

# PROPERTY VALUE IMPACT STUDY PROPOSED SOLAR FARM KANE COUNTY, IL

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CohnReznick LLP



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#### 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)
- California State Certified General Real Estate Appraiser
- District of Columbia Certified General Real Estate Appraiser
- Illinois State Certified General Real Estate Appraiser
- Indiana State Certified General Real Estate Appraiser
- New Jersey State Certified General Real Estate Appraiser
- Texas State Certified General Real Estate Appraiser
- Wisconsin State Certified General Real Estate Appraiser
- New York State Certified General Real Estate Appraiser
- Michigan State Certified General Real Estate Appraiser
- Virginia State Certified General Real Estate Appraiser
- Nevada State Certified General Real Estate Appraiser
- Maryland State Certified General Real Estate Appraiser
- Pennsylvania State Certified General Real Estate Appraiser
- Connecticut State Certified General Real Estate Appraiser

#### **Professional Affiliations**

- National Association of Realtors
- International Right Of Way Association
- Elkhart County Board of Realtors (MLS of Indiana)
- CREW (Commercial Real Estate Women)

#### **Appointments**

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





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#### Licenses and Accreditations

- Member of the Appraisal Institute (MAI)
- California State Certified General Real Estate Appraiser
- Illinois State Certified General Real Estate Appraiser
- Indiana State Certified General Real Estate Appraiser
- New Jersey State Certified General Real Estate Appraiser
- Wisconsin State Certified General Real Estate Appraiser
- New York State Certified General Real Estate Appraiser
- Maryland State Certified General Real Estate Appraiser
- Arizona State Certified General Real Estate Appraiser
- Georgia State Certified General Real Estate Appraiser
- Florida State Certified General Real Estate Appraiser

#### **Professional Affiliations**

- Appraisal Institute Member
- Chicago Chapter of the Appraisal Institute
- Institute of Real Estate Managers (IREM)
- National Council of Real Estate Investment Fiduciaries (NCREIF)

#### **Education**

• Syracuse University, BFA



#### Property Value Impact Study – Scope of Work

The purpose of this real estate impact study is to determine whether the existing solar farm uses under study have had any consistent and measurable impact on the value of adjacent properties.

#### Our Scope of Work includes:

- Review of published studies;
- Research and analyses of existing solar farms and the property value trends of the adjacent land uses, including agricultural and residential properties;
- Preparation of a Before & After Analysis to determine whether market appreciation rates were similar in Test and Control Areas;
- Discussions with market participants including brokers and local assessors;
- Reconciliation of all the data observed.



#### Property Value Impact Study - Overview

The purpose of this real estate impact study is to determine whether the existing solar farm uses under study have had any consistent and measurable impact on the value of adjacent properties.

According to the Solar Energy Industries Association (SEIA) 2017 statistics, Illinois had 83.8 Megawatts (MW) of solar panels installed, compared to Indiana which has had 275.6 MW of solar panels installed. As we are studying the impact of this use on adjacent property values, we have included four established solar farms in Indiana, focusing on similar rural and transitioning areas, that we believe are comparable to those locations proposed in Illinois.

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

- Solar Farm 1 (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 which qualified for a paired sales analysis. (Completed 2012, 20 MW AC Project)
- Solar Farm 2 (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. (Completed 2012, 1.5 MW Project)



