

BEFORE
THE OHIO POWER SITING BOARD

In the Matter of the Application)
of Kingwood SolarI LLC, for a)
Certificate of Environmental) Case No. 21-0117-EL-BGN
Compatibility and Public Need)

**DIRECT TESTIMONY OF MARY McCLINTON CLAY ON BEHALF
OFCITIZENS FOR GREENE ACRES, INC., JENIFER ADAMS, P. CHANCE
BALDWIN, JACOB CHURCH, VERITY DIGEL, JED HANNA, KRAJICEK
FAMILYTRUST, JAMES JOSEPH KRAJICEK, KAREN LANDON, NICOLE
MARVIN, CHAD MOSSING, KAREN MOSSING, NICHOLAS PITSTICK, KYLE
SHELTON, MARLIN VANGSNESS, JEAN WEYANDT, AND JERALD WEYANDT**

Q.1. Please state your name and work address.

A.1. My name is Mary McClinton Clay, MAI. My office address is 218 Main Street, Paris,
KY 40361.

Q.2. On whose behalf are you offering testimony in this case?

A.2. I am offering testimony on behalf ofIntervenors Citizens of Greene Acres, Inc., Jenifer
Adams, P. Chance Baldwin, Jacob Church, Verity Digel, Jed Hanna, Krajicek Family
Trust, James Joseph Krajicek, Karen Landon, Nicole Marvin, Chad Mossing, Karen
Mossing, Nicholas Pitstick, Kyle Shelton, Marlin Vangsness, Jean Weyandt, and Jerald
Weyandt. My testimony will refer to the Citizens for Greene Acres, Inc. as "CGA."

Q.3. What is your educational background?

A.3. I have a B. A. degree from Hollins College. I have also met the appraisal educational
requirements for SRA (Senior Residential Appraiser), SRPA (Senior Real Property
Appraiser) and MAI designations. The SRA is a residential appraisal designation, the
SRPA is a commercial appraisal designation, and the MAI is the most recognized
commercial appraisal designation by the Appraisal Institute. The Appraisal Institute is the

1 nation's largest professional organization of real estate appraisers. It is the primary source
2 of appraisal credentialing, education, body of knowledge and ethical standards.

3 **Q.4. What is your occupation?**

4
5 A.4. I have been a real estate appraiser for 46 years.

6 **Q.5. Please provide an overview of your occupational experience.**

7
8 A.5. Since the late 1980's my appraisal practice has been predominantly involved in eminent
9 domain and environmental damage studies. This has included approximately 30 major
10 highway jobs throughout Kentucky that I conducted for the Commonwealth of Kentucky
11 Transportation Cabinet. In the last three years I have appraised excess property owned
12 by the Commonwealth and access breaks to controlled access highways for private
13 individuals. With respect to environmental damage studies, I have prepared 11 damage
14 studies throughout the Commonwealth of Kentucky for court cases. The detrimental
15 conditions which were the subject of these studies include: ground water contamination
16 from a tannery solids and dry cleaning solvents, odors from an animal waste processor
17 and confined animal feeding operations, high voltage transmission lines, leaking
18 underground storage tanks, drainage encroachment, fugitive particulate emissions, airport
19 noise and avigation easements. In addition, I have appraised 8 other properties involving
20 various types of detrimental conditions, including faulty construction, flood damage,
21 blasting damage, superfund sites and transmission line easements. A full curriculum vitae
22 is provided in Exhibit A.

23 **Q.6. What professional honors have you received?**

24 A.6. I was president of the Bluegrass Chapter of the Appraisal Institute in 2010. The
25 Bluegrass Chapter is the Kentucky state organization of the Appraisal Institute.

1 **Q.7. What is the purpose of your testimony?**

2 A.7. The purpose of my testimony is to inform the Ohio Power Siting Board about the
3 evidence to date that supports the fact that industrial scale solar farms adversely affect the
4 market value of proximate real estate.

5 **Q.8. What if any experience do you have with evaluating the effects of solar projects on**
6 **neighboring property values?**

7 A.8. I have prior experience in estimating damage as the result of numerous detrimental
8 conditions, as previously described, including those affecting right of way takings, such
9 as proximity, loss of parking, reduced access, change of use, etc. The appraisal theory
10 and methodology for studying the effects of solar farms on proximate property values are
11 the same— with the only difference being the detrimental condition. In addition, I have
12 reviewed five “property value impact studies” submitted by developers for solar farms in
13 applications to the Kentucky Siting Board for installing solar facilities. One of those
14 developer studies was prepared by CohnReznick and the other four studies were
15 performed by Richard Kirkland. In the course of preparing my reports on proposed solar
16 farms submitted to the Kentucky Siting Board and other clients, I have analyzed the
17 property devaluation caused by four solar farms that range from reductions of 6.3 percent
18 to 30.0 percent of the properties’ values. In addition, I reanalyzed sales of properties
19 located near solar projects proffered by Richard Kirkland as evidence that solar projects
20 do not reduce property values and found that the sales contradict his conclusion that there
21 is no diminution in value from solar projects.

22 I have testified at two planning commission meetings—one in Clark County and
23 one in Hardin County, Kentucky on behalf of neighbors living near locations proposed

1 for solar farms regarding the diminution of property values as a result of proximity to
2 industrial scale solar farms.

3 **Q.9. Have you ever testified as an expert witness on the value or appraisal of property in**
4 **the past?**

5 A.9. I have testified as an expert on property value impacts in Kentucky Circuit Courts and at
6 Planning Commission meetings.

7 **Q.10. In what cases have you testified as an expert witness on these topics in Kentucky**
8 **Circuit Courts?**

9 A.10. I have testified as an expert witness in the following Kentucky Circuit Courts:

10 Laurel Circuit Court: *Yellow Creek Concerned Citizens v. Middlesboro Tannery*, 1995.

11 Franklin County Circuit Court: *Richard McGehee v. Commonwealth of Kentucky*
12 *Transportation Cabinet*, 2008; *Terrence G. Kerschner, et al v. Burley Oil Co., et al*, 2014.

13 Hardin County Circuit Court: *Richard McGehee v. Commonwealth of Kentucky*
14 *Transportation Cabinet*, 2008.

15 Woodford County: *Horn v. Horn*, 2009

16 Bourbon County Circuit Court: Blasting Case, 1980s; Waterway Impediment Case,
17 2000; Faulty Construction, 2009, *Hadden v. Linville*, 2015.

18 Fayette County Circuit Court: Faulty Construction, 1980s; Bluegrass Manufacturing
19 (Divorce Case), 1999; *Whitson v. Cross*: Drainage Encroachment, 2013.

20 Carter County: Condemnation for Commonwealth of KY Transportation Cabinet.

21 **Q.11. Did any of these cases in which you have testified as an expert involve the potential**
22 **impacts of solar projects on property values?**

23 A.11. Yes. I testified for Clark Coalition in Winchester, KY before the Clark County Planning
24 Commission (May, 2021) and for Hardin County Citizens for Responsible Solar in
25 Elizabethtown, KY before the Hardin County Planning Commission (January, 2022).
26 Both cases were for the approval of a proposed industrial scale solar farm. In the first

1 instance, the planning commission delayed a decision until such time that the
2 Comprehensive Plan was amended to include provisions for solar farms. In the later
3 instance, the application was denied.

4 **Q.12. Are you familiar with the impact of commercial-scale solar projects on property**
5 **values in the area surrounding such a solar project?**

6 A.12. Yes.

7 **Q.13. What documents did you consult in preparing for your testimony in this case?**

8 A.13. I examined the report on CohnReznick's Property Value Impact Study included in
9 Appendix F of Kingwood Solar's Application and reviewed Andrew Lines' written direct
10 testimony filed in this case. My testimony will refer to CohnReznick's report as the
11 "CohnReznick Study." I also examined the April 16, 2021 Application to the Ohio Siting
12 Board, including Appendices O, P, and Q.

13 **Q.14. Based on your review of the pertinent records, do you have any concerns with the**
14 **solar project for which Kingwood Solar has requested a certificate in this case?**

15 A.14. Yes. It will likely reduce property values of surrounding properties based on the existing
16 evidence.

17 **Q.15. With regard to the CohnReznick Study that is contained in Appendix F of the**
18 **Application in this case, do you have any concerns about whether CohnReznick has**
19 **bias in favor of solar companies?**

20 A.15. Yes, for a number of reasons.

21 The CohnReznick.com website features Renewable Energy prominently in the list
22 of the industries the company serves. The company's allegiance to renewable energy
23 clients is shown in the press release of February 24, 2017 from its affiliate CohnReznick

1 Capital Market Securities that is attached as Exhibit B and that is entitled “CohnReznick
2 Capital Markets Securities Announces the Sale of sPower to AES Corporation and
3 Alberta Investment Management Corporation.” The last paragraph on the second page of
4 the document states that, “CRCMS offers a comprehensive financial advisory platform
5 for the renewable energy and sustainability industries, including solutions for
6 corporations that includes corporate financing, project financing, and M&A advisory.
7 The company represents financial institutions, infrastructure funds, strategic participants
8 (IPPS and utilities), and the leading wind, solar, biomass, and other clean energy
9 developers worldwide. CRCMS has successfully executed more than \$12 billion in
10 project and corporate transactions.”

11 Purpose of Appraisal: On Page 1 of CohnReznick’s Study (Executive Summary),
12 the CohnReznick appraisers address the issue of the purpose of the appraisal, which is a
13 required discussion that establishes the scope of work required to solve the problem for
14 which the report is being prepared. The appraisers state: “The purpose of the assignment
15 is to determine whether proximity to an existing solar farm resulted in any significant
16 measurable and consistent impact on adjacent values, given the existing uses and zoning
17 of nearby property at the time of development;...” The appraisers should have stopped at
18 this point in the discussion. However, the sentence continued, “...address potential local
19 concerns regarding any proposed solar farm having a perceived impact on surrounding
20 property values; and provide a **consulting report** (emphasis added) that can address the
21 required criteria for obtaining approvals for future Vesper Energy Portfolio 1, LLC
22 projects.” It should be immaterial to an unbiased appraiser what the reactions of the
23 public will be or if the client gets his approval or not.

1 Consulting Report: CohnReznick characterize their study as a consulting report,
2 presumably to shield themselves from following the Uniform Standards of Professional
3 Appraisal Practice (USPAP), although they maintain in the Letter of Transmittal that the
4 report conforms. A detailed discussion of the lack of conformity to USPAP is included in
5 Exhibit C attached to my testimony. The preamble of USPAP states that “the purpose of
6 USPAP is to promote and maintain a high level of public trust in appraisal practice by
7 establishing requirements for appraisers. It is essential that appraisers develop and
8 communicate their analysis, opinions, and conclusions to intended users of their services
9 in a manner that is meaningful and not misleading. The Appraisal Standards Board
10 promulgates USPAP for both appraisers and users of appraisal services. The appraiser’s
11 responsibility is to protect the overall public trust and it is the importance of the role of
12 the appraiser that places ethical obligations on those who serve in this capacity. USPAP
13 reflects the current standards of the appraisal profession.”

14 List of references Articles: On Page 11 of the CohnReznick Study, the
15 CohnReznick appraisers cite published studies “that consider the impact of solar farms on
16 surrounding property values.” However, the report mentions only studies concluding that
17 solar farms do not damage surrounding property values, while ignoring studies that have
18 the opposite conclusion. In addition, the report relies on studies that are flawed. The
19 second and third paragraphs of this section list the standard talking points made by solar
20 developers. Among the cited works on which CohnReznick relies are the impact reports
21 prepared by Richard Kirkland, MAI, another appraiser used by numerous solar
22 developers, who concurs with CohnReznick that solar facilities do not adversely affect
23 proximate property values. I have explained above that these reports are unreliable.

1 Typically, peer review journals report the results of prior studies, before they
2 discuss their study. Rather than presenting the facts of the well publicized University of
3 Rhode Island study, they mentioned only their interpretation of aspects of the studies that
4 supported their claim of no damage. The conclusion in the Rhode Island study states:
5 “Our preferred model suggests that property values in the treatment group declined by
6 1.7 % (\$5,751). On average compared to those in the control group after the construction
7 of a nearby solar installation, all else equal...We find substantially larger negative effects
8 for properties within 0.1 miles and properties surrounding solar sites built on farm and
9 forest land in non-rural areas. Our complete sample (prior to any data cuts) consists of
10 289,254 unique properties located within 1 mile of all solar installations in the data set.
11 Put together, we estimate a net loss of \$1.66 billion in aggregate housing due to
12 proximate solar installations in MA and RI.”

13 The appraisers also cited the Chisago County, MN assessor who reported that all
14 the properties that sold within the proximity of the North Star solar farm sold at prices
15 above their assessment at the time of sale indicating “conclusive that valuation has not
16 suffered.” This is contradicted by my analysis of available data from Chisago County that
17 is discussed in more detail in the answer to Question 31.

18 The CohnReznick appraisers also cite the Grant County, KY assessor, who also
19 maintains that property values have not diminished adjacent to a local solar farm.
20 However, neither CohnReznick nor the Grant County, KY assessor divulges that the
21 subdivision in question abuts Interstate 75. When analyzing a neighborhood within
22 proximity of any detrimental condition it is necessary to consider all other externalities
23 that might impact that market’s expectations. This one-lane subdivision includes

1 manufactured housing and the 2.7 MW solar farm's proximity to the dwellings ranges
2 from 350.0 to 2,650.0 linear feet. According to Richard Kirkland, a local realtor
3 described this subdivision as, "the lowest price range/style in the market." Considering all
4 these factors, it is likely that the solar farm did not impact the expectations of this market
5 and consequently, the value of these dwellings. To use this example to support the claim
6 that solar farms do not adversely affect adjacent property values is misleading.

7 On Page 22, the appraisers "also note that our impact study data and methodology
8 have been previously reviewed by our peer in the field—Kirkland Appraisals, LLC—as
9 well as by the Solar Energy Industries Association (SEIA)." As I have explained, the
10 conclusions of Richard Kirkland, are not credible. SEIA is the national trade association
11 for the U.S. solar industry.

12 **Q.16. A sentence in the Summary and Final Conclusions on Page 112 of the CohnReznick**

13 **Study states:**

14 **We then can conclude that since the Adjoining Property Sales (Test**
15 **Area Sales) were not adversely affected by their proximity to the**
16 **solar farm, that properties surrounding other proposed solar farms**
17 **operating in compliance with all regulatory standards will similarly**
18 **not be adversely affected, in either the short- or long-term periods.**

19
20 **Do you agree with this conclusion?**

21
22 A.16. No.

23 **Q.17. Why do you disagree with the conclusion of the CohnReznick Study?**

24 A.17. This study is fundamentally flawed in that there is no documentation or any empirical
25 support for any of the claims that their paired sales indicated no diminution of value. The
26 Uniform Standards of Professional Appraisal Practice (USPAP) require that such

1 documentation be included. Moreover, even without this documentation, the premise of
2 the 11 solar farm examples is non-credible and misleading on its face.

3 It is significant that on Page 22 of the CohnReznick Study the appraisers state:
4 “For the 11 existing solar farms studied, a summary of the analysis completed for each
5 solar farm studied is presented on the following pages. Details of these analysis are
6 retained within our workfile, and will be provided to the client for their review (or to a
7 part of the hearing), after execution of a specific Non-Disclosure Agreement relating to
8 our research and interviews.” This information was requested from Kingwood Solar’s
9 lawyers by Mr. Jack Van Kley, but it was not provided until Saturday afternoon prior to
10 the Monday deadline for submission of my testimony to the Ohio Siting Board.

11 **Q.18. How large is the proposed Kingwood Solar Project compared to the sizes of the**
12 **solar projects studied in the CohnReznick Study?**

13 A.18. The Kingwood solar project will encumber 1,500 acres and will have a rating of 175
14 megawatts (“MW”). The other solar projects included in the CohnReznick report include
15 one with 100 MW; four between 61 MW and 74.5 MW; three between 24.9 MW and 40
16 MW; and four between 8.6 MW and 19.72 MW.

