



PROPERTY VALUE IMPACT STUDY

- 1

ADJACENT PROPERTY VALUES SOLAR IMPACT STUDY A STUDY OF SEVEN EXISTING SOLAR FARMS

Located in Jefferson County, Colorado; LaSalle County, Illinois; Frankton, Porter, and Marion Counties, Indiana; and Chisago County, Minnesota

PREPARED FOR:

Mr. Jonathan Fitzpatrick Director, Project Development Pivot Energy

SUBMITTED BY:

CohnReznick, LLP Valuation Advisory Services 200 S Wacker Drive, Suite 2600 Chicago, IL 60606 (312) 508-5900

Andrew R. Lines, MAI Patricia L. McGarr, MAI, CRE, FRICS

September 14, 2018



EXECUTIVE SUMMARY

The purpose of this real estate impact study is to determine whether the existing solar farm use has had any measurable impact on the value of adjacent properties.

According to the Solar Energy Industries Association (SEIA) 2017 statistics, Colorado had 1,020 Megawatts (MW) of solar panels installed as of year-end 2017, Minnesota had 850 Megawatts (MW) of solar panels installed, Illinois had 83.8 Megawatts (MW) of solar panels installed, and Indiana had 275.6 MW of solar panels installed.

As we are studying the impact of this use on adjacent property values in Colorado and the Midwest specifically, we have only studied established solar farms in Colorado and the Midwest; this is primarily due to the fact that this is an emerging industry in many states and is more established is some states than others. This has provided us a better opportunity to study a larger number of **existing facilities** and the property value trends of the properties adjacent to them.

We have included several of these established solar farms in Colorado, Illinois, Indiana, and Minnesota, focusing on similar rural and suburban areas with neighboring residential homes, that we believe are comparable to those locations proposed in Colorado. Solar farms with a variety of output capacities have been studied because of the existence of residential homes within close proximity. With sales of these adjacent properties, we are able to analyze the property value trends in similar locations as the proposed solar farms.

Study Features

Our study includes research and analyses of seven existing solar panel farms and the property value trends of the adjacent land uses, including agricultural, single family and residential properties; review of published studies, and discussions with market participants, summarized as follows:

- Solar Farm A (North Star Solar Farm) is located near the City of North Branch, in unincorporated Chisago County, Minnesota. The solar farm is a 100 MW solar farm that is situated on approximately 1,000 acres of land and is surrounded by agricultural land uses and some residential uses.
- Solar Farm 1 (*Jefferson County Community Solar Garden*) is located just outside the city limits of Arvada, in unincorporated Jefferson County, Colorado. The solar farm is adjacent to the Whisper Creek residential development. The surrounding uses consist of vacant land to the north and east, a horse and alpaca farm to the south, and residential uses such as single family homes to the west. We found three adjoining properties that qualified for a paired sales analysis.
- Solar Farm 2 (Grand Ridge Solar Farm) is located near the City of Streator in LaSalle County, Illinois, in a primarily rural area, on two contiguous parcels totaling 160 acres. Surrounding uses consist of agricultural land, some with homesteads, and single family homes to the northwest. We found one adjoining property that qualified for a paired sales analysis.



- Solar Farm 3 (*Portage Solar Farm*) is located near the City of Portage, in Porter County, Indiana. This solar farm is situated in a residential area on a 56-acre parcel of land. The surrounding uses consist of agricultural land to the north and east, and residential uses such as single family homes to the west and northwest, and multifamily apartments to the south. We found two adjoining properties that qualified for a paired sales analysis.
- Solar Farm 4 (*IMPA Frankton Solar Farm*) is located in the Town of Frankton, in Madison County, Indiana. This solar farm is situated in a fairly rural area and is located on a 13-acre parcel. The surrounding uses consist of single family homes to the east, agricultural land to the south, west, and north, and some baseball fields as well. We found two adjoining properties that qualified for a paired sales analysis.
- Solar Farm 5 (Dominion Indy Solar Farm III) is located in a suburban, yet rural area outside of Indianapolis, in Marion County, Indiana, on a parcel totaling 134 acres. The surrounding uses consist of agricultural land to the east, west and south, and a single-family subdivision to the north. We found eight adjoining properties that qualified for a paired sales analysis.
- Solar Farm 6 (Valparaiso Solar Farm) is located near the City of Valparaiso, in Porter County, Indiana. This solar farm is situated in a fairly rural area on two contiguous parcels totaling 27.9 acres. The surrounding uses consist of vacant land to the north, and single family homes to the east, south and west. We considered two adjoining properties that which qualified for a paired sales analysis.
- We performed a paired sales analysis for each adjoining property that fit the criteria for analysis that were
 adjacent to the solar farms we studied. The sales adjacent to solar farms, or Test Areas, were compared
 to agricultural land sales or single family home sales not adjacent to solar farms within the same county
 or geographical area as the subject solar farms, or Control Areas.
- We analyzed 18 adjoining property sales in Test Areas and 69 comparable sales in Control Areas, collectively, for the Jefferson County Community Solar Garden, Grand Ridge Solar Farm, the Portage Solar Farm, the IMPA Frankton Solar Farm, the Dominion Indy III Solar Farm, and the Valparaiso LLC Solar Farm, over the past five years. We conducted only a qualitative analysis for the North Star solar farm.

Methodology

The basic premise of this comparative analysis is that if there is any impact on the property values, by virtue of their proximity to a solar farm, it would be reflected by such factors as the range of sale prices, differences in unit sale prices, conditions of sale, and overall marketability. When comparing these factors for properties near the solar farm to properties locationally removed from the solar farm, we would expect to see some emerging and consistent pattern of substantial difference in these comparative elements – if, in fact, there was an effect.



Results

Colorado is a leading Solar Farm market with 53 solar farms in operation through June 2018¹, many of which are located in outlaying areas. We do note that our studies of facilities of various sizes demonstrate the same conclusions: that there is no measurable and consistent difference in property values for properties adjacent to solar farms when compared to similar properties locationally removed from their influence. This is supported by our interviews with local real estate brokers who have stated that there is no difference in price, marketing periods or demand for the homes directly adjacent to the solar farm facilities in Colorado, Illinois, Minnesota, and Indiana.

We have also reviewed published methodology for measuring impact on property values as well as published studies that specifically analyzed the impact of solar farms on nearby property values. We have also interviewed market participants, including County and Township Assessors, to give us additional insight as to how the market evaluates farm land and single family homes with views of the solar farm. These studies found little to no measurable and consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to solar farms and are generally considered a compatible use. Considering all of this information, we can conclude that since the Adjoining Property Sales (Test Area Sales) for the existing solar farms analyzed were not adversely affected by their proximity to solar farms, that properties surrounding other solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

¹ U.S. Energy Information Administration – Data as of June 2018 for Operating Projects in CO



September 14, 2018

Mr. Jonathan Fitzpatrick Project Development Manager Pivot Energy

SUBJECT: Property Value Impact Study Seven Solar Farms Located in Jefferson County, Colorado; LaSalle County, Illinois; Frankton, Porter, and Marion Counties, Indiana; and Chisago County, Minnesota

Dear Mr. Fitzpatrick:

CohnReznick is pleased to submit the accompanying adjacent property values impact study of the above referenced subject properties. Per the client's request, we have researched one solar farm in Colorado: Jefferson County Community Solar Garden in Jefferson County (Solar Farm 1). We have also researched one solar farm in Illinois: Grand Ridge in LaSalle County (Solar Farm 2), as well as, four solar farms in Indiana: Portage Solar Farm in Porter County (Solar Farm 3), IMPA Frankton Solar Farm in Madison County (Solar Farm 4), Dominion Indy Solar III Farm in Marion County (Solar Farm 5), and Valparaiso Solar LLC Farm in Porter County (Solar Farm A), was also researched.

In forming this report, we have researched and visited the existing solar farms in Colorado, Illinois, and Indiana, researched articles and other published studies, and interviewed real estate professionals and Township Assessors, active in the market where solar farms are located, to gain an understanding of market perceptions.

The purpose of the assignment is to determine whether the proximity of the subject facilities (solar farms) resulted in any significant measurable and consistent impact on adjacent property values, given the existing uses and zoning of nearby property at the time of development. The intended use of our findings and conclusions is to address local concerns regarding a solar farm's potential impact on surrounding property values. We have not been asked to value any specific property, and we have not done so.

The client and intended user for the assignment is Pivot Energy. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

The assignment is intended to conform to the Uniform Standards of Professional Appraisal Practice (USPAP), the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute as well as applicable state appraisal regulations.



Based on the analysis in the accompanying report, and subject to the definitions, assumptions, and limiting conditions expressed in the report, our findings follow below.

CONCLUSIONS

We analyzed 18 adjoining property sales and 69 comparable sales, collectively, for the Jefferson County Community Solar Garden, the Grand Ridge Solar Farm, the Portage Solar Farm, the IMPA Frankton Solar Farm, the Dominion Indy III Solar Farm, and the Valparaiso LLC Solar Farm, over the past five years. We note that proximity to the solar farms has not deterred sales of nearby agricultural land and residential single family homes nor has it deterred the development of new single family homes on adjacent land.

No empirical evidence evolved that indicated a more favorable real estate impact on the Control Area Sales as compared to the adjoining, Test Area Sales with regard to such market elements as:

- 1. Range of sale prices
- 2. Differences in unit sale prices
- 3. Conditions of sale
- 4. Overall marketability
- 5. New Development
- 6. Rate of Appreciation

We have also reviewed published methodology for measuring impact on property values as well as published studies that specifically analyzed the impact of solar farms on nearby property values. We have also interviewed market participants, including Township Assessors, to give us additional insight as to how the market evaluates farm land and single family homes with views of the solar farm.

These studies found little to no measurable and consistent difference in value between the Test Area Sales and the Control Area Sales attributed to the proximity to solar farms and are generally considered a compatible use. Considering all of this information, we can conclude that since the Adjoining Property Sales (Test Area Sales) for the existing solar farms analyzed were not adversely affected by their proximity to solar farms, that properties surrounding other solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.



If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Very truly yours,

CohnReznick, LLP

11th

Andrew R. Lines, MAI Principal Certified General Real Estate Appraiser Illinois License No. #553.001841 Expires 9/30/2019

Patricia SM Jars

Patricia L. McGarr, MAI, CRE, FRICS National Director - Valuation Advisory Services Certified General Real Estate Appraiser Colorado License No. #AT.200001525 Expires 2/28/2019 Illinois License No. #553.000621 Expires 9/30/2019 Indiana License No. #CG49600131 Expires 6/30/2020

Sonia K. Singh Senior Manager Certified General Real Estate Appraiser VA License No. #4001017615 Expires 3/31/2020 DC License No. #GA2002063 Expires 2/28/2020 MD License No. #33217 Expires 4/16/2021



TABLE OF CONTENTS

.......