- Solar Farm 3 (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 which qualified for a paired sales analysis. (Completed 2014, 1 MW Project)
- Solar Farm 4 (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 six adjoining properties which qualified for a paired sales analysis. (Completed 2013, 11.9 MW Project)
- Solar Farm 5 (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 which qualified for a paired sales analysis. (Completed 2012, 1.3 MW Project)
- Solar Farm A (North Star Solar Farm) is located near the City of North Branch, in Chisago County, Minnesota. This solar farm is situated on over 1,000 acres and contains 440,000 solar panels. The surrounding uses consist of agricultural land to the north and west, and residential properties to the east and south, some properties surrounded on every side by solar arrays. We considered five adjoining properties which qualified for a paired sales analysis. (Completed 2016, 100 MW Project)
- Solar Farm B (Jefferson County Community Solar Garden) is located near the City of Arvada, in Jefferson County, Colorado. This solar farm is adjacent to a residential development and is situated on 13 acres. The surrounding uses consist of vacant land to the north and east, a horse and alpaca farm to the south, and residential uses to the west. We considered three adjoining properties which qualified for a paired sales analysis. (Completed 2016, 1.2 MW Project)



#### Property Value Impact Study - Overview

We have 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 and single family home sales not adjacent to solar farms within the same county as the subject solar farms, or Control Areas.

We analyzed 24 adjoining property sales in Test Areas and 82 comparable sales in Control Areas, collectively, for the Grand Ridge Solar Farm, the Portage Solar Farm, the IMPA Frankton Solar Farm, the Dominion Indy III Solar Farm, the Valparaiso LLC Solar Farm, the North Star Solar Farm and the Jefferson County Community Solar Garden, over the past six years.



#### **Property Value Impact Study - Methodology**



#### **Paired Sales Analysis**

This type of analysis compares potentially impacted properties located in "*Test Areas*" with unimpacted properties called "*Control Areas*".

<u>Test Areas</u>: A group of sales located adjacent to Existing Solar Farms.

**Control Areas**: A group of otherwise similar properties not located adjacent to Existing Solar Farms.

"If a legitimate detrimental condition exists, there will likely be <u>a measurable</u> <u>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".

The Appraisal Institute's Text, page 25.



## Solar Farm 1: Grand Ridge Solar Farm-Streator, IL





## Solar Farm 1: Grand Ridge Solar Farm-Streator, IL



CohnReznick Paired Sale Analysis				
1	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%		

Solar Farm Opened 12/2013 Adjoining Single Family Home Sold 10/2016

> 479 feet (House to Solar Panel)



### Solar Farm 2: Portage Solar Farm-Porter County, IN





## Solar Farm 3: IMPA Frankton Solar Farm-Frankton, IN













#### Group 1 Comparable Sales



#### Group 2 Comparable Sales





## Dominion INDY III Solar Farm: Adjacent Property 9







Completed Estate Home Oct 2016 – 3 Years AFTER Solar Farm



### Dominion INDY III Solar Farm: Adjacent Property 9





New Estate Home sold on March 24, 2015 for \$449,545. Home features an attached garage and an in-ground swimming pool.



## Before & After Analysis





### Solar Farm 5: Valparaiso Solar LLC, IN

		CohnReznick Paired Sale Analysis - Solar Farm 5		
16		5-A	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF
	101+003 2 126+002	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
	and the second s	Difference		3.09%
	3			
		CohnReznick Paired Sale Analysis - Solar Farm 5		
	UNION MINOR SUB 729-C-1	5-B	Potentially Impacted by	Adjusted Median Price
	152-001		Solar Farm	Per SF
15	PUH Minor Std	Control Area Sales (5)	No: Not adjoining solar farm	\$64.07
		Adjoining Property 14 (Test Area)	Yes: Solar Farm was completed by the sale date	\$62.11
		Difference		-3.06%
		60.		
13	12			



### Solar Farm A: North Star Solar Farm Chisago County, MN

Largest Solar Farm in the Midwest 100 MW, 1,000 Acres, 440,000 Solar Panels Announced in 2014, Opened October 2016





## Solar Farm A: North Star Solar Farm Chisago County, MN



CohnReznick Paired Sale Analysis - Solar Farm A						
Solar Farm A	Potentially Impacted by Solar Farm	Adjusted Median Price Per SF				
Control Area Sales (12)	No: Not adjoining solar farm	\$136.00				
Test Area Group 1 (Adjoining Properties 17, 41, 42, 46, and 48)	Yes: Solar Farm was completed by the sale date	\$137.83				
Difference		1.35%				