17 **Q.19. Are there problems with the CohnReznick Study that affect the accuracy of**
18 **CohnReznick’s conclusion that solar projects do not reduce property values?**

19 A.19. CohnReznick does not provide any information about the adjoining property uses of the
20 properties sold in the control sales. In addition, CohnReznick does not provide pertinent
21 information about the characteristics of the homes included in the control sales. Without
22 this information, CohnReznick has provided no basis for stating that the test sales and the
23 control sales are comparable. The Uniformed Standards of Professional Appraisal

1 Practice (“USPAP”) require this information to be included in the CohnReznick Study,
2 but it has not been included.

3 The most credible conclusions to any appraisal related analysis would result from
4 the most comparable data. In some of the paired sales analysis studies on which
5 CohnReznick relies, the sales prices of properties near solar farms (“test sales”) and the
6 sales prices of properties not near solar farms (“control sales”) may have been affected by
7 different negative influences besides the proximity to solar farms. For example, the test
8 sale property near Solar Farm No. 4 (Lapeer) was located in B-2 zoning that allowed high
9 density business (commercial) uses. This means that any purchaser would bought the
10 property with the expectation that the land would be used for high density use. To not
11 divulge this information is misleading, as is the fact that CohnReznick did not reveal
12 enough information about the paired control property to tell whether it was comparable to
13 the test property. The proper analysis would be to use control sales that about B-2 zoning
14 to determine if the presence of the solar farm resulted in increased diminution. None of
15 the control sales adjoined a high density use.

16 A second example is No. 8: S-Power Shoreham, due to the adjoining four-lane
17 road between the test sale and the solar farm. This means that the proximity to a high
18 traffic four lane road was an additional factor in the purchaser’s decision about how much
19 to pay for this property. The proper analysis would be to use control sales that about a
20 four-lane highway to extract a reliable adjustment for the solar farm. Only one of the six
21 control sales abutted a four-lane highway.

22 A third example is No. 10: Barefoot Bay. This is a 1,000 acre subdivision of
23 manufactured homes with a population of 12,000 people and maximum density possible

1 Not only would a scenic view not be an expectation of the neighborhood, but the
2 adjoining sales have larger lots and, in this instance the location of the solar farm
3 provides relief from the crowded conditions of the subdivision. To use this example to
4 indicate that solar farms do not negatively impact property values in a rural area is
5 misleading.

6 A fourth example is Solar Farm 11: Miami-Dade. All the test sales are in the
7 flight path of a regional airport. This means that the control sales also must be within the
8 flight path of such an airport. However, anyone reading the report would not know
9 whether this is the case or not since the CohnReznick appraisers did not include so much
10 as an address for the control sales.

11 **Q.20. Does the data presented in the CohnReznick Study about the North Star Solar Farm**
12 **support the study's conclusion about the impact of solar projects on surrounding**
13 **property values?**

14 A.20. No. With regard to Group 1 analysis, Sale 52 is incorrectly marked on the map. The sale
15 is actually No. 54 on the map. This tract, unlike the other two sales (42 and 46), may not
16 be considered an adjoining tract. The 100 MW solar farm is on the opposite side of the
17 road which is lined with mature pine trees obscuring the view of the solar farm. The tract
18 is also improved with a barn which was not mentioned. Regarding the 11 control sales,
19 no identification is given—only a statement that the sales are similar. There is no
20 explanation for why the control sales were selected or how they are competitive with the
21 test area absent the detrimental condition. Furthermore it is impossible to confirm any of
22 the data or check the reasonableness of the sale selection or conclusions.

1 As previously indicated the supporting data for the control sales was provided on
2 Saturday afternoon prior to the Monday deadline for submission to the Ohio Siting
3 Board. Due to this time restriction, I was able to review only the Group 1 sales chart. My
4 reconstruction of the chart is included in Exhibit D attached to my testimony. This chart
5 supports the unreliability of the CohnReznick data. Regarding Test Sales 54 and 42, the
6 sale prices are incorrect because concessions paid by the seller were not included. It is
7 significant that these two sales required concessions because such payments by the sellers
8 are typically found when an incentive is needed to close a deal. They are found more
9 often in slow markets or in situations of buyer resistance, or for such things as closing
10 costs or repairs.

11 With regard to the 11 comparable sales, Sale No. 1 is not an arms-length sale and
12 should not have been included. In addition, four other sales (Nos. 2, 3, 4, 5) have the
13 incorrect sale price because seller concessions were not subtracted from the sale price.
14 Four sales (Nos. 2, 4, 7, 10) are of houses with inferior construction and thus are not
15 comparable without significant adjustment. The remaining five sales (3, 6, 8, 9, 11)
16 indicate a range of values per square foot from \$133.62 to \$149.29. These sales are on
17 lots ranging from 1.5 to 2.5 acres.

18 Although the test sales indicate a median price per square foot of \$148.64, these
19 sales indicate a range of lots sizes from 5.0 to 9.3 with the median size at 9.3 acres.

20 This is a prime example of why the CohnReznick methodology of comparing
21 aggregate groups of sales is unreliable and misleading. The intent of a paired sales
22 analysis is to compare one affected sale with another non-affected sale with as few
23 differences as possible. To use multiple sales from a homogeneous neighborhood may be

1 acceptable under certain circumstances, but to use sales from multiple neighborhoods
2 with as many differences that are evident in this example is fundamentally incorrect and
3 unreliable.

4 The Group 2 analysis compares Adjoining Property No. 18, a 2.97 acre tract
5 improved with a 2,412 square foot residence that sold for \$119.82 per square foot to 10
6 unidentified control sales with lots ranging from 1.25 to 10 acres with a median sale price
7 per square foot of \$118.72. As with Group 1, there are numerous differences in the sales
8 including lot sizes ranging from 1.25 acres to 10.00 acres of which 50.0 percent of the
9 sales contain 10.0 acres; the age of the houses range from 2 years to 46 years old; and
10 house size ranges from 1,792 square feet to 3,371 square feet. This example is also
11 unreliable and non-credible.

12 Group 3 is a comparison between Adjoining Property No. 46 and six other
13 unidentified control area sales that indicated the test sale sold for 41.02 percent more than
14 the median sale price of the control sales. On its face, this indicates that the two groups
15 are not comparable, even considering the location difference. The appraisers have
16 correctly excluded this group from their analysis.

17 CohnReznick also compared the sale-resales of four adjoining tracts (No. 54, 22,
18 18 and 3) that sold between 1999 and 2006, then resold between 2015 and 2019 to nine
19 non-adjacent sales that sold between 1998 and 2010, then resold between 2016 and 2017.

20 As depicted in the chart of median prices of North Branch houses per the local
21 MLS, prices during this period varied greatly considering the pre-recession boom and the
22 steep correction followed by recovery. The two groups do not represent the same years

1 and therefore, the comparison is not a reliable indicator of value change. The chart is
2 included in Exhibit E attached to my testimony.

3 Cohn Reznick did not analyze the obvious sale/resales of the properties purchased
4 by the developer. This includes a comparison of the original sale to the property owner,
5 prior to construction of North Star Solar, to the end user sale from the developer after
6 construction. Sale/resales are the most reliable method of isolating an adjustment for a
7 detrimental condition because they do not require finding a control sale that is similar in
8 all respects except for the externality. The comparison is to the same property with the
9 exception of time. Such a study was made by me and is included in Exhibit F attached to
10 my testimony. The results indicate diminution ranging from -6.3 percent to -28.0 percent
11 and contradicts CohnReznick's finding of no change of value.

12 **Q.21. Does the data presented in the CohnReznick Study about Innovative Solar Farm 42**
13 **support the study's conclusion about the impact of solar projects on surrounding**
14 **property values?**

15 A.21. No. In this 71 MW solar farm example, the CohnReznick compare each of two
16 "adjoining" tracts to 7 unidentified non-adjoining tracts and declare "no negative price
17 differential."

18 The first test example is on the opposite side of the highway from the solar
19 project, but is opposite single family dwellings with an interrupted view of the solar farm.
20 Therefore, it appears not to be an adjoining property. Not only is there no supporting
21 documentation for any of the control sales, the appraisers do not provide even the
22 addresses of the test sales. This is an unreliable, if not misleading, example.

1 In the second example, Parcel 2 is on the north side of County Line Road
2 diagonally to the northeast of the solar project which is on the south side of the road and
3 within 400.00 linear feet of the solar project. Although the solar facility is visible from
4 the dwelling, the lot is not adjoining. This is a newly constructed dwelling which is
5 compared to seven sales not adjoining the solar farm with no description of the sales nor
6 any indication that the seven sales are all new construction. There is insufficient
7 information to explain why the test sale would sell for 6.10 percent more than the median
8 price of seven control sales.

9 **Q.22. Does the data presented in the CohnReznick Study about the Rutherford Farm**
10 **solar facility support the study’s conclusion about the impact of solar projects on**
11 **surrounding property values?**

12 A.22. No. The appraisers provided only one test sale that is on the opposite side of the road and
13 200.00 linear feet from closest panel of the 61 MW solar farm. The property sold for
14 \$85,000, which indicates that it is at the lower end of the price spectrum of single family
15 dwellings. With no more data being provided, it is possible that this market has no
16 expectations of a scenic view and that the solar farm would have no impact on the utility
17 of the property. If this is the case, then the solar farm would not be expected to negatively
18 impact this sale. To remark the obvious and then declare that, “it does not appear that the
19 Rutherford Farm Solar energy use had any negative impact on adjacent property values,”
20 is misleading.

21 **Q.23. Does the data presented in the CohnReznick Study about DTE’s Lapeer Solar**
22 **Project support the study’s conclusion about the impact of solar projects on**
23 **surrounding property values?**

1 A.23. No. This 48.28 MW solar project consists of two sections on either side of the primary
2 north/south arterial highway, Main Street. The west plant (Demille) is within the city
3 limits while the east plant (Turrill) adjoins the city limits at its north property line. The
4 CohnReznick appraisers made two paired sales analysis for each section.

5 Group 1 (Demille) consisted of 3 adjoining sales with an aggregate median price
6 per square foot of \$86.12 compared to 7 unidentified control sales, also in the aggregate,
7 indicating \$85.92 per square foot.

8 Group 2 (Turrill) consisted of one adjoining sale with a per square foot price of
9 \$94.84 per square foot compared to 4 unidentified control sales with a median sale price
10 of \$91.80 per square foot.

11 The appraisers concluded from this minimal documentation, that, “it does not
12 appear that the DTE’s Lapeer Solar had any negative impact on adjacent property
13 values.”

14 The major flaw of this selection of study is that the appraisers stated that the prior
15 use was agricultural and failed to divulge that the area used by the solar farms is zoned B-
16 2 (General Business), Conditional as of 12/07/2015. This means that at the time of the
17 sale in 2018 the purchasers would have known to expect the area to be developed into
18 some type of high density use. Because of this, the analysis is misleading.

19 After receiving the sales data, I checked the control sales to see if any of them
20 were adjacent to a commercial use, as described in Question 19. With respect to Group 1,
21 one sale adjoined I-69; one sale adjoined an apartment complex; three sales were interior
22 lots in a subdivision; and one sale was in a rural residential area across from a church.

Regarding Group 2, one sale was an interior lot in a subdivision; one sale was in a rural residential subdivision; and three sales were from different towns—one was in a rural area, one was an interior lot in a residential subdivision; and one was in a residential area across from a high school.

The control sales for Group 3 included three sales near semi-rural areas and one interior lot in a residential subdivision.

Q.24. Does the data presented in the CohnReznick Study about the Elm City Solar Farm support the study’s conclusion about the impact of solar projects on surrounding property values?

A.24. No. This 40 MW solar farm example consists of an analysis of one sale. This modest (\$81,000) house appears to be among the smallest in the neighborhood and is the furthest away that may be considered to be adjoining the solar farm. With a sale price of \$56.60 per square foot and with no more information than the median price per square foot of the control sales, it is impossible to determine the reliability of this example.

Q.25. Does the data presented in the CohnReznick Study about the Shoreham Solar Commons support the study’s conclusion about the impact of solar projects on surrounding property values?

A.25. No. This 24.9 MW solar farm example consists of only one test sale whose rear property line abuts the solar project in a high density urban neighborhood. Additional sales analysis is required to document whether the solar farm affected the property’s value. The CohnReznick appraisers compared this two-story sale to 6 unidentified sales including 1 and 2 story houses with 1 to 3 bathrooms. This is too many variations to be

credible, even assuming the sales were documented. This example is inadequate to determine no proximity damage.

Q.26. Does the data presented in the CohnReznick Study about the Woodland Solar Farm support the study's conclusion about the impact of solar projects on surrounding property values?

A.26. No. The appraisers used one sale that adjoins the solar farm. It is designated as 18146 Longview Drive, however, Google Earth defines this address as the solar farm. By the process of elimination, it is presumed that the test sale is the property at the southwest corner of the intersection of Longview Road and Woodland Road. This tract is separated from the solar farm at its rear yard by another property owner's field.

As with the other solar farm examples, no documentation is provided for the 5 control sales that indicated an adjusted median price per square foot below the test sale. Additional sales analysis needs to be made to determine whether the solar farm affected the property's value. Nonetheless, the data presented by the CohnReznick appraisers is inadequate for any conclusion.

Q.27. Does the data presented in the CohnReznick Study about the S-Power Shoreham Solar Farm support the study's conclusion about the impact of solar projects on surrounding property values?

A.27. No. This 14.3 MW solar plant example is from a high density suburban area on Long Island. The first sale, 18 Estates Lane, is on the opposite side of a four-lane highway from the solar project. Because the dwelling is within 65.00 linear feet of a high traffic roadway and in a high density neighborhood, it is unlikely that the solar farm on the opposite side of the highway will have a measurable diminution in the utility of the test

1 sale. As with all the other examples, the appraisers compared the test sale with 5
2 unidentified undocumented control sales to justify concluding that this example supports
3 no damage from the solar farms. This example is inadequate, unreliable and misleading.

4 As indicated in Question No. 19 the proper analysis would include both the test
5 and control sales adjacent to an arterial highway. Of the 5 control sales, only one abuts
6 the highway, the other four sales are interior lots within a residential subdivision.

7 The second group consists of one test sale that abuts the solar project at its rear
8 property line. This is a high density neighborhood and needs more analysis than to
9 merely compare this sale to 5 undocumented control sales to credibly conclude no
10 diminution in value. Every market has different expectations, and the CohnReznick
11 appraisers have not addressed this issue in any of their solar examples.

12 **Q.28. Does the data presented in the CohnReznick Study about Dominion Indy Solar III**
13 **solar farm support the study's conclusion about the impact of solar projects on**
14 **surrounding property values?**

15 A.28. No. This 8.6 MW solar project example consists of two analyses. The first study
16 compared the sale of Adjoining Property 2, an 86.96 acre unimproved agricultural tract
17 to the east of the solar farm. The appraisers failed to divulge that this tract appears to
18 have no road frontage nor does it have an easement. Without road frontage this is not a
19 self contained parcel that could be purchased by anyone. By definition, it can only be
20 purchased by an adjoining owner. The 86.96 acre test sale is compared to four
21 unidentified tracts described as larger than 20 acres. Regarding agricultural tracts, there
22 is a large variation in values relative to size. The appraisers should have used sales
23 ranging from approximately 75.0 acres to 100.0 acres. In addition, they should have

1 used only adjoining owner or easement accessible sales for comparability. This analysis
2 is inadequate, misleading and non-credible.

3 A review of the sales, after they were provided, indicates that all the sales have
4 road frontage with Sale No. 1 having a residence.

5 In the second group, a significant factor in this analysis that the appraisers do not
6 address is the expectations of this particular market relative to the impact of the solar
7 farm. The median sale price for this subdivision is under \$130,000, which represents the
8 lower end of the spectrum for single family dwellings in subdivisions. In addition, the
9 lots are less than 0.25 acres that appear to be 50.00 feet wide and the houses appear to be
10 within 20.0 feet of each other. In a dense suburban neighborhood, a scenic view is not
11 typically an expectation. Also, the solar farm, being on the opposite side of the road,
12 does not reduce the utility of the dwellings. Without a reduction in utility there would be
13 no reduction in value.

14 The Group 2 analysis compared sales within the subdivision that sold after
15 construction of the solar farm to sales without the influence of the solar farm with a
16 median sale date of 2015, while Group 3 had a median sale date of 2018. Considering
17 this market, it would be expected that there would be no difference between the median
18 prices for both groups and their control sales.

19 It is notable that with any detrimental condition, the degree to which it impacts
20 the utility of an adjacent property determines its damage. If the utility is not diminished,
21 then there would be no diminution in value. Just because there may or may not be a
22 negative or positive impact, does not mean that this indication can be transferred to
23 another situation without qualification.