EXECUTIVE SUMMARY	2
Conclusions	6
SCOPE OF WORK	9
CLIENT	
INTENDED USERS	
INTENDED USE	9
PURPOSE	
EFFECTIVE DATE	
DATE OF REPORT	
PRIOR SERVICES	
OVERVIEW OF SOLAR DEVELOPMENT	
MARKET ANALYSIS OF THE IMPACT ON VALUE FROM SOLAR FARMS	15
METHODOLOGY	
PUBLISHED STUDIES	16
ADJACENT PROPERTY VALUES IMPACT STUDY	18
SOLAR FARM A: NORTH STAR SOLAR FARM, CHISAGO COUNTY, MN	
SOLAR FARM 1: JEFFERSON COUNTY COMMUNITY SOLAR GARDEN, JEFFERSON COUNTY, CO	
SOLAR FARM 2: GRAND RIDGE SOLAR FARM, STREATOR, IL	
SOLAR FARM 3: PORTAGE SOLAR FARM IN PORTER COUNTY, IN	
SOLAR FARM 4: IMPA FRANKTON SOLAR FARM IN MADISON COUNTY, IN	
SOLAR FARM 5: DOMINION INDY SOLAR III, IN INDIANAPOLIS, MARION COUNTY, IN SOLAR FARM 6: VALPARAISO SOLAR LLC, VAPARAISO, IN	
SULAR FARM 6. VALPARAISO SULAR LEC, VAPARAISO, IN	
MARKET COMMENTARY	
SOLAR FARM FACTORS ON HARMONY OF USE	49
COMPATIBILITY WITH EXISTING USES	50
SUMMARY AND FINAL CONCLUSIONS	53
CERTIFICATION	55
ASSUMPTIONS AND LIMITING CONDITIONS	57
ADDENDUM A: APPRAISER QUALIFICATIONS	61

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



......

SCOPE OF WORK

CLIENT

Pivot Energy

INTENDED USERS

Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals.

INTENDED USE

The intended use of our findings and conclusions is to address local concerns regarding a solar farm's potential impact on surrounding property values. The report may be used only for the aforementioned purpose and may not be distributed without the written consent of CohnReznick LLP ("CohnReznick").

PURPOSE

The purpose of this report is to address local concerns regarding a solar farm use having a perceived impact on surrounding property values, and provide a consulting report that can be submitted to municipal planning departments for the purposes of addressing the required criteria for obtaining approvals for proposed solar energy sites.

EFFECTIVE DATE

September 4, 2018

DATE OF REPORT

September 14, 2018

PRIOR SERVICES

USPAP requires appraisers to disclose to the client any services they have provided in connection with the subject property in the prior three years, including valuation, consulting, property management, brokerage, or any other services.

This report is a compilation of the Solar Farms which we have studied over the past year, and is not evaluating a specific subject site. In this instance, there is no "subject property" to disclose.

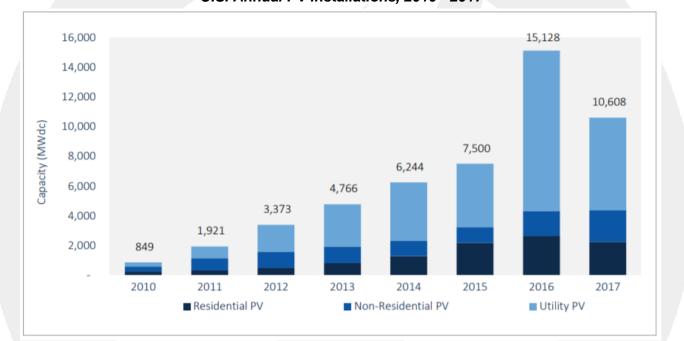


Patricia L. McGarr has performed an inspection of the exterior of the properties that are the subject of this impact study on various dates in 2017 and 2018. The inspections were conducted via public rights of way.

Patricia L. McGarr, MAI, Andrew R. Lines, MAI, and Sonia K. Singh have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.



Photovoltaic (PV) cell installations, commonly known as solar cells, increased almost exponentially over the past ten years in the United States as technology and the economic incentives (Solar Investment Tax Credits or ITC) made the installation of solar farms economically reasonable. A majority of these solar farm installations come from larger-scale solar farm developments for utility purposes. The charts below portray the increases of the solar installations in the US as a whole, on an annual basis, historically, courtesy of Solar Energy Industries Association (SEIA) and GTM Research.



U.S. Annual PV Installations, 2010 - 2017

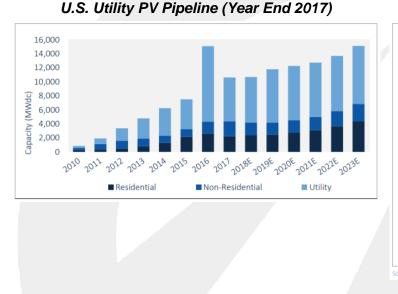
The year 2017 was a transitional year for the solar market. Residential and utility PV both saw installations fall on an annual basis for the first time since 2010, marking a "reset" year for both segments. Meanwhile, the nonresidential PV segment was the only market to experience growth in 2017. For residential PV, the downturn in 2017 stems from segment-wide customer acquisition challenges that are constraining growth across most major state markets. Amidst other variables such as loss of state incentives, and competitive landscape trends, there are concerns about the relationship between increasing customer penetration and low installation growth as the pool of attractive early-adopter customers grows increasingly thin in certain markets. While the relationship between market penetration and growth does not fully explain the market downturn, industry experts believe it is increasingly becoming a factor in constraining growth amongst major state markets.

Meanwhile, the year-over-year downturn for utility PV in 2017 was largely expected, due to the massive influx of projects trying to leverage the 30 percent federal Investment Tax Credit (ITC) in 2016. However, uncertainty surrounding the Section 201 tariffs caused many projects to be shelved in 2017, while other cancellations and interconnection delays resulted in many projects spilling over into 2018.

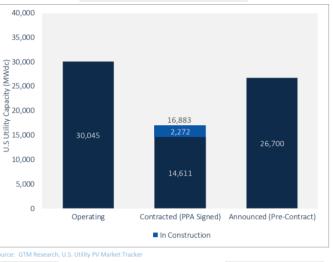


Both closing regulatory windows, and the realization of a robust community-solar pipeline, drove substantial growth in non-residential solar in 2017. This is the second consecutive year for such growth after the space essentially remained flat from 2012-2015.

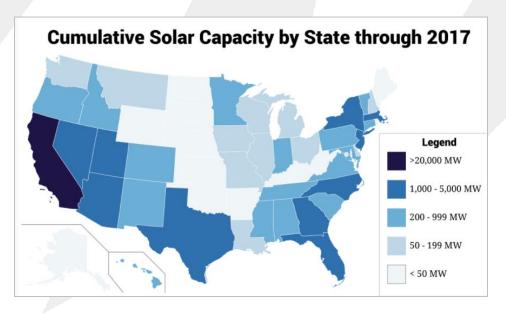
The pipeline for Utility PV, as of year-end 2017 includes capacity of 43,583 combined from contracted and under construction as well as announced but pre-contract sources, as seen below. This new capacity represents a 45 percent increase over current operational capacity.







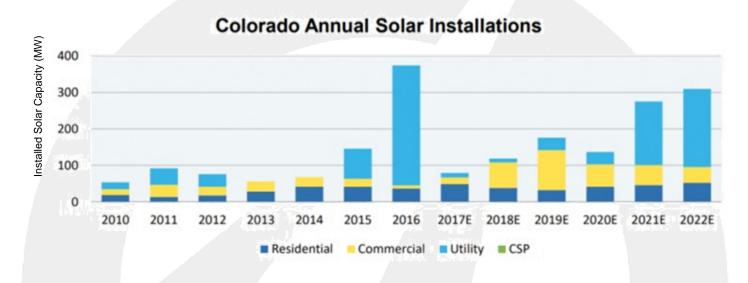
Nearly 250,000 Americans work in the solar industry. The cost to install solar panels has dropped nationally by 70 percent since 2010, which has been one cause that led to the increase in installations. The map below portrays solar capacity by state.



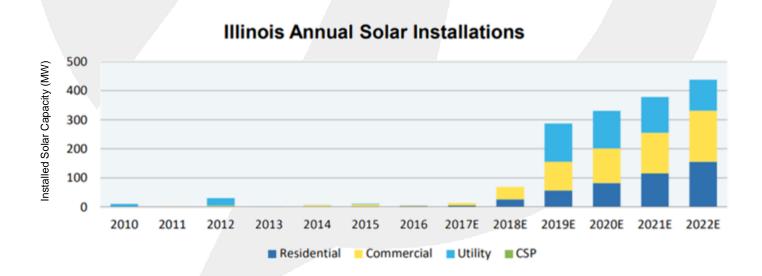


Prepared for Pivot Energy Page | 13

Colorado was one of the first states in the U.S. to have a Renewable Energy Standard and is ranked 12th in the nation by installed solar capacity, according to the Solar Energy Industries Association (SEIA). Over the next five years, the installed solar capacity in Colorado is estimated to almost double from 1,020 MW in 2017 to 2,035 MW by 2022. Colorado invested close to \$2.5 billion in solar as of year-end 2017 and \$192.28 million in 2017.



Illinois has recently picked up investment in solar installations. According to the SEIA, there was \$230.62 million invested in solar as of year-end 2017 and \$27.52 million invested in 2017 alone, reflecting nearly a 50 percent increase in annual investment in comparison to 2016. Illinois was ranked 41st in the nation by the SEIA in 2017. Although, Illinois is near the bottom of states with solar production, it ranked 20th in solar jobs in 2017.





Prepared for Pivot Energy Page | 14

The state of Indiana has clearly seen a significant uptick in solar investments. According to the SEIA, \$438.09 million invested in solar as of year-end 2017 and \$79.75 million invested in 2017 alone. The increase in solar investments is due to the falling costs of installations. According to the SEIA, solar prices have declined by 52 percent over the past five years in the state. Currently, solar energy powers 32,000 Indiana homes with 275.6 MW of solar installed. Indiana ranks in the middle of the pack comparatively to other states, at 27th.



Indiana Annual Solar Installations



MARKET ANALYSIS OF THE IMPACT ON VALUE FROM SOLAR FARMS

METHODOLOGY

According to Randall Bell, PhD, MAI, author of text *Real Estate Damages,* published by the Appraisal Institute in 2016, the paired sales analysis is an effective method of determining if there is a detrimental impact on surrounding properties.

"This type of analysis may compare the subject property or similarly impacted properties called **Test Areas** (at Points B, C, D, E, or F) with unimpaired properties called **Control Areas** (Point A). A comparison may also be made between the unimpaired value of the subject property before and after the discovery of a detrimental condition. If a legitimate detrimental condition exists, there will likely be a <u>measurable and consistent difference</u> between the two sets of market data; if not, there will likely be no significant difference between the two sets of data. This process involves the study of a group of sales with a detrimental condition, which are then compared to a group of otherwise similar sales without the detrimental condition."²

As an approved method, this technique can be utilized to extract the effect of a single characteristic on value. By definition, paired data analysis is "a quantitative technique used to identify and measure adjustments to the sale prices or rents of comparable properties; to apply this technique, sales or rental data on nearly identical properties is analyzed to isolate a single characteristic's effect on value or rent."³ The text further describes that this method is theoretically sound when an abundance of market data is available for analysis. It may be impractical for those property types that do not frequently sell, such as commercial properties. *The Appraisal of Real Estate* states that the lack of data can reduce the strength of the analysis, and that "an adjustment derived from a single pair of sales is not necessarily indicative" of the value of the single difference.

We also utilized a Trend Analysis to adjust our comparable Control Sales to a constant valuation date, the date of the Test Area sale. According to the *Dictionary of Real Estate Appraisal, 6th edition,* a Trend Analysis is defined as:

"A quantitative technique used to identify and measure trends in the sale prices of comparable properties; useful when sales data on highly comparable properties is lacking but a broad database on properties with less similar characteristics is available. Market sensitivity is investigated by testing various factors that influence sale prices."

We utilized a Trend Analysis to adjust the Control Sales for market conditions (the time between sales), as this is a variable that affects all properties similarly and can be adjusted for. Given the reduced amount of sale data and sales with highly similar characteristics to the Test Area sales, we concluded that adjusting only for market conditions is reasonable as this is explainable by a linear regression analysis, a form of Trend Analysis. This involved plotting our Control Sales unit sale prices against their sale dates and plotting a "Line of Best Fit" to

<u>Disclaimer:</u> This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



² Bell, Randall, PhD, MAI. Real Estate Damages. Third ed. Chicago, IL: Appraisal Institute, 2016.