## Solar Farm A: North Star Solar Farm Chisago County, MN





#### Solar Farm B: Jefferson County Community Solar Garden Jefferson County, CO





### Solar Farm B: Jefferson County Community Solar Garden Jefferson County, CO



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



# Summary of Findings

	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	Grand Ridge Solar Farm	12	\$79.90	\$74.35	+7.46%	366	479	No Impact
2	Portage Solar Farm	1	\$8,000	\$7,674	+4.25%	874	1227	No Impact
	Portage Solar Farm	7	\$84.35	\$84.27	+0.10%	1,196	1320	No Impact
3	IMPA Frankton Solar Farm	2	\$28.58	\$28.42	+0.56%	83	145	No Impact
	IMPA Frankton Solar Farm	7	\$52.40	\$51.47	+1.81%	208	414	No Impact
4	Dominion Indy Solar III	Group 1 (4)	\$59.10	\$57.84	+2.18%	157 to	230 to	No Impact
	Dominion Indy Solar III	Group 2 (4)	\$72.32	\$71.05	+1.79%	329	404	No Impact
	Dominion Indy Solar III	2	\$8,210	\$8,091	+1.47%	166	N/A	No Impact
5	Valparaiso Solar Farm	10	\$82.42	\$79.95	+3.09%	400	521	No Impact
	Valparaiso Solar Farm	14	\$62.11	\$64.07	-3.06%	595	678	No Impact
A	North Star Solar Farm	Group 1 (5)	\$137.83	\$136.00	+1.35%	100	350	No Impact
В	JeffCo CSG	Group 1 (3)	\$165.15	\$164.36	+0.48%	745	795	No Impact
Averag	Average Variance in Sale Prices for Test to Control Areas +1.79%							

24 Adjoining Test Sales Studied and compared to 82 Control Sales.

IL/IN 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 <u>no consistent negative impact has occurred to</u> <u>adjacent property that could be attributed to proximity to the adjacent</u> <u>solar farm,</u> 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.



#### **Market Interviews**

We have additionally contacted market participants such as appraisers, brokers, and developers. Our conversations with these market participants are noted below.

	Person Interviewed	Position	Solar Farm	Any Impact Identified?
Assesso	ors			
1	Viki Crouch	Otter Creek Township Assessor	Grand Ridge Solar Farm (LaSalle, IL)	None
2	James Weiseger	Champaign Township Assessor	University of Illinois Solar Farm (Champaign County, IL)	None
3	Missy Tetrick	Marion County Assessor (Valuation Analyst)	Indy Solar I, II, and III	None
4	Ken Crowley	Rockford Township Assessor	Rockford Solar Farm	None
5&6	Ken Surface	Senior VP of Nexus Group (Assessor for 20 Counties in IN)	Lanesville Solar Farm * Ellettsville Solar Farms (Harrison & Monroe Counties, IN)	None
7	Mendy Lassaline	Perry County Assessor	IMPA Tell City Solar Park (Perry, IN)	None
8	Patti St. Clair	Chief Deputy, St. Joseph's County Assessor	Olive PV Solar Farm (St. Joseph's, IN)	None
9	Betty Smith-Hanson	Wayne County Assessor	IMPA Richmond Solar Park (Wayne, IN)	None
10	James Allen	Elkhart County Assessor	Middlebury Solar Farm (Elkhart, IN)	None
11	John Keefe	Chisago County Assessor	North Star Solar Farm (Chisago County, MN)	None
Real Est	ate Brokers			
1	Tina Sergenti	Coldwell Banker	Grand Ridge Solar (Sold Adjacent House)	None on price or marketing period
2	Candace Rindahl	ReMax Reesults	North Star Solar Farm (Sold 2 Adjacent Houses)	None on price or marketing period