1 **Q.29. Does the data presented in the CohnReznick Study about the Barefoot Bay Solar**
2 **Energy Center support the study’s conclusion about the impact of solar projects on**
3 **surrounding property values?**

4 A.29. No. This 74.5 MW solar plant is adjacent to the Barefoot Bay manufactured home
5 community. According to the report, this 1,000 acre development with 5,000 lots is the
6 “largest manufactured home community in Florida.” The lot sizes are 50.0’ x 80.0’ and
7 75.0’ c 100.0’ and the dwellings are within 15.0 feet of each other. The population of the
8 subdivision is 12,000. This is an extremely dense development of houses at the lower end
9 of the value spectrum with no expectations of a scenic view.

10 The appraisers analyzed two groups of sales. The first group was two lots
11 “purchased by the same buyer from different sellers on different dates.” However, the
12 appraisers failed to note that one of the lots did not have road frontage and was behind
13 the other, even though this was apparent from the aerial photo. Because it is a combined
14 sale, it is a poor choice for comparison purposes. To be consistent with the control sales,
15 they should represent two independent sales. The combined sale, nonetheless, was
16 compared to seven unidentified aggregate sales indicating that there was no damage.
17 According to Google Earth, the map numbers should be switched. Also, from the aerial
18 photograph the lots on either side of these two control sales appear to be are commercial,
19 but the appraisers state that the two lots in question are residential. With no more
20 description than is given this comparison is inadequate, unreliable and non-credible.

21 The second group of sales compares the aggregate of five of the manufactured
22 home sales (Nos. 13, 18, 40, 47 and 51) within the Barefoot Bay subdivision and
23 adjoining the solar farm to the aggregate of 126 other unidentified sales not adjoining a

1 solar farm. As discussed in the answer to Question 19, not only would a scenic view not
2 be an expectation of the neighborhood, but the adjoining sales have larger lots and, in this
3 instance the location of the solar farm provides relief from the crowded conditions of the
4 subdivision. To use this example to indicate that solar farms do not negatively impact
5 property values in a rural area is misleading.

6 **Q.30. Does the data presented in the CohnReznick Study about the Miami-Dade Solar**
7 **Energy Center support the study's conclusion about the impact of solar projects on**
8 **surrounding property values?**

9 A.30. No. In this 74.5 MW solar farm example, the CohnReznick appraisers took the median
10 price per acre of three residential sales with interim agricultural zoning and compared
11 them to the median sale price per acre of six unidentified sales not adjoining a solar
12 farm.

13 Aside from the lack of basic appraisal documentation, this example is flawed
14 because the properties are within the direct flight path of the Miami Executive Airport
15 and within 2.0 miles of the runway. In order to extract an adjustment for the solar farm,
16 the control sales must also be within the flight path of the airport. There is no indication
17 from the data provided that this is the case.

18 **Q.31. Do you have an opinion, to a reasonable degree of certainty, as to whether the**
19 **Kingwood Solar Project will decrease the values of the properties surrounding the**
20 **Project?**

21 A.31. Yes. I have analyzed two case studies of improved properties and two case studies of
22 vacant land abutting solar farms.

1 The improved properties were analyzed based on the sale/resale of the same
2 property before and after construction of the solar farm. The North Star case study
3 indicated a range of diminution from -6.3 percent to -28.0 percent with a median decline
4 of -16.9 percent. The McBride Place case study indicated a range of diminution ranging
5 from -15.7 percent to -16.8percent indicating a conservative diminution of -15.0 percent
6 (rounded).

7 The two vacant residential lot studies are based on paired sales from the same
8 subdivision with the impacted sales adjoining the solar farm while the non-impacted sales
9 did not. This means the only difference between the sales was the solar plant. The results
10 from the Grandy, N.C. solar farm indicated diminution of -15.5 percent. This community
11 had an ordinance that required a 300.0 foot setback from the residential property line. The
12 Spotsylvania solar case study compared two sales that abutted the solar farm to three
13 sales that did not abut in the same immediate neighborhood. The difference between the
14 sales was -30.0 percent. The difference between these two case studies is that the lots in
15 Spotsylvania are more than twice as expensive and the size of the solar farms is 121.4
16 acres compared to 6,350 acres. The case studies are included in Exhibit G following my
17 testimony.

18 The fact that the Kingwood solar farm has only 25.0 foot setbacks between the
19 solar fence and the property line of adjoining properties with the possibility of an
20 additional 20.0 feet between the fence and solar panels is likely to have a negative effect
21 on the values of adjoining properties.

22 **Q.32. What is the basis of this opinion?**

1 A.32. In addition to the case studies cited in the answer to Question 32, I have considered the
2 results of the environmental damage studies I have previously prepared and they are
3 consistent with those results, if not conservative. A summary of these studies is included
4 in Exhibit H attached hereto.

5 **Q.33.** Does landscaping between solar projects and proximate properties mitigate property
6 damage?

7 A.33 I have provided an answer to this question in a paper that has been attached as Exhibit I.

8 **Q.34. Does this conclude your direct testimony?**

9 A.34. Yes.

10 **LIST OF EXHIBITS**

- 11 A. Curriculum Vitae of Mary McClinton Clay
12 B. CohnReznick News Release
13 C. Discussion of USPAP
14 D. Reconstructed CohnReznick North Branch Solar Sales Chart
15 E. North Branch Solar Time Adjustment Chart
16 F. Mary Clay's North Branch Solar Case Study
17 G. Mary Clay's Solar Damage Case Studies
18 H. Summary of Kentucky Environmental Damage Studies
19 I. Discussion of Landscaping

EXHIBIT A

MARY MCCLINTON CLAY
PROFESSIONAL QUALIFICATIONS

Mary McClinton Clay, MAI
218 Main Street, Paris, KY 40361
859-987-5698/Cell: 859-707-5575
mclayky@bellsouth.net

Market Area: Commonwealth of Kentucky

Primary Practice Focus: Litigation and zoning support with an emphasis on damage studies, including environmental and eminent domain.

Appraisal Experience:

1985 to Present: Self-employed - engaged in commercial, industrial and farm valuation.
1979-1984: Employed by Realty Research - engaged primarily in income property appraisal.
1976-1979: Residential appraisal experience with fee appraisers.

Previous assignments include: Eastern State Hospital; Gateway Shopping Center; Lakeside Heights Nursing Home, N. KY; L&N Office Building, Louisville; Alltech Biotechnology Center, Nicholasville, Paris Stockyards; Conrad Chevrolet, Lexington; CSX Rail Yards in Mt. Sterling and Paris; First Baptist Church, Cold Spring; Lusk-McFarland Funeral Home, Paris; Feasibility Study of proposed Hamburg Place Office/Industrial Park, Lexington; Rent Analysis of IRS Service Center, Covington; Surtech Coating, Nicholasville; Clem Refrigerated Warehouse, Lexington; Bluegrass Manufacturing, Lexington; Finley Adhesives, Louisville; Central Manufacturing and Central Light Alloy, Paris; Review Appraisal of Rand McNally Plant, Versailles and Timberland Distribution, Danville; Old Scott County Jail; Millspring Battlefield; Truck Terminals, Fast Food Restaurants, Retail Centers, Lumber Mills, Car Wash, Multi-Family Residential, Mobile Home Parks, Convenient Stores and Subdivision Analyses.

Thoroughbred Horse Farms including Pin Oak Farm, Bunker Hunt Farms, Pillar Stud Farms, Elmendorf Farm, Summer Wind Farm, Hidaway Farm, Stoner Creek Stud, Runnymede Farm, Wilshire Farm, Lynnwood Farms, Stonereath Farm, Idle Hour Farm, Canefield Farm, Elk Creek Farm, Lochness Farm, Stoneleigh Farm, Elizabeth Station Farm.

Right of Way Experience: Rose Street Extension, Lexington, 1986-87; AA Highway: Greenup Co., 1989, Carter Co., 1990-91; U.S. 27 Campbell Co. 1991-1992, 1993; Bridge Realignment, Walton, 1992; Industry Rd, Louisville, 1993; 19th St. Bridge, Covington, 1994; U.S. 27, Alexandria, 1994; S. Main St., London, 1995; Paris Pike, Paris and Bourbon County, 1995-98; KY Hwy 22 at I-75, Dry Ridge, 1996; Bridge Projects on KY Hwy 19, Whitley County, 1997; US 150, Danville, 1998; US 460 Morgan Co., 1999; US 62 South, Georgetown, 2000; Bluegrass Pkwy and KY 27 Interchange, Anderson Co., 2001; KY 519, Rowan County, 2002; US 641, Crittenden County, 2005; US 25, Madison County, 2008-09; US 68, Bourbon County, 2009-10; Clark County, 2011; US 68 Millersburg By-pass, Bourbon County, 2012-13; US 119, Bell County, 2014-15; US 25, Madison County, 2016-17; Excess Land, Georgetown By-pass, 2020; Access Break, Industrial Drive, Lebanon, 2020; Excess Land, Bluegrass Parkway and Harrodsburg Road, Lawrenceburg, 2021.

Railroad Right of Way Experience: CSX in Floyd, Perry, Clark, Woodford, Franklin, Montgomery, Johnson, Magoffin, Breathitt, Fayette, Madison, Mason, and Bourbon Counties, 1987-2016.

Rails to Trails: Rowan County, 2005; Montgomery County, 2009, Franklin County, 2014; Floyd County, 2016.

MARY MCCLINTON CLAY
PROFESSIONAL QUALIFICATIONS

Environmental Damage Studies: *Yellow Creek Concerned Citizens v. Middlesboro Tannery*: effect of tannery contamination on 350 properties along Yellow Creek, Bell County, KY, 1988; *James E. Sullivan, et al v. Board of Regents, et al*: effect of Animal Waste Fermentation Project at the Organic Pasteurization Plant at North Farm of Murray State University on Sullivan's Executive Par 3 Golf Course and Sports Center, Murray, KY, 2003; West Farm Subdivision, Pulaski County: effect of contamination of groundwater from underground storage of dry cleaning solvents on residential lot values, 2004; *Gene Nettles, et al v. Environmental and Public Protection Cabinet: Division of Water, David Morgan, Director and J.P. Amberg Hog Farm*: Diminution of Value Analysis As a Result of Proximity to Hog Facilities in Daviess, Warren, Calloway, Graves, Hickman and Carlisle Counties, Kentucky, 2006; *Terry Powell, et al v. Tosh, et al*: Diminution of Value Analysis as a Result of Proximity to Hog CAFOs in Marshall County, KY, 2007; *City of Versailles v. Prichard Farm Partnership, Ltd.*: effect of sewage treatment pump station and ancillary easements upon Woodford County cattle farm, 2008; *Kentucky Utilities Company v. James and Mary Jent, CDH Preserve, LLC and Farm Credit Services of Mid-America, FLC, Violet Monroe*: the effect of High Voltage Transmission Lines on three Hardin County agricultural properties, 2011; *Terrence G. Kerschner, et al v. Burley Oil Company, et al*: the effect of Leaking Underground Gasoline Tanks on Country Lane Estates, Frankfort, KY, 2013; *Jerry Whitson v. Donnie Cross*: effect of Drainage Encroachment upon Adjacent Property, 2013; the effect of Cell Tower on Bourbon County Farm, 2014; *Steve D. Hubbard v. Prestress Services Industries, LLC*: effect of Fugitive Particulate Emissions upon a Single Family Dwelling, 2016; *Henderson City-County Airport v. Mary Janet Williams, et. al.*: the effect of Proximity of a Regional General Aviation Airport on Agricultural Values, 2019; *Patricia Kushino, et al v. Federal Aviation Administration, et al*: the effect of Stormwater Drainage on Woodland Value, 2021.

Additional Damage Studies:

Faulty Construction: 172 Post Oak Road, Paris, KY; 152 Cross Creek Drive, Paris, KY; Hartland Subdivision, Lexington, KY
Flood Damage: 208 Cary Lane, Elizabethtown, KY
Blasting Damage: Chicken Farm, Tolesboro KY
Super Fund Sites: KY Wood Preserving, Inc., Winchester, KY; River Metals Recycling, Somerset, KY
Industrial Scale Solar Farms: "A Summary of Solar Energy Power Systems Damage Studies as of May 25, 2021"

Expert Witness: Circuit Courts of Bourbon, Carter, Fayette, Franklin, Hardin, Laurel and Woodford Counties

Court Testimony:

Laurel Circuit Court: *Yellow Creek Concerned Citizens v. Middlesboro Tannery*, 1995.
Franklin County Circuit Court: *Richard McGehee v. Commonwealth of Kentucky Transportation Cabinet*, 2008; *Terrence G. Kerschner, et al v. Burley Oil Co., et al*, 2014.
Hardin County Circuit Court: *Richard McGehee v. Commonwealth of Kentucky Transportation Cabinet*, 2008.
Woodford County: *Horn v. Horn*, 2009
Bourbon County Circuit Court: Blasting Case, 1980s; Waterway Impediment Case, 2000; Faulty Construction, 2009, *Hadden v. Linville*, 2015.
Fayette County Circuit Court: Faulty Construction, 1980s; Bluegrass Manufacturing (Divorce Case), 1999, *Whitson v. Cross*: Drainage Encroachment, 2013.
Carter County: Condemnation for Commonwealth of KY Transportation Cabinet.

MARY MCCLINTON CLAY
PROFESSIONAL QUALIFICATIONS

Conservation and Wetland Easements: Bluegrass Heights Farm, Fayette County: Conservation and Preservation Easement; Wetland Easements in Pulaski, Lincoln, and Fulton Counties for NRCS.

Zoning Support: Solar Farm Conditional Use Permits: Hardin County, 2022, Clark County 2021; *John Vance, et al v. Paris City Commission* 2019; *Citizens for Progressive Growth and Development v. Paris Bourbon County Planning Commission* 2004-2007 and 2016; *Paris First v. Paris Bourbon County Planning Commission* 2003-2006; *Paris First v. Paris City Commission* 2002-2003; *Coppers Run Historic District, Inc. v. Abundant Life Worship Center* 1995; *Sugar Grove Farm v. East Kentucky Power* 1994-1996; *Lawrence Simpson, et al v. Harry Laytart* 1986-1996.

Professional Organizations:

Appraisal Institute: MAI, 1985; SRPA, 1982; SRA, 1980

Appraisal Institute Education Certification:

The Appraisal Institute conducts a voluntary program of continuing education for its designated members. I am certified under this program through December 31, 2023.

Education: Hollins College, B.A., 1972

Appraisal Education: Society of Real Estate Appraisers Course 101, 1977; SREA Course 201, 1978; SREA Course 301, 1981; AIREA Course VIII, 1979; AIREA Course VI, 1979; AIREA Course II, 1980; AIREA Course in Investment Analysis, 1980; AIREA Course in Valuation Litigation, March, 1986; Appraisal Institute Standards of Professional Practice, 1992; AIREA Comprehensive Examination, August, 1983; Courses in Real Estate Finance, Income Property Appraisal, Real Property Valuation, and Investment Analysis, 1977-1978, Eastern Kentucky University; Appraisal Institute Course 400G, Market Analysis/Highest and Best Use, 2008, Conservation Easement Certification, 2008.

Attended numerous seminars covering a variety of topics including investment analysis, feasibility and market analysis, eminent domain and condemnation, valuation of lease interests, component depreciation, risk analysis, current issues in subdivision and zoning law, Yellow Book and appraiser as expert witness.

EXHIBIT B

COHN REZNICK CAPITAL MARKETS SECURITIES, LLC

February 24, 2017

FOR IMMEDIATE RELEASE

CohnReznick Capital Markets Securities Announces the Sale of sPower to AES Corporation and Alberta Investment Management Corporation

New York, NY – February 24, 2017 – CohnReznick Capital Markets Securities is pleased to announce the successful sale of FTP Power LLC ("sPower"), the largest independent utility scale solar owner, operator and developer in the United States to the AES Corporation (NYSE: AES) and Alberta Investment Management Corporation ("AIMCo"). AES and AIMCo will each own approximately 50% equity interest in sPower.

Barclays served as the lead financial advisor and global coordinator to sPower for the transaction. CohnReznick Capital Markets Securities, Marathon Capital, and Citi also served as co-advisors to sPower.

sPower, a Fir Tree portfolio company that the firm capitalized in 2014, owns and operates more than 150 utility and commercial distributed electrical generation systems across the United States. The sPower portfolio includes nearly 1.3 GW of solar and wind projects in operation or under construction and a development pipeline of more than 10 GW located in the United States.