³ The Appraisal of Real Estate 14th Edition. Chicago, IL: Appraisal Institute, 2013.

explain market condition trends. We extracted a monthly appreciation rate for each set of Control Sales and applied that to each respective grouping to normalize the sales to a common valuation date.

PUBLISHED STUDIES

We have also considered various studies that consider the impact of solar farms on surrounding property values. The studies range from survey-based formal research to less formal analyses.

The studies show that over the past decade, the solar industry has experienced unprecedented growth. Among the factors contributing to its growth were government incentives, significant capacity additions from existing and new entrants and continual innovation. The incentives made the solar photovoltaic (PV) industry economically attractive for many consumers and as a result, set the conditions for the boom. A significant amount of farmland trades have been to solar developers, transaction prices for these deals were reported to be between 30 to 50 percent above normal agricultural land prices in 2016. Clean Energy Trends, a publication developed by Clean Edge, reported in 2013 that investments in new capacity of solar farms increased from approximately \$3 billion USD in 2000 to approximately \$91 billion USD in 2013, just short of the record of \$92 billion USD in 2011. Solar PV installations increased from 31 Gigawatts (GW) in 2012 to a record of approximately 37 GW in 2013. As a result, annual solar PV installations exceed annual wind installations for the first time. Before 2011, annual wind installations were double annual solar PV installations.

Solar farms offer a wide array of economic and environmental benefits to surrounding properties. Unlike other energy sources, solar energy does not produce emissions that may cause negative health effects or environmental damage. Solar farms produce a lower electromagnetic field exposure than most household appliances, such as TV and refrigerators, and studies have confirmed there are no health issues related to solar farms.⁴ The Solar Foundation measured that the solar industry employed 22 percent more workers in the period from 2013 to 2015. Solar farm construction in rural areas has also dramatically increased the tax value of the land on which they are built, which has provided a financial boost to some counties. According to Duke University's Center on Globalization, Governance, and Competitiveness ("DUCGCC"), a study of solar projects in North Carolina indicated despite the 80 percent tax abatement, the taxable value of a parcel with a solar farm is significantly larger than the taxable value of that same land under agricultural zoning.

Beyond creating jobs, solar farms are also benefiting the overall long-term agricultural health of the community. As explained by ReThink Energy, a conservation foundation, a typical solar farm has more than two-thirds of the field left open and uncovered by solar panels. This unused land, and also all the land beneath the solar panels, will be left to repair naturally. In the long run this is a better use of land since the soil is allowed to recuperate instead of being ploughed and fertilized year in and year out.



⁴ "Electromagnetic Field and Public Health." Media Centre (2013): 1-4. World Health Organization.

A solar farm can greatly increase the value of land, offering some financial security for the property owner over 20 to 25 years. Once solar panel racking systems are removed, the land can revert to its original use.⁵

Property Value Impact Studies have also noted that the installation of utility-scale solar on a property has no negative impact on adjoining property's value. According to a report titled "Mapleton Solar Impact Study" from Kirkland Appraisals, LLC, conducted in Murfreesboro, North Carolina in September 2017, the study found that the proposed solar farm had no impact to adjacent vacant residential, agricultural land, or residential homes. The adjoining land for the paired data sales analysis in the report was primarily low density residential and agricultural uses, although there was one case where the solar farm adjoined to two dense subdivisions of homes.

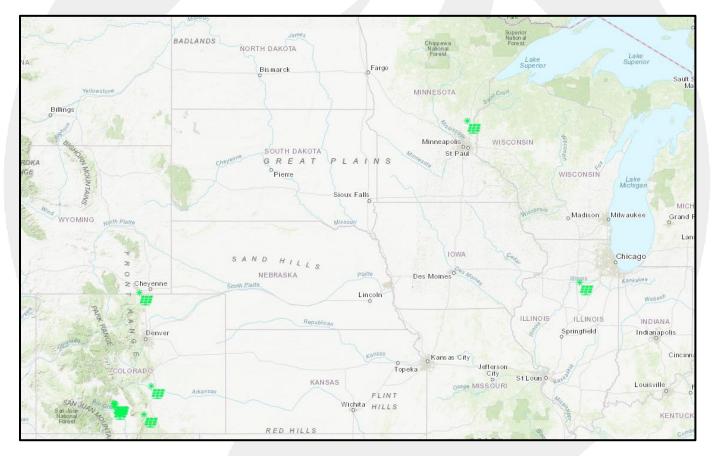
⁵ NC State Extension. (May 2016). Landowner Solar Leasing: Contract Terms Explained. Retrieved from: https://content.ces.ncsu.edu/landowner-solar-leasing-contract-terms-explained



ADJACENT PROPERTY VALUES IMPACT STUDY

We have studied established solar farms in Colorado and the Midwest specifically, because of the way that regional soil conditions, climate, and topography contribute to property values and their potential for impact on property values.

According to the U.S. Energy Information Administration (EIA), through June 2018 there are 53 Colorado solar projects in operation and 7 of them generate more than 15 MW. The largest Colorado project is the Comanche Solar Farm in Pueblo that generates 156 MW, enough to power more than 31,000 homes. A map illustrating existing solar farms that generate greater than 15 MW is presented below, courtesy of open source data retrieved from the EIA.



In our analysis of existing solar farms, we have included seven solar farms on the following pages. We have chosen to study the North Star solar farm in Minnesota because of its large size, which is less common, and because it is also situated in the Midwest. We also analyzed one solar farm in Colorado, one in Illinois, and four in Indiana. We reviewed other solar farms located in Colorado; however, they were mostly located in outlying areas. The solar farm we studied in Colorado had a large amount of data to analyze, and its proximity to a single-family subdivision made it an excellent candidate for a paired sale analysis.

In total, we identified seven solar farms to study with comparable sales where generally the only difference was the attribute under study: proximity to a solar farm.

<u>Disclaimer:</u> This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



.....

Prepared	l for	Pivot	Energy
----------	-------	-------	--------

Ownership and sales history for each adjoining property to an existing solar farm through the effective date of this report is maintained within our workfile. Adjoining properties with no sales data or that sold prior to the development of the solar farm were excluded from further analysis. Adjoining properties that sold during construction were not considered for a paired sales analysis because the impact of being proximate to the solar farm could not be differentiated from the impact of the construction. Adjoining properties that sold in a non-arm's length transaction (such as a transaction between related parties, bank-owned transaction, or between adjacent owners) were excluded from analysis as these are not considered to be reflective of market price levels. The adjoining properties that remained after exclusions were considered for a paired sale analysis.

The difference in price is considered to be an indication of the impact of proximity to the solar farm. Two types of paired sales analyses were considered based on the availability of data:

- Comparing sales of adjoining properties prior to the announcement of the solar farm to sales of adjoining properties after announcement and subsequent development of the solar farm (a "Before and After Analysis").
- Comparing sales of adjoining properties after the announcement and subsequent development of the solar farm to sales of comparable properties that are locationally removed from their influence.

We have considered both types of paired sales analyses in this study. We performed a Before and After Analysis, in which we compared sales that occurred prior to the announcement and subsequent development of the solar farm project with sales that occurred after completion of the solar farm project for one solar farm in Indiana for both adjoining and non-adjoining properties. The remaining existing solar farms studied did not qualify for this Before and After Analysis. All seven solar farms qualified for the second type of paired sales analysis, which was comparing sales of properties locationally removed from the solar farm (Control Area) to sales of adjoining properties that occurred after the announcement and subsequent development of the solar farm project (Test Area).

We have found Control Area sales data through the local Multiple Listing Service (MLS) and other real estate broker databases and verified these sales through county records, conversations with brokers, the individual county's GIS services, and the County Assessor's office. It is important to note that these Control Area Sales are not adjoining to any solar farm, nor do they have a view of a solar farm from the property. Therefore, the announcement nor the completion of the solar farm use could not have impacted the sales price of these properties.

To make direct comparisons, the sale price of the Control Area sales will need to be adjusted for market conditions to a common date. In this analysis, the common date is the date of the Adjoining Property Sale after the completion of the solar farm. After adjustment, any measurable difference between the sale prices would be indicative of a possible price impact of the solar farm, if any.

We conducted a qualitative analysis of the North Star Solar Farm in Minnesota given differences in geographical location. For the remaining six existing solar farms in Colorado, Illinois, and Indiana, a summary of the analyses completed for each of solar farms studied is presented on the following pages. Detail of these analyses is retained within our workfile.



SOLAR FARM A: NORTH STAR SOLAR FARM, CHISAGO COUNTY, MN

Location: North Star Solar Farm in Chisago County, MN

Coordinates: Latitude 45.47, Longitude -92.91

PINs: Multiple

Owner of Record: Renewable Energy Asset Co, L.L.C.

Total Land Size: ±1,000 Acres

Date Project Announced: 2014

Date Project Completed: October, 2016

Output: 100 MW AC

This solar farm is located approximately four miles southeast of the City of North Branch in unincorporated Chisago County, near the intersection of Route 69 and Route 72. The solar farm was developed by North Star and is the largest solar farm in the Midwest. The solar facility consists of 440,000 solar panels and the project has a power output capacity of 100 MW, enough to power 20,000 homes. The solar farm has agricultural land to the north and west. To the south and east of the project there are a number of residential properties, some nestled within the actual solar farm, surrounded on every side.



Due to limited transaction data, we conducted a qualitative study of the potential impact of the solar farm on neighboring properties. After speaking with six local real estate brokers familiar with the area, we conclude that there has been no discernable impact, positive or negative, on properties surrounding the solar farm. Candace Rindahl of ReMax Results, a real estate broker with 16 years of experience in the area, said that she has been in most of the homes surrounding the solar farm and personally sold two of them. She reported that the neighboring homes sold at market rates comparable to other homes in the area not influenced by the solar farm, and they sold within 45 days of offering, at the end of 2017, which was in line with the market.



While assembling the solar development site, the developer of the solar project acquired four homes along 367th Street, which are surrounded by the solar arrays. According to conversations with the developer, they purchased the homes prior to development at a premium above the appraised values given assemblage of the development site. The developer did not end up utilizing these sites for development and subsequently sold all four homes after completion of the solar farm to new buyers at market levels, with the exception of one home that was actually purchased by the original owner. This indicates that the development of the North Star Solar Farm <u>did</u> <u>not deter transactions nor affect sale prices</u> in the surrounding area.

Clifford Sheppeck of Keller Williams Classic was hired by Renewable Energy Asset Co, L.L.C. to market and sell the homes. We discussed these transactions with Mr. Sheppeck who indicated they all sold within two months, in line with the market.





SOLAR FARM 1: JEFFERSON COUNTY COMMUNITY SOLAR GARDEN, JEFFERSON COUNTY, CO

Location: Jefferson County Community Solar Garden in Jefferson County, IL

Coordinates: Latitude 39.859564, Longitude -105.1497

PIN: 29-194-01-032

Total Land Size: 13 acres

Date Project Announced: November 2013

Date Project Completed: May 2016

Output: 1.5 MW DC (1.2 MW AC)

The Jefferson County Community Solar Garden is adjacent to the Whisper Creek residential development, just outside the City of Arvada, and was developed by SunShare Management. This solar farm has the capacity for 1.2 Megawatts (MW) of power, which is enough to power 300 homes. After two months of operation, the solar farm was 100 percent subscribed and its three largest customers are the cities of Arvada and Northglenn, as well as Green Mountain Water and Sanitation District. The surrounding uses consist of vacant land to the north and east, a horse and alpaca farm to the south, and residential uses such as single family homes to the west.

