As stated in your Rebuttal Testimony, do you continue to believe that the**
28 **Commission has PUC has adequate information in this record to evaluate the**
29 **potential land value impacts of the Project?**

30 A. Yes. The Commission has even more information than was available at the time of
31 my Rebuttal Testimony. The additional paired sales analysis of the Brookings

1 County sales detailed in this testimony supports my opinion that there is no market
2 evidence to conclude that property values would be adversely impacted.

3

4 **Q. Does this conclude your Sur-Surrebuttal Testimony?**

5 A. Yes.

6

7 Dated this the 9th day of May 2018.

8

9

10  _____

11 Michael MaRous