Ryan Creamer, Chief Executive Officer of sPower, said, "With the help of Fir Tree, we have experienced incredible growth over the last three years. We are excited to become part of the AES/AIMCo partnership and we are confident that it positions us to continue to grow, develop and maximize the platform that we have created. On behalf of the entire sPower team, I want to thank Fir Tree for its support and vision that have been so critical to our success. I also want to thank Barclays, CohnReznick Capital Markets Securities, Marathon Capital and Citi for their guidance and efforts."

"We are happy to have helped facilitate sPower's advancement to the next level of its growth and remain dedicated to its continued evolution," stated Conor McKenna, Managing Director, CohnReznick Capital Markets Securities. "It was a comprehensive process with a fantastic result for the company."

The transaction is expected to close by the third quarter of 2017, subject to review or approval by the Federal Energy Regulatory Commission, the U.S. Department of Justice and the Committee on Foreign Investment in the United States.

For any media inquiries, please contact:

Tom Weirich

Tel: 202-509-6435

Email: tom.weirich@crcms.com

About sPower

Headquartered in Salt Lake City, with offices in San Francisco, Long Beach and New York City, sPower is the largest private owner of operating solar assets in the United States. sPower owns and operates more than 150 utility and commercial distributed electrical generation systems across the U.S. producing nearly 1.3 GW of power. Additionally, sPower has an in-construction and development pipeline in excess of 10 GW. For more information on sPower, please visit www.spower.com.

About Fir Tree Partners

Fir Tree, founded in 1994, is a private investment firm with approximately \$10 billion of capital under management. The firm invests worldwide in public and private companies, real estate, and debt. Fir Tree manages assets on behalf of leading endowments, foundations, pension funds, and sovereign wealth funds. The firm maintains offices in New York and Miami. Additional information is available at: <https://www.firtree.com>.

About CohnReznick Capital Markets Securities

CRCMS offers a comprehensive financial advisory platform for the renewable energy and sustainability industries, including solutions for corporations that includes corporate financing, project financing, and M&A advisory. The company represents financial institutions, infrastructure funds, strategic participants (IPPs and utilities), and the leading wind, solar, biomass, and other clean energy developers nationwide. CRCMS has successfully executed more than \$12 billion in project and corporate transactions. To learn more, visit www.cohnreznickcapmarkets.com.

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EXHIBIT C

UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE

Although CohnReznick has characterized their study as a consulting report, this does not prevent them from not conforming to Uniform Standards of Professional Appraisal Practice (USPAP) Standards No. 1 and No. 2 concerning “Real Property Appraisal Development” and “Real Property Appraisal Reporting.” The preparer of the report is acting as an appraiser and is required to perform valuation services within (USPAP).

STANDARD 1: Real Property Appraisal Development

In developing a real property appraisal, an appraiser must identify the problem to be solved, determine the scope of work necessary to solve the problem, and correctly complete the research and analysis necessary to produce credible results.

Standards Rule 1-1, General Development Requirements

In developing a real property appraisal, an appraiser must:

- a. be aware of, understand, and correctly employ those recognized methods and techniques that are necessary to produce a credible appraisal
- b. not commit a substantial error of omission or commission that significantly affects an appraisal

STANDARD 2: REAL PROPERTY APPRAISAL REPORTING

In reporting the results of a real property appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

Standards Rule 2-1, General Reporting Requirements

Each written or oral property appraisal report must:

- a. clearly and accurately set forth the appraisal in a manner that will not be misleading;
- b. contain sufficient information to enable the intended user(s) of the appraisal to understand the report properly;

Standards Rule 2-2, Content of a Real Property Appraisal Report

Each written real property appraisal report must be prepared under one of the following options and prominently state which option is used: Appraisal Report or Restricted Report.

An appraiser may use any other label in addition to, but not in place of, the labels set forth in this Standards Rule for the type of report provided. The use of additional labels such as analysis, consultation, evaluation, study, or valuation does not exempt an appraiser from adherence to USPAP.

EXHIBIT D

**RECONSTRUCTED CHART OF COHNREZNICK NORTH STAR SOLAR
TEST AREA and CONTROL AREA SALES - GROUP 1**

| SALE | ADDRESS | SALE PRICE | CASH EQUIVALENT | COHNREZNICK SALE PRICE | DATE | CR SF | Lot Size | COMMENTS | SP/SF | SALES NOT COMPARABLE |
|-----------------------------------|--------------------|------------|-----------------|------------------------|----------|-------|----------|-------------------------------------|----------|----------------------|
| TEST SALES | | | | | | | | | | |
| 52 | 10505 367th Street | \$260,500 | \$252,685 | \$260,500 | 8/19/16 | 1,890 | 5.0 | Wrong Sale Price, Barn | \$133.70 | |
| 42 | 10200 367th Street | \$330,000 | \$322,837 | \$330,000 | 11/28/17 | 2,172 | 9.3 | Wrong Sale Price | \$148.64 | |
| 46 | 10132 367th Street | \$333,000 | \$333,000 | \$330,000 | 10/20/17 | 2,108 | 9.3 | | \$156.55 | |
| Median Sale Price/Square Foot | | | | | | | | | | |
| | | | | | | | | | | |
| CONTROL SALES | | | | | | | | | | |
| 1 | 10589 Wilcox Ave | NA | NA | \$262,500 | 06/23/16 | 1,900 | 2.0 | Not Arms Length Sale | NA | X |
| 2 | 5183 366th Street | \$201,000 | \$194,970 | \$227,708 | 07/28/16 | 1,530 | 1.5 | Wrong Sale Price, Inferior Const. | \$98.97 | X |
| 3 | 4359 Elk Court | \$263,000 | \$257,740 | \$263,000 | 01/10/17 | 1,970 | 1.5 | Wrong Sale Price | \$140.84 | |
| 4 | 39088 More Ferry | \$229,000 | \$222,130 | \$229,000 | 01/20/17 | 1,838 | 2.0 | Wrong Sale Price, Inferior Const. | \$120.85 | X |
| 5 | 5460 367th Street | \$201,000 | \$194,970 | \$201,000 | 02/17/17 | 1,456 | 1.5 | Wrong Sale Price, Adjoins I-35 | \$133.91 | X |
| 6 | 37081 Little Oak | \$310,000 | \$310,000 | \$310,000 | 05/05/17 | 2,320 | 2.5 | 1 Lot Removed from SF | \$133.62 | |
| 7 | 4737 377th Street | \$230,000 | \$230,000 | \$230,000 | 06/28/17 | 2,002 | 2.0 | Inferior Construction, 2.5 Acre Lot | \$114.89 | X |
| 8 | 8628 380th Street | \$275,000 | \$275,000 | \$275,000 | 07/06/17 | 1,842 | 1.5 | | \$149.29 | |
| 9 | 6417 360th Street | \$325,000 | \$325,000 | \$325,009 | 07/07/17 | 2,346 | 2.5 | | \$138.53 | |
| 10 | 4625 412th Street | \$275,000 | \$275,000 | \$275,000 | 09/15/17 | 2,128 | 4.0 | Inferior Condition, Barn | \$129.41 | X |
| 11 | 5954 371st Street | \$239,900 | \$239,000 | \$239,900 | 09/15/17 | 1,724 | 2.0 | | \$139.15 | |
| Median Sale Price Per Square Foot | | | | | | | | | | |
| \$139.15 | | | | | | | | | | |

EXHIBIT E

North Branch

| | Median | % YoY Chg | Average | % YoY Chg |
|------|------------|-----------|------------|-----------|
| 2000 | \$ 139,000 | | \$ 147,552 | |
| 2001 | \$ 155,389 | 11.8% | \$ 174,121 | 18.0% |
| 2002 | \$ 171,900 | 10.6% | \$ 188,163 | 8.1% |
| 2003 | \$ 182,000 | 5.9% | \$ 207,129 | 10.1% |
| 2004 | \$ 197,000 | 8.2% | \$ 212,733 | 2.7% |
| 2005 | \$ 208,900 | 6.0% | \$ 230,131 | 8.2% |
| 2006 | \$ 201,950 | -3.3% | \$ 214,891 | -6.6% |
| 2007 | \$ 202,150 | 0.1% | \$ 206,783 | -3.8% |
| 2008 | \$ 159,382 | -21.2% | \$ 166,781 | -19.3% |
| 2009 | \$ 141,000 | -11.5% | \$ 143,056 | -14.2% |
| 2010 | \$ 136,000 | -3.5% | \$ 147,947 | 3.4% |
| 2011 | \$ 115,544 | -15.0% | \$ 121,466 | -17.9% |
| 2012 | \$ 123,650 | 7.0% | \$ 129,505 | 6.6% |
| 2013 | \$ 149,900 | 21.2% | \$ 159,728 | 23.3% |
| 2014 | \$ 163,700 | 9.2% | \$ 168,857 | 5.7% |
| 2015 | \$ 175,000 | 6.9% | \$ 195,721 | 15.9% |
| 2016 | \$ 187,750 | 7.3% | \$ 198,888 | 1.6% |
| 2017 | \$ 208,195 | 10.9% | \$ 221,678 | 11.5% |
| 2018 | \$ 230,000 | 10.5% | \$ 251,715 | 13.5% |
| 2019 | \$ 231,800 | 0.8% | \$ 248,021 | -1.5% |
| 2020 | \$ 262,500 | 13.2% | \$ 275,585 | 11.1% |

2007 chg
2020 chg
2020 chg

45.4%
29.9%
88.8%

40.1%
33.3%
86.8%

Chisago County

| | Median | % YoY Chg | Average | % YoY Chg |
|--|------------|-----------|------------|-----------|
| | \$ 147,900 | | \$ 161,997 | |
| | \$ 164,900 | 11.5% | \$ 178,846 | 10.4% |
| | \$ 181,900 | 10.3% | \$ 199,640 | 11.6% |
| | \$ 200,000 | 10.0% | \$ 219,703 | 10.0% |
| | \$ 210,000 | 5.0% | \$ 235,939 | 7.4% |
| | \$ 229,000 | 9.0% | \$ 250,686 | 6.3% |
| | \$ 224,325 | -2.0% | \$ 248,741 | -0.8% |
| | \$ 215,000 | -4.2% | \$ 231,397 | -7.0% |
| | \$ 176,000 | -18.1% | \$ 192,913 | -16.6% |
| | \$ 155,000 | -11.9% | \$ 164,975 | -14.5% |
| | \$ 148,875 | -4.0% | \$ 157,998 | -4.2% |
| | \$ 140,000 | -6.0% | \$ 146,672 | -7.2% |
| | \$ 139,900 | -0.1% | \$ 153,268 | 4.5% |
| | \$ 166,950 | 19.3% | \$ 182,321 | 19.0% |
| | \$ 185,000 | 10.8% | \$ 199,015 | 9.2% |
| | \$ 197,500 | 6.8% | \$ 215,329 | 8.2% |
| | \$ 215,000 | 8.9% | \$ 230,247 | 6.9% |
| | \$ 233,250 | 8.5% | \$ 249,491 | 8.4% |
| | \$ 254,900 | 9.3% | \$ 268,737 | 7.7% |
| | \$ 261,403 | 2.6% | \$ 282,035 | 4.9% |
| | \$ 285,500 | 9.2% | \$ 304,938 | 8.1% |

45.4%
32.8%
93.0%

42.8%
31.8%
88.2%

EXHIBIT F

NORTH STAR SOLAR PV CASE STUDY – SALE-RESALES ANALYSIS

The North Star SPGPS is the example of such a facility that required the purchase and subsequent resale of adjoining properties.

At the time of its completion, in December 2016, North Star Solar PV was the largest SEGPS in the Midwest. This 1,000.00 acre, 138 MW facility is in North Branch, Minnesota. As a result of pressure from property owners who abutted at least three sides of the SEGPS, the developer purchased their seven properties and subsequently resold them. The following charts summarize the sale-resales data of these seven properties.¹ A map depicting these properties follow and are followed by a map depicting the solar farm.

The chart depicting the seven sales purchased and resold by the developer, CER Land, LLC, for deed transfer purposes, includes three transfers for each property. The first deed represents the sale to the original property owner, which is an arms-length or market sale because it meets the definition of market value.² The second sale is from the original owner to CER Land, LLC. This is not considered a market value sale because it does not meet the definition of market value, primarily because it was negotiated under duress. The third sale is from the developer to a new owner (except for Sale-resale No. 1 which was sold back to the original owner). The third sale is a market value sale because, except for No. 1, the sales were adequately exposed to the market having been placed on the local Multiple Listing Service prior to the last sale.

¹ The sales data was obtained from county records, MLS data, and information present to the Minnesota Public Utilities Commission on March 15, 2016 regarding the resolution of the negotiations with landowners.

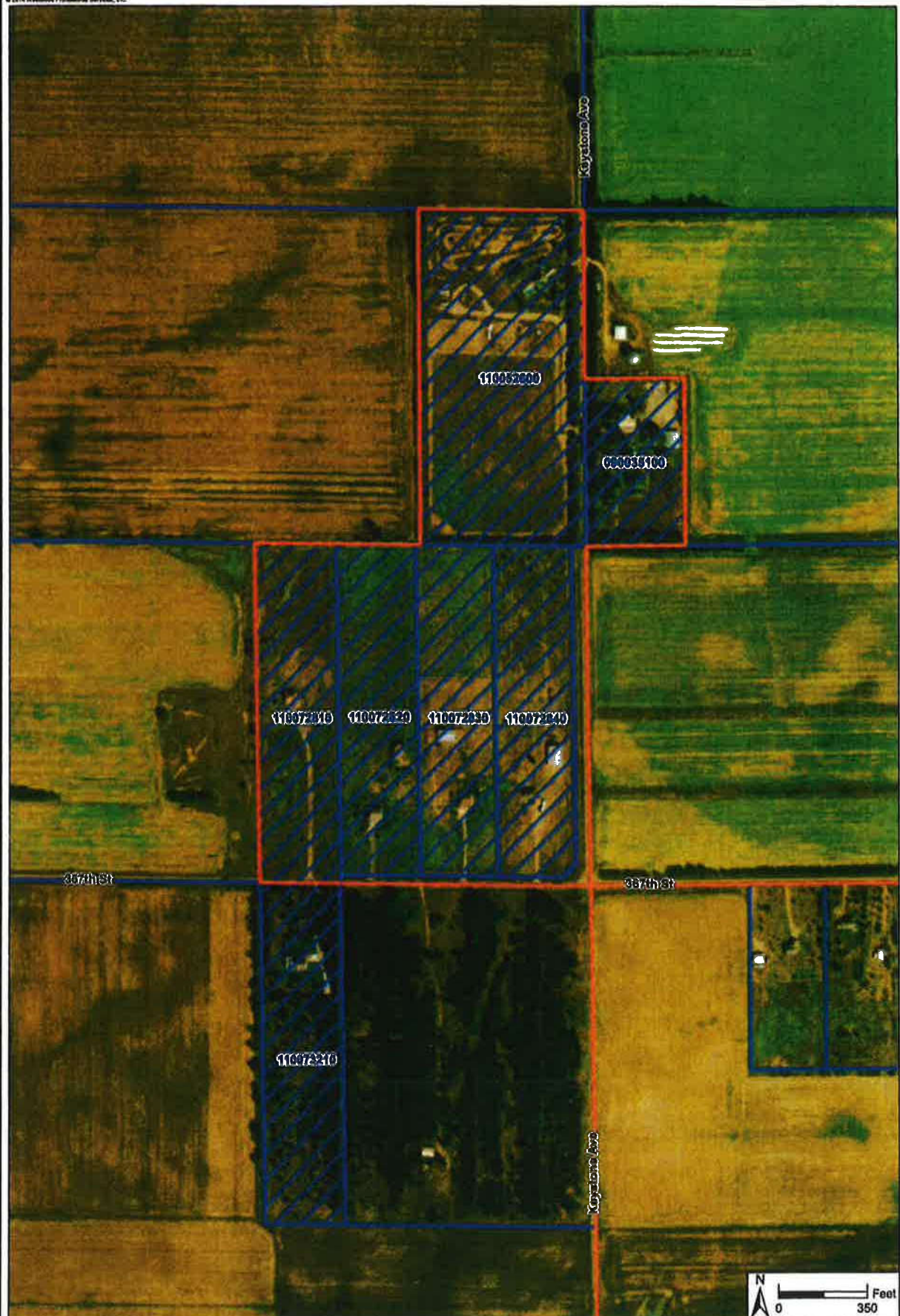
² Definition of Market or Arms-length Sale: A transaction between unrelated parties who are each acting in his or her own best interest. *The Dictionary of Real Estate Appraisal*, 5th ed., s.v. "arms-length transaction." Definition of Market Value: The most probable price that the specified property interest should sell for in a competitive market after a reasonable exposure time, as of a specified date, in cash, or in terms equivalent to cash, under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, for self-interest and assuming that neither is under duress. *The Dictionary of Real Estate Appraisal*, 5th ed., s.v. "market value."