<u>**Real Estate Tax Info:**</u> In 2017, real estate taxes totaled \$79.10 for the entire parcel for the year, which is slightly less than taxes assessed in 2016 and 2015. The real estate taxes may increase once the property is reassessed with the solar farm improvement.

We found three adjoining properties that qualified for a paired sales analysis. The map on the following page displays the parcels adjacent to the solar (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis





Solar Farm 1 Adjoining Properties (Q2 2016 imagery date) (Green Arrow – Direction of Pictures on Following Page)

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



. . .



View from 89th Loop (Target Area Homes) towards Solar Farm at Rear of Home



View from the Rear of a Test Area Home, towards Solar Farm

<u>Disclaimer:</u> This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



. . .

The Test Area Group is comprised of Adjoining Properties 9, 10, and 12, and was considered for a paired sales analysis. The Test Area Group consists of two-story, single family homes with four bedrooms and three full bathrooms with between 3,000 and 4,000 square feet of gross living area on less than 0.30 acre of land.

For the Test Area Group we analyzed six control area single family home sales that sold within a reasonable time frame from the median sale date of the Test Area Group sales. All control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

CohnReznick Paired Sale Analysis - Solar Farm 1			
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF	
Control Area Sales (6)	No: Not adjoining solar farm	\$164.36	
Test Area Group (Adjoining Properties 9, 10, and 12)	Adjoining solar farm	\$165.15	
Difference		0.48%	

The result of our analyses for Solar Farm 1 is presented below.

Noting no negative price differential, with the Test Area Group having a slightly higher unit sale price than the Control Area sales, it does not appear that Solar Farm 1 had any negative impact on adjacent property values.



SOLAR FARM 2: GRAND RIDGE SOLAR FARM, STREATOR, IL

Location: Grand Ridge Solar Farm in LaSalle County, IL

Coordinates: Latitude 41.143421, Longitude -88.758340

PINs: 34-22-100-000, 34-22-101-000

Total Land Size: 160 acres

Date Project Announced: December 31, 2010

Date Project Completed: July 2012

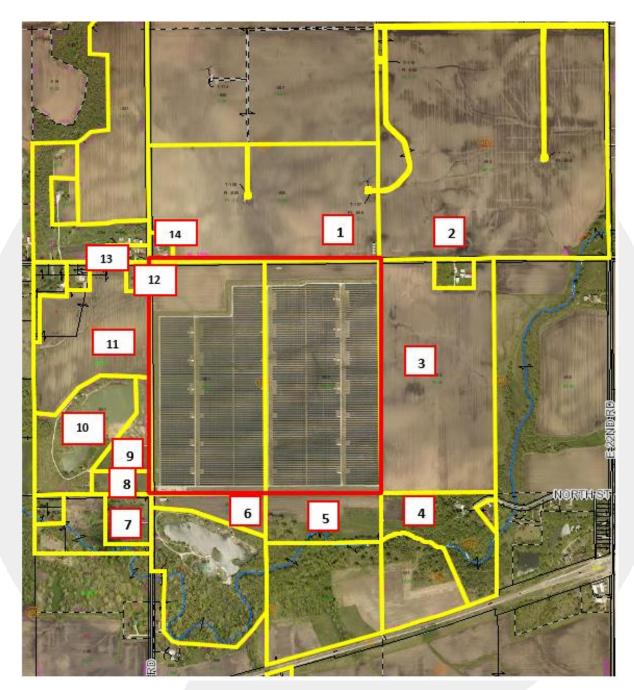
Output: 23 MW DC (20 MW AC)

This solar farm is located at the southeast corner at the intersection of 21st and 15th Roads. The solar farm was developed by Invenergy and is considered to be one of the largest renewable energy centers in the world. It includes a 210 MW wind farm, 20 MW AC project solar and 1.5 MW advanced-energy storage project all in one location. The solar facility consists of twenty individual one MW solar inverters and over 155,000 photovoltaic modules supplied by General Electric. The solar farm has vacant agricultural land to the north and east, and natural vegetation to the east and south. The solar plant is located adjacent to Invenergy's wind farm.

<u>Real Estate Tax Info:</u> Prior to development of the solar farm, during the period between 2009 and 2011, this 160-acre farm paid real estate taxes of about \$1,500 per 80-acre parcel (\$3,000 per year in total). In the 5 years since the solar farm has been operating, the real estate taxes have increased to about \$1,600 per acre (\$255,000 per year in total). The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



.



Solar Farm 2 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



....

Adjoining Property 12 (Test Area) was considered for a paired sales analysis, and we analyzed this property as a single-family home use. We analyzed five Control Area single family home sales on similar lot sizes that sold within a reasonable time frame from the sale date of Adjoining Property 12, and adjusted the Control Area sales for market conditions using a regression analysis to identify the appropriate monthly market conditions adjustment. The result of our analysis for Solar Farm 2 is presented below.

CohnReznick Paired Sale Analysis - Solar Farm 2			
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF	
Control Area Sales (5)	No: Not adjoining solar farm	\$74.35	
Adjoining Property 12 (Test Area)	Yes: Solar Farm was completed by the sale date	\$79.90	
Difference		7.46%	

The unit sale price of Adjoining Property 12 was slightly higher than the median adjusted unit sale price of the Control Sales.

We contacted the selling broker, Tina Sergenti with Coldwell Banker, and were told that the proximity of the solar farm had no impact on the marketing time or selling price of the property.

Noting no negative price differential, it does not appear that Solar Farm 2 impacted the sales price of Adjoining Property 12. This was confirmed by the real estate agent who marketed and sold this home.



SOLAR FARM 3: PORTAGE SOLAR FARM, PORTAGE TOWNSHIP, IN

Location: Portage Solar Farm in Porter County, IN

Coordinates: Latitude 41.333263, Longitude -87.093015

PIN: 64-06-19-176-001.000-015

Recorded Owner: PLH Inc

Total Project Size: 56 AC

Date Project Announced: February 2012

Date Project Completed: September 2012

Output: 1.5 MW AC

This solar farm is located on the south side of Robbins Road, located just outside the City of Portage. The solar farm was developed by Ecos Energy, who is a subsidiary of Allco Renewable Energy Limited. This solar farm is ground mounted has the capacity for 1.5 Megawatts (MW) of power, which is enough to power 300 homes. This solar farm consists of 7,128 solar modules which are of a fixed tilt installation, and contains three inverters. The solar farm is fenced from adjacent properties by a fence that surrounds all of the solar panels. Natural vegetation borders the western and northern sides of the solar farm.

<u>Real Estate Tax Info:</u> The 56 acres of farm land was paying \$1,400 per year in taxes. After the solar farm was developed, only 13 acres (23 percent of the site) was reassessed and the remaining 43 acres continued to be farmed. The total real estate tax bill increased to \$16,350 per year after the solar farm was built, including both uses on the site. This indicates that the real estate taxes for the solar farm increased from \$25 per acre to \$1,175 per acre after the solar farm was developed. The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.







Solar Farm 3 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



. . . .



Solar Farm 3 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



Adjoining Properties 1 and 7 (Test Areas) were each considered for a paired sales analysis. Adjoining Property 1 was analyzed as homestead/small farm land tract since at the time of purchase the site was used as agricultural land. The buyer bought it as vacant land and subsequently built a home on site. Adjoining Property 7 was analyzed as a single-family home use.

For Adjoining Property 1, we analyzed nine Control Area homestead/small farm land tract sales that sold within a reasonable time frame from the sale date of Adjoining Property 1. For Adjoining Property 7, we analyzed seven Control Area single family home sales that sold within a reasonable time frame the sale date of Adjoining Property 7. All Control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

CohnReznick Paired Sale Analysis - Solar Farm 3

Adjusted Potentially Impacted by **Median Price** Solar Farm Per Acre No: Not adjoining Control Area Sales (9) \$7,674 solar farm Yes: Solar Farm Adjoining Property 1 was completed by \$8,000 (Test Area) the sale date Difference 4.25% CohnReznick Paired Sale Analysis - Solar Farm 3 Potentially Adjusted **Median Price** Impacted by Per SF Solar Farm No: Not adjoining Control Area Sales (7) \$84.27 solar farm Yes: Solar Farm Adjoining Property 7 was completed by \$84.35 (Test Area) the sale date 0.10% Difference

The result of our analyses for Solar Farm 3 is presented below.

Noting the relatively small price differential, with both adjacent sales (Adjoining Property 1 or 7) having higher unit sale prices than the Control Area sales, it does not appear that Solar Farm 3 had any negative impact on adjacent property values.



SOLAR FARM 4: IMPA FRANKTON SOLAR FARM, FRANKTON, IN

Location: IMPA Frankton Solar Farm in Madison County, IN

Coordinates: Latitude 40.125701; Longitude -85.4626.88

PIN: 48-08-06-500-012.001-020

Recorded Owner: IMPA

Total Land Size: 13 acres

Date Project Announced: November 2013

Date Project Completed: June 2014

Output: 1.426 MW DC (1.0 MW AC)

This solar farm is located on the west side of South Lafayette Street, located in the Town of Frankton. IMPA Frankton Solar Farm was built in 2014 in joint effort by Inovateus Solar and Indian Municipal Power Agency (IMPA). This solar farm has the capacity for 1 MW and its expected annual output is 1,426 MWh (megawatt hours). The solar farm is separated off from their adjacent properties by a 6' fence that surrounds the entirety of the solar panels. From our inspection of the site we note that the driveway to access the panels slopes downward and allows some views of the site. The map on the following page displays the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



. .



Solar Farm 4 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



.

Adjoining Properties 2 and 7 (Test Areas) were each considered for a paired sales analysis. Adjoining Property 2 was manufactured single family home use. Adjoining Property 7 was analyzed as a single-family home use.

For Adjoining Property 2, we analyzed six Control Area sales that sold within a reasonable time frame from the sale date of Adjoining Property 2. For Adjoining Property 7, we analyzed five Control Area sales that sold within a reasonable time frame from sale date of Adjoining Property 7. All Control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

CohnReznick Paired Sale Analysis - Solar Farm 4				
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF		
Control Area Sales (6)	No: Not adjoining solar farm	\$28.42		
Adjoining Property 2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$28.58		
Difference		0.56%		
CohnReznick Paired Sale Analysis - Solar Farm 4				
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF		
Control Area Sales (5)	No: Not adjoining solar farm	\$51.47		
Adjoining Property 7	Yes: Solar Farm	\$50.40		
(Test Area)	was completed by the sale date	\$52.40		

The result of our analyses for Solar Farm 4 is presented below.

Noting the relatively small price differential, in which both Adjoining Property Sales 2 and 7 sold at a slightly higher unit sale price that the Control Area Sales, it does not appear that Solar Farm 4 had any negative impact on adjoining property sales.