**SALE/
RESALE**

| SALE/ RESALE | PARCEL NO. | ADDRESS | SALE DATE | GRANTOR | GRANTEE | NET SALE PRICE | \$ CHANGE | % CHANGE | ANNUAL % CHNG | SALE TAX ASSESSMT | ACRES | COMMENTS |
|-----------------|------------|--------------------|--------------|-----------------|-----------------|-------------------|--------------|-------------|------------------|----------------------|--------|--|
| 1 | 110072810 | 10090 367th Street | 05/07/10 | Corey Holcomb | Scott Dornbusch | \$216,600 | NA | NA | NA | NA | 10.090 | 2001 1,990 SF 4LS, 800 SF Fin. |
| 1 | 110072810 | 10090 367th Street | 08/03/16 | Scott Dornbusch | CER Land, LLC | \$360,800 | \$144,200 | 66.57 | 8.50 | \$250,600 | 10.090 | 48R-3B; Adj. SF at W & Rear |
| 1 | 110072810 | 10090 367th Street | 03/21/18 | CER Land, LLC | Scott Dornbusch | \$302,500 | (\$58,300) | -16.16 | NA | \$269,500 | 10.090 | Time Adjustment from 5/7/10 |
| | | | | | | | | | | | | Sale to 3/21/18, or 7.9 yrs. |
| | | | | | | | | | | | | \$216,600/7.9 Yr/6.8% = \$364,296 |
| | | | | | | | | | | | | \$364,296 v. \$302,500 = -17.0% |
| 2 | 110073210 | 10095 367th Street | 07/09/10 | Rense Dresel | Shawn Yerges | \$299,000 | NA | NA | NA | NA | 9.900 | 2002 1,677 SF 3LS, 1000 SF Fin Bsm't, |
| 2 | 110073210 | 10095 367th Street | 05/18/16 | Glenn J. Yerges | CER Land, LLC | \$365,000 | \$66,000 | 22.07 | 3.46 | \$277,900 | 9.900 | 4BR, 2.5B; Adj. SF 2 Sides, Rear |
| 2 | 110073210 | 10095 367th Street | 06/15/17 | CER Land, LLC | Shawn Campbell | \$328,004 | (\$36,996) | -10.14 | NA | \$301,500 | 9.900 | Dense Mature Trees Adj. SF |
| | | | | | | | | | | | | Time Adjustment from 7/9/10 |
| | | | | | | | | | | | | Sale to 6/15/17, or 6.9 yrs. |
| | | | | | | | | | | | | \$299,000/6.9 Yr/6.3% = \$455,851 |
| | | | | | | | | | | | | \$455,851 v. \$328,004 = -28.0% |
| 3 | 90035100 | 37083 Keystone Ave | 08/08/00 | P.W. Lee | Douglas Melby | \$100,000 | NA | NA | NA | NA | 6.000 | 1964 1,442 SF 1 Sty, 228 SF Fin Bsm't |
| 3 | 90035100 | 37083 Keystone Ave | 10/11/16 | Douglas Melby | CER Land, LLC | \$302,500 | \$202,500 | 202.50 | 7.08 | \$179,300 | 6.000 | 3BR-2B; Adj. SF 2 Sides & Rear |
| 3 | 90035100 | 37083 Keystone Ave | 08/28/17 | CER Land, LLC | Richard Brandt | \$252,290 | (\$50,210) | -16.60 | NA | \$199,140 | 6.000 | Time Adjustment from 8/8/00 |
| | | | | | | | | | | | | Sale to 8/28/17, or 17.1 yrs. |
| | | | | | | | | | | | | \$200,000/17.1 Yr/2.4% = \$300,034 |
| | | | | | | | | | | | | \$300,034 v. \$252,290 = -15.9% |
| 4 | 110072840 | 10254 367th Street | 11/29/05 | Nielson Const. | Kory Abell | \$360,000 | NA | NA | NA | NA | 9.280 | 2005 2,326 SF 4LS, Unfin. Bsm't, |
| 4 | 110072840 | 10254 367th Street | 07/27/16 | Kory B. Abell | CER Land, LLC | \$535,000 | \$175,000 | 48.81 | 3.78 | \$285,000 | 9.280 | 3BR-2.5B; Corner Lot, Opposite |
| 4 | 110072840 | 10254 367th Street | 10/27/17 | CER Land, LLC | Todd J. Huebl | \$324,950 | (\$210,050) | -39.26 | NA | \$304,600 | 9.280 | SF at W and Front |
| | | | | | | | | | | | | Time Adjustment from 12/16/05 |
| | | | | | | | | | | | | Sale to 10/17/17, or 11.8 yrs. |
| | | | | | | | | | | | | \$390,000/11.8 Yr/0.0% = \$390,000 |
| | | | | | | | | | | | | \$390,000 v. \$324,950 = -16.7% |

NORTH STAR SOLAR PV SALE/RESALE COMPARISON

| SALE/ RESALE | PARCEL NO. | ADDRESS | SALE DATE | GRANTOR | GRANTEE | SALE PRICE | \$ CHANGE | % CHANGE | ANNUAL % CHNG | SALE TAX ASSESSMT | ACRES | COMMENTS |
|--|------------|--------------------|--------------|-------------------|-------------------|---------------|--------------|-------------|------------------|----------------------|-------------|---|
| 5 | 110072820 | 10132 367th Street | 07/02/01 | Corey Holcomb | Richard Daniels | \$226,800 | NA | NA | NA | NA | 9.308 | 2001 1,446 SF 3LS, 700 SF Fin Bsmt |
| 5 | 110072820 | 10132 367th Street | 09/23/16 | Richard Daniels | CER Land, LLC | \$371,800 | \$145,800 | 63.58 | 3.30 | \$239,900 | 9.308 | 4BR-2.5B: SF at Rear & Front |
| 5 | 110072820 | 10132 367th Street | 10/20/17 | CER Land, LLC | Tyler Winczewski | \$333,000 | (\$38,800) | -10.44 | NA | \$256,600 | 9.308 | Time Adjustment from 7/3/01 Sale to 10/20/17, or 16.3 yrs. \$226,800/16.3 Yr/1.8% = \$303,352 28' x 50' Pole Barn Not Included. Constructed after 2001 Sale. 0% |
| 6 | 110072830 | 10200 367th Street | 10/27/04 | Corey Holcomb | Thomas B. Hoch | \$309,000 | NA | NA | NA | NA | 9.300 | 2003 1,472 SF TL, 4BR-3.5B, Barn |
| 6 | 110072830 | 10200 367th Street | 07/27/16 | Thomas B. Hoch | CER Land, LLC | \$387,900 | \$78,900 | 25.53 | 4.71 | \$262,800 | 9.300 | Renov. 2009, SF at Front |
| 6 | 110072830 | 10200 367th Street | 11/28/17 | CER Land, LLC | Mikael Koldste | \$320,100 | (\$67,800) | -16.77 | NA | \$281,200 | 9.300 | Time Adjustment from 11/8/04 Sale to 11/18/17, or 13.0 Yrs. \$324,500/13.0 Yr/0.4% = \$341,785 \$341,560 v. \$320,100 = -6.3% |
| Pole Barn was constructed in 2006 for \$15,500. 10/27/04 Sale Price is adjusted to \$324,500. 10/28/17 Sale Price was \$330,000 with seller paid amount of \$9,900, or \$320,100. | | | | | | | | | | | | |
| 7 | 110052600 | 37206 Keystone | 07/31/12 | John M. Mosley | Kristine Anderson | \$212,000 | NA | NA | NA | NA | 20.110 | 1996 1,092 SF SE, 900 SF Fin. Bsmt |
| 7 | 110052600 | 37206 Keystone | 07/20/16 | Kristine Jacobsen | CER Land, LLC | \$450,000 | \$238,000 | 112.30 | | \$258,000 | 20.110 | 4BR-2B, Det. Gar. w/Apt |
| 7 | 110052600 | 37206 Keystone | 06/15/17 | CER Land, LLC | Todd R. Iverson | \$282,200 | (\$167,800) | -37.3 | NA | \$273,700 | 20.110 | Time Adjustment from 6-4-13 Sale to 5-15-17, or 3.9 Yrs. \$212,000/3.9 Yr/8.6% = \$292,552 \$292,552 v. \$282,200 = -3.5% |
| Contract for Deed on 7/31/12 with Deed transfer on 6/4/13. 6/15/17 Sale Price was \$290,000 with seller paid amount of \$7,800, or \$282,200. | | | | | | | | | | | | |
| Total Purchase Price to CRE Land, LLC | | | | | | | | | | | \$2,773,000 | |
| Total Sales Price from CRE Land, LLC | | | | | | | | | | | \$2,143,044 | |
| Total Loss | | | | | | | | | | | \$629,956 | |
| | | | | | | | | | | | -22.72% | |



Westwood
 14145 W. 100th St. Suite 100
 Westwood Professional Services, Inc.



- Legend**
- Project Boundary
 - Parcel Boundary
 - Subject Parcel

North Star Solar Project
 North Branch, Sunrise Township, and Lent Township;
 Chicago County, Minnesota

Parcel Information

Because the first and third sale for each property are market value sales, it is possible to apply the sale-resale methodology to these sales to determine if they indicate a “before and after” change in value. The first sale represents a sale that occurred before any knowledge of the solar development existed, while the third sale occurred after construction of the facility. Generally, the only difference between the two sales is time, also referred to as market condition.

In order to compare the two sales, an adjustment must be made to the older sale to bring it up to the value level of the second sale. This is done by making a time adjustment based on supporting data from the market. The following chart represents the annual median and average sale price for houses in North Branch and Chisago County.³ The median sale price for North Branch, specifically, was judged to be the most relevant of the two sources since it does not include the extreme values.

This data was used to calculate the compound rate of increase from the date of the first sale to the second sale and then increase the first sale by the indicated rate. After this adjustment is made, then the adjusted sale price of the first sale can be compared to the sale price of the third sale. A difference in the two sale prices will indicate if there is a diminution in value as a result of the construction of the SEGPS.

Description of the Sales Chart

For ease of comparing the sales data at once, the North Star sales are depicted on the North Star Solar Farm Sale-resale Comparison Chart. The following describes each column of the chart.

Sale-resale: This column identifies the 7 transactions that involved the developer of North Star.

³ The time adjustment chart was prepared by David Abbot, a statistician with the Minneapolis Area Board of Realtors.

North Branch

| | Median | % YoY Chg | Average | % YoY Chg |
|------|------------|-----------|------------|-----------|
| 2000 | \$ 139,000 | | \$ 147,552 | |
| 2001 | \$ 155,389 | 11.8% | \$ 174,121 | 18.0% |
| 2002 | \$ 171,900 | 10.6% | \$ 188,163 | 8.1% |
| 2003 | \$ 182,000 | 5.9% | \$ 207,129 | 10.1% |
| 2004 | \$ 197,000 | 8.2% | \$ 212,733 | 2.7% |
| 2005 | \$ 208,900 | 6.0% | \$ 230,131 | 8.2% |
| 2006 | \$ 201,950 | -3.3% | \$ 214,891 | -6.6% |
| 2007 | \$ 202,150 | 0.1% | \$ 206,783 | -3.8% |
| 2008 | \$ 159,382 | -21.2% | \$ 166,781 | -19.3% |
| 2009 | \$ 141,000 | -11.5% | \$ 143,056 | -14.2% |
| 2010 | \$ 136,000 | -3.5% | \$ 147,947 | 3.4% |
| 2011 | \$ 115,544 | -15.0% | \$ 121,466 | -17.9% |
| 2012 | \$ 123,650 | 7.0% | \$ 129,505 | 6.6% |
| 2013 | \$ 149,900 | 21.2% | \$ 159,728 | 23.3% |
| 2014 | \$ 163,700 | 9.2% | \$ 168,857 | 5.7% |
| 2015 | \$ 175,000 | 6.9% | \$ 195,721 | 15.9% |
| 2016 | \$ 187,750 | 7.3% | \$ 198,888 | 1.6% |
| 2017 | \$ 208,195 | 10.9% | \$ 221,678 | 11.5% |
| 2018 | \$ 230,000 | 10.5% | \$ 251,715 | 13.5% |
| 2019 | \$ 231,800 | 0.8% | \$ 248,021 | -1.5% |
| 2020 | \$ 262,500 | 13.2% | \$ 275,585 | 11.1% |

2007 chg
2020 chg
2020 chg

45.4%
29.9%
88.8%

40.1%
33.3%
86.8%

Chisago County

| | Median | % YoY Chg | Average | % YoY Chg |
|--|------------|-----------|------------|-----------|
| | \$ 147,900 | | \$ 161,997 | |
| | \$ 164,900 | 11.5% | \$ 178,846 | 10.4% |
| | \$ 181,900 | 10.3% | \$ 199,640 | 11.6% |
| | \$ 200,000 | 10.0% | \$ 219,703 | 10.0% |
| | \$ 210,000 | 5.0% | \$ 235,939 | 7.4% |
| | \$ 229,000 | 9.0% | \$ 250,686 | 6.3% |
| | \$ 224,325 | -2.0% | \$ 248,741 | -0.8% |
| | \$ 215,000 | -4.2% | \$ 231,397 | -7.0% |
| | \$ 176,000 | -18.1% | \$ 192,913 | -16.6% |
| | \$ 155,000 | -11.9% | \$ 164,975 | -14.5% |
| | \$ 148,875 | -4.0% | \$ 157,998 | -4.2% |
| | \$ 140,000 | -6.0% | \$ 146,672 | -7.2% |
| | \$ 139,900 | -0.1% | \$ 153,268 | 4.5% |
| | \$ 166,950 | 19.3% | \$ 182,321 | 19.0% |
| | \$ 185,000 | 10.8% | \$ 199,015 | 9.2% |
| | \$ 197,500 | 6.8% | \$ 215,329 | 8.2% |
| | \$ 215,000 | 8.9% | \$ 230,247 | 6.9% |
| | \$ 233,250 | 8.5% | \$ 249,491 | 8.4% |
| | \$ 254,900 | 9.3% | \$ 268,737 | 7.7% |
| | \$ 261,403 | 2.6% | \$ 282,035 | 4.9% |
| | \$ 285,500 | 9.2% | \$ 304,938 | 8.1% |

45.4%
32.8%
93.0%

42.8%
31.8%
88.2%

Parcel No.: This is the Chisago County Tax Assessors identifying number of the property.

Address: This is the street address of the property being analyzed.

Sale Date: This is the date that the deed was transferred, i.e. the date on the deed. This date is not to be confused with the date that the deed was recorded, which is sometimes a few days later.

Grantor: This is the seller of the property.

Grantee: This is the buyer of the property.

Net Sale Price: The net sale price is the gross sale price less any money paid by the seller that was applied to reduce the sale price. If the sale price includes any seller paid amount, it will be described in the note after the property transactions.

\$ Change: This is the dollar amount difference between the first and second sale, as well as the dollar amount difference between the second and third sale.

% Change: This is the percentage difference between the first and second sale, as well as the percentage difference between the second and third sale.

Annual % Change: This is the annualized rate of change between the first and second sale.

Sale Tax Assessment: This is the property tax assessment of the property as of the date of sale.

Comments: The comments include a description of the property in the following order: date of construction; square footage above ground level; architectural design (3 or 4 level split, 1-story, tri-level, split entry); basement square footage of finish; number of bedrooms and baths; location of solar farm, i.e. rear and front.

Also, under comments, the time adjustment is made from the date of the first sale to the date of the third sale. This includes calculating the number of years between the two sales and determining the rate or percentage change between these two years based on the North Branch median sale price chart. After the number of years is determined and the rate of

increase between that time, these numbers are applied to the first sale price which adjusts it the level of the third sale price. In other words, this indicates, in the first example, that the value of the \$216,000 sale price in 7.9 years increased at 6.8 percent is \$364,296.

Sale-Resale Analysis

The following is a discussion of the results of each of the seven properties with the first sale adjusted for time from its sale date to the date of the third sale and the resulting comparison of the two sales, adjusted for time, to determine if there is a change in value.