SOLAR FARM 5: DOMINION INDY SOLAR III, INDIANAPOLIS, IN

Location: Dominion Indy Solar III, in Indianapolis, Marion County, IN

Coordinates: Latitude 39.3914.16, Longitude -86.153485

PIN: 49-13-13-113-001.000-200

Recorded Owner: PLH Inc

Total Land Size: 134 acres

Date Project Announced: August 2012

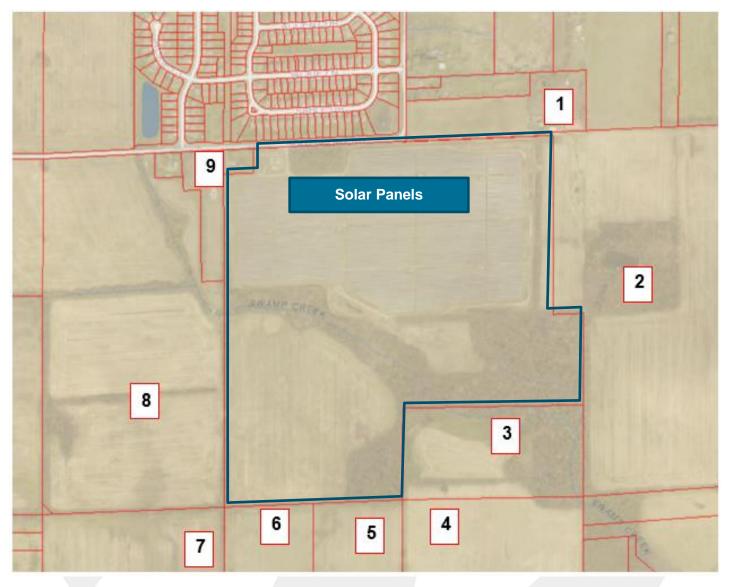
Date Project Completed: December 2013

Output: 11.9 MW DC (8.6 MW AC)

This solar farm is located on the southern side of West Southport Road, located approximately eight and a half miles from the heart of Indianapolis. The solar farm was developed by Dominion Renewable Energy. This solar farm is ground mounted has the capacity for 11.9 Megawatts (MW) of power. The panels are mounted in a fixed tilt fashion and there are 12 inverters in this solar farm. The solar farm is lined by a chain link fence that surrounds all of the solar panels. Additionally, there are some natural bushes and trees on all sides of the property; this vegetation has been in place since before development of the solar farm. The maps on the following pages display the parcels within the solar farm is located (outlined in blue). Properties adjoining this parcel are numbered for subsequent analysis.



. .



Solar Farm 5 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



.....



Solar Farm 5 Adjoining Properties

We identified a total of eight adjoining properties that were considered for a paired sale analysis. Adjoining Property 2 (Test Area) was analyzed agricultural land. Adjoining Properties 11, 13, 14, 18, 20, 22, and 24 were analyzed as single-family home uses.

Adjoining Property 2 was a vacant agricultural parcel and we identified and analyzed four Control Area Sales that were comparable in location and use. The Control Area Sales for Adjoining Property 2 are land tracts that were larger than 20 acres and utilized specifically as farmland. We excluded sales between related parties, split transactions, and those with significant improvements.



Prepared for Pivot Energy	Page 39

Control Area sales for Adjoining Property 2 were adjusted for market conditions using a regression and trend analysis to identify the appropriate monthly market condition adjustment. Using the sale data published in the *Land Sales Bulletin*, from January 2016 through December 2017, which includes reliable and credible data for analysis, we extracted a monthly rate of change of 0.50 percent. The results of our analysis for Adjoining Property 2 for Solar Farm 5 is presented below.

CohnReznick Paired Sale Analysis - Solar Farm 5					
	Potentially Impacted by Solar Farm	Adjusted Median Price Per Acre			
Control Area Sales (4)	No: Not adjoining solar farm	\$8,091			
Group 3 Adjoining Property 2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$8,210			
Difference		1.47%			

Ag Land Matched Pair Analysis

<u>Crossfield Subdivision</u>: The remaining seven of the Adjoining Properties (Test Areas) were considered for a paired sales analysis consisted of single-family homes. The adjoining properties that were included in our paired sales analysis were divided into two groupings, based on the sale dates of the Test Area Sales, as detailed below.

Group	Adj. Property #	Address	Sa	le Price	Site Size (AC)	Beds	Baths	Year Built	Square Feet	Sale date	PSF
1	11	5933 SABLE DR	\$	140,000	0.31	3	1.5	2006	2412	12/9/2015	\$ 58.04
2	13	5921 SABLE DR	\$	160,000	0.24	4	1.5	2006	2412	9/6/2017	\$ 66.33
2	14	5915 SABLE DR	\$	147,000	0.23	3	2.5	2009	2028	5/10/2017	\$ 72.49
2	18	5841 SABLE DR	\$	149,000	0.23	3	2.5	2009	1962	10/3/2017	\$ 75.94
1	20	5829 SABLE DR	\$	131,750	0.23	4	2.5	2011	2190	12/9/2015	\$ 60.16
1	22	5813 SABLE DR	\$	127,000	0.23	4	1.5	2005	2080	3/4/2015	\$ 61.06
1	24	5737 SABLE DR	\$	120,000	0.23	3	2.5	2010	2136	2/3/2014	\$ 56.18

For Group 1 (Sales in 2014 - 2015), we analyzed eight Control Area sales that sold within a reasonable time frame from the average sale date of the Group 1 Test Area sales. For Group 2 (Sales in 2017), we analyzed a separate grouping of nine Control Area sales that sold within a reasonable time frame from the average sale date of the Group 2 Test Area sales.



Page | 40

Control Area sales in Groups 1 and 2 were adjusted for market conditions using a regression analysis to identify the appropriate monthly market condition adjustment. The results of our study are presented below:

CohnReznick Paired Sale Analysis - Solar Farm 5						
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF				
Control Area Sales (8)	No: Not adjoining solar farm	\$57.84				
Group 1 (Test Area)	Yes: Solar Farm was completed by the sale date	\$59.10				
Difference		2.18%				

CohnReznick Paired Sale Analysis - Solar Farm 5							
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF					
Control Area Sales (9)	No: Not adjoining solar farm	\$71.52					
Group 2 (Test Area)	Yes: Solar Farm was completed by the sale date	\$72.49					
Difference		1.36%					

Noting the relatively small price differential, in which the Test Area Sales were slightly higher than the median for the Control Areas Sales, it does not appear that Solar Farm 5 had any negative impact on adjoining property values. In addition, the homes in both groups were appreciating at consistent rates.





Dominion Indy III - Crossfield Subdivision: Test Area vs Control Area Comparison of Unit Sale Prices from 2006 to 2017

Before & After Construction of the Solar Farm Analysis:

- 21 Test area sales were identified from 2006 to 2017 and 38 Control area sales were identified from 2008 to 2017.
 - The Test area sales are located adjoining to the Dominion Indy III Solar Farm in the Crossfield subdivision.
 - > The Control area sales are located in the remainder of the Crossfield subdivision.
- In both the Test (BLUE) and Control (ORANGE) areas, new construction homes sold through 2011, prior to announcement of the solar farm.
- The dotted lines are polynomial trend lines plotted by Microsoft Excel in order to illustrate and approximate the "average" trend of each set of data. After construction of the solar farm, in parallel with the improving economic climate, it appears that unit prices for both the test and control areas appreciated at a similar rate over the period from 2013 to 2017. A difference in appreciation rates does not appear to exist between homes in the Test area versus homes in the Control area.
- Overall, our findings indicate that there *is not a consistent and measurable difference* that exists in association with proximity to a solar farm.



SOLAR FARM 6: VALPARAISO SOLAR LLC, VAPARAISO, IN

Location: Valparaiso Solar LLC, in Porter County, IN

Coordinates: Latitude 41.301180, Longitude –87.094055

PINs: 64-09-07-152-001.000-019, 64-09-07-152-002.000-019

Recorded Owner: PLH Inc

Total Land Size: 27.9 acres

Date Project Announced: March 2012

Date Project Completed: December 20, 2012

Output: 1.3 MW DC (1 MW AC)

This solar farm is located on the southern side of Indiana Route 130 (Railroad Ave), located approximately 35 miles southwest of the Chicago Loop. The solar farm was developed by Sustainable Power Group LLC and has ground mounted capacity for 1.3 Megawatts (MW) of power. The panels are mounted in a fixed tilt fashion and there are two inverters in this solar farm. The solar farm is lined by a chain link fence that surrounds all of the solar panels. Additionally, there are some natural bushes and trees to the north and west of the solar panels; this vegetation has been in place since before development of the solar farm. Other small trees were planted spaced out around the perimeter of the solar farm after development. From our inspection, the solar panels cannot be seen from Indiana State Route 130 from the north, nor on N 475 W Road to the east as this is a raised roadway. The adjacent properties to the east of the solar panels have full view of the panels from their backyards. The maps on the following pages display the parcels within the solar farm is located (outlined in red). Properties adjoining this parcel are numbered for subsequent analysis.



.



Solar Farm 6 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



. . .

.



Solar Farm 6 Adjoining Properties

<u>Disclaimer</u>: This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



....

Adjoining Properties 10 and 14 (Test Areas) were each considered for a paired sales analysis. Both were analyzed as single-family home uses.

For Adjoining Property 10, we analyzed five Control Area sales that sold within a reasonable time frame from the sale date of Adjoining Property 10. For Adjoining Property 14, we analyzed five Control Area sales that sold within a reasonable time frame from the sale date of Adjoining Property 14. All Control area sales were adjusted for market conditions using regression analysis to identify the appropriate monthly market conditions adjustment.

The result of our analyses for Solar Farm 6 is presented below.

CohnReznick Paired Sale Analysis - Solar Farm 6							
	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF					
Control Area Sales (5)	No: Not adjoining solar farm	\$79.95					
Adjoining Property 10 (Test Area)	Yes: Solar Farm was completed by the sale date	\$82.42					
Difference		3.09%					
CohnReznick Paire	Potentially	Adjusted					
CohnReznick Paire							
CohnReznick Paire Control Area Sales (5)	Potentially Impacted by	Adjusted Median Price					
	Potentially Impacted by Solar Farm No: Not adjoining	Adjusted Median Price Per SF					

Noting the relatively small price differential, with one matched pair reflecting a unit sale price of three percent higher for the Adjoining Property sale and the other Adjoining Property sale reflecting a three percent lower unit sale price, it does not appear that Solar Farm 6 negatively impacted the sales price of Adjoining Property 10 or 14 in any consistent way.



SUMMARY OF ADJOINING USES

Solar Farm	Parcel ID	Owner	Acreage % of Surrounding Agricultural Uses	Acreage % of Surrounding Residential Uses	Acreage % of Surrounding Industrial Uses	Acreage % of Surrounding Office Uses	Acreage % of Surrounding Other Uses	Average Distance from Panels to Improvements
Jefferson County Solar Garden	29-194-01-032	Alkire Investments Inc	73.00%	10.00%	0.00%	0.00%	16.67%	730
Grand Ridge	34-22-100-000; 32- 22-101-000	Missel, Eugene / Dorothy Ttee	97.60%	1.40%	0.00%	0.00%	1.00%	553
Portage	64-06-19-176- 001.000-015	PLH LLC	65.50%	34.50%	0.00%	0.00%	0.00%	991
IMPA Frankton	48-08-06-500- 012.001-020	IMPA	76.30%	5.70%	0.00%	0.00%	18.00%	236
Indy Solar III	49-13-13-113- 001.000-200	Indy Solar Development LLC	97.70%	2.30%	0.00%	0.00%	0.00%	474
Valparaiso Solar LLC	64-09-07-152- 001.000-019, 64- 09-07-152- 002.000-019	PLH Inc	81.60%	18.40%	0.00%	0.00%	0.00%	659

The table below summarizes each subject solar farm's adjoining uses.

Overall, the vast majority of the surrounding acreage for each comparable solar farm is made up of agricultural land, some of which have homesteads. There are also smaller single family home sites that adjoin to the solar farms we have studied. We have found that these comparable solar farms are sound comparables in terms of adjoining uses, location, and size.

Ten of the eleven paired sales analyses reflected sales of property adjoining an existing solar farm in which the unit sale prices were effectively the same or higher (+0.10 percent to +7.46 percent) than the comparable Control Area sales that were not near any solar farms.

Considering this analysis, we conclude that there was no demonstrated measurable and consistent impact on adjacent property values that was associated with proximity to solar farms.



.

MARKET COMMENTARY

We have additionally contacted market participants such as appraisers, brokers, and developers familiar with property values around solar farms in Colorado, Illinois, and Indiana. Our conversations with these market participants are noted below.