Regarding Sale-Resale No. 1, Scott Dornbusch not only sold his property to CER Land, LLC, for \$360,000, but he bought it back for \$302,500. However, with respect to the comparison between the first sale price, increased for time, to the date of the third sale, this example indicates a **diminution in value of -17.0 percent**. Although this sale-resale is not arms-length, it is nonetheless, consistent with the other 6 arms-length sales. Because this sale was repurchased by the same individual, it is reasonable that his prior invested interest in the property would indicate this to be a minimal indication of value loss.

Sale-resale No. 2 is the property on the south side of 367th surrounded on three sides by the solar plant. The rear 6.24 acres of this property was encumbered by a 30 year lease to North Star Solar PV, LLC at a rate of \$1,000 per year to be increased at 1.0 percent annually. This example represents a highest rate of **decline in value of -28.0 percent**. The most predominant rate of decrease is -17.00 percent (Sale/resales No. 1, No. 3, and No. 4), which suggests that this encumbrance would add an additional -11.00 percent, despite that it contributes an annual income stream of \$12,000.

Sale-resale No. 3 represent an original sale that occurred in 2000 that was extensively renovated, subsequent to that sale, with the additional construction of a pole barn. The seller indicated that the cost of such improvements was approximately \$100,000. Adjusted for these improvements, this sale-resale **indicates -16.0 percent diminution in value**.

Sale-resale No. 4 is at the corner of Keystone Avenue and represents a **diminution in value of -12.9 percent**.

Sale-resale No. 5 **does not indicate a decrease in value** between the original sale and the second resale. However, the sale price does not reflect the addition of a pole barn in the estimates. According to reports from the Chisago County Assessor's office more than one purchaser indicated that they did not consider the solar plant to be detrimental—in fact, they preferred this industrial use to having neighbors.

Sale-resale No. 6 **indicates a -6.3 percent diminution in value**.

Sale-resale No. 7 is the largest property among this group on the west side of Keystone Avenue. This example indicates a **diminution in value of -3.5 percent**. The original purchaser reported that the last purchaser stated that, "he did not want neighbors."

The sale-resales indicate a range of diminution in value from 0 to -28.0 percent, or an average of -12.5 percent and a median of -15.9 percent. **The median of -15.9 percent diminution in value is consistent with the indication from the McBride Solar Case Study of improved properties.**

It is notable that CER Land, LLC purchased the seven properties for a total of \$2,773,000 and sold them for \$2,143,044. This represents a loss of -\$629,956, or -22.72 percent.

EXHIBIT G

MCBRIDE PLACE, GRANDY AND SPOTSYLVANIA
SOLAR FARM CASE STUDIES – SALE-RESALES ANALYSIS

MCBRIDE PLACE SOLAR

McBride Place Solar Farm is on Mount Pleasant Road in Midland, North Carolina. The project consists of 627 acres of a total tract of 974.59 acres. The 74.9 MW project was approved in 2017.

An analysis of the sales of the single-family dwellings that surround the project indicate that three sale-resales have occurred spanning the time period before and after the project was approved.

A time adjustment derived from the Zillow Home Value Index for North Carolina Single Family Market from 2014 to 2021. The first sale was increased for time based on the indicated rate of appreciation of 5.35 percent, 5.08 percent and 5.00 percent respectively. This resulted in the anticipated value based on market appreciation, as if the solar farm had not been constructed. When comparing these values to the actual sale prices after construction, these **sales indicate diminution of -15.65 percent, -15.51 percent and -16.44 percent**, respectively. The analysis is depicted on the following chart and map.

It is notable that a fourth sale, though not a sale-resale, was **-16.81 percent** below its assessment at the time of sale.

It is significant that Sale-Resale No. 1's property line is **325.0 linear feet west of the closest solar panel and the dwelling is 550.0 linear feet west**. Sale-resale No. 2's rear property line is **200.0 linear feet north of the closest solar panel and the dwelling is 350.0** linear feet north. Sale-resale No. 3 is one lot removed from the solar panels on the west side of Haydens Way. Sale No. 4's east property line is within 150.0 linear feet of the closest solar panel while the dwelling is within 550.0 linear feet. Dense woodland is between the solar panels and all the examples of diminution.

SALE/RESALES ADJOINING MCBRIDE PLACE SOLAR FARM - MIDLAND, NC

| SALE/ RESALE | PARCEL NO. | ADDRESS | SALE DATE | DEED BOOK/PG | GRANTEE | SALE PRICE | SALE TAX ASSESSM'T | ACRES | COMMENTS |
|-----------------|--------------|-------------------|--------------|-----------------|--------------------|---------------|-----------------------|-------|---|
| 1 | 5556-26-2054 | 4504 Chanel Court | 1/17 | 12328-116 | NA | \$399,000 | \$396,720 | 1.730 | 2005 2,558 SF 1 Sty BV, 4-3.5, Full Bsmt, 2-CAG, FAG, CA, FP Adjust 1/17 Sale to 1/20, or \$399,000/3.0 Yr/5.35%* = \$466,527, or -15.65% |
| | | | 1/20 | 13932-047 | Phillip G. Pees | \$393,500 | \$474,750 | | |
| 2 | 5556-27-5419 | 4599 Chanel Court | 9/15 | 11575-087 | NA | \$462,000 | \$473,490 | 1.000 | 2007 2,411 SF 2 Sty BV, 5/4.5 Full Bsmt, 2-CAG, HP, CA, FP Adjust 9/15 Sale to 8/20, or \$462,000/5.0 Yr/5.08% = \$591,775, or -15.51% |
| | | | 8/20 | 14404-283 | Peter Weinziel | \$500,000 | \$531,440 | | |
| 3 | 5556-15-6844 | 8704 Haydens Way | 7/12 | 10081/209 | NA | \$322,000 | \$306,680 | 1.960 | 2001 1,353 SF 2 Sty BV, 4/3 Full Bsmt, 2-CAG, HP, CA, FP Adjust 7/12 Sale to 4/19, or \$322,000/6.8 Yr/5.0% = \$448,771, or -16.44% |
| | | | 4/19 | 13463/180 | Ben. Merriman | \$375,000 | \$372,460 | | |
| 4 | 5556-46-7264 | 5811 Kristi Lane | 4/20 | 14095/125 | Fred E. Trull, Jr. | \$530,000 | \$637,100 | 3.740 | 2019 2,462 SF 2 Sty BV, 6/4 Part. Bsmt, 2-CAG, FAE, CA Sale Price compared to Assessment = -16.81% |

*The time adjustment was based on the Zillow Home Value Index for the North Carolina Single Family Market from 2014 to 2021.



SUNSHINE FARMS (GRANDY) CASE STUDY – SALE-RESALES ANALYSIS

Ecoplexus, Inc., a San Francisco solar developer built a 20 MW project on the former 121.4 acre Goose Creek Golf and Country Club at 6562 Caratoke Highway in Grandy, North Carolina. This is an example of single-family lots that were generally acquired by virtue of their abutting a golf course view, and then having it replaced by the view of solar panels.

The North Carolina Utilities Commission gave its approval for the facility in January 2015. Based on concerns from the neighbors regarding its incompatibility with neighboring residential lots, the Currituck County Planning Board denied Ecoplexus a permit in April 2016. The solar company filed suit, and in March 2017, a Superior Court judge upheld the county's decision to turn down the project. However, on appeal, the North Carolina Court of Appeals overturned the decision in December 2017. The project was constructed in 2019.

The solar farm is surrounded by 62 properties, which consist predominantly of single-family lots and improved tracts on Grandy Road and Uncle Graham Road. The east side, on Caratoke Highway, is predominantly improved with commercial tracts. The northern property line abuts a single-family subdivision, Carolina Club, that also encircles a second golf course.

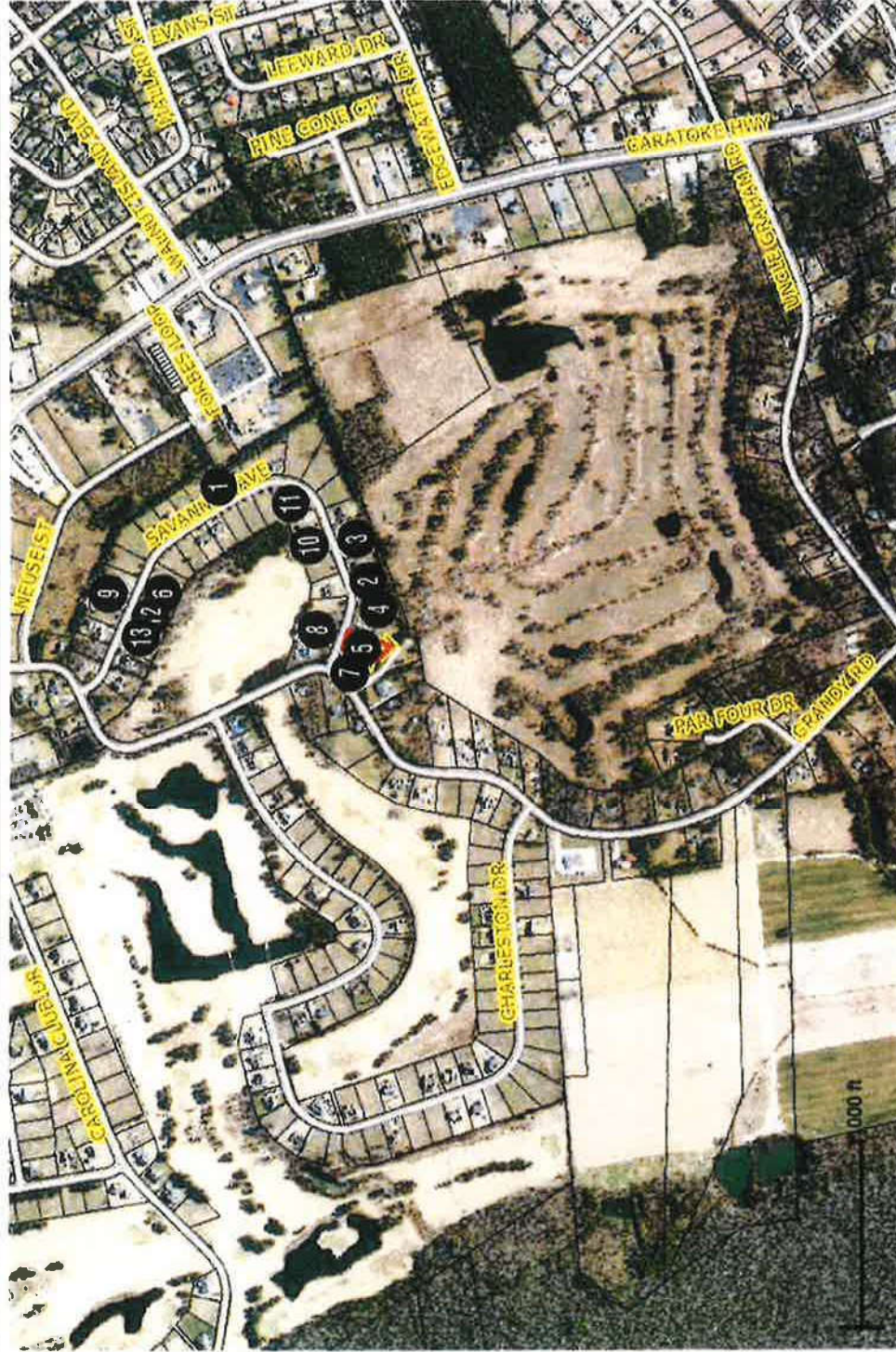
All the properties that encircle the solar farm were examined for sale-resales prior to and after the knowledge of the proposed golf course. Since there were no sale-resales, which are the most reliable measure of damage since they require the least adjustment, the only sale-resales available to analyze were the vacant lot sales from the adjacent Carolina Club Subdivision on Savannah Drive.

The following chart and map represents two groups of sales—those abutting the solar farm or commercial uses and those not abutting. Sale Nos. 1 through 5 represent the former, while Sale Nos. 6 through 13 represent the latter. Sales No. 1, No. 2 and No. 3 contain approximately 0.50 acre and sold in mid-2017 for \$27,000 to \$28,000, or an average of \$27,500. Sale No. 4 is larger, containing 0.870 acres and sold for \$29,500 during this same

GRANDY, NORTH CAROLINA SINGLE FAMILY LOT SALES

| SALE | PARCEL ID | ADDRESS | GRANTOR | GRANTEE | DB/PAGE | SALE PRICE | LOT SIZE | SP/SF | SALE DATE | COMMENTS |
|--|-----------|--------------|----------------|-------------------|----------|------------|----------|--------|-----------|---------------------------|
| Lots Abutting Solar Farm or Commerical Use | | | | | | | | | | |
| 1 | 94G-16 | 125 Savannah | George Mills | Earl Thomas Hall | 1404-149 | \$27,000 | 0.510 | \$1.22 | 4/25/17 | Abutts Commercial at Rear |
| 2 | 94G-5 | 147 Savannah | Wm Weatherly | Branden Shuler | 1404-848 | \$27,000 | 0.580 | \$1.07 | 4/28/17 | Abutts Solar Farm |
| 3 | 94-G | 143 Savannah | Wm Weatherly | Roger Mihovch | 1404-848 | \$28,000 | 0.460 | \$1.40 | 6/20/17 | Abutts Solar Farm |
| 4 | 94G-4 | 149 Savannah | Wm Weatherly | David A. King | 1402-737 | \$29,500 | 0.870 | \$0.78 | 7/13/17 | Abutts Solar Farm |
| 5 | 94G-2 | 153 Savannah | Rodney Blake | G. Romero-Mendez | 1465-529 | \$30,000 | 0.510 | \$1.35 | 12/10/18 | 2 Lots NW of Solar Farm |
| Lots Not Abutting Solar Farm or Commerical Use | | | | | | | | | | |
| 6 | 94G-35 | 112 Savannah | Jeff Weatherly | Frasca Custom Hms | 1425-482 | \$32,500 | 0.460 | \$1.62 | 11/15/17 | |
| 7 | 94G-1 | 155 Savannah | Keith Ostrom | Hunter D. Wright | 1447-837 | \$35,000 | 0.490 | \$1.64 | 06/15/18 | |
| 8 | 94G-5 | 142 Savannah | Michael Mills | Lutz Quality | 1510-321 | \$35,000 | 0.460 | \$1.75 | 12/17/18 | |
| 9 | 94G-24 | 109 Savannah | John Peterson | Michael Locicero | 1430-662 | \$33,000 | 0.450 | \$1.68 | 01/09/18 | |
| 10 | 94G-46 | 134 Savannah | Bernard Hall | Anthony Leete | 1534-847 | \$37,000 | 0.460 | \$1.85 | 05/11/20 | |
| 11 | 94G-44 | 130 Savaanah | John Bergstrom | Scott Shaker | 1601-332 | \$38,500 | 0.610 | \$1.45 | 02/23/21 | |
| 12 | 94G-34 | 110 Savannah | Jonathan Thau | Kelly Coon | 1591-766 | \$38,000 | 0.460 | \$1.90 | 01/14/21 | |
| 13 | 94G-33 | 108 Savannah | Lina Ward | Joagin Salazar | 1618-635 | \$37,400 | 0.460 | \$1.87 | 04/27/21 | |

Currituck County GIS Data Viewer



Currituck County GIS

Phone: (252) 232-2034

E-mail: gis@currituckcountync.gov

This map should be used for general reference purposes only. Currituck County assumes no legal liability for the information shown on this map.

period. Though Sale No. 5 did not abut the solar farm, it was only two lots to the northwest. This sale sold in late 2018 for \$30,000.

Sale Nos. 6 through 13 sold between late 2017 and mid-2021. These sales are 0.50 acre in size and ranged in price from \$32,500 in 2017 to \$38,500 in 2021.

Comparing the two groups of sales from 2017 indicates a range in price from \$27,500 to \$32,500, or a **difference of -15.38 percent.**

There is insufficient data to determine if the lots that adjoin the solar farm continue to increase in value at the same or a reduced rate as the rest of the local market, or if their value stabilized. Nonetheless, this case study indicates a minimal diminution of **-15.50 percent R** as a result of their proximity to the solar farm. This diminution in value reflects an ordinance that requires a **300.0 linear feet setback for the solar panels from the residential property line; no chemicals can be used to control vegetation throughout the life of the project; and the solar farm had to submit a decommissioning plan.**

Among the neighboring property owners' concerns during the permitting process was the potential damage to their residences in the case of a hurricane. The developer claimed that the arrays would withstand winds up to 120 miles per hour. However, the effect of Hurricane Dorian in 2019 was that dozens of frames and panels were mangled even though the storm was 50 miles offshore and the winds were 60 miles per hour. This is an example of the solar developer's misrepresentation and the unpredictable nature of the impact of an unstable structure occupying immense areas of land.

SPOTSYLVANIA SOLAR CASE STUDY – PAIRED SALES ANALYSIS

Spotsylvania Solar in northern Spotsylvania County Virginia, adjoining the 2,350 acre Fawn Leaf gated community to the south. The development consists of 1,398 single family lots with 900 residences and a 288.0 acre lake. Home prices range from the high \$500,000s to \$2,500,000. Of the 1,398 single family lots, 1,080 have sold, leaving a current inventory of 318.

Spotsylvania Solar is a 617 MW industrial scale electrical generating plant, comprised of four solar phases—Pleinmont 1, Pleinmont 2, Richmond and Highlander. The project sites contain a total of 6,350 acre of which 3,500 will be developed with solar panels. The developer is sPower who merged with AES in 2020. The project was announced in 2018 and approved in April 2019. Approximately half of the project was completed in July 2021 with the remaining anticipated to be completed in the fall of 2021. The surrounding areas to the east, west and south are rural, yet populated.

The northeastern most portion of Site A adjoins the Fawn Lake subdivision at the development's southwestern property line as indicated on the following aerial photograph. The chart following represents five land sales that occurred before and after the knowledge of the solar farm. A plat of the five lots follows.

Land Sales No. 1 and No. 2 occurred in 2015 indicating a range of values from \$85,000 to \$90,000 depending on size. Sale No. 3 is a 2017 sale that adjoins the site of the future solar farm, which is a slightly more remote location than the prior sales abutting the main road. This property sold for \$77,250.

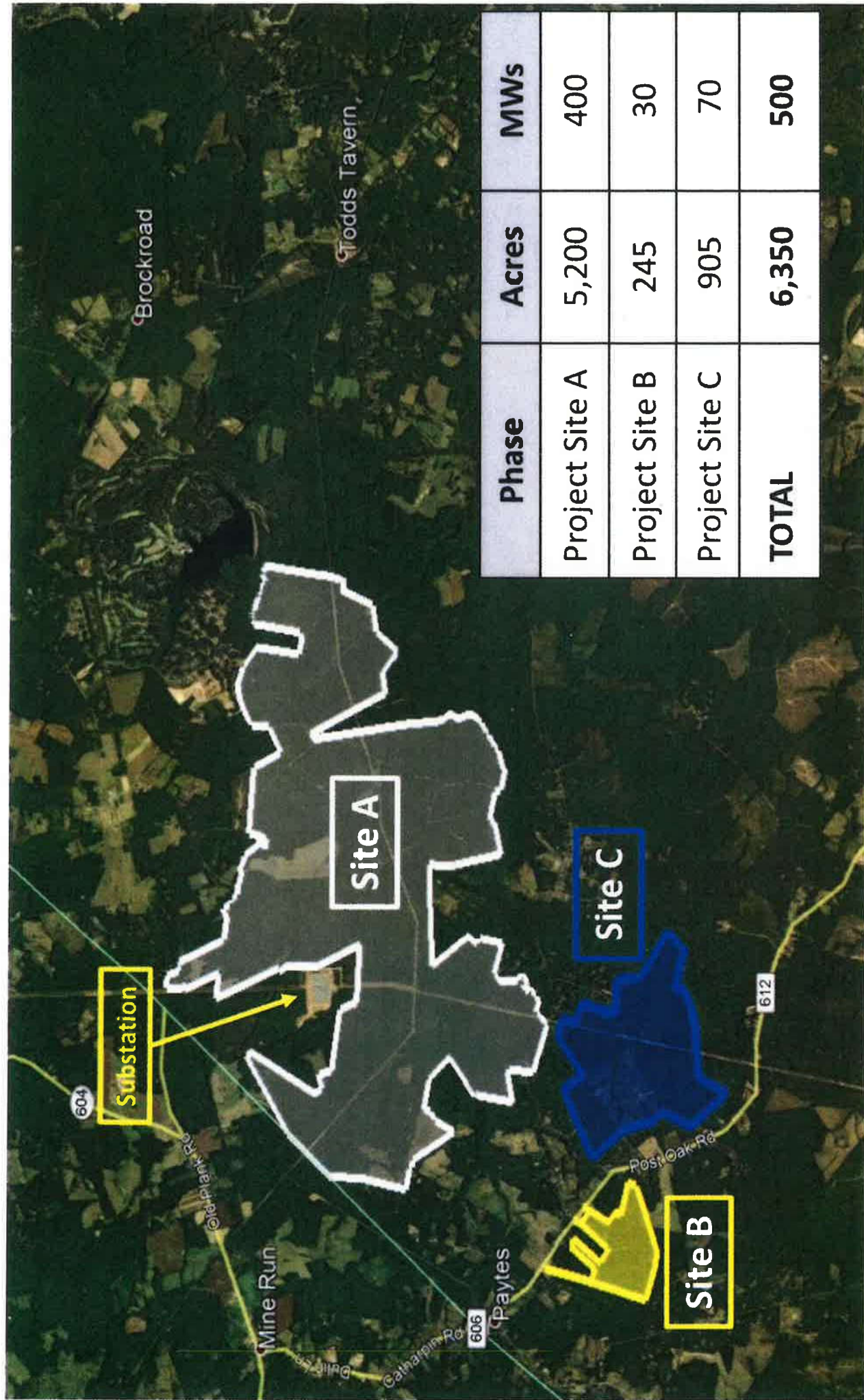
Sale No. 4 and 5 represent land sales that occurred after the approval of the solar farm. Sale No. 4 is at the corner of the main road and are in Site A. The lots on Bander Way and Southview Hill are also in Site A. This sale sold for \$65,000, while Sale No. 5, which adjoins the solar farm sold for \$55,000.

Comparing Sales No. 3 and 5 without any adjustment for market change (time)
indicates a diminution in value of a minimum of -30.0 percent.

Comparable Sale No. 3: \$77,250

Comparable Sale No. 5: \$55,000

Difference: \$22,500, or -28.8, or -30.0 percent (R)



| Phase | Acres | MWs |
|----------------|--------------|------------|
| Project Site A | 5,200 | 400 |
| Project Site B | 245 | 30 |
| Project Site C | 905 | 70 |
| TOTAL | 6,350 | 500 |

**FAWN LAKE LOT SALES
SPOTSYLVANIA SOLAR**

| NO. | ADDRESS | GRANTOR | GRANTEE | DATE | PRICE | SIZE | SP/SF | DB INST | MAP | COMMENTS |
|-----|--------------------|------------------|----------------------|----------|----------|--------|--------|----------|--------------|---------------------------------------|
| 1 | 11200 Brander Way | Simply Home LLC | Christopher Pichurko | 03/17/15 | \$90,000 | 32,470 | \$2.77 | 0003 960 | 18C-43-1-205 | Interior Lot, North of Brandermill Pk |
| 2 | 11709 Southview CT | Simply Home, LLC | Bernard J. Logan | 06/25/15 | \$85,000 | 23,599 | \$3.60 | 0010 297 | 18C-43-1-192 | Interior Lot, North Side of Southview |
| 3 | 11602 Southview CT | NA | Casey Pence | 11/03/17 | \$77,250 | 30,122 | \$2.56 | 0019 899 | 18C-43-1-183 | Adjoins Solar Farm, S. Side SV |
| 4 | 11009 Southview HL | NA | Mark S. Wilson | 08/05/19 | \$65,000 | 26,893 | \$2.42 | 0012 434 | 18C-43-1-177 | SE Corner of Brandermill & SV HL |
| 5 | 11700 Southview CT | NA | Charles Pattillo | 09/27/19 | \$55,000 | 32,958 | \$1.67 | 0016 191 | 18C-43-1-185 | Adjoins Solar Farm, S. Side SV |



July 29, 2021

 Tax County Boundary

1:9,028
0 0.05 0.1 0.2 mi
0 0.07 0.15 0.3 km

EXHIBIT H

MARY MCCLINTON CLAY, MAI
218 Main Street
Paris, Kentucky 40361
859-987-5698

KENTUCKY ENVIRONMENTAL DAMAGE STUDIES

In the event that there is insufficient sales data within a subject area to extract an indication of diminution of value as a result of a specific detrimental condition, it is acceptable appraisal methodology to use another location with sufficient data or a similar detrimental condition with similar diminution upon utility as a proxy for the subject area or detrimental condition.

The following summary of environmental damage studies conducted by this office include the following detrimental conditions: ground water contamination by tannery sludge; animal odors; leaking underground storage tanks; cell tower and transmission line easements; fugitive particulate emissions (dust), and airport proximity.

GROUND WATER CONTAMINATION

The ground water contamination study was prepared for the plaintiffs in *Yellow Creek Concerned Citizens v. Middlesboro Tannery*. This study estimated the effect of tannery contamination on 350 properties along Yellow Creek, in Bell County. This study was conducted after city water had replaced well water in the affected watershed. The analysis compared affected sales along Yellow Creek and associated Williams Creek with three creeks upstream that were not contaminated. The multiple regression analysis found that there was residual diminution in value of **-16.5 percent** for improved properties and **-22.00 percent** for unimproved land.

ANIMAL ODORS

A damage study prepared for the case *James E. Sullivan, et al v. Board of Regents, et al* estimated the effect of an animal waste fermentation project at the Organic Pasteurization

Plant at North Farm of Murray State University on Sullivan's Executive Par 3 Golf Course and Sports Center and on-site residential improvements in Murray. An income analysis of the golf course before and after the construction of the "manure cooker" indicated that the golf course was damaged 28.00 percent. Based paired sales analysis of dwellings within proximity to chicken houses, it was estimated that the two residential improvements had diminution in value from **-21.0 to -28.0 percent**.

Two studies in western Kentucky measure the effect of hog barns on proximate vacant land and residential properties. The first study estimated the damage of hog barns on residential properties in five western Kentucky counties including Calloway, Graves, Carlisle/Hickman, Warren and Davies. Sales data to within 2.00 miles of hog barns were analyzed using matched pairs. The study indicated that vacant land values within one mile of a hog barn diminished approximately 40.0 percent, while improved properties declined between 26.7 and 11.00 percent depending on their proximity to the barn. This study was prepared for the case of *Gene Nettles, et al v. Environmental and Public Protection Cabinet; Division of Water, David Morgan, Director, and J.P. Amberg Hog Farm*.

The second study was prepared for the case *Terry Powell, et al v. Tosh, et al*. This study estimated the diminution of value as a result of proximity to 5,000 hog confined animal feeding operations (CAFOs) in Marshall County. The results of the paired sales study were that improved properties adjacent to or within approximately 0.25 miles to hog farms are damaged approximately **-50.0 percent**. Properties from approximately 0.5 mile to 1.25 miles are damaged **-25.0 percent**. Farms beyond 1.25 miles to 1.5 miles and/or those adjacent to agricultural fields that may experience routine manure spreading are damaged approximately **-10.0 to -12.0 percent**. Vacant land was damaged **-40.0 percent**.

LEAKING UNDERGROUND GASOLINE STORAGE TANKS

This study was prepared for the case *Terrence G. Kerschner, et al v. Burley Oil Company, et al*. The study estimated the effect of leaking underground gasoline storage tanks

on Country Lane Estates in Frankfort and, specifically, on a residence where the petroleum surfaced. The results of this study was that the property most affected by the leak was damaged **-100.0 percent**, with adjoining properties damaged **-50.0 percent** and the remaining properties within the subdivision were damaged **-20.0 percent**.

CELL TOWERS AND HIGH VOLTAGE TRANSMISSION LINES

The overhead transmission line study was prepared for the case *Kentucky Utilities Company v. James and Mary Jent, CDH Preserve, LLC and Farm Credit Services of Mid-America, FLC, Violet Monroe* and estimated the effect of High Voltage Transmission Lines on three Hardin County agricultural properties. The study was later expanded to include cell towers in a Bourbon County property division dispute.

The paired sales analysis indicated a range of diminution in value as a result of the encumbrance of high voltage transmission lines (HVTL) on agricultural properties. The amount of damage is the result of the degree to which HVTL impact the utility and degree of trespass upon the bundle of rights. The study indicated a range of diminution in value from minimal impact of **-12.0 percent** to a **maximum of -50.0 percent** depending on the placement of the easement within the property.

The study also indicated buyer resistance to lots impacted by HVTL. Two subdivisions in the same area were analyzed—one with and one without the encumbrance. The subdivision without the easement consists of 14 lots that sold from 2005 until 2011, with the absorption rate of 2 lots per year. The other is significantly encumbered by the transmission line. This subdivision consists of 16 lots of which only 6 have sold from 2007 to 2011, or 1.2 lots per year. The transmission line diagonally traverses the remaining lots, which had yet to sell when the study was conducted in 2012.

With respect to the effect of cell towers on agricultural property a paired sales analysis was made between two farms on opposite sides of the road in Bourbon County. The

analysis indicated a **-24.28 percent** damage to the farm. The comparison indicates buyer resistance and damage as a result of proximity to vertical structures similar to HVTL.

FUGITIVE PARTICULATE EMISSIONS

This study examined the condition of Claremont Acres, a single-family residential subdivision in the closest proximity to the Louisville Gas and Electric Plant (LG & E) at 5252 Cane Run Road in western Louisville. This four street subdivision was developed in the late 1960s and consists of predominantly 1,000 square foot masonry ranch houses with detached garages. The subdivision abuts a single row of dwellings which front along Cane Run Road on the south side of the street opposite the LG & E facility. The properties suffered from air borne dust contamination from coal ash landfills that were expanded in 2010. The most affected properties were 300 feet southeast of the ash pond, 2,500 feet from the ash landfill, and 3,000 feet from the stacks. The Claremore Acres properties that suffered from the dust, which the EPA tested were 0.31 to 0.45 miles from the Cane Run generating plant.

The study documented an **overall diminution in value of -25.8 percent for properties within approximately 0.50 mile of the source of the detrimental condition.**

PROXIMITY TO REGIONAL AIRPORT

This 2019 study of a Kentucky regional general aviation airport was prepared for the case, *Mary Williams v. Henderson City-County Airport Board*. The study examined three 5.00 acre residential subdivisions in the vicinity of the Georgetown-Scott County Regional Airport. The control subdivision was 1.75 miles southwest of the runway. The two impacted subdivisions were within 0.33 and 0.50 miles northwest of the runway.

The study indicated a **diminution of -20.5 percent as a result of being within 0.5 mile west of the beginning of the Runway Protective Zone (RPZ) and diminution of -20.18 percent for lots abutting the RPZ from approximately the mid-point to the end. Lots within the RPZ indicated a diminution of -50.15 percent.**

DRAINAGE AND EROSION

A 2021 storm water drainage study was prepared for the Henderson County, Kentucky case, *Patricia Kushino, et al v. Federal Aviation Administration, et al*. This study estimated the diminution in value of an 80.00 acre woodland that was part of the 183.90 acre Williams Farm. The property was negatively impacted by the construction of a drainage ditch from the adjacent regional airport. Prior to the drainage ditch the woodland had natural drainage and a healthy stand of hardwood trees. After construction it suffered from constant flooding and become non-productive. The estimated contributing value of the woodland prior to the damage was \$3,000 per acre and after construction, its contributing value was \$850 per acre, or a **loss of -72.00 percent**.

A 2012 drainage study was prepared for the Fayette County case, *Jerry Whitson v. Donnie Cross*. This study involved the diminution in value to a rural residential tract improved with a dwelling a horse barn used for layups at the Kentucky Training Center. The property was encumbered by drainage from a pond on the adjoining tract which accumulated for extended periods of time at the front of the horse barn. The extent of the drainage rendered the horse barn non-contributing to the overall property value based on the expectations of the rental market for stalls. Although the contributing value of the horse barn was \$55,000, the cost to cure was less at \$32,614. Therefore, the estimate of damages was **-13.0 percent**.

EXHIBIT I

LANDSCAPING AND UTILITY SCALE SOLAR PROJECTS

One of the flaws in the impact studies prepared by solar developer's appraisers is the belief that the that the proposed screening of a 7.0 foot wire mesh fence with 1 feet of barbed wire and two rows of staggered 8.0 foot high evergreens at maturity would result in the solar facility being the scenic equivalent of the existing natural agricultural landscape.

In addition to my studies of McBride Place Solar, Grandy Solar and Pleinmont Solar (Spotsylvania), in Exhibit G, I realized three of Richard Kirkland solar project matched pairs analysis. These include Mulberry Solar, Simon Solar and Candace Solar.