We spoke with Michael Earley, an appraiser for Jefferson County's Assessors Office in Colorado, who stated that <u>there has been no impact on property values due to their proximity to the **Jefferson County Community Solar Garden.** Additionally, he stated that <u>no appeals have come in to his office stating that this solar farm has had any negative effect.</u></u>

In El Paso County, Colorado, we spoke with Rick Davis, an appraiser for the County Assessor, who stated that <u>there has been no impact on land prices due to the proximity to solar farms in El Paso County</u>. El Paso County has four solar farms in operation ranging from 1.5 MW to 10 MW.

We also spoke with Duane Robson, senior appraiser for the Welt County Assessor Office in Colorado, who stated that <u>there has not been any effect on land or home prices with respect to proximity to solar farms in Weld</u> <u>County.</u> Weld County has eight solar farms in operation ranging from 1.5 MW to 16 MW.

In Otter Creek Township, in LaSalle County, Illinois, we spoke with Viki Crouch, the Township Assessor, and she said that <u>there has been no impact on property values due to their proximity to the **Grand Ridge Solar** <u>Farm</u>.</u>

We also contacted the selling broker of the Adjoining Property 12 of the **Grand Ridge Solar Farm**, Tina Sergenti with Coldwell Banker, and were told that the proximity of the solar farm had no impact on the marketing time or selling price of the property.

We spoke with Ken Crowley, Rockford Township Assessor in Winnebago County, Illinois, who stated that he has seen <u>no impact on property values in his township as an effect of proximity to the **Rockford Solar Farm**.</u>

We spoke with James Weisiger, the Champaign Township Assessor in Champaign County, where the **University of Illinois Solar Farm** is located and he noted that no one has petitioned to have their property assessments lowered and <u>there appears to have been no impact on property values as a result of proximity to the solar farm</u>.

We interviewed Missy Tetrick, a Commercial Valuation Analyst for the Marion County Indiana Assessor. She mentioned the **Indy Solar III sites** and stated that she saw <u>no impact on land or property prices from proximity</u> to this solar farm.

We spoke with Ken Surface, a Senior Vice President of Nexus Group. Nexus Group is a large valuation group in Indiana and has been hired by 20 counties in Indiana regarding property assessments. Mr. Surface is familiar with the solar farm sites in Harrison County (Lanesville Solar Farm) and Monroe County (Ellettsville Solar Farm) and stated he has noticed <u>no impact on property values from proximity to these sites</u>.

We spoke to Mendy Lassaline, the County Assessor for Perry County, Indiana. She stated that she has seen <u>no</u> <u>impact on land or residences from proximity to the solar farm</u> in her county (**IMPA Tell City Solar Park**).

Page | 48

We interviewed Patti St. Clair, the Chief Deputy to the St. Josephs County Assessor in Indiana. She stated that she has seen <u>no impact from proximity to the solar farm on land or properties</u> in her county (**Olive PV Solar Farm**). Additionally, she stated that <u>no appeals have come in to her office stating that this solar farm has had any negative effect.</u>



SOLAR FARM FACTORS ON HARMONY OF USE

The data from the solar farms included in this Property Value Impact Study, clearly indicates that solar farms are generally a compatible use with agricultural and residential uses.

The following section analyzes specific physical characteristics of solar farms and is based on research and our solar farm site visits.

Appearance: Most solar panels have a similar appearance to a greenhouse or single story residence and are usually not more than 10 feet high. As previously mentioned, developers generally surround a solar farm with a fence and often leave existing perimeter foliage, which minimizes the visibility of the farm. The physical characteristics of solar farms are compatible with adjoining agricultural and residential uses.

Noise: Solar panels in general are effectively silent and noise levels are minimal, like ambient noise. The only two sources of noise include the tracking motors and inverters housed in a sound-proofed container, which produce a quiet hum. However, neither source is typically heard outside the facility fence.

Odor: Solar panels do not produce any byproduct or odor.

Traffic: The solar farm does not require regular maintenance from on-site employees and thus does not attract traffic during daily operation aside from the initial construction and installation of the farm.

Hazardous Material: Modern solar panel arrays are constructed to U.S. government standards. Testing shows that modern solar modules are both safe to dispose of in landfills, and are also safe in worst case conditions of abandonment or damage in a disaster.



COMPATIBILITY WITH EXISTING USES

We have examined multiple instances where adjoining property owners have developed homes next to an operational solar farm, which shows that the presence of solar farms has not deterred new development. Supporting images are presented below and on the following pages.

The Brighton PV Solar farm became operational in December 2012. Located in Adams County, north of Denver, CO, this solar farm has a capacity of 1.8 MW AC and is located on a triangular parcel of land east of an area of existing custom-built estate homes. A photo of one home (15880 Jackson Street) located directly north of the circled area below is presented to the right.



In December 2012, the 2.55 acre lot encircled in red below (15840 Jackson Street) was purchased for future development of a single-family home. This home was built in 2017, and per the county assessor, the two-story home is 3,725 square feet above ground with 4 bedrooms and 3.5 bathrooms. According to the building permit issued in August 2016, the job was valued at \$410,000.



Brighton PV Solar, Adams County, CO June 2016

Brighton PV Solar, Adams County, CO June 2017





Portage Solar Farm (Solar Farm 3) October 2015



Portage Solar Farm (Solar Farm 3) October 2016



4,255 square foot estate home under construction, adjacent to Portage Solar Farm (Solar Farm 3)

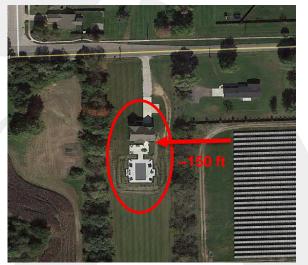
On-site pond and attached garage (cost estimated at \$465,000) April 2018



For Solar Farm 5, Dominion Indy III, the adjacent land to the west was acquired and subsequently developed with a large estate home – after the solar panels had been in operation for years.



Dominion Indy III Solar Farm (Solar Farm 5) September 2014



Dominion Indy III Solar Farm (Solar Farm 5) October 2016



Estate home adjacent to Dominion Indy III Solar Farm (Solar Farm 5)

On-site pool and attached garage (home cost estimated at \$450,000 - October 2015)



SUMMARY AND FINAL CONCLUSIONS

We have reviewed published methodology for measuring impact on property values as well as published studies that analyzed the impact of solar farms on property values. We have also interviewed market participants to give us additional insight as to how the market evaluates farm land and single family homes with views of the solar farm. These studies found little to no measurable and consistent difference between the Test Area Sales and the Control Area Sales attributed to the solar farms, and are generally considered a compatible use. We then can conclude that since the Adjoining Property Sales (Test Area Sales) were not adversely affected by their proximity to the solar farm, that properties surrounding other proposed solar farms operating in compliance with all regulatory standards will similarly not be adversely affected, in either the short or long term periods.

The purpose of this property value impact study is to determine whether the presence of a solar farm has caused a measurable and consistent difference in values between the Test Area Sales and the Control Area Sales. A summary of our findings for the paired sales analyses is presented below.

	CohnReznick Impact Study Analysis Conclusions									
	Solar Farm	Adj. Property Number	Adjoining Property Sale (Test Area) Price Per Unit	Control Area Sales Median Price Per Unit	% Difference	Feet from Panel to Lot	Feet From Panel to House	Impact Found		
1	Jefferson CSG	Test Group (3)	\$165.15	\$164.36	+0.48%	745	795	No Impact		
2	Grand Ridge Solar	12	\$79.90	\$74.35	+7.46%	366	479	No Impact		
3	Portage Solar	1	\$8,000	\$7,674	+4.25%	874	1,227	No Impact		
	Portage Solar	7	\$84.35	\$84.27	+0.10%	1,196	1,320	No Impact		
4	IMPA Frankton	2	\$25.58	\$28.42	+0.56%	83	145	No Impact		
	IMPA Frankton	7	\$52.40	\$51.47	+1.81%	208	414	No Impact		
5	Indy Solar III	2	\$8,210	\$8,091	+1.47%	166	n/a	No Impact		
	Indy Solar III	Group 1 (4)	\$59.10	\$57.84	+2.18%	157 to	230 to	No Impact		
	Indy Solar III	Group 2 (3)	\$72.49	\$71.52	+1.36%	329	404	No Impact		
6	Valparaiso Solar LLC	10	\$82.42	\$79.95	+3.09%	400	521	No Impact		
	Valparaiso Solar LLC	14	\$62.11	\$64.07	-3.06%	595	678	No Impact		
Averag	e Variance in Sale Prices	for Test to Contr	ol Areas		+1.79%					

Average Variance in Sale Prices for Test to Control Areas

18 Adjoining Test Sales Studied and compared to 69 Control Sales.

Marketing Time Averages: Adjoining Test Sales 162 days; Control Area Sales 171 days

Based upon our examination, research, and analyses of the existing solar farm uses, the surrounding areas, and an extensive market database, we have concluded that no consistent negative impact has occurred to adjacent property that could be attributed to proximity to the adjacent solar farm, with regard to unit sale prices or other influential market indicators. This conclusion has been confirmed by numerous County Assessors who have also investigated this use's potential impact.



If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

CohnReznick, LLP

MIL.

Andrew R. Lines, MAI Principal **Certified General Real Estate Appraiser** Illinois License No. #553.001841 Expires 9/30/2019

Patricia SM Jars

Patricia L. McGarr, MAI, CRE, FRICS National Director - Valuation Advisory Services Certified General Real Estate Appraiser Colorado License No. #AT.200001525 Expires 2/28/2019 Illinois License No. #553.000621 Expires 9/30/2019 Indiana License No. #CG49600131 Expires 6/30/2020

Sonia K. Singh Senior Manager Certified General Real Estate Appraiser VA License No. #4001017615 Expires 3/31/2020 DC License No. #GA2002063 Expires 2/28/2020 MD License No. #33217 Expires 4/16/2021



CERTIFICATION

We certify that, to the best of our knowledge and belief:

- 1. The statements of fact and data reported are true and correct.
- 2. The reported analyses, findings, and conclusions in this consulting report are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, findings, and conclusions.
- 3. We have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- 4. We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- 5. We have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
- 6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- 7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value finding, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
- 8. Our analyses, findings, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, which includes the Uniform Standards of Professional Appraisal Practice (USPAP).
- 9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- 10. Patricia L. McGarr, MAI, CRE, FRICS, Andrew R. Lines, MAI and Sonia K. Singh have viewed the exterior of all comparable data referenced in this report in person, via photographs, or aerial imagery.
- 11. We have not relied on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, and receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.
- 12. Michael F. Antypas, Amanda G. Edwards, Lydia D. Terry, and TJ Schemmel provided significant appraisal consulting assistance to the persons signing this certification.
- 13. We have experience in reviewing properties similar to the subject and are in compliance with the Competency Rule of USPAP.
- 14. As of the date of this report, Patricia L. McGarr, MAI, CRE, FRICS and Andrew R. Lines, MAI have completed the continuing education program of the Appraisal Institute.
- 15. As of the date of this report, Sonia K. Singh has completed the Standards and Ethics Education Requirements for Candidates of the Appraisal Institute.



If you have any questions or comments, please contact the undersigned. Thank you for the opportunity to be of service.

Respectfully submitted,

CohnReznick, LLP

MIL.