Mulberry Solar is a 16 MW plant in Selmer, Tennessee. The sales data included two similar sized sales—one 1.70 acre tract that adjoined the solar farm sold for \$14,000 (bracketed by a \$12,000 and \$16,000 sale) and two 1.67 acre tracts that sold for \$20,000 that did not adjoin the solar farm. These two examples met the test of comparability with exception of the solar farm, which is the definition of a proper paired sale. The difference between these two sales is -30.0 percent.

Simon Solar is a 30 MW facility in a rural area in Social Circle, Georgia. This paired sales analysis considers the effect of the solar plant on a 36.86 acre tract adjoining the solar plant to the south. The 36.86 acre tract was sold in two parcels that are separated by the access lane to two flag lots at the rear of the 20.5 acre tract adjoining the solar farm and the 16.36 acre tract to the southeast. The two lots fronting on Hawkins Academy Road were transferred in the same deed (DB 3891, Page 481) on March 31, 2016. An existing easement meanders through the two tracts what lead to the rear northwest flag lot which was originally owned by the grantor of both tracts. Presumably, the access lanes of the flag lots will provide the ultimate access to the rear residential tracts. The fact that the 20.5 acre tract and the 16.36 together sold as two platted tracts would offset the current easement access.

The combined 36.86 acres sold for a total of \$180,000, or \$4,883 per acre. This is also the same per acre value of each of the two individual lots.

The following graph depicts the 36.86 acre tract and the following three control sales selected by Kirkland.

| <u>Address</u> | <u>Acres</u> | <u>Date</u> | <u>Sale Price</u> | <u>SP/Ace</u> |
|----------------|--------------|-------------|-------------------|---------------|
| 4514 Hawkins | 36.86 | 03/31/16 | \$180,000 | \$4,883 |
| HD Atha | 69.95 | 12/20/16 | \$357,500 | \$5,111 |
| Pannell | 66.94 | 11/08/16 | \$322,851 | \$4,823 |
| 1402 Roy | 123.36 | 09/29/16 | \$479,302 | \$3,885 |

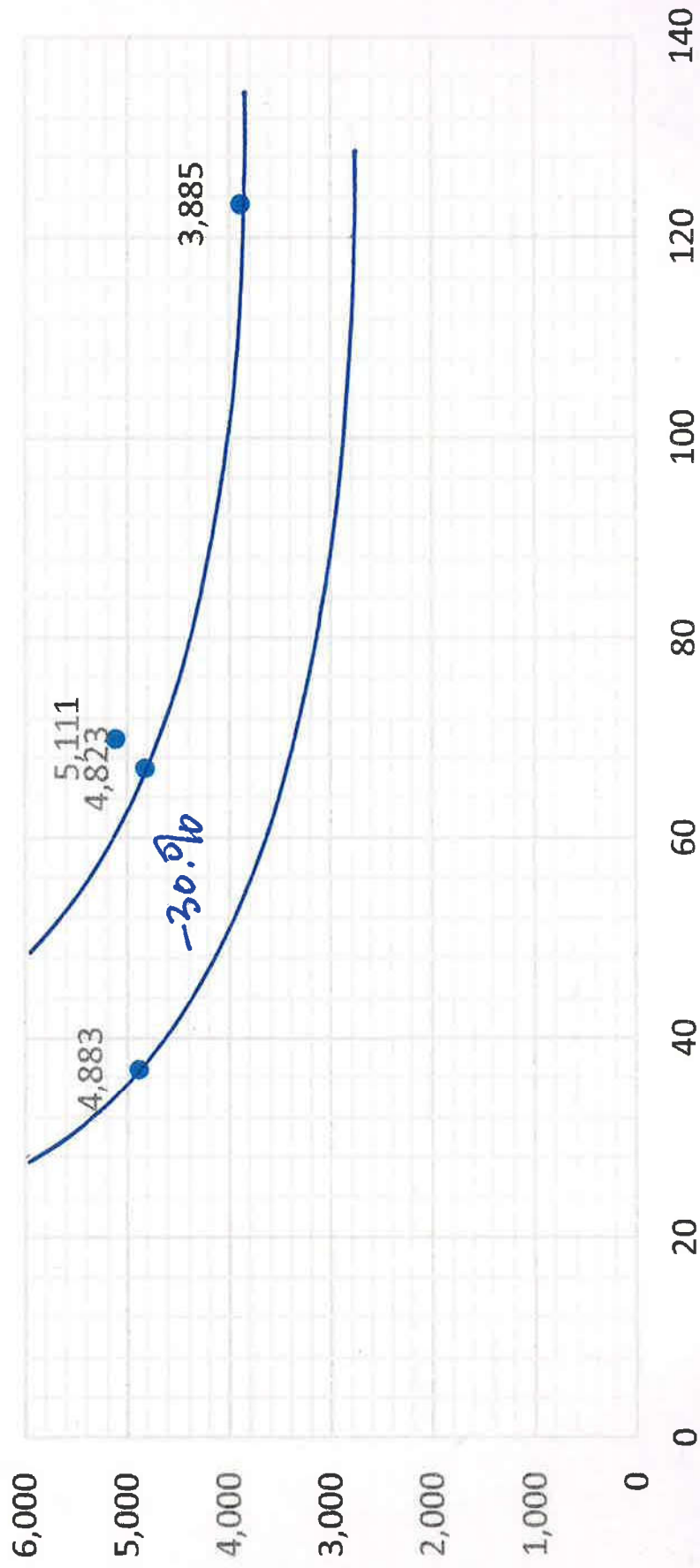
When graphed against the other three sales used by Kirkland, which were 2 to 3 times larger than the subject, the difference was -30.0 percent. The graph is on the following page.

The property line of this small agricultural tract was approximately 300.00 linear feet south of the nearest solar panel and had 100.00 foot mature tree stand between the property line and the solar farm. However, the elevation of the subject property was above that of the solar farm providing a view of the solar farm.

It is also notable that the -30.0 percent adjustment for this vacant agricultural tract corresponds to the -30.0 percent adjustment for vacant single family lots in the Selmer, Tennessee and Spotsylvania case studies.

Candace Solar, a 5 MW facility is in Princeton, North Carolina. This example is based on a 2.03 acre sale at 499 Herring Road that abuts the solar farm at its rear property line. The dwelling that was subsequently placed on it is within 450.0 linear feet of the nearest solar panel but separated by a 250.0 foot depth of dense woodland. Graphing the subject and the sales used by Kirkland indicates that the proximity of the subject to the solar farm resulted in a -13.0 percent diminution in value. This lesser amount is reasonable since the solar farm is at the rear of the property.

No. 11 Simon Solar



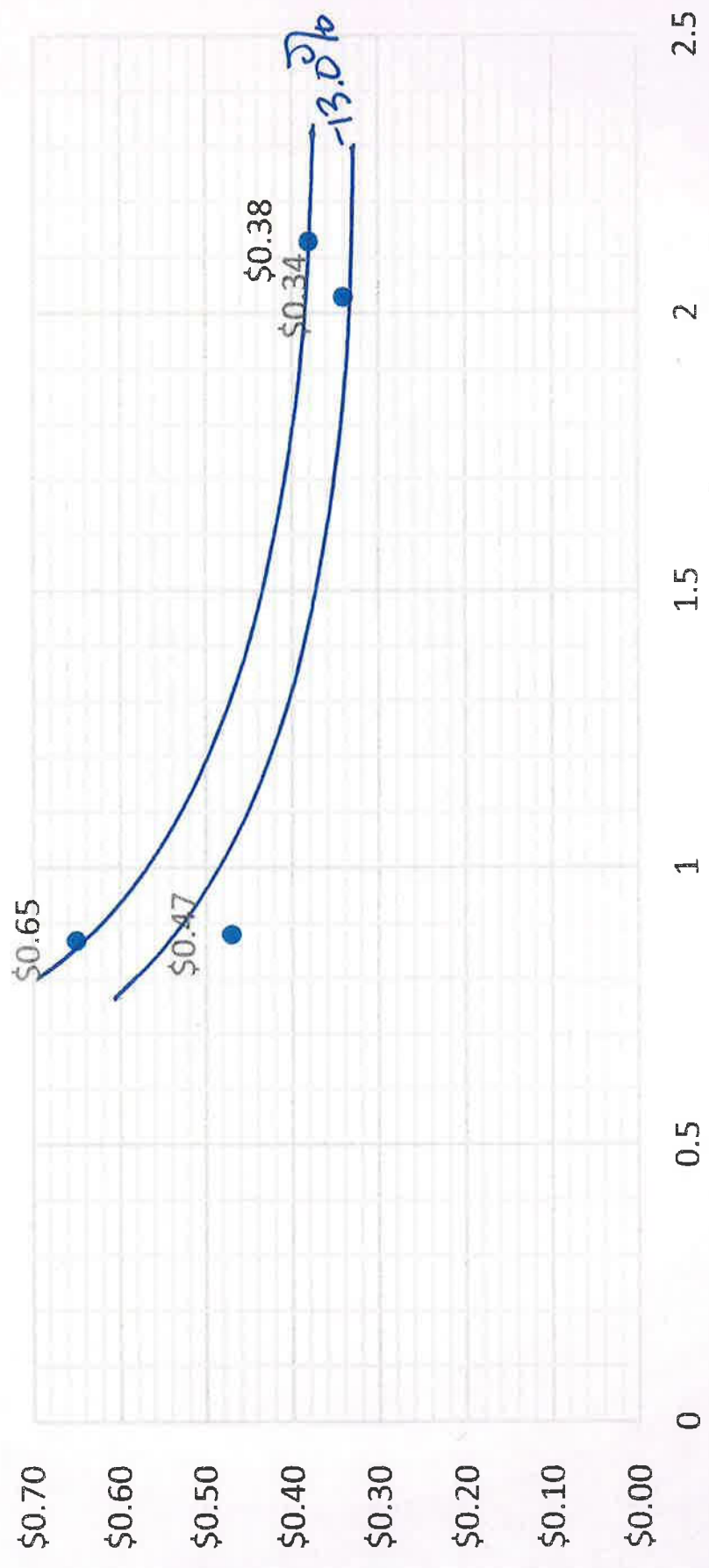
| <u>Address</u> | <u>Acres</u> | <u>Date</u> | <u>Sale Price</u> | <u>SP/SF</u> |
|----------------|--------------|-------------|-------------------|--------------|
| 499 Herring | 2.03 | 05/01/17 | \$30,000 | \$0.34 |
| 37 Becky | 0.87 | 07/23/19 | \$24,500 | \$0.64 |
| Pannell | 0.88 | 08/17/16 | \$18,000 | \$0.47 |
| 1402 Roy | 2.13 | 12/20/16 | \$35,000 | \$0.38 |

The non-adjoining sales include an 0.87, an 0.88 acre tract and a 2.13 acre tract. The most relevant sale is the latter which is opposite the adjoining sale on the west side of Herring Road. It is 950.0 linear feet west of the solar farm and the front of this yard has a dense tree stand. Based on the following graph which depicts the per square foot values of the sales, the larger tract sold for \$0.38 per square foot while the smaller tract sold for \$0.34 per square foot. Adjusting the larger tract \$0.01 per square foot for size, based on the graph, to \$0.39 per square foot the indicated diminution in value for the adjoining lot is -13.0 percent. This indication is consistent with the McBride lots that had some woodland visual protection from the abutting solar farm, as well as the Grandy case study.

McBride Place, had four sale-resales of the same properties. Sale-resales are the most accurate method of determining damage because they compare an earlier sale of the same property with a later sale. The only difference being the addition of the solar farm. These three properties indicated a range of diminution in value from -15.51 percent to -16.44 percent. In addition, there was a fourth sale, although it did not have a prior sale with which to compare it. However, it is notable that the assessment was -16.81 percent lower than the recent sale post construction of the solar farm.

The Grandy Solar example, is based on the sales from the subdivision abutting the former golf course at its north property line. A comparison of the five sales that abut the solar farm of \$27,500 to eight sales within the subdivision that do not abut of \$32,500 indicates a consistent difference of -15.50 percent. The sales that abut the solar farm are approximately 400.0 linear feet from the nearest solar panel, with a setback of 300.00 feet. In addition, there is a 75.0' wide mature tree stand at the rear property line. This example indicates that the

Candace Solar



value of residential lots with the solar farm at the rear and with a 300.00 foot setback and landscaping are damaged -15.50 percent.

The Pleinmont Solar Case Study is from a 6,412 acre solar farm in Spotsylvania County, VA. This office identified five lots that are in a section of Fawn Lake subdivision that adjoin the solar farm. Two of the sales abut the solar farm at their rear property line. Although these lots are wooded, the solar farm land was clear cut and the only barrier is that prescribed by the ordinance. The most recent lot abutting the solar farm sold for \$55,000 compared to the most comparable that did not abut at \$77,250. The difference between these two lots was -30.0 percent. This case study indicates that the greater the value the more adversely solar farms affect adjoining properties, all things being equal. Also, the less dense natural woodland buffer the more solar farms adversely affect adjoining properties. In other words, a couple of staggered rows of arborvitae, even at 8 feet, are not going to mitigate the negative impact of solar farms.

The following charts summarize the evidence refuting the solar developer's appraisers claim of no proximity damage with screening prescribed by ordinance.

Those case studies indicating damage of -15.0 percent were from McBride Place, Candace Solar and Grandy Solar. These analyses are of single family lots that abut the solar farm and have all have varying degrees of buffering in terms of tree stands or dense woodland.

| <u>Solar Plant</u> | <u>Distance to Nearest Panel</u> | <u>Buffering</u> |
|-----------------------------------|----------------------------------|--------------------------|
| McBride Place \$400,000+/- SFR | 550.0', 350.0', 500.0+ | 400.0'+/- Dense Woodland |
| Candace Solar \$30,000 Lot | 450.0' | 250.0' Dense Woodland |
| Grandy \$28,000+/- Lots | 400.0+/- | 75.0' Mature Tree Stand |

The case studies indicating -30.0 percent damage include Mulberry Solar, Simon Solar and Pleinmont Solar, which have minimal buffering or a clear view of the solar plant.

| <u>Solar Plant</u> | <u>Distance to Nearest Panel</u> | <u>Buffering</u> |
|---------------------------------|----------------------------------|--|
| Mulberry Solar \$14,000 Lot | 450.0' | Minimal Tree Stand |
| Simon Solar 36.86 Acres | 300.0' | 100.0' Mature Tree Stand Elevation Above Solar Farm |
| Pleinmont Solar \$55,000 Lot | Unknown | 200.0' +/- Woodland Lot No natural Buffer-Ordinance |

Based on the available documented evidence it is estimated that the solar farms adversely impact single family lots and improved residential properties -15.0 percent for properties that are within approximately 500.00 feet of the solar panels and have a dense mature woodland buffer of at least 75.0 feet.

The above data also indicate that solar farms adversely impact single family lots and agricultural tracts of up to 40.0 acres -30.00 percent for properties that are within 450.0 feet of the solar panels and have minimal natural buffering or a clear view of the solar facility.

1
2 **CERTIFICATE OF SERVICE**
3

4 I hereby certify that, on February 28, 2022, a copy of the foregoing written direct
5 testimony was served by electronic mail on the following: Jodi Bair at
6 Jodi.Bair@ohioattorneygeneral.gov; Daniel A. Brown at dbrown@brownlawdayton.com; Kevin
7 Dunn at kdd@planklaw.com; John Hart at jehartlaw@gmail.com; Werner Margard III at
8 Nathaniel B. Morse at nbmorse@vorys.com; Werner.Margard@ohioattorneygeneral.gov;
9 Michael Settineri at mjsettineri@vorys.com; Lee Slone at lee.slone@dinsmore.com; Charles
10 Swaney at cswaney@woh.rr.com; David Watkins at dw@planklaw.com; Anna Sanyal at
11 aasanyal@vorys.com; Nathaniel Morse at nmorse@vorys.com; Thaddeus Boggs at
12 tboggs@fbtlaw.com; Chad A. Endsley at cendsley@ofbf.org; Amy M. Milam at
13 amilam@ofbf.org; and Leah F. [Curtis at lcurtis@ofbf.com](mailto:Curtis@lcurtis@ofbf.com).

14 /s/ Jack A. Van Kley
15 Jack A. Van Kley
16

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Commission of Ohio Docketing Information System on**

2/28/2022 5:07:50 PM

in

Case No(s). 21-0117-EL-BGN

Summary: Testimony of Mary Clay electronically filed by Mr. Jack A. Van Kley on
behalf of Citizens for Greene Acres & Its Member Intervenors