Andrew R. Lines, MAI Principal Certified General Real Estate Appraiser Illinois License No. #553.001841 Expires 9/30/2019

Patricia SM Jars

Patricia L. McGarr, MAI, CRE, FRICS National Director - Valuation Advisory Services Certified General Real Estate Appraiser Colorado License No. #AT.200001525 Expires 2/28/2019 Illinois License No. #553.000621 Expires 9/30/2019 Indiana License No. #CG49600131 Expires 6/30/2020

Sonia K. Singh Senior Manager Certified General Real Estate Appraiser VA License No. #4001017615 Expires 3/31/2020 DC License No. #GA2002063 Expires 2/28/2020 MD License No. #33217 Expires 4/16/2021



ASSUMPTIONS AND LIMITING CONDITIONS

This report is based on the following assumptions, except as otherwise noted in the report.

- 1. The title is marketable and free and clear of all liens, encumbrances, encroachments, easements and restrictions. The property is under responsible ownership and competent management and is available for its highest and best use.
- 2. There are no existing judgments or pending or threatened litigation that could affect the value of the property.
- 3. There are no hidden or undisclosed conditions of the land or of the improvements that would render the property more or less valuable. Furthermore, there is no asbestos in the property.
- 4. The revenue stamps placed on any deed referenced herein to indicate the sale price are in correct relation to the actual dollar amount of the transaction.
- 5. The property is in compliance with all applicable building, environmental, zoning, and other federal, state and local laws, regulations and codes.
- 6. The information furnished by others is believed to be reliable, but no warranty is given for its accuracy.

This report is subject to the following limiting conditions, except as otherwise noted in the report.

- 1. An appraisal is inherently subjective and represents our finding as to the value of the property appraised.
- 2. The conclusions stated in our appraisal apply only as of the effective date of the appraisal, and no representation is made as to the effect of subsequent events.
- 3. No changes in any federal, state or local laws, regulations or codes (including, without limitation, the Internal Revenue Code) are anticipated.
- 4. No environmental impact studies were either requested or made in conjunction with this appraisal, and we reserve the right to revise or rescind any of the value findings based upon any subsequent environmental impact studies. If any environmental impact statement is required by law, the appraisal assumes that such statement will be favorable and will be approved by the appropriate regulatory bodies.
- 5. Unless otherwise agreed to in writing, we are not required to give testimony, respond to any subpoena or attend any court, governmental or other hearing with reference to the property without compensation relative to such additional employment.
- 6. We have made no survey of the property and assume no responsibility in connection with such matters. Any sketch or survey of the property included in this report is for illustrative purposes only and should not be considered to be scaled accurately for size. The appraisal covers the property as described in this report, and the areas and dimensions set forth are assumed to be correct.
- 7. No finding is expressed as to the value of subsurface oil, gas or mineral rights, if any, and we have assumed that the property is not subject to surface entry for the exploration or removal of such materials, unless otherwise noted in our appraisal.
- 8. We accept no responsibility for considerations requiring expertise in other fields. Such considerations include, but are not limited to, legal descriptions and other legal matters such as legal title, geologic considerations such as soils and seismic stability, and civil, mechanical, electrical, structural and other engineering and environmental matters.



- 9. The distribution of the total valuation in the report between land and improvements applies only under the reported highest and best use of the property. The allocations of value for land and improvements must not be used in conjunction with any other appraisal and are invalid if so used. The appraisal report shall be considered only in its entirety. No part of the appraisal report shall be utilized separately or out of context.
- 10. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers, or any reference to the Appraisal Institute) shall be disseminated through advertising media, public relations media, news media or any other means of communication (including without limitation prospectuses, private offering memoranda and other offering material provided to prospective investors) without the prior written consent of the person signing the report.
- 11. Information, estimates and findings contained in the report, obtained from third-party sources are assumed to be reliable and have not been independently verified.
- 12. Any income and expense estimates contained in the appraisal report are used only for the purpose of estimating value and do not constitute predictions of future operating results.
- 13. If the property is subject to one or more leases, any estimate of residual value contained in the appraisal may be particularly affected by significant changes in the condition of the economy, of the real estate industry, or of the appraised property at the time these leases expire or otherwise terminate.
- 14. No consideration has been given to personal property located on the premises or to the cost of moving or relocating such personal property; only the real property has been considered.
- 15. The current purchasing power of the dollar is the basis for the value stated in our appraisal; we have assumed that no extreme fluctuations in economic cycles will occur.
- 16. The value found herein is subject to these and to any other assumptions or conditions set forth in the body of this report but which may have been omitted from this list of Assumptions and Limiting Conditions.
- 17. The analyses contained in the report necessarily incorporate numerous estimates and assumptions regarding property performance, general and local business and economic conditions, the absence of material changes in the competitive environment and other matters. Some estimates or assumptions, however, inevitably will not materialize, and unanticipated events and circumstances may occur; therefore, actual results achieved during the period covered by our analysis will vary from our estimates, and the variations may be material.
- 18. The Americans with Disabilities Act (ADA) became effective January 26, 1992. We have not made a specific survey or analysis of any property to determine whether the physical aspects of the improvements meet the ADA accessibility guidelines. In as much as compliance matches each owner's financial ability with the cost to cure the non-conforming physical characteristics of a property, we cannot comment on compliance to ADA. Given that compliance can change with each owner's financial ability to cure non-accessibility, the value of the subject does not consider possible non-compliance. A specific study of both the owner's financial ability and the cost to cure any deficiencies would be needed for the Department of Justice to determine compliance.
- 19. The appraisal report is prepared for the exclusive benefit of the Client, its subsidiaries and/or affiliates. It may not be used or relied upon by any other party. All parties who use or rely upon any information in the report without our written consent do so at their own risk.
- 20. No studies have been provided to us indicating the presence or absence of hazardous materials on the subject property or in the improvements, and our valuation is predicated upon the assumption that the

<u>Disclaimer:</u> This report is limited to the intended use, intended users (Pivot Energy; other intended users may include the client's legal, accounting, and site development professionals), and purpose stated within. No part of this report may be reproduced or modified in any form, or by any means, without the prior written permission of CohnReznick, LLP.



subject property is free and clear of any environment hazards including, without limitation, hazardous wastes, toxic substances and mold. No representations or warranties are made regarding the environmental condition of the subject property and the person signing the report shall not be responsible for any such environmental conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because we are not experts in the field of environmental conditions, the appraisal report cannot be considered as an environmental assessment of the subject property.

- 21. The person signing the report may have reviewed available flood maps and may have noted in the appraisal report whether the subject property is located in an identified Special Flood Hazard Area. We are not qualified to detect such areas and therefore do not guarantee such determinations. The presence of flood plain areas and/or wetlands may affect the value of the property, and the value conclusion is predicated on the assumption that wetlands are non-existent or minimal.
- 22. CohnReznick is not a building or environmental inspector. CohnReznick does not guarantee that the subject property is free of defects or environmental problems. Mold may be present in the subject property and a professional inspection is recommended.
- 23. The appraisal report and value conclusion for an appraisal assumes the satisfactory completion of construction, repairs or alterations in a workmanlike manner.
- 24. CohnReznick an independently owned and operated company, has prepared the appraisal for the specific purpose stated elsewhere in the report. The intended use of the appraisal is stated in the General Information section of the report. The use of the appraisal report by anyone other than the Client is prohibited except as otherwise provided. Accordingly, the appraisal report is addressed to and shall be solely for the Client's use and benefit unless we provide our prior written consent. We expressly reserve the unrestricted right to withhold our consent to your disclosure of the appraisal report (or any part thereof including, without limitation, conclusions of value and our identity), to any third parties. Stated again for clarification, unless our prior written consent is obtained, no third party may rely on the appraisal report (even if their reliance was foreseeable).
- 25. The conclusions of this report are estimates based on known current trends and reasonably foreseeable future occurrences. These estimates are based partly on property information, data obtained in public records, interviews, existing trends, buyer-seller decision criteria in the current market, and research conducted by third parties, and such data are not always completely reliable. CohnReznick and the undersigned are not responsible for these and other future occurrences that could not have reasonably been foreseen on the effective date of this assignment. Furthermore, it is inevitable that some assumptions will not materialize and that unanticipated events may occur that will likely affect actual performance. While we are of the opinion that our findings are reasonable based on current market conditions, we do not represent that these estimates will actually be achieved, as they are subject to considerable risk and uncertainty. Moreover, we assume competent and effective management and marketing for the duration of the projected holding period of this property.
- 26. All prospective value estimates presented in this report are estimates and forecasts which are prospective in nature and are subject to considerable risk and uncertainty. In addition to the contingencies noted in the preceding paragraph, several events may occur that could substantially alter the outcome of our estimates such as, but not limited to changes in the economy, interest rates, and capitalization rates, behavior of consumers, investors and lenders, fire and other physical destruction, changes in title or



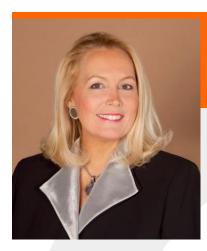
conveyances of easements and deed restrictions, etc. It is assumed that conditions reasonably foreseeable at the present time are consistent or similar with the future.

27. While this appraisal has been proofed for typographical errors, mathematical inaccuracies, and other discrepancies, others may be discovered in subsequent reviews performed by the client or their designated agent. We reserve the right to correct any typographical errors, mathematical inaccuracies, or other discrepancies that may affect the estimate of value contained in the report. These corrections will be corrected promptly upon the written request of the client.



ADDENDUM A: APPRAISER QUALIFICATIONS





Patricia L. McGarr, MAI, CRE, FRICS, CRA Principal, National Director, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600 Chicago, IL 60606 312-508-5802 patricia.mcgarr@cohnreznick.com www.cohnreznick.com

Patricia L. McGarr, MAI, CRE, FRICS, CRA, is a principal and National Director of CohnReznick Advisory Group's Valuation Advisory Services practice who is based in Chicago. Pat's experience includes market value appraisals of varied property types for acquisition, condemnation, mortgage, estate, ad valorem tax, litigation, zoning, and other purposes. Pat has been involved in the real estate business since 1980. From June 1980 to January 1984, she was involved with the sales and brokerage of residential and commercial properties. Her responsibilities during this time included the formation, management, and training of sales staff in addition to her sales, marketing, and analytical functions. Of special note was her development of a commercial division for a major Chicago-area brokerage firm.

Since January 1984, Pat has been exclusively involved in the valuation of real estate. Her experience includes the valuation of a wide variety of property types including residential, commercial, industrial, and special purpose properties including such diverse subjects as quarries, marinas, riverboat gaming sites, shopping centers, manufacturing plants, and office buildings. She is also experienced in the valuation of leasehold and leased fee interests. Pat has performed appraisal assignments throughout Illinois and the Chicago Metropolitan area as well as Wisconsin, Indiana, Michigan, New York, New Jersey, California, Nevada, Florida, Utah, Texas, and Ohio. Pat has gained substantial experience in the study and analysis of the establishment and expansion of sanitary landfills in various metropolitan areas including the preparation of real estate impact studies to address criteria required by Senate Bill 172. She has also developed an accepted format for allocating value of a landfill operation between real property, landfill improvements, and franchise (permits) value.

Over the past several years, Pat has developed a valuation group that specializes in serving utility companies establish new utility corridors for electric power transmission and pipelines. This includes determining acquisition budgets, easement acquisitions, and litigation support. Pat has considerable experience in performing valuation impact studies on potential detrimental conditions and has studied properties adjoining landfills, waste transfer stations, stone quarries, cellular towers, schools, electrical power transmission lines, "Big Box" retail facilities, levies, properties with restrictive covenants, landmark districts, environmental contamination, airports, material defects in construction, stigma, and loss of view amenity for residential high rises.

Pat has qualified as an expert valuation witness in numerous local, state and federal courts.

Pat has participated in specialized real estate appraisal education and has completed more than 50 courses and seminars offered by the Appraisal Institute totaling more than 600 classroom hours, including real estate transaction courses as a prerequisite to obtaining a State of Illinois Real Estate Salesman License.



Pat has earned the professional designations of Counselors of Real Estate (CRE), Member of the Appraisal Institute (MAI), Fellow of Royal Institution of Chartered Surveyors (FRICS) and Certified Review Appraiser (CRA). She is also a certified general real estate appraiser with active licenses in numerous states.

Education

• North Park University: Bachelor of Science, General Studies

Professional Affiliations

- National Association of Realtors
- CREW Commercial Real Estate Executive Women
- IRWA International Right Of Way Association

Appointments

Appointed by the Governor in 2017 to the State of Illinois' Department of Financial & Professional Regulation's Real Estate Appraisal Board; Vice-Chairman - 2018

Licenses and Accreditations

- Member of the Appraisal Institute (MAI)
- Counselors of Real Estate, designated CRE
- Fellow of Royal Institution of Chartered Surveyors (FRICS)
- Certified Review Appraiser (CRA)
- Alabama State Certified General Real Estate Appraiser
- California State Certified General Real Estate Appraiser
- Connecticut State Certified General Real Estate Appraiser
- District of Columbia State Certified General Real Estate Appraiser
- Illinois State Certified General Real Estate Appraiser
- Indiana State Certified General Real Estate Appraiser
- Louisiana State Certified General Real Estate Appraiser
- Maryland State Certified General Real Estate Appraiser
- Massachusetts State Certified General Real Estate Appraiser
- Michigan State Certified General Real Estate Appraiser
- Nevada State Certified General Real Estate Appraiser
- New Jersey State Certified General Real Estate Appraiser
- New York State Certified General Real Estate Appraiser
- North Carolina State Certified General Real Estate Appraiser
- Pennsylvania State Certified General Real Estate Appraiser
- South Carolina State Certified General Real Estate Appraiser
- Tennessee State Certified General Real Estate Appraiser
- Texas State Certified General Real Estate Appraiser
- Virginia State Certified General Real Estate Appraiser
- Wisconsin State Certified General Real Estate Appraiser





Andrew R. Lines, MAI Principal – Real Estate Valuation, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600 Chicago, IL 60606 312-508-5892 andrew.lines@cohnreznick.com www.cohnreznick.com

Andrew R. Lines, MAI, is a partner for CohnReznick Advisory Group's Valuation Advisory practice who is based in the Chicago office and has been a CohnReznick employee for over six years. Andrew has been involved in the real estate business for more than 15 years and has performed valuations on a wide variety of real property types including single- and multi-unit residential (including LIHTC), student housing, office, retail, industrial, mixed-use and special purpose properties including landfills, waste transfer stations, marinas, hospitals, universities, telecommunications facilities, data centers, self- storage facilities, racetracks, CCRCs, and railroad corridors. He is also experienced in the valuation of leasehold, leased fee, and partial interests, as well as purchase price allocations (GAAP, IFRS and IRC 1060) for financial reporting.

Valuations have been completed nationwide for a variety of assignments including mortgage financing, litigation, tax appeal, estate gifts, asset management, workouts, and restructuring, as well as valuation for financial reporting including purchase price allocations (ASC 805), impairment studies, and appraisals for investment company guidelines and REIS standards. Andrew has qualified as an expert witness, providing testimony for eminent domain cases in the states of IL and MD. Andrew has also performed appraisal review assignments for accounting purposes (audit support), asset management, litigation and as an evaluator for a large Midwest regional bank.

Andrew has earned the professional designation of Member of the Appraisal Institute (MAI). He has also qualified for certified general commercial real estate appraiser licenses in Arizona, California, Maryland, Florida, Wisconsin, Georgia, Illinois, Indiana, New Jersey and New York. Temporary licenses have been granted in Connecticut, Colorado, Ohio, Pennsylvania, Idaho, Kansas, Minnesota and South Carolina.

Education

• Syracuse University: Bachelor of Fine Arts

Professional Affiliations

- Chicago Chapter of the Appraisal Institute Alternate Regional Representative (2016 Present)
- International Real Estate Management (IREM)
- National Council of Real Estate Investment Fiduciaries (NCREIF)

Community Involvement

- Fellows Alumni Network World Business Chicago, Founding member
- Syracuse University Regional Council Active Member
- Syracuse University Alumni Association of Chicago, Past Board member
- Chicago Friends School Board Member





Sonia K. Singh

Senior Manager – Real Estate Valuation

7501 Wisconsin Avenue, Suite 400E Bethesda, Maryland 20814 301-280-5193 sonia.singh@cohnreznick.com www.cohnreznick.com

Sonia K. Singh is a senior manager in CohnReznick Advisory Group's Valuation Advisory practice who is based in the Bethesda office. She has been engaged in real estate valuation and other real estate consulting services for the past six years and has valued over \$3.5 billion in real property.

She is adept at valuing a variety of real estate property types across the United States, including the following: right-of-way acquisitions for utility corridors; single- and multi-tenant industrial buildings; historic redevelopment projects; freestanding and retail shopping centers; trophy, class A office buildings; continuing care retirement communities; marinas; car dealerships; athletic clubs; boutique and luxury flag hotels with for-sale residential villas; and medical office buildings with a surgical center. Real estate appraisals have been prepared for pending litigation matters, estate planning, estate & gift tax purposes, and asset management.

In addition to real estate appraisal services, she has completed over 2,500 hours related to generating purchase price allocations for the acquisition of tangible and intangible assets for financial reporting purposes under the guidance of ASC 805 and early adoption of ASU 2017-01. Other experienced real estate consulting services include appraisal review and statistical analysis. Several impact studies were prepared by her and her peers measuring the impact, if any, of economic and environmental influences on property values.

Other services she provided significant assistance with include useful life analysis of real estate assets and valuation of minority interests for gift and estate tax purposes. In addition, she has developed several financial forecasts for proposed real estate development to illustrate profit measures as well as return on capital for potential investors.

Sonia is a certified general real estate appraiser with active licenses in the District of Columbia, Maryland, and Virginia. She has also completed the following actuarial exams: Probability, Financial Mathematics, and Models for Financial Economics.

Education

University of Illinois: Bachelor of Science, Actuarial Science

Professional Affiliations and Licenses

- Appraisal Institute, Candidate for Designation
- Urban Land Institute, Associate Member
- Certified General Real Estate Appraiser Licenses in the States of DC, MD, and VA



Michael F. Antypas Consultant, Valuation Advisory Services

7501 Wisconsin Avenue, Suite 400E Bethesda, Maryland 20814 301-280-2741 michael.antypas@cohnreznick.com www.cohnreznick.com

Michael Antypas is a consultant in CohnReznick Advisory Group's Valuation Advisory Services practice and is based in the Bethesda office. He has assisted other associates and appraisers in the valuation of a variety of retail shopping centers, hotels, market rate and restricted rental apartment properties, Class A office complexes with GSA tenants, mixed-use properties, developable land, and single family rental home portfolios owned by REITs. He has also completed solar farm impact studies, appraisals for eminent domain disputes, as well as purchase price allocations on various senior living facilities, medical office buildings, and retail centers. In addition, Michael is certified in working with Argus Enterprise valuation software. He is a practicing affiliate in the Appraisal Institute and is working towards becoming a Certified General Real Estate Appraiser.

He graduated from the Villanova School of Business in May of 2016. Some of his other experience working in Real Estate originated through interning with commercial brokers. Throughout his senior year in college, Michael interned with Newmark Grubb Knight Frank as a Capital Markets intern. There he helped create and revise many marketing packages for the firm's senior managing directors. He also assisted in developing underwriting models and projections for offering memorandums. He also worked with a boutique restaurant broker in Washington D.C, Papadopoulos Properties where he compiled market research for his client's use and surveyed prospective restaurants to gauge their interest in expanding to the Washington D.C. market.

Education

 Villanova University: Bachelor of Business Administration, Finance and Real Estate, Minor in Business Analytics

Certifications

Argus Enterprise Certified

Professional Affiliations

Appraisal Institute, Practicing Affiliate



Amanda G. Edwards Consultant, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600 Chicago, Illinois 60606 312-508-5453 amanda.edwards@cohnreznick.com www.cohnreznick.com

Amanda Edwards is a consultant in CohnReznick's Valuation Advisory Services practice group and is based in Chicago. Amanda has assisted other appraisers in the valuation of a variety of industrial properties, medical offices, hotels, multifamily properties, condominium developments, retail and mixed-use properties, developable and open space land, and single family subdivisions. She has also assisted with appraisals and continuing consulting for eminent domain litigation. Additionally, Amanda has provided audit support for Assurance clients of the firm. Amanda is a licensed Associate Real Estate Trainee Appraiser in Illinois, working toward becoming a Certified General Real Estate Appraiser.

Before joining CohnReznick, Amanda worked at the Inland Group of companies valuing properties and underwriting, as well as assisting in the closing of, commercial mortgage loans, nationwide. Property types included industrial, office, multi-family, retail, and hotel, with an emphasis on value-add properties and new construction projects. Amanda has also worked as a commercial lender for builder-developer housing at Fifth Third Bank, specializing in the Chicago metro area. She has also worked valuing senior housing properties and associated business models for acquisition purposes at a senior housing developer/operator.

Amanda has spent considerable time in the consulting environment, developing and conducting in-depth interviews for primary research in a variety of industries such as technology, financial institutions, and industrial manufacturing for private equity clients.

Education

• Bryn Mawr College, Bachelor of Arts

Professional Licenses

Associate Real Estate Trainee Appraiser in Illinois

Other Affiliations

- Practicing Affiliate Appraisal Institute
- Chicago Real Estate Council Member
- Bryn Mawr College Alumnae Club of Chicago President



Lydia D. Terry Consultant, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600 Chicago, IL 60606 312-508-5397 lydia.terry@cohnreznick.com www.cohnreznick.com

Lydia Terry is a consultant in CohnReznick Advisory Group's Valuation Advisory Services practice and is based in the Chicago office. She has worked in real estate valuation, acquisition, and sales for the past 14 years, primarily working in residential mortgage collateral and eminent domain.

Prior to, and during the great recession (2004-2010), Lydia appraised residential properties in the California central valley (Bakersfield and Fresno) which saw some of the highest appreciation and declines in the country. As such, Lydia helped develop the industry standard market conditions report, which is now required for all FannieMae backed residential mortgages. Additionally, she has appraised farmland, gas stations, broadcast towers, commercial signs and other sites typically found along interstate and state highways.

Beyond appraisal, she has experience in mortgage debt negotiation, bank REOs, foreclosures and short sales.

Lydia is currently working towards obtaining her Certified General Real Estate Appraiser License.



TJ Schemmel

Consultant, Valuation Advisory Services

200 S. Wacker Drive, Suite 2600 Chicago, IL 60606 312-854-1270 TJ.Schemmel@cohnreznick.com www.cohnreznick.com

TJ Schemmel is a consultant in CohnReznick Advisory Group's Valuation Advisory Services practice and is based in the Chicago office. His scope of experience includes assisting other appraisers in performing solar farm impact studies and various special use appraisals. He is currently working towards obtaining his Associate Real Estate Trainee Appraisal License.

Prior to joining CohnReznick, TJ was a financial analyst at Avison Young, specializing in office tenant representation and land development. Over the five years in this position, he participated in office lease negotiations and real estate transactions for companies ranging in size from small start-ups to large multinational corporations. His diverse skill set allowed him to help numerous teams at Avison Young close more than \$150 million of lease transactions. He also supported the land development team on numerous multifamily and office projects for Chicago based investors.

Education

University of Cincinnati: Bachelor of Business Administration

Other Affiliations

- Routes to Success, Incorporated (HOBY Ohio West) Board President
- Chicago Tutoring Associate Board Member

